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# THE CHRYSOMELIDAE (Coleopt.) OF CHINA AND KOREA, Part 2<sup>1,2</sup>

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*Abstracts*: This second and final installment of a study of the Chrysomelidae (leafbeetles or plant-beetles) of mainland China, Hainan Island and Korea concerns the remaining 5 subfamilies: Chrysomelinae, Galerucinae, Alticinae, Hispinae and Cassidinae. Each of these includes 100 species or more and the Galerucinae number 529. This installment treats 1,249 species and subspecies, of which 178 are described as new. Also 4 new genera are proposed, as well as an additional new generic name, all in the subfamily Galerucinae. Also, some new species names are proposed, and many new combinations. In the entire paper (Mon. 1A-1B), 1,935 species and subspecies are treated, of which 243 are described as new.

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#### Subfamily CHRYSOMELINAE

This subfamily is predominantly temperate in occurrence, and relatively few are found in S. China. As our material is mainly from the south, representation in this subfamily is relatively weak. Thus we have not seen representatives of some of the genera, and of many of the species, so some of the keys are incomplete or possibly inaccurate. The number of species treated (191) is considerably more than those covered in Chen's monograph of 1934.

## Oreina (nos. 1-58)

1. aeneolucens; 2. aeneomicans; 3. aeruginosa; 4. alatavica; 5. altimontana; 6. angusticollis; 7. a. aurata; 8. a. foveopunctata; 9. aurichalcea; 10. bechynei; 11. bowringii; 12.

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<sup>5.</sup> For introductory notes and clarification of treatment, see Introduction and Systematics, Part 1 (pp. 1-7), and additional notes, summary and index, at end of Part 2.

brunicornis; 13. cheni; 14. coerulans; 15. convexicollis; 16. costulata; 17. cuprina dilecta; 18. dohertyi; 19. dzhungarica; 20. exanthematica; 21. fallax; 22. fricata; 23. gensanensis; 24. gracilis; 25. graminis auraria; 26. guttifera; 27. haemochlora; 28. infuscipes; 29. jacobyi; 30. jeanneli; 31. koltzei; 32. liturata; 33. marginata; 34. n. nikinoja; 35. n. exgeminata; 36. ordinata; 37. perforata; 38. pieli; 39. polita adamsi; 40. poricollis; 41. porosa; 42. przewalskii; 43. pubitarsis; 44. roborowskii; 45. rufilabris; 46. rugulosa; 47. sajanica; 48. stalii (=micans); 49. staphylea; 50. s. sulcicollis; 51. s. koreana; 52. tianshanica; 53. tonkinea; 54. trichopila; 55. undulata; 56. unicolor; 57. urjachaica; 58. virgata.

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Synerga (no. 59)
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59. modesta.

Crosita (nos. 60-69)

60. alaschanica; 61. altaica; 62. clementzae; 63. kowalewskyi; 64. matronula; 65. mellyi; 66. pigra; 67. potanini; 68. przewalskyi; 69. urumchiana.

Ambrostoma (nos. 70-77)

70. fasciatum; 71. fortunei; 72. fulgurans; 73. omeishana; 74. quadriimpressum; 75. rugosopunctatum; 76. ambiguum; 77. sublaevis.

Agrosteomela (nos. 78-80)

78. i. indica; 79. i. chinensis; 80. i. impressiuscula.

Humba (no. 81)

81. cyanicollis.

Phaedon (nos. 82-84)

82. brassicae; 83. chinensis; 84. fulvescens; 85. mellyi.

Sternoplatys (nos. 86-88)

86. clementzi; 87. fulvipes; 88. weisei.

Colaphellus (nos. 89–92)

89. alpinus; 90. bowringii; 91. nitidicollis; 92. sophiae.

Gastrophysa (nos. 93-96)

93. atrocyanea; 94. mannerheimi; 95. polygoni; 96. ruficeps.

Gastrolina (nos. 97–98)

97. depressa; 98. peltoidea.

Prasocuris (nos. 99-100)

99. phellandrii; 100. weisei.

Plagiodera (nos. 101-108)

101. bicolor; 102. borealis; 103. cupreata; 104. hanoiensis; 105. maculicollis; 106. septemvittata; 107. versicolora; 108. yunnanica.

Chrysomela (nos. 109-117)

109. parvicollis; 110. populi; 111. tremulae; 112. maculicollis; 113. collaris; 114. hajeki; 115. lapponica; 116. salicivorax; 117. vigintipunctata.

Linaeidea (nos. 118-121)

Fig. 78. a, Aetheomorpha yunnana Pic, p. 87; b, Mireditha ovalum (Weise), p. 214; c, Callisina rufipes Pic, p. 214; d, Chujoa uetsukii (Chûjô); e, Epaenidea subvirida n. g. & n. sp.; f, Linaeidea aeneipennis (Baly); g, Ophrida spectabilis (Baly); h, Glyphocassis spilota (Gorham); i, Platypria melli Uhmann.



118. a. adamsi; 119. a. emmerichi; 120. a. minutior; 121. aeneipennis (=siemsseni).

Agasta (no. 122)

122. formosa.

Paropsides (nos. 123-124)

123. duodecimpustulata; 124. nigrofasciata.

Asiparopsis (no. 125)

125. pardalis.

Gonioctena (nos. 126-146)

126. cheni; 127. coreana; 128. dinah; 129. gracilicornis; 130. kanfani; 131. rufipes; 132. springlovae; 133. viminalis; 134. f. flexuosa; 135. f. melli; 136. flavipennis; 137. fulva; 138. lesnei; 139. melanoptera; 140. semiglobosa; 141; flavoplagiata; 142. subgeminata; 143. tredecimmaculata; 144. aeneipennis; 145. fortunei; 146. nigroplagiata.

Phratora (nos. 147-155)

147. bicolor; 148. inhonesta; 149. laticollis; 150. multipunctata; 151. parva; 152. phaedonoides; 153. sinensis; 154. vitellinae; 155. vulgatissima.

Lycaria (no. 156)

156. westermanni.

Phyllocharis (no. 157) 157. undulata.

Phola (no. 158)

158. octodecimguttata (=cybele).

Potaninia (nos. 159–161)

159. assamensis; 160. laboissierei; 161. polita.

Semenowia (no. 162)

162. chalcea.

Entomoscelis (nos. 163-166)

163. adonidis; 164. ecoffeti; 165. orientalis; 166. suturalis.

Xenomela (no. 167)

167. marginicollis.

Oreomela (nos. 168-190)

168. korolkovi; 169. suvorovi; 170. andreevi; 171. celyphoides; 172. dungana; 173. dzhungara; 174. kutzenkoi; 175. muzartea; 176. pedashenkoi; 177. przewalskii; 178. radkewiczi; 179. rueckbeili; 180. sapozhnikovi; 181. sarydzhasea; 182. scutellaris; 183. shnitnikovi; 184. tarantsha; 185. tshernavini; 186. weisei; 187. grumi; 188. kaznakovi; 189. kolzei; 190. oirata.

Apaksha (no. 191)

191. himalayensis.

Timarcha (-)

KEY TO CHINESE GENERA OF CHRYSOMELINAE

Pac.	Ins.	Mon.

1B

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	Anterior coxal cavities closed posteriorly (almost closed in <i>Anaksha</i> ) 20
2(1)	Tarsal claws simple
- (1).	Tarsal claws appendiculate or bifid
3(2)	Interior border of elvtral epipleuron ciliate, at least posteriorly.
5 (2).	Interior border of enipleuron not ciliate
1(3)	Hind targed segment 3 entirely publicate thereath
4 (3).	Hind tarsal segment 3 publicant only at sides beneath deenly emerginate and
	Annu taisaí segnent 5 publicient omy at sides beneath, deepiy emarginate and
5 (1)	Intercoval process of metasternum not margined anteriorly
5(4).	Intercoval process of metasternum margined anteriorly.
$\epsilon$ (5)	Deep of menotum margined
0(3).	Base of pronotum margined
7 (1)	Base of pronotum not margined
7(0).	Enviral puncturation in regular gennate series
0 (2)	Elytral puncturation in integular rows, not geninate
8(3).	Elytron with regular rows of punctures
0 (0)	Eight of with punctures confused of in megural lows
9(8).	Body short and perallel eided weekly swellen above protherey personal
	Body narrow and paranei-sided, weakly swohen above, prothorax narrower
10 (0)	than elyira
10 (9).	A depression internation numeral swenning, protitorax natiower than erytrat
	Dase, with find angle a right angleriacuon
	No depression internal to numeral sweining, promotax as broad as crystal
11 (8)	Page of proportium margined tarsal segment 3 bilobed
11 (0).	Base of proportium not margined; tarsal segment 3 not lobed Colonbellus
12 (11)	This anises not armed with tooth-like processes
12(11).	Tibial appees not armed with a tooth-like processes
13 (12)	Rody convex: mesosternum shorter than prosternum between covae 14
13 (12).	Body strongly flattened is mesosternum well developed as long as prosternum
	between coxae.
14(13)	Flytral epipleuron flat
(15).	Enjiter oppression and the outer border sharp
15(14)	Antennal segment 3 as long as, or barely longer than, 4
10 (11)1	Antennal segment 3 nearly as long as 4+5
16 (15)	Pronotum with lateral callus separated by punctured depression; tarsal seg-
	ment 3 deeply emarginate; metasternum unmargined anteriorly Chrysomela
	Pronotum evenly convex and smooth, without callus; tarsal segment 3 shallow-
	ly emarginate; metasternum margined and truncate anteriorly Linaeidea
17(2).	Elvtral epipleuron vertical; tarsal claws bifid
	Elytral epipleuron horizontal: tarsal claws appendiculate
18 (17).	Prosternum emarginate behind Paronsides
	Prosternum truncate behind
19 (17).	Tibiae angularly dilated apically; tarsal segment 3 not lobed Gonioctena
	Tibiae not angularly dilated apically; tarsal segment 3 bilobedPhratora
20 (1).	Tarsal claws bifid or appendiculate
<u> </u>	Tarsal claws simple

Tarsal claws appendiculate	21 (20).
Tarsal claws bifid Lycaria	
Clypeus subtriangular, depressed; antenna moniliform Phyllocharis	22 (21).
Clypeus trapezoidal, not depressed; antenna subfiliform Phola	
Apterous	23 (20).
Winged; body short and broad; tibiae not dentate apically Potaninia	
Body short and stout	24 (23).
Body ovate, fairly slender; elytron with small, irregular punctures Apaksha	
Elytron with more than 7 rows of punctures, or irregularly punctured	25 (24).
Elytron with 7 distinct puncture-rows; mesosternum small, elevated; basal an-	
gle of pronotum produced Semenowia	
Metasternum no longer than prosternum	26 (25).
Metasternum longer than prosternum; prothorax not margined basally; tibiae	
toothed apically Entomoscelis	
Prothorax not margined basally	27 (26).
Prothorax margined basally, generally widened anteriorly; body very broad	
Timarcha	
Elytron subparallel at middle; mid and hind tibiae with oblique apical trun-	28 (27).
cation straight	
Elytron rounded at middle; mid and hind tibiae with oblique apical trunca-	
tion rounded, without angles Oreomela	

#### Genus Oreina Chevrolat

- Chrysomela Linnaeus, 1758, Syst. Nat. ed. 10, 368 (part).—Weise, 1916, Coleopt. Cat. 68: 56.
- Oreina Chev., 1837, IN Dejean, Cat. Col. ed. 3, 402.—Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 202 (type: Chrysomela tristis Fabr.).—Monrós & Bechyně, 1956, Ent. Arb. Mus. Frey 7: 1129.
- Polysticha Hope, 1840, Col. Mand. 3: 164.
- Atechna Chevrolat, 1843, Dict. Univ. 2: 282.
- Chrysolina Mots., 1860, Schrenck's Reisen Amurl. 2: 210 (type: Chrysomela staphylea Linn.; Europe).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 29; 1935, Soc. Ent. France, Ann. 104: 155.—Bechyně, 1950, Ent. Arb. Mus. Frey 1: 47–185; 1952, op. cit. 3: 351–85.
- Anopachys, Centoptera, Chalcoidea, Chrysomorpha, Colaphodes, Colaphoptera, Colaphosoma, Craspeda, Dlochrysa, Heliostola, Hoplosoma, Lithoptera, Ovomorpha, Ovosoma, Ovostoma, Pleurosticha, Stichoptera, Stichosoma, Taeniosticha, Timarchoptera, Threnosoma, Zeugotaenia Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 190-216.
- Chrysochloa Marseul, 1886, Abeille 24: 26.
- Hypericia, Sphaeromela Bedel, 1892, Faune Col. Bassin Seine 5: 258, note, 260, note.
- Cystocnemis Jacobson, 1894, Deutsche Ent. Zeits. 1894: 104 (nec Motschulsky).
- Minckia Strand, 1935, Folia Zool.-hydrobiol. 7: 292 (for Hoplosoma Motschulsky).
- Timarchomima, Timarcholina, Pierryvettia, Menthastriella, Chrysolinopsis, Euchrysolina, Taeniochrysea, Chrysocrosita, Erythrochrysa, Maenadochrysa, Allochrysolina, Melasomoptera, Caudatochrysa, Allohypericia, Ghesquierita, Naluhia, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 51–171.

# Palaeosticta, Polystictella Bechyně, 1952, Ent. Arb. Mus. Frey 3: 383, 384.

Numerous previous users of *Chrysolina* for this genus have overlooked the fact that several of Motschulsky's names for categories used within the genus have priority over *Chrysolina*, besides *Oreina*, as shown in the above synonymy. As Bechyne, who has split this group very finely, considers *Oreina* and *Chrysolina* to be congeneric, objection can hardly be raised to reducing *Chrysolina* to a subgenus of *Oreina*, which has priority.

Our representation of material in this genus is very incomplete, as the species are mainly found in the far north and northwest. Thus our treatment of the genus is incomplete. We are not convinced of the validity of the many subgenera, and we are not formally accepting them, although they are mentioned, when known, in the key and the text. The following partial key is patterned largely after Bechyne (1950, 1952).

#### PARTIAL KEY TO CHINESE SPECIES OF OREINA

1.	Abdominal segment 1 as long as metasternum ( <i>Chrysolina</i> )
	Abdominal segment 1 longer than metasternum (Europe only) Oreina*
2 (1).	Proepimeron flat, not keeled or swollen, at most with a groove parallel to epi-
	meral suture
2 (2)	Proepimeron swollen of keeled
3(2).	Elytral epipieuron norizontal, its posterior 1/2 not visible in side view
	Elytral epipleuron oblique, not visible for entire length in side view 12
4 (3).	Tarsi slender; if stout, then claw segment with an inferior apical tooth ( <i>Pier</i> -
	ryvettia of Bechyne)
	Tarsi stout; claw segment without an apical tooth (Menthastriella of Bechy-
	ně); elongate, metallic cupreous, varied with blue or green; elytron with
	close, irregular rows of punctures, less regular posteriorly; pronotum finely
	and closely punctured; length 5–8 mm 14. coerulans
5 (5).	Elytron with quite distinct punctures or with intervals impunctate
	Elytron with 10 irregular rows (1st very short) of weak punctures including
	4 geminate series, and intervals with minute punctules; uniformly bronzy;
	antenna brown, basal segments reddish beneath; apterous; length 8.0–9.5
	mm1. aeneolucens
6 (5).	Claw segment of tarsus feebly toothed beneath; tarsus of normal proportions7
	Claw segment of tarsus untoothed; tarsus very slender
7(6).	Pronotum without a deep lateral impression, only slightly depressed on side
	of disc where there are numerous large punctures
	Pronotum with a deep longitudinal impression at side near base, disappearing
	anteriorly and replaced by numerous large punctures8. aurata foveopunctata
8 (7).	Head and pronotum dark bronzy; elytron reddish brown with coppery reflec-
	tions; pronotum with widely spaced punctures at side which are slightly
	larger than those on disc; length 8.5 mm2. aeneomicans
	Dorsum varying from bronzy green to violet blue, sometimes coppery; prono-
	tum with punctures at side in part subconfluent and much larger than those
	of disc; length 7–9 mm7. a. aurata
9 (6).	Elytron shiny, with no reticulation visible with magnification of $60 \times \dots 10$
	Elytron dull, with reticulations distinctly visible with magnification of $40 \times$ ;

	intervale between 8 comingto discal puncture rows vaguely punctulate:
	miter vals between 8 gemmate discar puncture rows vaguery puncturate,
	greenish bronzy promotax wheest at base, concave on anterior margin, very
	maire 1997: Wistnem
10 (0)	The second of reddich brown with distinct matellin sheet, head and prothe
10 (9).	Elytron red or reddish brown, with distinct metallic sheen; head and protno-
	rax bronzy and bluish green; scutellum rounded-triangular
	Elytron red, without metallic sheen; remainder of body black; scientum sub-
11 (10)	quadrate
11 (10).	Lateral border of pronotum arcuately dilated anterior to middle; disc marked
	with fine scattered punctures of uniform size
	Lateral border of pronotum straight; disc with very fine punctures mixed with
	very sparse larger punctures 11. bowringii
12 (3).	Prothorax strongly transverse, as broad, or nearly as broad, as elytra; hind
	wing present
	Prothorax narrow, much narrower than eight and only slightly broader than
	long; antennal insertion near edge of clypeus; elytron irregularly punctur-
	ed; hindwing rudimentary; antenna not very long, with thickened terminal
	segments; last maxillary palpal segment smaller than 3rd ( <i>Timarchoptera</i> of
	Bechyne); bluish black, greenish on head and pronotum, with elytral punc-
	tures brown and borders red; length 7-8 mm 27. haemochlora
13 (12).	Ventral surfaces of tarsi completely pubescent
	Ventral surfaces of tarsal segment 1 of $\gamma$ with a glabrous median line; an-
	tennal insertion midway between eye and clypeus; hind wing present (Ery-
	throchrysa of Bechyne); elytron red; head and pronotum green or blue;
	elytron somewhat irregularly punctured; length 1-8 mm 39. polita adamsi
14 (13).	Main sclerite of aedeagus unusually complex (Euchrysolina of Bechyně); hind
	wing developed
	Main sclerite of aedeagus simple; last maxillary palpal segment 2x as broad
	as 3rd (Chrysolina of Bechyne, part); hind wing developed; dull testaceous
15 (14).	Lateral callus of pronotum weak or lacking; antenna moderately thickened
	towards apex; last abdominal sternite of $\mathcal{J}$ slightly convex; color variable;
	length 7-11 mm 25. graminis auraria
	Lateral callus of pronotum strongly convex, with deep lateral groove; antenna
	slender, feebly thickened apically; brilliant metallic, often golden striped
	with green; length 9-14 mm 58. virgata
16 (2).	Last maxillary palpal segment no longer than segment 3 17
	Last maxillary palpal segment distinctly longer than 3
17 (16).	Last abdominal sternite of $\varphi$ simple; aedeagus of $\delta$ fairly simple
	Last abdominal sternite of $\mathcal{P}$ of specialized structure, at least raised in mid-
	dle; elytron irregularly punctured; aedeagus moderately complex
18 (17).	Elytron not grooved 19
	Elytron grooved, with intervals strongly swollen (Timarchomela of Bechyně);
	apterous; elytral intervals finely punctured; dull bronzy, nearly black be-
	neath; antenna reddish; tarsi blackish brown; length 10-11 mm 16. costulata
19 (18).	Elytron with secondary puncturation not greatly different from primary punc-

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	turation, resulting in somewhat irregular puncturation
	Elytron with secondary puncturation in regular rows and quite distinct be-
	cause of weaker primary puncturation; pronotum irregularly punctured; ely-
	tral puncture-rows equidistant; hind wing vestigial; primary punctures weak
	(Taeniosticha of Bechyně)
20 (19).	Tarsi completely pubescent beneath in both sexes
	Tarsi with at least segment 1 of $\mathcal{P}$ with a glabrous median line beneath lat-
	eral callus of pronotum strongly swollen; elytron irregularly punctured (Li-
	thopteroides of Bechyně)22
21 (20).	Body beneath, and legs, reddish brown, at most with indistinct bronzy sheen;
	hind wing developed (Chrysolina of Bechyně); dull testaceous 49. staphylea
	Body metallic beneath; legs dark (or only tarsi red); pronotum with com-
	plete or broad lateral callus; elytral punctures coarse (Stichoptera of Be-
	chyně); hind wing vestigial, long and slender; shiny black above with outer
	border of elytron dull red; length 7.5-9.0 mm
22 (20).	Elytron finely and completely punctured; hind wing not developed; viola-
	ceous black
	Elytron with shiny, impunctate patches in regular longitudinal rows; hind
	wing developed; bronzy black; length 7.5-9.0 mm20. exanthematica
23 (22).	Dorsum shagreened; elytral punctures not distinctly larger than those of pro-
	notum; prothorax strongly rounded at side and dorsum strongly convex 24
	Dorsum not shagreened, less strongly convex; prothorax weakly rounded at
	side; elytral punctures distinctly larger than those of pronotum; length 7.5-
	8.5 mm
24 (23).	Pronotal and elytral punctures quite distinct, mostly about as large as inter-
	spaces; length 7.0-9.2 mm50. s. sulcicollis
	Pronotal and elytral punctures very weak, mostly about 1/3 as large as inter-
	spaces; 7.5-9.0 mm (Jacobson, 1898; E. Siberia, Japan)nikolskyi*
25 (19).	Vertex with a distinctly longitudinal groove; all elytral puncture-rows groov-
	ed and interspaces raised
	Vertex without a distinct groove; elytral interspaces not, or hardly, raised,
	thus not corrugate, but slightly sinuate; occiput distinctly punctured; black;
	length 6 mm 52. tianshanica
26 (25).	Vertex with groove strong; black, greenish on head and pronotum; lateral
	callus of pronotum not narrowed posteriorly; occiput weakly punctured;
	length 7-8 mm 4. alatavica
	Vertex with groove weak; head, pronotum and scutellum violet black; later-
	al callus of pronotum narrowed posteriorly; length 7 mm 19. dzhungarica
27 (17).	Last abdominal sternite of $\mathcal{P}$ obtusely convex (roof-shaped); pygidium not
	greatly lengthened (Anopachys of Bechyně)
	Last abdominal sternite with a long ovipositor-like process covered by a long
	process of pygidium (Caudatochrysa of Bechyně); elytral punctures in sub-
	regular paired rows; hind wing lacking; purplish coppery, black beneath;
	length 7 mm6. angusticollis
28 (27).	Elytron fairly smooth, not rugulose

	Elytron rugulose punctate; bluish; antenna ferrugineous basally; length 5-8 mm
29 (28)	Elytron with punctures of interspaces fairly strong irregular
	Elytron with punctures in interspaces very weak i propotal disc finely and sub-
	uniformly numerured: hrongy above: length 6.7 mm
	uniformity punctureu, ofonzy above, tengui 0-7 mini
30 (29).	Anterior emargination of pronotum obliquely transverse at side; pronotal punc-
	tures fairly strong, with a median impunctate strip; bronzy or bluish; length
	6–8 mm
	Anterior emargination of pronotum obliquely longitudinal at side; pronotal
	punctures weak on disc, nearly lacking on anterior $1/2$ ; bronzy black; length
	7–8 mm
31 (16).	Antennal insertion midway between eye and clypeus; elytron with regular ge-
	minate rows of punctures ( <i>Hypericia</i> of Bechyně)32
	Antennal insertion close to clypeus: elytron less regularly punctured
32 (31).	Length 6-9 mm: primary elytral punctures fairly large and close: tarsi broad. 33
•= (•1)•	Length 5 0-65 mm; primary elytral punctures fairly small not very close; tarsi
	narrow 35
33 (22)	Length 8-9 mm; body fairly slender; elytral nunctures not very irregular; in-
	terspaces more finely and sparsely punctured than proportium 34
	Length 6-8 mm: body broader: elytral nunctures quite dense and rather irre-
	gular: interspaces closely nunctured and obscuring linear arrangement of
	ntimary nunctures; coldish black
24 (22)	Denne historica succession of the second sec
54 (55).	Dorsum blackish blue, not very sniny; pronotal puncturation stronger (neavier
	than puncturation of elytral interspaces); secondary (lineate) elytral punc-
	turation finer
	Dorsum metallic violet, very shiny; body more slender; pronotal punctura-
	tion finer (only as strong as puncturation of elytral interspaces); secondary
	elytral puncturation coarser 35. nikinoja exgeminata
35 (32).	Elytral interspaces finely but distinctly punctured; blackish blue or bronzy;
	length 5-6 mm 24. gracilis
	Elytral interspaces nearly impunctate; bronzy brown with a greenish tint; legs
	blackish blue; antenna thickened apically; length 6.0-6.5 mm22. fricata
36 (31).	Last maxillary palpal segment no broader than preceding (Chalcoidea of Be-
	chyně)
	Last maxillary palpal segment broader than preceding in both sexes (Allo-
	hypericia of Bechyně)
37 (36).	Pronotal punctures fine, smaller than interspaces; punctures of elytral inter-
	spaces minute, smaller than pronotal punctures; primary punctures regular;
	brownish black, somewhat shagreened; elytron reddish at side; length 7 mm
	Pronotal punctures moderate, partly larger than interspaces; punctures of ely-
	tral interspaces relatively large, much larger than pronotal punctures and
	partly obscuring regularity of primary punctures: bronzy black to reddish:
	length 5.0–5.5 mm
38 (36).	Tarsi with basal segment glabrous medially beneath in $\mathcal{Q}$
- ()•	Tarsi with basal segment entirely pubescent beneath in both sexes

39 (38). Pronotum with lateral callus dilated anteriorly and nearly straight at side,
hardly narrowed anteriorly; elytron not grossly punctured; more slender
than in aeruginosa; length 6.0-7.5 mm 43. pubitarsis
Pronotum with lateral callus not dilated anteriorly, strongly rounded at side
and narrowed anteriorly; elytral punctures large at side, mostly as large as
interspaces in about 12 partly irregular and hardly geminate rows; length
9 mm
40 (38). Hind wing developed; body short; oval, punctures of elytral interspaces quite
sparse
Hind wing vestigial; body elongate; punctures of elytral interspaces very dense;
dull bronzy; length 6–7 mm 36. ordinata
41 (40). Body short, oval; punctures of elytral interspaces quite sparse; bronzy; length
5–8 mm
Body slender; punctures of elytral interspaces dense

1. Oreina (Chrysolina) aeneolucens (Achard), NEW COMBINATION

Timarchomela aeneolucens Ach., 1922, Fragm. Ent., 17 (Tali, Yunnan; PRAHA).

Timarchomela aeneolucens var. melanaspis Ach., 1922, l. c., 18 (Tali).

Chrysolina aeneoluscens, Chen, 1934, Rech. Chrysom. Chine et Tonkin 38; 1936, Soc. Ent. France, Ann. 105: 150.

DISTRIBUTION: SW China (Yunnan).

## 2. Oreina (Chrysolina) aeneomicans (Chen), NEW COMBINATION

- Chrysolina aeneomicans Chen, 1934, Rech. Chrysom. Chine et Tonkin, 35, fig. 38; 1936, Soc. Ent. France, Ann. 105: 147 (Pe-yen-tsin, Yunnan; PARIS).
- Chrysolina (Timarcholina) aeneomicans, Bechyně, 1960, Ent. Arb. Mus. Frey 1: 71 (with ab. rufolucens).

DISTRIBUTION: SW China (Yunnan).

3. Oreina (Chrysolina) aeruginosa (Faldermann), NEW COMBINATION

Chrysomela aeruginosa Fald., 1835, Ac. Petersb., Mem. 2: 440 (Irkutzk).—Chen, 1934, Arkiv Zool. 27A (5): 3 (Kansu).—Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10 (51): 5, pl. 1, fig. 3 (Jehol).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 66 (Korea).

Chrysomela sereipunctata Weise, 1887, Archiv Naturg. 53, 1: 176 (Amur).—Jacoby, 1890, Entomologist 23: 116 (Chang-yang).

Chrysomela sibirica Ws., 1887, l. c., 177 (Amur).—Jacoby, 1890, l. c., 116 (Chang-yang, Hupeh).

Chrysomela lobicollis Fairmaire, 1887, Rev. d'Ent. 6: 331 (Pekin; ?PARIS).

Chrysomela distans Csiki, 1901, IN Horváth, Ergebn. Zichy's Reise 2: 116 (Mongolia; BU-DAPEST).

Chrysomela muralis Csiki, 1901, l. c., 117 (Kalgan).

Chrysomela mandarina Achard, 1922, Fragm. Ent., 16 (Tai-yuen-fu [Shantung]; PRAHA).

Chrysolina sibirica, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 39; 1936, Ent. Soc. France, Ann. 105: 151.

- Chrysolina lobicollis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 42; 1936, Ent. Soc. France, Ann. 105: 154.
- Chrysolina mandarina, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 39 (Kweichow); 1936, Ent. Soc. France, Ann. 105: 151.

Chrysolina (Allohypericia) aeruginosa, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 161.

- Chrysolina sereipunctata, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 40; 1936, Ent. Soc. France, Ann. 105: 152.
- Chrysolina (Allohypericia) aeruginosa, Bechyně, 1952, Ent. Arb. Mus. Frey 3: 381.
- Chrysolina (Allopypericia) aeruginosa chingana Bech., 1952, Ent. Arb. Mus. Frey 3: 382 (Manchuria; FREY).
- Chrysolina (Allopypericia) aeruginosa subsp. peninsularis Bech., 1952, l. c. (Korea; FREY).
- Chrysolina (Allohypericia) aeruginosa aeruginosa, muralis, lobicollis, sibirica, Bechyně, 1952, l. c., 382.

DISTRIBUTION: Siberia, Tibet, Mongolia, N. China, Korea.

KIRIN: 1, Hunchun, VIII. 1942, Nakao (Кімото); 1, Tetsumakado, Kinshu, XII. 1927, Busck (US). TSINGHAI: 1, Kuku-Nor, 1898, Hauser (ZMB). KANSU: 2, Hoei-sien, S. Kansu; King-iang-fu, E. Kansu (ZMB). KOREA: 5, Fune, 20. V. 1911, Thompson (CAS).

4. Oreina (Chrysolina) alatavica (Jacobson), NEW COMBINATION

Chrysomela alatavica Jac., 1910, Rev. Russe d'Ent. 10: 58 (Dzungaria; ?LENINGRAD). Chrysolina (Taeniosticha) alatavica, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 136.

This species is not included in the key.

DISTRIBUTION: NW China (Sinkiang).

# 5. Oreina (Chrysolina) altimontana (Rybakov), NEW COMBINATION

Chrysomela altimontana Ryb., 1889, Soc. Ent. Ross., Horae 23: 286 (Burchan Buda, Amdo; ?LENINGRAD).

Chrysomela amplicollis Jacobson, 1895, op. cit. 29: 550 (Amdo).

Chrysolina altimontana, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 66.

This species is not included in the key.

DISTRIBUTION: NW China (Amdo), SE Mongolia.

6. Oreina (Chrysolina) angusticollis (Motschulsky), NEW COMBINATION

Apterosoma angusticollis Mots., 1860, Etud. Ent. 9: 23 (Japan).

Chrysomela angusticollis Jacobson, 1901, Finska Vet. Soc. Forh. 43: 127.

Chrysolina angusticollis Chen, 1934, Rech. Chrysom. Chine et Tonkin, 25, fig. 33; 1936, Soc. Ent. France, Ann. 105: 145.

Chrysolina (Caudatochrysa) angusticollis, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 149.

DISTRIBUTION: N. China (Manchuria), Japan.

7. Oreina (Chrysolina) aurata aurata (Suffrian), NEW COMBINATION

Chrysomela aurata Suffr., 1851, Linn. Ent. 5: 102.—Maulik, 1926, Fauna India, Chrys. Halt., 41.

Chrysolina (Timarcholina) aurata aurata, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 70.

The typical form may or may not occur in China. Chen's records seem referable to the following subspecies.

DISTRIBUTION: India.

# 8. Oreina (Chrysolina) aurata foveopunctata (Fairmaire), NEW COMBINATION

- Chrysomela foveopunctata Fairm., 1888, Soc. Ent. Belg., Ann. 32: 39 (Yunnan; ?PARIS).— Chen, 1934, Rech. Chrysom. Chine et Tonkin, 34; 1936, Soc. Ent. France, Ann. 105: 146.
- Chrysolina aurata, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 35 (part: Kweichow, Yunnan).

Chrysolina (Timarcholina) aurata foveopunctata, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 70. DISTRIBUTION: SW China (Yunnan, Kweichow, Kwangtung).

YUNNAN: 1, Hang Kia Pin (US). KWANGTUNG: Pak-wan San, Canton, III. 1914, Mell (ZMB); 1, Tsha-jiu San, VII-IX. 1910, Mell (ZMB).

9. Oreina (Chrysolina) aurichalcea (Mannerheim), NEW COMBINATION

Chrysomela aurichalcea Mann., 1825, IN Hummel, Essais 4: 39.—Weise, 1887, Archiv Naturg. 53, 1: 181.

Chrysomela wallacei Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, 10: 21.

Chrysomela amethystina Kolbe, 1886, Archiv Naturg. 52, 1: 228 (Korea; ?ZMB).

Chrysomela pekinensis Fairm., 1887, Rev. d'Ent. 6: 331.

Chrysolina aurichalcea, Chen, 1934, Arkiv Zool. 27 A 5: 3, 1934, Rech. Chrysom. Chine et Tonkin, 41.—Yu, 1936, Sinensia 7: 172.—Yuasa, 1936, First Sci. Exp. Manchoukuo 5, 1, 10 (51): 7, pl. 1, fig. 4 (Jehol).—Chûjô, 1940, Mushi 13 (1): 4 (N. Korea); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 66 (Korea); 1942, Mushi 14 (2): 57 (Kwangtung).

Chrysolina (Anopachys) aurichalcea subsp. kwanghsiensis, omisiensis, fokiensis, yunnanica Bechyně, 1950, Ent. Arb. Mus. Frey 1: 147, 148 (China; FREY).

Chrysolina (Anopachys) aurichalcea amethystina, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 147. Chrysolina (Anopachys) aurichalcea aurichalcea, pekinensis, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 147.

DISTRIBUTION: Siberia, China (Hopei, Honan, Kansu, Shensi, Shantung, Kweichow, Yunnan, Kwangsi), Korea, Japan, Ryukyu Is., Taiwan, Tonkin, Burma.

ANHWEI: 3, Tai-ping-shien, X. 1932, Liu (MCZ). FUKIEN: many, Ta-chu-lan, Shaowu, III-IV, X. 1942, III-VI. 1943, V. 1945, Maa, Lin (BISHOP); Yun-ling Shan (ZMB); 2, Kuatun, Chungan, VI. 1942, I. 1943, Maa (BISHOP); 1, Chungan: Sanchiang, X. 1942, Maa, Gressitt (CAS). KWANGTUNG: 1, Canton, Mell (ZMB); 1, Tsha-jiu-san, VII-IX. 10, Mell (ZMB); 1, Tong-cung-san, VIII. 1912, Mell (ZMB); 2, Naam-kong-paai, Yao Shan, Yangshan Distr., X-XI. 1934, To (LINGNAN). HUNAN: 1, Yo Chow, X. 1919, Loomis (US). SZECHUAN: 1, Mt. Omei, VII. 1932, Hadden (BISHOP); 4, Ya-chow, XII. 1928, XI. 1930, Graham (US); 2, betw. Kiating & Suifu, VI. 1930, Graham (US); 1, nr. Song-pan, VII. 1930, Graham (US); 3, Shuin-gien-su, V. 1924, Graham (US); 1, Wan-hsien, X. 1948, Gressitt & Djou (CAS); NE of Mo-tau-chi, Wanhsien, IX. 1948, Gressitt & Djou (BISHOP). CHEKIANG: 2, Hangchow, IV. 1927, Wong (US); X. 1921, Bowditch (US); 2, Hangchow, Illingworth

(BISHOP). SHANTUNG: 2, W. Shangtung, X-XI. 1903, (US). HUPEH: 2, Tan-chi-chan (ZMB); many, Hsiao-ho, Lichuan, VII-IX. 1948, Gressitt & Djou (CAS); 4, Suisapa, VIII. 1948, Gressitt & Djou (BISHOP); many, Leung-ho-kow, IX. 1948, Gressitt & Djou (CAS); 3, Chi-au-shan, IX. 1948, Gressitt & Djou (BISHOP). SHENSI: 2, Shensi, V. 1904 (US). TIBET: 3, Tibet Prov. (AMNH). MANCHURIA: many, Weishahao, VII. 1923, Van Dyke (CAS). KIANGSU: Shanghai, Bowditch (US). 1, Chinkiang, VII. 1924, Illing-worth (BISHOP).

10. Oreina (Chrysolina) bechynei Gressitt and Kimoto, n. sp. Fig. 79.

*Male*: Pitchy reddish with a metallic greenish bronzy tinge: slightly more reddish beneath; antenna reddish brown, slightly metallic in basal 2/5; abdomen and legs with a somewhat bluish tinge. Body glabrous above; ventral surfaces very thinly pubescent; tarsi entirely pubescent beneath.

*Head* much narrower than prothorax; occiput deeply convex, sparsely and irregularly punctured; vertex not quite even; frons broadly transverse, weakly convex and sparsely

punctured; labrum distinctly emarginate apically; antennal insertion closer to frons than to eye; last maxillary palpal segment about as large as preceding, obliquely truncate apically. Antenna 2/3 as long as body, slightly thickened beyond middle; segment 1 about 1/2 as broad as long, moderately punctured; 2 about 2/3 as long as 1; 3 distinctly longer than 2 and 4; 5 slightly shorter than 4; 6 barely as long as 5; 7 as long as 3; 8 as long as 4; 9 as long as 10 and slightly longer than 8; 11 longest, subacute. Prothorax 2/5 as long as broad, deeply and arcuately emarginate anteriorly; basal margin subobtuse, shallowly emarginate on each side; lateral margin evenly and weakly convex; disc subevenly convex, finely and sparsely punctured; lateral callus not very strongly raised, but set off by an irregular group of large deep punctures which are sparser anteriorly and denser posteriorly, also a few large punctures along basal margin. Scutellum slightly longer than broad, narrowed and rounded apically and impunctate. Elytron 3/7 as broad as long, weakly and subevenly rounded externally, broadly rounded apically; epipleuron



Fig. 79. Oreina (Chrysolina) bechynei n. sp.

moderately broad basally, slightly wider than metepisternum, gradually narrowed to apex; disc strongly and subevenly convex, with about 15 subregular longitudinal rows of fairly strong punctures, in part geminate, but the rows partly indistinct by reason of some larger irregular punctures and interspaces, in addition to a few minute punctures. Thoracic sternites with a few punctures along borders of sclerites; abdominal segments with a few vague punctures at side; last abdominal sternite rather deeply concave just behind sub-truncate apical margin. *Legs* moderately stout and sparsely punctured; hind tarsal segment

1 nearly as long as 2+3 and distinctly shorter than last. Length 5.1 mm; breadth 3.5.

*Female*: Bronzy black above and bluish to bronzy black beneath; antenna 1/2 as long as body; last abdominal sternite somewhat convex, slightly grooved parallel to sub-truncate apical margin; tarsi completely pubescent beneath on segments 1–3. Length 5.6 mm; breadth 3.9.

*Paratypes*: Black with a bronzy tinge above, bluish to greenish black beneath. Length 5.0-5.5 mm; breadth 3.9-4.0.

DISTRIBUTION: W. China (Hupeh).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 25. VII. 1948, Gressitt & Djou; allotopotype ♀ (CAS), 26. VII.; 2 ♀ paratopotypes (LINGNAN, BISHOP), 25. VII, 19. VIII. 1948; 1 ♀ paratype (CAS), Liang-hou-keu, Lichuan, Hupeh, 1. IX. 1948, Djou; 1 ♀ paratype, Kuan-hsien, Szechuan, VII. 1934, Graham (USNM).

Differs from *marginata* (Linn.) in being shorter, more metallic and unicolorous above, and with dorsal punctures much stronger, and elytral punctures much heavier than pronotal punctures and partly obscuring regularity of primary punctures. According to Bechyně's system, this species would go in the subgenus *Chalcoides*.

#### 11. Oreina (Chrysolina) bowringii (Baly), NEW COMBINATION

Chrysomela Bowringii Baly, 1860, Jour. Ent. 1: 96 (Hong Kong; BM).

Colaphellus grouvellei Achard, 1926, Fragm. Ent., 130 (Yunnan, Kweichow, Nanking).

Chrysolina bowringii, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 37; 1936, Soc. Ent. France, Ann. 105: 149.

Chrysolina (Pierryvettia) bowringii, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 72, 73 (with var. rubricans, Annam).

DISTRIBUTION: S. China (Kweichow, Yunnan, Kwangtung), Tonkin, Taiwan.

KWANGTUNG: 1, Honam I., Canton, P'an-yu Distr., VIII. 1939, Gressitt (BISHOP); XII. 1934, Tinkham (LINGNAN); 1, Lui-chow Pen., IX. 1950, for Gressitt (BISHOP); 2, Lo-fau Shan, VII. 1912, I. 1914, Mell (ZMB).

12. Oreina (Chrysolina) brunicornis (Weise), NEW COMBINATION

Chrysomela brunicornis Ws., 1887, Archiv Naturg. 53: 175.

Chrysolina brunicornis, Chen, 1936, Notes d'Ent. Chinoise 3(5): 67.

This species is not included in the key.

DISTRIBUTION: C. Asia (Altai), Mongolia.

13. Oreina (Chrysolina) cheni (Bechyně), NEW COMBINATION

Chrysolina lucidula Chen, 1934 (nec Apfelbeck), Rech. Chrysom. Chine et Tonkin, 36 (Yunnan); 1936, Soc. Ent. France, Ann. 105: 148.

Chrysolina (Pierryvettia) cheni Bech., 1950, Ent. Arb. Mus. Frey 1: 73 (new name for lucidula).

DISTRIBUTION: SW China (Yunnan).

14. Oreina (Chrysolina) coerulans (Scriba), NEW COMBINATION

Chrysomela coerulans Scr., 1791, Jour. Liebh. Ent. 3: 286 (C. Europe).

Chrysomela angelica Baly, 1878 (nec Reiche), Second Yarkand Mission, 29 (Himalaya).

- Chrysomela bella Jacoby, 1890, Entomologist 23: 253 (Ichang, Hupeh; BM); 1896, Soc. Ent. Belg., Ann. 40: 250.
- Chrysolina bella, Maulik, 1926, Fauna India, Chrys. Halt., 39.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 41; 1936, Soc. Ent. France, Ann. 105: 153.

Chrysolina (Menthastriella) coerulans, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 81.

DISTRIBUTION: NW Himalayas (Chamba), Kashmir, W. China (Hupeh).

15. Oreina (Chrysolina) convexicollis (Jacobson), NEW COMBINATION

Chrysomela convexicollis Jac., 1901, Finska Vet. Soc. Forh. 43: 122 (Mongolia; ? LENIN-GRAD).

Chrysolina convexicollis, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 67.

This species is not included in the key.

DISTRIBUTION: NW China (Mongolia).

## 16. Oreina (Chrysolina) costulata (Achard), NEW COMBINATION

Timarchomela costulata Ach., 1922, Fragm. Ent., 18 (Tali, Yunnan; PRAHA).

Chrysolina costulata, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 37, fig. 29; 1936, Soc. Ent. France, Ann. 105: 150 (Tali, Kwang-si-hien).

DISTRIBUTION: SW China (Yunnan).

17. Oreina (Chrysolina) cuprina dilecta (Bechyně), NEW COMBINATION

Chrysolina (Hypericia) cuprina subsp. dilecta Bech., 1952, Ent. Arb. Mus. Frey 3: 380 (Altai).

This species is not included in the key.

DISTRIBUTION: C. Asia.

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18. Oreina (Chrysolina) dohertyi (Maulik), NEW COMBINATION Fig. 80, b.
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Chrysolina dohertyi Maulik, 1926, Fauna India, Chrys. Halt., 27 (Burma; BM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 37 (Chao-chow); 1936, Soc. Ent. France, Ann. 105: 149.

Chrysolina (Anopachys) dohertyi, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 146.

DISTRIBUTION: SW China (Yunnan), Burma.

YUNNAN: 13, Chao-chow-fu, 2360 m, W. Yunnan, 23. VII-21. IX. 1914, Mell (ZMB).

19. Oreina (Chrysolina) dzhungarica (Jacobson), NEW COMBINATION

Chrysomela dzhungarica Jac., 1910, Rev. Russe d'Ent. 10: 58 (Dzhungaria; ?Moscow). Chrysolina (Taeniosticha) dzhungarica, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 136.

Chrysonna (Tachoshena) azhangarea, beenyhe, 1550, Eht. Ato. Mus. They I. 150,

DISTRIBUTION: NW China (Sinkiang).

20. Oreina (Chrysolina) exanthematica (Wiedemann), NEW COMBINATION

Chrysomela exanthematica Wied., 1821, IN Germar, Mag. Ent. 4: 178.

Chrysomela guttata Gebler, 1817, Ac. Moscou, Mem. 5: 316.

Chrysomela musiva Gebl., 1830, Ledebour Reise 2 (3): 215.

Lithoptera subaenea Motschulsky, 1860 (nec Suffrian), Schrenk's Reisen Amurl. 2: 229, pl. 11, fig. 13 (Amur).



Fig. 80. a, Oreina (Chrysolina) polita adamsii (Baly); b, O. (C.) dohertyi (Maulik).

Chrysomela consimilis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 172.

Chrysolina exanthematica, Maulik, 1925, Fauna India, Chrys. Halt., 22.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 33; 1936, Soc. Ent. France, Ann. 105: 145 (Peiping, Chekiang, Kweichow, Yunnan).—Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10 (51): 8, pl. 1, fig. 1 (Jehol).—Chûjô, 1940, Mushi 13 (1): 5 (N. Korea); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 67 (Korea); 1942, Mushi 14 (2): 58 (Kwangtung).

Chrysolina (Lithopteroides) exanthematica, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 150, 151.

DISTRIBUTION: Siberia, Japan, India, China (Kirin, Hopei, Honan, Chekiang, Anhwei, Kiangsu, Hupeh, Szechuan, Yunnan, Kwangtung).

KWANGTUNG: 3, Canton, III. 1911, Mell (ZMB). YUNNAN: 6, Tche-ping-tcheou (US). HONAN: 1, Yo Chow, X. 1918 (US). HUPEH: 2, Sui-sa-pa, Lichuan Distr., VIII. 1948, Gressitt & Djou (CAS); 1, Hsiaoho, Lichuan, VIII. 1948, Gressitt & Djou (BISHOP); 1, Tan-che-chan (ZMB). ANHWEI: 1, Kiu-hua-Sinn, IX. 1932, Liu (MCZ). KIRIN: 5, Shinkyo (Hsinking), VII. 1939, Tagawa (SK). KIANGSU: 1, Chin-kiang, VII. 1924, Illingworth (BISHOP); 1, Soochow, from Gee (US). SZECHUAN: 8, Suifu, IV, XI-XII. 1923, V, VII. 1924, X-XII. 1928, III, V. 1929, Graham (US).

# 21. Oreina (Chrysolina) fallax (Jacobson), NEW COMBINATION

Chrysomela fallax Jac., 1895, Soc. Ent. Ross., Horae 29: 551 (Amdo; ?LENINGRAD).

Chrysolina fallax, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 68.This species is not included in the key.DISTRIBUTION: NW China (Mongolia).

22. Oreina (Chrysolina) fricata (Bechyně), NEW COMBINATION

Chrysolina (Hypericia) fricata Bech., 1950, Ent. Arb. Mus. Frey 1: 158 (Fukien; PRAHA). DISTRIBUTION: SE China (Fukien).

23. Oreina (Chrysolina) gensanensis (Weise), NEW COMBINATION

Chrysomela gensanensis Weise, 1900, Archiv Naturg. 66: 282 (Korea; ?ZMB).

Chrysolina gensanensis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 36; 1936, Soc. Ent. France, Ann. 105: 148 (Wu Shan, Hupeh, Kweichow).—Chûjô, 1942, Mushi 14 (2): 58 (Kwantung).

Chrysolina (Anopachys) gensanensis, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 155.

DISTRIBUTION: Korea, China (Hupeh, Liaoning, Kweichow).

KOREA: 1, Chemulpo (ZMB).

24. Oreina (Chrysolina) gracilis (Bechyně), NEW COMBINATION

?Chrysolina nikkoensis, Chen, 1934, (nec Jacoby), Rech. Chrysom. Chine et Tonkin, 39; 1936, Soc. Ent. France, Ann. 105: 151 (Kweichow, Kiangsi, Yunnan, Tonkin).

Chrysolina (Hypericia) gracilis Bech., 1950, Ent. Arb. Mus. Frey 1: 157 (Kweichow; PRAHA).

DISTRIBUTION: S. China (Kweichow, Hupeh, Szechuan, Yunnan, Kiangsi, Kwangtung), N. Vietnam (Tonkin).

HUPEH: 1, Liang-hou-keu, IX, 1, Sui-sa-pa, VIII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). KWANGTUNG: 1, Yao Shan, 1933, G. Liu (MCZ). SZECHUAN: 2, Sui-fu, X. 1924, Graham (US).

25. Oreina (Chrysolina) graminis auraria (Motschulsky), NEW COMBINATION

Chrysomela auraria Mots., 1860, Schrenck's Reisen Amurl. 2: 226 (Mongolia; ?type destroyed).

Chrysolina (Euchrysolina) graminis auraria ab. falsocerealis Bechyně, 1950, Ent. Arb. Mus. Frey 1: 85 (?Manchuria; FREY).

DISTRIBUTION: Mongolia, Manchuria.

26. Oreina (Chrysolina) guttifera (Motschulsky), NEW COMBINATION Lithoptera guttifera Mots., 1860, Schrenck's Reisen Amurl. 2: 229 (Amur; ?type lost).

Chrysomela guttifera, Weise, 1898, Archiv Naturg. 64, 1: 199, 200. Chrysolina guttifera var. nigrogemmata, Chûjô, 1942, Mushi 14 (2): 58 (Dairen).

This species is not included in the key.

DISTRIBUTION: N. China (Manchuria, Liaoning).

27. Oreina (Chrysolina) haemochlora (Gebler), NEW COMBINATION

Chrysomela haemochlora Gebl., 1823, Mem. Mosc. 6: 120 (W. Siberia; ?type destroyed).

Timarchoptera hemochlora, Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 188. Chrysolina (Timarchoptera) haemochlora, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 66. DISTRIBUTION: W. Siberia, Mongolia.

## 28. Oreina (Chrysolina) infuscipes (Weise), NEW COMBINATION

Chrysomela fuscipes Ws., 1890, (nec Gmelin, 1790), Soc. Ent. Ross., Horae 24: 279 (Chingan). Chrysomela infuscipes Ws., 1916, Coleopt. Cat. 68: 76 (new name for fuscipes Ws.) Chrysolina infuscipes, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 69.

This species is not included in the key.

DISTRIBUTION: NW China (Mongolia, Chingan).

29. Oreina (Chrysolina) jacobyi (Baly), NEW COMBINATION

Chrysomela Jacobyi Baly, 1878, Ann. Mag. Nat. Hist. ser. 5, 1: 38.

Chrysolina Jacobyi, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 33; 1936, Soc. Ent. France, Ann. 105: 145.

DISTRIBUTION: NE China (Shantung).

30. Oreina (Chrysolina) jeanneli (Chen), NEW COMBINATION

Chrysolina Jeanneli Chen, 1934, Rech. Chrysom. Chine et Tonkin, 37 (Yunnan; PARIS); 1936, Soc. Ent. France, Ann. 105: 149.

DISTRIBUTION: SW China (Yunnan).

31. Oreina (Chrysolina) koltzei (Weise), NEW COMBINATION

Chrysomela koltzei Ws., 1887, Archiv Naturg. 53, 1: 179 (Amur; ?ZMB).

Chrysolina (Hypericia) koltzei Bechyně, 1950, Ent. Arb. Mus. Frey 1: 155.

DISTRIBUTION: SE Siberia, NE China (Manchuria).

# 32. Oreina (Chrysolina) liturata (Swartz), NEW COMBINATION

Chrysomela liturata Swartz, 1808, IN Schoenh., Syn. Ins. 1, 2: 241, nota n, pl. 4, fig. 8 (?Canton; LUND).

Weise (Coleopt. Cat. 68: 98) questionably put this species after *Chrysomela* (*Chrysolina*) and Chen (Soc. Ent. France, Ann. 106: 304) suggested it might belong to *Paropsides*. This species is not included in the key.

DISTRIBUTION: S. China (?Kwangtung).

#### 33. Oreina (Chrysolina) marginata (Linnaeus), NEW COMBINATION

Chrysomela marginata L., 1758, Syst. Nat. ed. 10, 371 (Europe).—Chen, 1934, Arkiv Zool. 27 A (5): 3.

Chrysolina (Chalcoidea) marginata, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 165.

DISTRIBUTION: N. Africa, Europe, W. China (Sinkiang: Urumchi, Tian Shan).

34. Oreina (Chrysolina) nikinoja nikinoja (Bechyně), NEW COMBINATION

Chrysolina (Hypericia) nikinoja Bech., 1950, Ent. Arb. Mus. Frey 1: 155 (Niki Nojo, Korea; FREY).

DISTRIBUTION : Korea.

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35. Oreina (Chrysolina) nikinoja exgeminata (Bechyně), NEW COMBINATION

Chrysolina (Hypericia) nikinoja subsp. exgeminata Bech., 1952, op. cit. 3: 380 (Chikuanshan, Manchuria; FREY).

DISTRIBUTION: NE China.

36. Oreina (Chrysolina) ordinata (Gebler), NEW COMBINATION

Chrysomela ordinata Gebl., 1926, Mem. Mosc. 6: 119 (S. Siberia).—Weise, 1889, Soc. Ent. Ross., Horae 23: 565 (Kansu, Szechuan).

Chrysomela ussuriensis Jacobson, 1901, Finska Vet. Soc. Forh. 43: 126 (new name for aeruginosa Weise, 1887, nec Faldermann, 1835).

Chrysolina ordinata, Chen, 1934, Rech. Chrysom. Chine et Tonkin 38; 1936, Soc. Ent. France, Ann. 105: 150.

Chrysolina (Allohypericia) ordinata, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 159.

DISTRIBUTION: S. Siberia, Mongolia, W. China (Kansu, Szechuan).

37. Oreina (Chrysolina) perforata (Gebler), NEW COMBINATION

Chrysomela perforata Gebl., 1830, Ledebour Reise 2 (3): 216 (W. Siberia).-Weise, 1912, Archiv Naturg. 78: 84 (Mongolia).

Chrysolina perforata, Chen, 1935, Notes d'Ent. Chinoise 3(5): 70.

This species is not included in the key.

DISTRIBUTION: W. Siberia, NW China (Mongolia).

38. Oreina (Chrysolina) pieli (Chen), NEW COMBINATION

Chrysolina pieli Chen, 1935, Notes d'Ent. Chinoise 3: 96, pl. 3 (Kuling; HEUDE).

Chrysolina (Anopachys) pieli, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 146.

This species is not included in the key.

DISTRIBUTION: E. China (Kiangsi).

39. Oreina (Chrysolina) polita adamsi (Baly), NEW COMBINATION Fig. 80, a.

Chrysomela adamsi B., 1879, Ent. Soc. Lond., Trans. 1879: 190 (Oo Bay; Siberia; BM).-Chen, 1934, Arkiv Zool. 27 A 5: 3 (Tien Shan).

Chrysolina (Erythrochrysa) polita adamsi, Bechyně, 1952, Ent. Arb. Mus. Frey 3: 363.

DISTRIBUTION: N. China (Shantung, Mongolia, Sinkiang), Siberia, Iran.

SINKIANG: 1, Kuldja, Tien Shan, Hedin (STOCKHOLM); 4, Tian Shan, Musart (ZMB).

40. Oreina (Chrysolina) poricollis (Motschulsky), NEW COMBINATION Taeniosticha poricollis Mots., 1860, Schrenck's Reisen, Amurl. 2: 228 (Mongolia). Chrysolina poricollis, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 70.

The original description is very brief, and this species is not included in the key. DISTRIBUTION: NW China (Mongolia).

41. Oreina (Chrysolina) porosa (Gebler), NEW COMBINATION

Chrysomela porosa Gebl., 1830, Ledebour Reise 2(3): 217 (Dauria).

Chrysolina porosa, Chen, 1936, Notes d'Ent. Chinoise 3(5): 70. This species is not included in the key.

DISTRIBUTION: Siberia.

# 42. Oreina (Chrysolina) przewalskii (Jacobson), NEW COMBINATION

Chrysomela przewalskii Jac., 1895, Soc. Ent. Ross., Horae 29: 551 (Amdo; ?LENINGRAD). Chrysolina przewalskii, Chen, 1936, Notes d'Ent. Chinoise 3(5): 71.

This species is not included in the key.

DISTRIBUTION: NW China (Amdo).

## 43. Oreina (Chrysolina) pubitarsis (Bechyně), NEW COMBINATION

Chrysomela aeruginosa, Chen, 1934, (nec Faldermann), Arkiv Zool. 27 A (5): 3 (Kansu).

Chrysolina aeruginosa, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 40; 1936, Soc. Ent. France, Ann. 105: 152 (Kansu, Shansi, Hopei).

Chrysolina (Allohypericia) pubitarsis Bech., 1950, Ent. Arb. Mus. Frey. 1: 160 (Peking; PRAHA).

We are not sure if Yuasa's and Chûjô's records (see under *aeruginosa*) belong here or with *aeruginosa* Fald. Our material is all *aeruginosa*.

DISTRIBUTION: N. China (Hopei, Shensi, Kansu).

44. Oreina (Chrysolina) roborowskii (Jacobson), NEW COMBINATION

Chrysomela roborowskii Jac., 1895, Soc. Ent. Ross., Horae 29: 550 (Amdo; ?LENINGRAD). Chrysolina roborowskii, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 71.

This species is not included in the key.

DISTRIBUTION: NW China (Amdo).

45. Oreina (Chrysolina) rufilabris (Faldermann), NEW COMBINATION

Chrysomela rufilabris Fald., 1835, Ac. Petersb., Mem. 2: 443 (Siberia).—Jacobson, 1901, Finska Vet. Soc. Forh. 43: 124.

Chrysolina rufilabris, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 71.

This species is not included in the key.

DISTRIBUTION: Siberia, NW China (Mongolia).

# 46. Oreina (Chrysolina) rugulosa (Gebler), NEW COMBINATION

Chrysomela rugulosa Gebl. 1841, Bull. Mosc. 84: 620 (Altai).

Chrysolina (?Anopachys) rugulosa, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 146.

DISTRIBUTION: C. Asia (Altai).

# 47. Oreina (Chrysolina) sajanica (Jacobson), NEW COMBINATION

Chrysomela sajanica, Jac., 1925, Jahrb. Martijanov. Staatsmus. Minussunsk. 3: 52 (Mongolia; ?Moscow).

Chrysolina sajanica, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 71.

This species is not included in the key.

DISTRIBUTION: NW China (Mongolia).

# 48. Oreina (Chrysolina) stalii (Baly), NEW COMBINATION

Chrysomela stalii Baly, 1860, Jour. Ent. 1: 95 (N. China; BM).

Chrysomela micans Jac., 1892, Entomologist 26 (suppl.): 105 (China; BM).

- Chrysolina stali, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 34; 1936, Ent. Soc. France, Ann. 105: 146.
- Chrysolina micans, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 35; 1936, Ent. Soc. France, Ann. 105: 147 (Kiu-kiang).

This species apparently runs to Bechyně's Allohypericia.

DISTRIBUTION: E. China (Kiangsi).

49. Oreina (Chrysolina) staphylea (Linnaeus), NEW COMBINATION

Chrysomela staphylea L., 1758, Syst. Nat. ed. 10, 370 (Europe).—Jacobson, 1901, Finska Vet. Soc. Forh. 43: 125.

Chrysolina (s. str.) staphylea, Bechyně, 1950, Ent. Arb. Mus. Frey 1:93.

DISTRIBUTION: Europe, Siberia, NW China (Mongolia), N. America.

50. Oreina (Chrysolina) sulcicollis sulcicollis (Fairmaire), NEW COMBINATION

Chrysomela sulicollis Fairm., 1887, Rev. d'Ent. 6: 330 (Pekin; PARIS).

Chrysomela solida Weise, 1898, Archiv Naturg. 64, 1: 207 (Gensan, Korea; ?ZMB).—Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10 (51): 4, pl. 1, fig. 6 (Jehol).

Chrysolina sulcicollis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 33; 1936, Soc. Ent. France, Ann. 105: 145 (Peiping, Shang-hai-kwan).—Chûjô, 1942, Mushi 14(2): 59 (Kwantung).

Chrysolina (Lithopteroides) sulcicollis, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 151.

DISTRIBUTION: W. China, Korea.

HOPEI: Shanghai-kwan, Peiping. MANCHURIA: 2, Chin Shan, 10. IX. 1923, Van Dyke (CAS).

51. Oreina (Chrysolina) sulcicollis koreana (Chûjô), NEW COMBINATION, NEW STATUS

Chrysolina koreana Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 68, fig. 8 (Kogen-Do, Korea; TARI).

Chrysolina (Lithopteroides) koreana, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 151.
We are tentatively calling this a subspecies of sulcicollis, though it might be a synonym.
DISTRIBUTION: Korea.

- 52. Oreina (Chrysolina) tianshanica (Jacobson), NEW COMBINATION
- Chrysomela tianshanica Jac., 1910, Rev. Russe d'Ent. 10: 59 (Tian Shan; ?LENINGRAD).— Breit, 1920, Kol. Rundsch. 8: 84.
- Chrysolina (Taeniosticha) tianshanica, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 136. DISTRIBUTION: NW China (Sinkiang).

53. Oreina (Chrysolina) tonkinea (Fairmaire), NEW COMBINATION

Chrysomela tonkinea Fairm., 1888, Soc. Ent. France, Ann. ser. 6, 8: 372 (Tonkin; PARIS). Chrysolina (Pierryvettia) tonkinea, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 71, 73.

DISTRIBUTION: N. Vietnam (Tonkin).

## 54. Oreina (Chrysolina) trichopila (Csiki), NEW COMBINATION

Chrysomela trichopila Csiki, 1901, IN Horváth, Zichy's Ergebn. 2: 117 (Khalgan; ?BUDA-PEST).

Chrysolina trichopila, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 72.

This species is not included in the key.

DISTRIBUTION: NE China (Hopei).

55. Oreina (Chrysolina) undulata (Gebler), NEW COMBINATION

Chrysomela undulata Gebl., 1833, Bull. Mosc. 6: 308 (Altai; LENINGRAD). Chrysolina undulata, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 72.

This species is not included in the key.

DISTRIBUTION: C. Asia (Altai, Barnaul).

56. Oreina (Chrysolina) unicolor (Gebler), NEW COMBINATION

Chrysomela unicolor Gebl., 1845, Ac. Petersb., Bull. 3: 105 (Dzungaria; ?Moscow).

Chrysolina (Allohypericia) unicolor, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 159.

DISTRIBUTION: NW China (Sinkiang).

57. Oreina (Chrysolina) urjachaica (Jacobson), NEW COMBINATION

Chrysomela urjachaica Jac., 1925, Martijanov Staatsmus. Minussinsk 3: 50 (Mongolia; ?Moscow).

Chrysolina urjachaica, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 72.

This species is not included in the key.

DISTRIBUTION: NW China (Mongolia).

#### 58. Oreina (Chrysolina) virgata (Motschulsky), NEW COMBINATION

Dlochrysa virgata Mots., 1860, Schrenck's Reisen, Amurl. 2: 224, pl. 11, fig. 8 (Amur; ?type lost).

Chrysomela virgata, Doi, 1927, Dobutsugaku Zasshi 39 (468): 396 (Kung-chi-ling, Liaoning).

Chrysolina virgata, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 40; 1936, Soc. Ent. France, Ann. 105: 153 (Nankin).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 70 (Korea); 1941, t. c. (219): 459 (Korea).

Chrysomela eximia Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, 10: 20.

Chrysomela eximia ab. obscurofasciata Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 208, pl. 11, fig. 11.

Chrysolina (Euchrysolina) virgata, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 85, 86.

DISTRIBUTION: N. China, Korea, Quelpart I., Japan.

MANCHURIA: Tchien Shan, 6–8. VI. 1906 (US). KIRIN: Mukden, 28. V. 1928, Ertao-ho-tze, 23. V. 1939, Lukashkin (CAS). KOREA: 4, Kwang-nung, VIII. 1954, VIII. 1961, H. K. Kim.

#### Genus Synerga Weise

The validity of *Synerga* is very questionable, as explained by Maulik (1926, p. 21) and repeated by Chen (1936, Notes d'Ent. Chinoise 3: 83). It may belong to *Chrysolina*.

59. Synerga modesta (Fabricius)

Chrysomela modesta Fabr., 1792, Ent. Syst. 1: 323.

DISTRIBUTION: China, Himalayas.

# Genus Crosita Motschulsky

Crosita Mots., 1860, Schrenck's Reisen Amurl. 2: 190 (type: Chrysomela altaica Gebler;
C. Asia).—Baly, 1879, Ent. Soc. Lond., Trans. 1879: 192, pl. 2, fig. 15.—Marseul, 1883, Abeille 21: 100.—Weise, 1894, Wien. Ent. Ztg. 13: 153.—Reitter, 1912, Fauna Germ. 4: 109.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 43; 1936, Notes d'Ent. Chinoise 5 (3): 73; 1936, Ent. Soc. France, Ann. 105: 155.

Bittotaenia Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 206 (type: Chrysomela salviae Germ.).

#### KEY TO CHINESE SPECIES OF CROSITA

1.	Hind wing not developed (Crosita s. str.)
	Hind wing developed (Bittotaenia); dark blue to violet; venter violet; elytral
	punctures in regular paired rows; length 8.0-10.5 mm
2(1).	Hind tarsal segment 3 with apex slightly emarginate
	Hind tarsal segment 3 with apex deeply cleft
3 (2).	Elytron sulcate; dorsum black, slightly bronzy greenish iridescent; length 9.5-
	11.0 mm 60. alaschanica
	Elytron not sulcate, strongly punctured and rugulose, with 3 raised lines;
	greenish blue, dorsum sometimes black; length 8.5-10.5 mm 68. przewalskyi
4(2).	Elytron sulcate
	Elytron not sulcate7
5 (4).	Elytron with spaces between grooves not alternately wider and narrower; pos-
	terior angle of prothorax not squarish
	Elytron with spaces between grooves alternately wider and narrower, and grooves
	with single rows of large punctures; hind tarsus of $\mathcal{J}$ glabrous beneath in
	middle; length 8-11 mm 62. clementzae
6 (5).	Elytral interstices carinate; venter, head, prothorax and elytral grooves green,
	rest of elytron blue; or cupreous with elytron bronzy green with black
	costae; length 9.5–12.5 mm 63. kowalewskyi
	Elytral interstices slightly elevated, punctured; blue or blackish blue, rarely
	green; length 8–11 mm 64. matronula
7 (4).	Elytron strongly rugose-punctate
	Elytron weakly rugulose-punctate
8 (7).	Prothorax sinuate at side near base; elytral rugae somewhat in rows; length
	10.0-11.5 mm (Jacobson, 1895; S. Siberia) heptapotamica*
	Prothorax straight at side near base; elytral rugae irregular; tarsi of $\mathcal{J}$ broader,
	strongly dilated, segment 1 of hind tarsus with glabrous line beneath; length
	8 mm
9 (7).	Dorsum of more than one color 10
	Dorsum unicolorous, bronzy green; elytron finely but not densely punctured;
	length 6.5–8.0 mm

8.0-12.5 mm...... 61. altaica

## 60. Crosita alaschanica Jacobson

Crosita alaschanica Jac., 1898, Mus. Petersb., Ann. 2: 196, 198 (S. Mongolia; Moscow).— Chen, 1934, Rech. Chrysom. Chine et Tonkin, 43; 1936, Soc. Ent. France, Ann. 105: 155.

Crosita filchnerae Ws., 1903, Exped. Filchn. 10, 1: 92, pl. 3, fig. 4. DISTRIBUTION: NW China (S. Mongolia, Kansu).

#### 61. Crosita altaica Gebler

Crosita altaica Gebl., 1823, Mem. Mosc. 6: 117 (Altai; Moscow).—Jacobson, 1898, Mus. Petersb., Ann. 2: 200.

DISTRIBUTION: C. Asia (Mongolia, Kirghiz steppe, Orenburg).

#### 62. Crosita clementzae Jacobson

Crosita clementzae Jac., 1899, Mus. Petersb., Ann. 3: 9 (E. Dshungaria; Moscow). DISTRIBUTION: N. China (Zungaria).

#### 63. Crosita kowalewskyi Gebler

- Crosita kowalewskyi Gebl., 1836, Bull. Mosc. 9: 344, pl. 5, fig. 4 (Altai; Moscow).—Jacobson, 1898, Mus. Petersb., Ann. 2: 199.
- Crosita kowalewskyi var. cupreo-viridula Jacobson, 1898, l. c., 198 (NW Mongolia).

DISTRIBUTION: C. Asia (W. Mongolia).

HOST: Artemisia.

## 64. Crosita matronula Weise

Crosita matronula Ws., 1894, Wien. Ent. Ztg. 13: 154 (N. Mongolia: Karakorum; BUDA-PEST).—Jacobson, 1898, Mus. Petersb., Ann. 2: 199.

Crosita matronula var. viridula Jacobson, 1898, l. c., 198 (N. Mongolia).

DISTRIBUTION: NW China (N. Mongolia).

## 65. Crosita mellyi (Stål)

Chrysomela mellyi Stål, 1857, Ofv. Vet. Akad. Förh. 14: 60 (Tibet; ?STOCKHOLM).

Crosita coelestina Baly, 1879, Ent. Soc. Lond. Trans. 1879: 193 (N. China; India; Persia; BM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin 43; 1936, Soc. Ent. France, Ann. 105: 156.

Chrysolina coelestina, Maulik, 1926, Fauna India, Chrys. Halt., 33.

Crosita mellyi, Bechyně, 1950, Ent. Arb. Mus. Frey 1: 177.

DISTRIBUTION: Tibet, N. China, Himalayas, India, Afghanistan, ?Iran).

#### 66. Crosita pigra Weise

1963

Crosita pigra Ws., 1894, Wien. Ent. Ztg. 13: 153 (N. Mongolia: Karakorum; BUDAPEST).— Jacobson, 1898, Mus. Petersb., Ann. 2: 199.

DISTRIBUTION: NW China (N. Mongolia).

# 67. Crosita potanini Jacobson

Crosita potanini Jac., 1899, op. cit. 3: 8 (NW Mongolia; Moscow). DISTRIBUTION: NW China (NE Mongolia).

## 68. Crosita przewalskyi Jacobson

Crosita przewalskyi Jac., 1898, op. cit. 2: 197, 198 (S. Mongolia; Moscow). DISTRIBUTION: NW China (S. Mongolia).

## 69. Crosita urumchiana Chen

Crosita urumchiana Chen, 1934, Arkiv Zool. 27 A (5): 2 (Urumchi; Stockholm). DISTRIBUTION: W. China (Sinkiang).

# Genus Ambrostoma Motschulsky

Ambrostoma Mots., 1860, Schrenck's Reisen Amurl. 2: 205 (type: Chrysomela 4-impressa Mots.).—Baly, 1879, Ent. Soc. Lond., Trans. 1879: 192, pl. 2, fig. 16.—Weise, 1898, Archiv Naturg. 44: 196.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 44; 1936, Soc. Ent. France, Ann. 105: 156; 1936, Sinensia 7 (6): 713, 9 figs.
Parambrostoma Chen, 1936, l. c., 718 (type: Ambrostoma sublaevis Chen). Subgenus.

# Key to Chinese species of Ambrostoma

1.	Elytral epipleuron ciliated for posterior 1/3 ( <i>Parambrostoma</i> )2
	Elytral epipleuron ciliated for entire length (Ambrostoma, s. str.)
2(1).	Elytron lacking a humeral row of strong punctures
	Elytron with a short row of strong punctures at base from inner edge of humerus
	to transverse impression (Hope, 1831; Nepal) mahesa*
3 (2).	Pronotum strongly dilated just anterior to middle, and with lateral longitudinal
	depression deep; metasternal process not bordered by a groove 77. sublaevis
	Pronotum not strongly dilated anterior to middle, and with lateral depression
	shallow; metasternal process bordered by a groove
4(1).	Elytral puncturation finer than that of pronotum5
	Elytral puncturation as strong as that of side of pronotum 75. rugosopunctatum
5(4).	Elytron with a large well-defined post-median violaceous patch surrounded with
	green 6
	green
6 (5).	green

Subgenus Ambrostoma, s. str.

#### 70. Ambrostoma (Ambrostoma) fasciatum Chen

Ambrostoma fasciatum Chen, 1936, Sinensia 7 (6): 721, figs. 5, 6 (Tien-mo Shan, Chekiang; U. NANKING).

DISTRIBUTION: E. China (Chekiang).

#### 71. Ambrostoma (Ambrostoma) fortunei Baly

Chrysomela fortunei Baly, 1860, Jour. Ent. 1: 94, 301 (N. China; BM).

- Ambrostoma chinense Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 228 (Shanghai; ?Moscow).
- Ambrostoma fortunei, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 45; 1936, Soc. Ent.
  France, Ann. 105: 157, fig. 6 (Nanking; Chekiang: Hangchow, Ningpo; Kouy-Tcheou: reg. de Pin-fa); 1936, Sinensia 7 (6): 725, fig. 6 (Soochow, Shanghai, Anhwei, Tien-mu Shan, Wenchow, Kiangsi, Fokien).—Chûjô, 1957, Kagawa Univ., Mem. 2 (41): 3 (Changsha).

DISTRIBUTION: China (Honan, Kiangsu, Chekiang, Anhwei, Kiangsi, Fukien, Kweichow, Hunan).

FUKIEN: many, Foochow, 6. V. 1928, Hadden (BISHOP); 1, Chashan, Kienning Distr., VI. 1933, Ngu (LINGNAN); 2, Baek-liang, VI. 1928 (AMNH); 3, Yunling Shan. KWANG-TUNG: 2, Sing-tsz Shan, Linhsien, V. 1933, To (LINGNAN). HONAN: 1, Yo-chow, X. 1919, Loomis (US). KIANGSU: Soochow, Gee (US); 5, Chin-kiang, VI. 1924, Illingworth (BISHOP). CHEKIANG: Chekiang, VII. 1921 (US); 1, Tunglu, 30. III. 1926, Wright (CAS); 4, Ning-Po (ZMB); Hangchow, VI. 1927, Wong (US); X. 1921, Suenson (US); many, VI-VII. 1924, Illingworth (BISHOP). KIANGSI: 5, Chang-tsin-cheng (ZMB); 8, Kiu-kiang (ZSBS).

# 72. Ambrostoma (Ambrostoma) fulgurans Achard

- Ambrostoma fulgurans Ach., 1922, Fragm. Ent., 15 (Peiping?; PRAHA).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 45; 1936, Ent. Soc. France, Ann. 105: 157 (reg. de Peiping); 1936, Sinensia 7 (6): 720 (?Peiping).
  DISTRIBUTION: NE China (?Hopei).
- 73. Ambrostoma (Ambrostoma) omeishana Gressitt and Kimoto, n. sp. Fig. 81.
   Male: Metallic golden green to purplish red; head golden green, slightly bluish pos-

teriorly and brilliant purplish red on central raised portions continuing towards middle from antennal insertions; mouthparts bluish to pitchy red; antenna steely blue, slightly tinged with purplish on scape; pronotum green to bluish, broadly marked with purplish red between middle and side and a golden ring near lateral margin; scutellum blue; elytron largely reddish purple, with suture greenish on parts of external margin, greenish to bluish and with some vague greenish areas or spots on humerus, in transverse postbasal depression, and along median portion of disc behind middle, and at extreme apex; ventral surfaces bright golden to greenish, with parts of abdominal sternites pitchy brown; legs bluish purple. Dorsum glabrous except for a few hairs around mouth parts; antenna moderately clothed with pale pubescence; ventral surfaces with sparse scattered pale hairs; legs with thinly scattered hairs, becoming denser on apex of tibia and on tarsus.

Head 2/3 as broad as prothorax, moderately convex posteriorly, slightly grooved along

middle of occiput, obliquely raised towards middle from antennal insertions and arcuately grooved on posterior portion of frontoclypeus: surface minutely and sparsely punctured. Antenna nearly 1/2 as long as body, moderately slender; scape arched, distinctly punctured; segment  $2\frac{1}{2}$  as long as 1; 3rd 1/2 again as long as 2, distinctly longer than 4: 4-7 subequal, very slightly increasing in thickness: 8-11 longer, but only slightly thicker; 11 slightly longer than 10, slightly narrowed apically. *Prothorax* not quite 2/3 as long as broad, with side subevenly rounded. and broadest near middle: basal margin strongly sinuate, convex in center; anterior margin distinctly emarginate, but nearly transverse in major portions; disc evenly convex except at side, minutely and sparsely punctured; lateral portion raised near margin, with some scattered moderate punctures and more punctures of moderate size in depression parallel to margin. Scutellum triangular, slightly rounded at side and blunt apically. *Elytron* nearly  $3 \times$  as long as broad, convex at side and widest near middle, strongly convex above in central portion; disc in large



Fig. 81. Ambrostoma omeishana n. sp.

part minutely punctured with punctures mostly in paired but somewhat irregular rows and interspaces also with some minute punctures; postbasal depression with some slightly larger punctures and also a row of larger punctures from base to depression on inner side of humerus. *Ventral surfaces* largely minutely wrinkled or punctured; last abdominal sternite distinctly emarginate on each side of middle of apex exposing a considerable portion of apex of tergite. *Legs* rather shiny and nearly impunctate on the femur and bases of tibiae; hind tarsal segment 1 fairly large, not quite as long as 2+3 and somewhat narrower than 3; 5 longer than 1. Length 9.5 mm; breadth 5.8.

DISTRIBUTION: W. China (Szechuan).

Holotype & (U. S. Nat. Mus.), Mt. Omei, 1500 m, Szechuan Prov., W. China, 12-13.

VII. 1925, D. C. Graham.

Differs from *fortunei* Baly in having prothorax evenly rounded at side instead of strongly expanded anteriorly and in being much less heavily punctured and more strongly raised near side of prothorax. Elytral punctures are less regular than in fortunei and partly in single and partly in double rows.

# 74. Ambrostoma (Ambrostoma) quadriimpressum Motschulsky

- Chrysomela quadriimpressa Mots., 1845, Bull. Mosc. 18, 1: 109 (Mongolia; ? type destroyed).—Suffrian, 1851, Linn. Ent. 5: 105 (SE Russia, Siberia, Irkutzk, Baikal).—Weise, 1884, Ins. Deutschl. 6 (3): 413, note (Mongolia).—Marseul, 1886, Abeille 24: 42 (Mongolie, Kjachta; Chine).
- Ambrostoma quadriimpressum, Mots., 1860, Schrenck's Reisen Amurl. 2: 205 (Amur; ?Moscow).—Doi, 1927, Dobutsugaku Zasshi 39 (468): 395 (Kungchu-ling).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 44; 1936, Ent. Soc. France, Ann. 105: 156 (Hopei, Shantung); 1936, Sinensia 7 (6): 724 (Siberia, Dauria, Manchuria, Korea, Peiping, Chin-Wan-Tao).—Chûjô, 1942, Mushi 14 (2): 51 (Dairen).
- Ambrostoma quadriimpressum varr. viridicyaneum, purpureocupreum Jacobson, 1901, Finsk Vet.-Soc. Forh. 43: 127 (Dauria; ?LENINGRAD)

DISTRIBUTION: Siberia, Korea, Mongolia, N. China (Liaoning).

KIRIN: many, Mukden, 15. VIII. 1923, Van Dyke (CAS); 3, Mukden, IX. 1927, Loukashkin (CAS); 2, Mukden, V. 1922, Suenson (US); 2, Harbin, III. 1938, for Gressitt (BISHOP); 1, Harbin (Garden) early X. 1930, v. Jettmar (ZMB); many, Harbin, V. 1925, Dorsett (US); many, Shinkyo (Hsin-king), V. 1939, Tagawa (KIMOTO); Liao-yang, V. 1927, Loukashkin, Ching-wang-tao, Bowditch coll. (US).

HOST: Ulmus sp. (Harbin).

## 75. Ambrostoma (Ambrostoma) rugosopunctatum Chen

Ambrostoma fulgurans, Chen (nec Achard), 1934, Rech. Chrysom. Chine et Tonkin, 45, fig. 4; 1936, Ent. Soc. France, Ann. 105: 157 (reg. de Peiping).

Ambrostoma rugosopunctatum Chen, 1936, Sinensia 7 (6): 718 (China; Ac. SIN.).

DISTRIBUTION: NE China (Hopei).

## Subgenus Parambrostoma Chen

#### 76. Ambrostoma (Parambrostoma) ambiguum Chen

Ambrostoma (Parambrostoma) ambiguum Chen, 1936, Sinensia 7 (6): 728, fig. 9 (Korea with some doubt; BM).

DISTRIBUTION: ?Korea (see note under following species).

## 77. Ambrostoma (Parambrostoma) sublaevis Chen

Ambrostoma sublaevis Chen, 1934, Stylops 3: 66 (Korea, with some doubt; BM); 1936, Sinensia 7 (6): 727 (?Korea).

DISTRIBUTION: Though labelled "Korea, J. C. Bowring", the type was from a collection suspicioned by Gahan to be from N. India, according to Blair in a footnote to Chen's description.

#### Gressitt & Kimoto: Chrysomelidae of China

#### Genus Agrosteomela Gistl

Agrosteomela Gistl, 1857, Vacuna 2: 605 (type: A. caschmirensis Gistl).—Strand, 1916, Archiv Naturg. 82 A (5): 91.—Monrós & Bechyně, 1956, Ent. Arb. 7 (3): 1130.
Paralina Baly, 1859, Ent. Soc. Lond., Trans. ser. 2, 5: 155 (type: Chrysomela indica Hope).
—Chapuis, 1874, Gen. Col. 10: 368, 377.—Maulik, 1926, Fauna India, Chrysom., 47.
—Chen, 1936, Soc. Ent. France, Ann. 105: 158.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 38.

KEY TO CHINESE SPECIES OF AGROSTEOMELA

#### 78. Agrosteomela indica indica (Hope) Fig. 82, c.

Chrysomela indica Hope, 1831, IN Gray, Misc. Zool., 39 (Nepal; BM). Paralina indica, Maulik, 1926, Fauna India, Chrys. Halt., 47, fig. 16. Agrosteomela indica, Monrós & Bechyně, 1956, Ent. Arb. 7 (3): 1130.

Chûjô (1958) recorded *indica* from Taiwan. The Taiwan material appears similar to that from NE India, but somewhat different from that from S. China. Probably *indica*, *chinensis* and *impressiuscula* are all one species with several subspecies. We do not have enough material to solve this for certain by genitalic studies, so this arrangement is tentative.

Maulik recorded *indica* from W. China (Chin-fu Shan), but this may refer to *impressiuscula*.

In the Himalayas there appear to be two slightly different forms, referable to *indica*. The one differing from the typical form is larger and broader, with more golden green pronotum and minutely granulose elytron, giving it a more frosted and less shiny appearance. This suggests *caschmirensis* Gistl, (? = *cashmirensis* Redtenbacher which Maulik synonymized with *indica*), but our material from Simla appears to be typical *indica*, and that from Sikkim appears to be *cashmirensis*.

DISTRIBUTION: ?W. China, Himalayas, N. India, ?Taiwan, ?Japan (Kyushu).

79. Agrosteomela indica chinensis (Weise), NEW COMBINATION, NEW STATUS Fig. 82, d-c.

Paralina chinensis Ws., 1922, Tijdschr. Ent. 65: 54 (Fukien; STOCKHOLM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 46; 1936, Soc. Ent. France, Ann. 105: 158. DISTRIBUTION: S. China (Fukien, Kiangsu, Yunnan, Hupeh).

HUPEH: many, Sui-sa-pa, 1000 m, Lichuan Distr., 20. VIII-12. IX. and Liang-ho-keu, 5. IX. 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: Kuatun, Chungan Distr., 3. VI. 1945, Maa (BISHOP); 7, Yun-ling Shan, Koateng (ZMB). KIANGSU: 1, Sutschau (?Soo-chow), (ZSBS). YUNNAN: Li-kiang, N. Yunnan, 21. VI. 1935, Höne.

- Agrosteomela indica impressiuscula (Fairmaire), NEW COMBINATION, NEW STATUS Fig. 82, b.
- Paralina impressiuscula Fairm., 1878, Soc. Ent. France, Ann. ser. 5, 8: 135 (C. China; ?PARIS).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 46, fig. 40; 1936, Soc. Ent. France, Ann. 105: 152.

DISTRIBUTION: S. China (Szechuan, Sikang, Yunnan, Kweichow), Tonkin.

SZECHUAN: 1, Yachow, IX. 1930, Graham (USNM); 1, Weichow, VIII. 1933, Graham (US). SIKANG: 1, Muping, VIII. 1929, Graham (US); 1, Kulu Distr. (US); 1, nr. Ningyuen-fu, 2200 m, 25. VII. 1928, Graham (US); 1, betw. Wei-chow & Tsa-gu-low, 19. VIII. 1933, Graham (BISHOP); 1, Kulu (US).



Fig. 82. & genitalia. a, Agrosteomela fallaciosa (Stål); b, A. indica impressiuscula (Fairemaire); c, A. indica indica (Hope) (India); d, A. indica chinensis (Weise) (S. China); e, A. indica chinensis (Weise) (Formosa).

#### Genus Humba Chen

Eumela Baly, 1875 (nec Stål, 1867), Ent. Soc. Lond., Trans. 1875: 23 (type: Chrysomela cyanicollis Hope).—Weise, 1902, Deutsche Ent. Zeitschr. 1902: 109.—Maulik, 1926, Fauna India, Chrys. Halt., 49.

Humba Chen, 1934, Rech. Chrysom. Chine et Tonkin, 47 (new name for Eumela Baly); 1936, Soc. Ent. France, Ann. 105: 159.

Eumelaëlla Strand, 1935, Folia Zool.-hydrobiol. 7: 289 (new name for Eumela Baly).

#### Gressitt & Kimoto: Chrysomelidae of China

#### KEY TO CHINESE SPECIES OF HUMBA

#### 81. Humba cyanicollis (Hope)

Chrysomela cyanicollis Hope, 1831, IN Gray, Zool. Misc., 29 (China; OXFORD). Sphaerolina Davidis Fairm., 1878, Soc. Ent. France, Ann. ser. 5, 8: 134 (C. China; PARIS). Humba tonkinensis Weise, 1902, Deutsche Ent. Zeits. 1902: 110 (Mts. Mauson, Tonkin;

ZMB).

- Eumela cyanicollis, Maulik, 1925, Fauna India, Chrys. Halt., 50, fig. 17 (Sikkim, Assam, Burma, Ceylon; Oxford).
- Humba cyanicollis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 47; 1936, Soc. Ent. France, Ann. 105: 159 (Moupin, Sze-Chouen, Kouy-Tcheou, Yunnan, Tonkin).

DISTRIBUTION: SW China (Szechuan, Hupeh, Hunan, Kweichow, Sikang, Yunnan), N. Vietnam (Tonkin) NE India, (Sikkim, Assam), Burma, Ceylon.

HUPEH: many, Sui-sa-pa, 1000 m, Lichuan Distr. VIII-IX. 1948, Gressitt & Djou (CAS); Hsiao-ho, Lichuan, VII. 1948, Gressitt & Djou (BISHOP); 4, Leung-ho-kow, Lichuan, IX. 1948, Gressitt (CAS); 1, Ta-yin-ping to Sui-sa-pa, 5. VIII. 1948, Gressitt (BISHOP). HUNAN: 1, Wukang (ZMB). YUNNAN: 4, Yunnan (ZMB); 4, Ma-chang, 1000 m (US): 6, Yunnan-sen (ZMB). SZECHUAN: 3, Mt. Omei, VII. 1932, Franck (BISHOP); Shin-kai-si, 1500 m, VIII. 1925, Graham (US); 1, Mt. Omei, VIII. 1938, Sage (AMNH); 4, Wen-chuan-hsien, 50 km NNW Kuan-hsien, V-VIII. 1933, Graham (US); 1, Washan, VII. 1923, Graham (US); 1, Sui-fu, Graham (US); 1, Kuanshien, 1934, Graham (US). SIKANG: 4, Ya-chow & Ta-tsien-lu, VIII. 1940, Graham (US); 1, Si-gi-pin, V. 1925, 3, Mu-ping VII. 1929, Graham, (US).

#### Genus Phaedon Latreille

- Phaedon Latr., 1829, IN Cuvier, Regne Anim. ed. 2, 5: 151.—Dejean, 1837, Cat., ed. 3, 429.—Redtenbacher, 1845, Gatt. Deutsch. Käferf., 116; 1849, Fauna Austr., ed. 1, 554.—Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 221 (type: Chrysomela carniolica Dufn.).—Fairmaire, 1868, Gen. Col. Eur. 4: 233.—Stål, Monogr. Chrysom. Amer., 316.—Chapuis, 1874, Gen. Col. 10: 371.—Reitter, 1912, Fauna Germ. 4: 133. —Maulik, 1926, Fauna India, Chrys. Halt., 59 (type: Chrysomela armoraciae L.; Europe, N. Asia, N. America).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 49; 1936, Ent. Soc. France, Ann. 105: 160.
- Alitene Gistl, 1857, Vacuna, 2: 530.—Strand, 1916, Archiv Naturg. 82 A (5): 91.—Monrós & Bechyně, 1956, Ent. Arb. 7 (3): 1130.
- Orthosticha Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 196 (type: Plagiodera Bonariense Sahlb.).

Emmetrus Motschulsky, 1860, l. c., 221 (type: Chrys. betulae F.).

Until more material is studied from various parts of China and Central Asia, we are inclined to question the identifications of a number of the existing Chinese records. There is the possibility that *brassicae* is the same as, or a subspecies of, *armoraciae*, and also that the Chinese records of *armoraceae* and *concinnus* are erroneous. We are also doubtful about the validity of *mellyi*. Thus we are not including these in the key.

## KEY TO CHINESE SPECIES OF PHAEDON

#### 82. Phaedon'brassicae Baly

- Phaedon Brassicae Baly, 1874, Ent. Soc. Lond., Trans. 1874: 174 (Nagasaki, on turnips; BM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 48, fig. 41; 1936, Soc. Ent. France, Ann. 105: 161, fig. 41 (Kiangsi, Kweichow, Yunnan, Tonkin).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 13 (Taiwan).—Chûjô & Kimoto, 1961, Pac. Ins. 3 (1): 154 (Japan hosts).
- Phaedon incertum Baly, 1874, Ent. Soc. Lond., Trans. 1874: 175 (Nagasaki; BM).—Weise, 1922, Tijdschr. Ent. 65: 55 (Fokien: Futschau).

Phaedon baolacensis Achard, 1926, Fragm. Ent., 139 (Tonkin; PRAHA).

?Phaedon armoraciae, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 49; 1936, Ent. Soc. France, Ann. 105: 161 (Peiping).

?Phaedon concinnus, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 49; 1936, Ent. Soc. France, Ann. 105: 161 (Kansu, Mongolia).

DISTRIBUTION: China (Kiangsu, Anhwei, Chekiang, Kiangsi, Fukien, Hupeh, Hunan, Kweichow, Szechuan, Kwangtung), N. Vietnam (Tonkin), Taiwan, Ryukyu Is., Japan.

KIANGSU: 2, Nanking, 1923, Van Dyke (CAS). ANHWEI: 1, Tai-ping-shien, X. 1932, Liu (MCZ). CHEKIANG: 6, Ning-Po (ZMB); 4, Tung-lu, XI. 1925, Wright (CAS). KIANGSI: 4, T'en-gan (ZMB). FUKIEN: Foochow, Kellogg (CAS); many, Yungan City, IV. 1941, Maa, and Shaowu City, III. 1944, Maa (CAS, BISHOP). KWANGTUNG: Hauleng, Tin-tong, Lohchang Distr. VIII. 1947, Tseng & Lam (LINGNAN); 1, Lo-chang, 1947, Gressitt (BISHOP); Tsha-jiu San, V-VI. 1912, Mell (ZMB). HUNAN: Pushi, Luki, XI. 1938, Maa. HUPEH: many, Sui-sa-pa, 1000 m, 19. VIII-17. IX. 1948, Gressitt & Djou (CAS, BISHOP). SZECHUAN: 1, Kuan-shien, 900 m, 1930, Graham (US); 1, nr. Washan, VI. 1930, Graham (US); Wanhsien, X. 1948, Djou. HEILUNGKIANG: 1 (possibly referable to *armoraciae*), Hingan (Kingan), VIII. 1923, Van Dyke. KIRIN: 1, Wei-scha-che, V.

1938 and Mao-er-schan, 30. V. 1937 (FREY). SIBERIA: 1, Okeanskya, VIII. 1923, Cockerell (US).

HOSTS: Allium cepa, Beta vulgaris, Brassica chinensis, Capsella bursa-pastoris, Chrysanthemum coronarium, Daucus carotae, Lactuca sativa, Raphanus sativus, Rorippa atrovirens (Japan).

# 83. Phaedon chinensis Gressitt and Kimoto, n. sp. Fig. 83, a.

Broad, strongly convex; reddish pitchy with a slight bronzy tinge, more reddish near external margin of elytron, on mouthparts, coxae and sides and apex of abdomen; remainder of ventral surfaces darker and more metallic; antenna moderately tinged with reddish. Body almost glabrous above, with a few short pale hairs on anterior portion of head; antenna with a few pale hairs, particularly with oblique ones at apices of segments; ventral surfaces nearly glabrous; legs with some short pale golden hairs on coxae and on inner borders and apices of tibiae, and on tarsi.

Head less than 1/2 as broad as prothorax, broader than long, smooth and finely punctured to frosted; occiput somewhat evenly convex and flattened above; vertex depressed at center and transversely slightly depressed between upper eye-lobes; antennal supports slightly raised, separated by median depression; frontoclypeus not distinct from vertex, depressed above and somewhat raised towards middle of apex; labrum transverse, slightly emarginate in middle of apex and bearing a transverse row of distinct punctures. Antenna nearly 1/2 as long as body, almost as stout as scape in distal 2/5; scape a little longer than broad, convex anteriorly, somewhat compressed and slightly punctured; segment 2 slightly longer than broad, 1/2 as long as 1; 3 nearly as long as 1, relatively slender, slightly thickened distally; 4 nearly as long as 3, stouter in middle; 5 similar to 4, longer than 6; 7 longer than 6, stouter; 8-10 subequal, fairly stout, each about 1/2again as long as broad; 11 nearly as long as 9+10. Prothorax nearly 3/5 as long as broad in average length, crescentic-trapeziform, with anterior margin strongly and subevenly emarginate and basal margin strongly convex; apex over 3/5 as broad as base; side moderately and evenly convex; disc somewhat evenly convex, finely punctured with punctures much smaller than spaces between them. Scutellum subequilaterally triangular, very slightly longer than broad, with sides feebly convex and surface not distinctly punctured. *Elytron* about 1/2 as broad as long, strongly convex, particularly raised just behind basal 1/3; margin subevenly rounded, not quite visible from above for portion below humerus and posterolateral convexity; disc smooth and even, with 10 regular rows of distinct fine punctures, with punctures mostly longer than broad and separated by spaces about as large as punctures; interspaces nearly impunctate. Ventral surfaces rather sparsely punctured, the punctures more distinct on metepimeron and less distinct on metasternum except along borders and along an oblique ridge from near middle of anterior margin towards posterolateral angle of metasternum; abdomen largely impunctate except near base of sternite 1. Legs feebly punctured; femora nearly parallel-sided; hind tarsus with segment 1 about as long as 2+3 and slightly shorter than 5. Length 5.5 mm; breadth 4.45.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 31. VIII. 1948, Gressitt & Djou.

Differs from *fulvescens* Ws. in being distinctly larger, much more strongly convex and



Fig. 83. a, Phaedon chinensis n. sp.; b. P. fulvescens Weise.

much darker, and in having the body more finely punctured throughout.

#### 84. Phaedon fulvescens Weise Fig. 83, b.

Phaedon fulvescens Ws., 1922, Tijdschr. Ent. 65: 55 (Mt. Mauson, Tonkin; PARIS).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 49; 1936, Ent. Soc. France, Ann. 105: 162 (Kweichow: Gan-chouen, Yin-yi-fu & Chen-fong; Canton).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 16 (Taiwan).

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kweichow, Kwangtung), Taiwan. KWANGTUNG: 2, Lung-ping-hui, Linhsien Distr., 16. V. 1934, To (LINGNAN, BI-SHOP); 1, Yim-na Shan, 500 m, nr. Mei-hsien, 10–15. VI. 1936, Gressitt (CAS); 2, Canton, Mell (ZMB).

#### 85. Phaedon mellyi Achard

Phaedon mellyi Ach., 1922, Fragm. Ent., 137 ("Hong Kong"; PRAHA).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 49; 1936, Soc. Ent. France, Ann. 105: 162 (Chine bor.: Hong-kung?).

DISTRIBUTION: S. China.

This species is not included in the key.

## Genus Sternoplatys Motschulsky

Sternoplatys Mots., 1860, Schrenck's Reisen Amurl. 2: 220 (type: S. fulvipes Mots.; Amur). —Jacobson, 1900, Soc. Ent. Ross., Horae 35: 90.
#### Gressitt & Kimoto: Chrysomelidae of China

#### KEY TO CHINESE SPECIES OF STERNOPLATYS

- - elytral interstices finely punctured; length 3.3-4.0 mm...... 88. weisei

## 86. Sternoplatys clementzi Jacobson

Sternoplatys clementzi Jac., 1901, Finska Vet. Soc. Forh. 43: 131, nota (nr. Urga, N. Mongoka; ?LENINGRAD).

DISTRIBUTION: NW China (N. Mongolia).

## 87. Sternoplatys fulvipes Motschulsky

Sternoplatys fulvipes Mots., 1860, Schrenck's Reisen Amurl. 2: 220 (Amur; ?type lost).

Sternoplatys fulvipes var. piceipes Jacobson, 1901, Finska Vet. Soc. Forh. 43: 133 (Ussuri; ?LENINGRAD).

DISTRIBUTION: SE Siberia, NE China (Manchuria).

#### 88. Sternoplatys weisei Csiki

Sternoplatys Weisei Csiki, 1906, IN Horváth, Zichy's Reise 2: 118 (Urga, Mongolia; BUDA-PEST).

DISTRIBUTION: NW China (Mongolia).

#### Genus Colaphellus Weise

Colaphus Redtenbacher, 1845 (nec Chevrolat), Gatt. Deutsch. Käferf., 116 (type: Chrysomela sophiae Schall).—Weise, 1882, Ins. Deutschl. 6(2): 303.—Everts, 1903, Col. Neerl. 2: 448.

Colaspidema Redtenbacher, 1874, Fauna Austr. ed. 3, 2: 484 (part).

Colaphellus Ws., 1916, Coleopt. Cat. 68: 113 (new name for Colaphus Redt.).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 50; 1936, Ent. Soc. France, Ann. 105: 162.

A key is not presented because we are not certain whether *alpinus* and *nitidicollis* are actually distinct from *bowringii* or not. Also, we are not certain as to whether *sophiae* actually occurs in China or not. We are referring one specimen to the latter with some question.

89. Colaphellus alpinus Gebler

- Colaphellus alpinus Gebl., 1833, Bull. Mosc. 6: 307 (Altai; ?LENINGRAD).—Weise, 1887, Archiv Naturg. 53, 1: 173.
  - DISTRIBUTION: C. Asia (Altai, Kjachta).

#### Pac. Ins. Mon.

## 90. Colaphellus bowringii Baly Fig. 84, a.

- Colaphellus Bowringii Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 15: 35 (N. China; BM).—
  Chen, 1934, Rech. Chrysom. Chine et Tonkin, 50, fig. 42; 1936, Ent. Soc. France, Ann. 105: 163 (Peiping; Chen-Si; Che-kiang; Ningpo; Kouy-Tcheou; reg. de Pinfa; Canton; Tonkin).—Chûjô, 1957, Kagawa Univ. Fac. Lib. Arts & Ed., Mem. 3 (47): 3 (Kiangsu).
- Colaphellus grouvellei Achard, 1926, Fragm. Ent., 130 (Tali, Yunnan; Kweichow; Nanking; PRAHA).

DISTRIBUTION: China (Hopei, Kansu, Shensi, Shantung, Kiangsu, Chekiang, Kiangsi, Szechuan, Kweichow, Kwangtung), N. Vietnam (Tonkin).

SZECHUAN: 5, Wanhsien, X. 1948, Gressitt & Djou (CAS); 1, Shin-kai-si, Mt. Omei, Graham (US); many, Sui-fu, 1923, Graham (US); 2, Ta-ning-ho, V–VI. 1904, Blackwelder (US). HUPEH: many, Sui-sa-pa, 1000 m, VIII–IX, and Liang-ho-keu, Lichuan, IX. 1948, Gressitt & Djou (CAS, BISHOP); many, Gau-yu-tai to Wang-chia-ying, IX. 1948, Djou (BISHOP). KIANGSU: 1, Yu-kao-ku nr. Nanking, 1925, Porter (US). SHANTUNG: 2, W. Shantung, X–XI. 1903, Blackwelder (US). LIAONING: 3, Mukden, VI. 1928, 1, Liaoyang, VI. 1928, Loukashkin (CAS); Yablonya, 16. VI. 1940, Weymarn. KIRIN: Harbin (Charbin) 18. V. 1950 (FREY); 1, Ho-ten, VI. 1939, Tagawa (KIMOTO); 1, Er-sen-tien-tze, VI. 1940, Weymarn (CAS). HOPEI: 1, Peiping, VIII. 1932, Liu (MCZ). ANHWEI: Kiuhua Shan, IX. 1932, Liu (MCZ). CHEKIANG: Tung-lu, 30. III. 1926, Wright (CAS); Ningpo (ZSBS). FUKIEN: many, Bohea Hills, Chungan, XI. 1938, Maa (BISHOP). HUNAN: Pushih, Luki, 31. III. 1939, Maa (BISHOP). KWANGSI: 1, Pei-liu, V. 1933, Liu (MCZ); 1, Yue-ling, V. 1933, Liu (MCZ); 2, Hsiang-shien, V. 1933, Liu (MCZ). KWANGTUNG: Lin-hsien, 16–18. IV. 1934, To (LINGNAN).

HOST: Chinese cabbage (Lichuan).



Fig. 84. a, Colaphellus bowringii Baly; b, Gastrolina depressa Baly; c, Plagiodera borealis n. sp.

## 91. Colaphellus nitidicollis Weise

Colaphellus nitidicollis Ws., 1889, Soc. Ent. Ross., Horae 23: 601 (Amdo; ?ZMB). DISTRIBUTION: C. Asia (Amdo).

## 92. Colaphellus sophiae (Schaller)

Chrysomela sophiae Schall., 1783, Hall. Ges., Abh. 1: 272 (Europe). Colaphus sophiae, Reitter, 1912, Fauna Germ. 4: 125, pl. 144, fig. 7 (Europe).

The specimen cited below is somewhat questionably assigned to this species. DISTRIBUTION: Europe, Asia Minor, NE China (Manchuria).

LIAONING: 1, Mukden, 30. III. 1928, Loukashkin (CAS)

HOSTS: Sisymbrium Sophia, Raphanus raphanistrum.

## Genus Gastrophysa Chevrolat

Gastrophysa Chevr., 1837, IN Dejean, Cat. Col. 405, 429; 1843, IN d'Orbigny, Dict. Univ. Hist. Nat. Paris 3: 656 (type: Chrysomela polygoni L.).—Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 179.—Chapuis, 1874, Gen. Col. 10: 369.—Barber & Bridwell, 1949, Brooklyn Ent. Soc., Bull. 35: 6.—Jolivet, 1951, Inst. R. Sci. Nat. Belg., Bull. 27 (21): 1.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 18.

Gastroeidea Hope, 1840, Col. Man. 3: 164.

Gastroidea Gemminger & Harold, 1874, Cat. Col. 11: 3403 (emend.).—Weise, 1882, Ins. Deutschl. 6 (2): 306.—Reitter, 1912, Fauna Germ. 4: 125.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 43; 1936, Soc. Ent. France, Ann. 105: 163.

This is a strictly Holarctic genus, in China found only in the northern half, to date.

## Key to Chinese species of Gastrophysa

1.	Length of body over 3.5 mm
	Length of body about 3.0 mm; blackish blue with head, prothorax and legs reddish brown; elytron minutely punctured (perhaps not in this genus)
2.	Dorsum metallic, varying from green to blackish steel blue 3
	Dorsum yellowish testaceous with scutellum and suture black; length 4 mm
3.	Appendages and prothorax concolorous with body; body length usually over 5 mm 4 Prothorax, bases of antenna and legs reddish; remainder of body bluish green;
	length 4.5 mm
4.	Humeral callus distinct, bordered internally with a depression; elytral puncturation fine; last abdominal sternite bordered with yellowish; length 4.8-6.0 mm
	Humeral callus not very distinct, not clearly separated by a depression; elytral puncturation not very fine; last abdominal sternite not bordered with pale; length 5.7 mm (Weise, 1887; SW Siberia) lenta

## 93. Gastrophysa atrocyanea Motschulsky

Gastrophysa atrocyanea Mots., 1860, Schrenk's Reisen Amurl. 2: 222, pl. 11, fig. 3 (E. Siberia, Amour; type lost).—Jolivet, 1951, Inst. R. Sci. Nat. Belg., Bull. 27 (21): 14,

fig. 9 (Peiping, Wu-shan, Soo-chow, Ningpo, Nanking, Shanghai, N. O. Szechuan; Tonkin; Formose; Japon).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 19 (Taiwan).

Gastroidea atrocyanea, Gemminger & Harold, 1874, Cat. Col. 11: 3403.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 72 (Korea).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 52; 1936, Ent. Soc. France, Ann. 105: 164 (Peiping; Hupeh: Wushan; Kiangsu; Ningpo).

Gastroidea tonkinea Achard, 1926, Fragm. Ent., 134 (Tonkin; PRAHA).

Specimens from Mongolia are more greenish or bronzy than those from E. China, but perhaps do not represent a different race.

DISTRIBUTION: E. Siberia, China (Liaoning, Hopei, Hupeh, Hunan, Kiangsu, Kiangsi, Fukien, Chekiang, Szechuan, Kansu), Korea, Japan, N. Vietnam (Tonkin).

LIAONING: Liao-yang, 28. V. 1927, on *Rumex*, Loukashkin. KANSU: 6, K'ing-iangfou (King-yang), E. Kansu (ZMB). HUNAN: 1, Luki: Pushin, II. 1939, Maa (BISHOP). ?CHAHAR: Shi-wan-tsze, Hiu-mou, Kiang-keou (ZMB). SZECHUAN: 1, Kuanhsien, 1930, Graham (US). KIANGSI: Chang-tsin-cheng (ZMB). FUKIEN: 1, Yungan City, IV. 1941, Maa (BISHOP). KIANGSU: 1, Nanking, IX. 1923, Van Dyke (CAS); Ching-kiang, 10. VI. 1924, Illingworth (BISHOP). CHEKIANG: 2 (ZMB), 2, Tung-lu, II. 1926, Wright (CAS).

HOST: Rumex japonicus Meisn., Rumex sp.

## 94. Gastrophysa mannerheimi (Stål)

Phytodecta mannerheimi Stål, 1858, Ofv. Vet.-Ak. Forh. 15: 252 (Siberia; ? STOCKHOLM).

Gastrophysa suturalis Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 222 (Dauria; ?type lost).—Marseul, 1888, Abeille 25: 79 (377) (Dauorie).

Gastrophysa popovi Marseul, 1888, l. c., 78 (376) (Mongolia).

Gastroidea amoena Weise, 1889, Soc. Ent. Ross., Horae 23: 602 (Mongolia).

- Gastroidea mannerheimi, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 51; 1936, Ent. Soc. France, Ann. 105: 164 (Peiping, Mandchourie).
- Gastrophysa mannerheimi, Jolivet, 1951, Inst. R. Sci. Nat. Belg., Bull. 27 (21): 8, fig. 5-6 (Siberie Or., Chine, Turkestan).

DISTRIBUTION: C. Asia, N. China (Manchuria, Hopei).

#### 95. Gastrophysa polygoni (Linnaeus)

Chrysomela polygoni L., 1758, Syst. Nat. ed. 10, 370 (Europe; ?UPSSALA).

Gastrophysa polygoni, Redtenbacher, 1874, Fauna Austr. ed. 3, 2: 481.—Jolivet, 1951, Inst. R. Sci. Belg., Bull. 27 (21): 10 (Mongolie, Siberie, Turkestan).

Gastroidea polygoni, Weise, 1884, Ins. Deutschl. 6 (2): 308 (Siberia, N. America).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 52; 1936, Ent. Soc. France, Ann. 105: 164 (Peiping).—Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10 (51): 10, pl. 1, fig. 5.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 73 (Korea); 1942, Mushi 14 (2): 59 (Kwantung).

DISTRIBUTION: Europe, W. Asia (Turkestan), Siberia, N. America, N. China (Mongolia, Liaoning, Hopei), Korea.

LIAONING: 2, Mukden, 8. VIII. 1927, and Kiaoyang, 5. V. 1927, Loukashkin (CAS, BISHOP).

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#### 96. Gastrophysa ruficeps Gebler

Gastrophysa ruficeps Gebler, 1845, Ac. Petersb., Bull. 3: 106 (no locality); 1860, Bull. Mosc.
23 (3): 35.—Jolivet, 1951, Inst. R. Sci. Belg., Bull. 27 (21): 35 (China; Djoungarie).
Jolivet questions whether this species actually belongs to Gastrophysa or not.
DISTRIBUTION: NW China (Dzungaria).

#### Genus Gastrolina Baly

Gastrolina Baly, 1859, Ann. Mag. Nat. Hist. ser. 3, 4: 61 (type: G. depressa Baly).—
Chapuis, 1874, Gen. Col. 10: 368, 376.—Harold, 1877, Deutsche Ent. Zeits. 21: 362.
—Marseul, 1888, Abeille 26: 17.—Chen, 1931, Soc. Ent. France, Bull. 1931: 129; 1934, Rech. Chrysom. Chine et Tonkin, 52; 1936, Soc. Ent. France, Ann. 105: 165.
Linastica Motschulsky, 1860, Schrenk's Reise Amurl. 2: 200 (type: Chrysomela peltoidea

# Gebl.).

## KEY TO CHINESE SPECIES OF GASTROLINA

1.	Lateral margin of prothorax strongly sinuate, widened and convex anteriorly; an-
	tennal base brownish green 2
	Lateral margin of prothorax nearly straight; antennal segments 2-4, and part of 1,
	testaceous
2.	Claw segment of each tarsus strongly bidentate below at base of claws 97. depressa
	Claw segment of each tarsus very feebly bidentate below claws (Chen 1936; Tonkin)
	tonkinea*

## 97. Gastrolina depressa Baly Fig. 84, b.

- Gastrolina depressa Baly, 1859, Ann. Mag. Nat. Hist. ser. 3, 4: 61 (N. China; BM).— Chûjô & Kimoto, 1960, Niponius, Takamatsu 1 (4): 4 (Japan; *thoracica* synonymized).
- Gastrolina thoracica Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 228 (Amur; BM); 1874, op. cit. 1874: 172 (Japan).—Chen, 1931, Soc. Ent. France, Bull. 1931: 129, fig. la; 1934, Rech. Chrysom. Chine et Tonkin, 53, fig. 43; 1936, Soc. Ent. France, Ann. 105: 165 (Peiping; Hupeh: Wu-shan; Kiangsi; Chekiang: Hangchow, Ningpo; Canton; Siberie; Japan).
- Gastrolina thoracica var. immaculicollis Chen, 1936, Notes d'Ent. Chinoise 3(5): 83 (Kiangsu: Ihing; Kiangsi; Chekiang: Hangchow).
- Gastrolina thoracica var. cupricollis Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (219): 459 (Korea).

The varr. *immaculicollis* and *cupricollis* are the same as typical *depressa*. Thus *thoracica* is a color form of *depressa* with center of pronotal disc submetallic. Formerly, *depressa* was erroneously treated as a synonym of *peltoidea* Gebler.

DISTRIBUTION: Siberia, Japan, China.

SZECHUAN: many, Wan-hsien, X. 1948, Djou (CAS, BISHOP); 5, Chang-tang-ching, Wanshien, X. 1948, Gressitt & Djou (CAS); 2, Lung-chue-pa to Chang-tau-ching, IX. 1948, Gressit & Djou (BISHOP); 1, Ya-chow, VII. 1940, Graham (US); 3, Wen-chuan, 1500 m, XI-XII. 1934, Graham (US). SHENSI: 2, Chin-ling Mts., IV-V. 1904, Blackwelder (US). FUKIEN: 1, Fukien, XI. 1903, Weise (US). KWANGTUNG: many, Tsha-jiu-san, V. 1911, Mell; Fung-wan, 20. IX. 1910, 10. V. 1911, Mell (ZMB, BISHOP).

HOSTS: Juglans ailanthifolia Carr.; Pterocarya rhoifolia Zieb. & Zucc. (Japan).

98. Gastrolina peltoidea (Gebler) Fig. 87, b.

Chrysomela peltoidea Gebl., 1832, Nouv. Mem. Mosc. 2: 74 (E. Siberia).

Linastica peltoidea, Motschulsky, 1860, Schrenk's Reisen Amurl. 2: 200 (E. Siberia, Amour; ?type lost).—Heyden, 1884, Deutsche Ent. Zeits. 28: 292 (Chabarovsk, Amur).

- Gastrolina japana Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 210, pl. 11, fig. 12 (Japan; BM).—Chûjô & Kimoto, 1960, Niponius, Takamatsu 1 (4): 4 (synonymized with G. peltoidea Gebl.); 1961, Pac. Ins. 3 (1): 151 (host).
- Gastrolina peltoidea, Marseul, 1888, L'Abeille 25: 17 (Amur, Japan).—Jacobson, 1909, Käfer Russl., pl. 57, fig. 18.—Chen, 1931, Soc. Ent. France, Bull. 1931: 129; 1934, Rech. Chrysom. Chine et Tonkin, 53; 1936, Soc. Ent. France, Ann. 105: 165 (N. China, E. Siberia, Japan).

DISTRIBUTION: E. Siberia, NE China, Japan.

SIBERIA: Ussuri, Anutschina (ZMB); 1, E. Siberia, v. Bodemeyer (ZSBS).

HOST: Alnus hirsuta Turcz. (Japan).

#### Genus Prasocuris Latreille

Prasocuris Latr., 1802, Hist. Nat. Crust. Ins. 3: 224 (type: C. phellandrii L.).—Chapuis, 1874, Gen. Col. 10: 372 (part).—Weise, 1884, Ins. Deutschl. 6 (3): 529.—Reitter, 1912, Fauna Germ. 4: 132.

## KEY TO CHINESE SPECIES OF PRASOCURIS

#### 99. Prasocuris phellandrii (Linnaeus)

Chrysomela phellandrii L., 1758, Syst. Nat. ed. 10, 376 (Europe).

Prasocuris phellandrii, Weise, 1884, Ins. Deutsch. 6 (3): 531 (Europe, Sibirien, N. Amerika).
 —Reitter, 1912, Fauna Germ. 4: 132, pl. 146, fig. 5; Liu, 1935, Lingnan Sci. Jour.
 14 (3): 433 (Chihli, Hopei).—Chen, 1936, Notes d'Ent. Chinoise 3 (5): 78 (Hopei).

Perhaps Liu's record is open to question. Chen repeated the record without comment. We have seen no material.

DISTRIBUTION: Europe, Siberia, N. China (Hopei), N. America.

HOSTS: Cicuta virosa, Sium latifolium, Oenanthe (Europe).

## 100. Prasocuris weisei Reitter

Prasocuris weisei Reitt., 1901, Wien. Ent. Ztg. 20: 163, pl. 3, fig. 8 (Altai; ?BUDAPEST).— Chen, 1936, Notes d'Ent. Chinoise 3 (5): 79 (Altai).

DISTRIBUTION: C. Asia (Altai).

## Genus Plagiodera Chevrolat

Plagiodera Chevrolat, IN Dejean, Cat. Col., 404.—Redtenbacher, 1845, Gatt. Deutsch. Käferf., 116.—Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 197 (type: Chrysomela armoraciae Fab.=versicolora Laich.).—Weise, 1898, Archiv Naturg. 64: 211.—Maulik, 1926, Fauna India, Chrysom., 60.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 54; 1936, Soc. Ent. France, Ann. 105: 166.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 29.—Monrós & Bechyně, 1956, Ent. Arb. 7 (3): 1130.

Plagiosterna Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 196 (type: Plagiosterna rufolimbata Motsch.).

Linamorpha Motschulsky, 1860, l. c.: 197 (type: Linamorpha erythroptera Erich.).

Plagiomorpha Motschulsky, 1860, l. c.: 200 (type: Chrysomela californica Roger).

#### KEY TO CHINESE SPECIES OF PLAGIODERA

1.	Abdominal sternite 1 with a prominent carina near each coxa
2 (1).	Dorsum coppery red; length 4.0-6.3 mm
3(1).	Smaller size of insects: smaller than 4.5 mm
- (-)-	Larger size of insect: entirely reddish ochraceous: length 5.8–6.8 mm 102, horealis
4 (3).	Basal border of elvtron margined, at least externally: pronotum without median
. (-).	longitudinal bluish green stripe
	Basal margin of elytron not margined; head and pronotum red. latter with a
	median longitudinal bluish green stripe, broader posteriorly; elvtron metallic
	green, slightly bronzy: length 4.4 mm 105. maculicollis
5(4).	Head with a small depression on each side between median groove and eve
- (.).	Head lacking a small depression on each side between eyes
6(5).	Head and pronotum red; elytron metallic blue, sometimes slightly greenish, ex-
- (-)-	cept for dark reddish lateral margin; length 3.8-4.5 mm 104. hanojensis
	Dorsum vellowish; elytron with suture and 6 stripes blackish blue; length 4.0-
	4.5 mm
7(5).	Side of elytron with 3 regular series of punctures, the penultimate close to margi-
. (-)-	nal row and with widely spaced punctures
	Side of elvtron with 3-4 very irregular series of punctures; yellow, elytron with
	4 small black spots; length 3.3 mm (Chen, 1936; Tonkin) octomaculata
8(7).	Median puncture-row of marginal space with punctures widely spaced and some-
	what irregular; head black; lateral margins of pronotum and elytron reddish
	brown; central portion of pronotum black and inner portion of elytron dark
	metallic green; length 4.5 mm 101. bicolor
	Median puncture-row of marginal space with punctures regular; color variable;
	generally blue or bronzy brown, sometimes with elytron dark and pronotum
	orange, or with body entirely pale; length 4.0-4.5 mm 107. versicolora

#### 101. Plagiodera bicolor Weise

Plagiodera bicolor Ws., 1889, Soc. Ent. Ross., Horae 23: 606 (Kansu; ZMB).-Chen, 1934,

Rech. Chrysom. Chine et Tonkin, 59; 1936, Ent. Soc. France, Ann. 105: 171. DISTRIBUTION: NW China (Kansu).

#### 102. Plagiodera borealis Gressitt and Kimoto, n. sp. Fig. 84, c.

*Female*: Entirely reddish ochraceous, slightly duller on last 4 antennal segments. Body nearly glabrous except for pubescence on tarsal pads, apices of tibiae and apex of abdomen.

*Head* about 2/3 as broad as prothorax; occiput weakly convex, feebly depressed medially, finely and not very closely punctured; frons a little more densely punctured. depressed at apex; labrum moderately concave apically; antennal insertion close to frons and eye; gena extremely short. Antenna 1/3 as long as body, moderately flat; segment 1 thickened in middle and slightly arched; 2 slightly longer than broad; 3 nearly as long as 1 and fairly slender; 4 flattened, nearly as broad as long; 5 distinctly broader than long and about as long as 4; 6-10 each expanded anteriorly and nearly  $2\times$  as broad as long; 11 flattened and obtuse apically, slightly longer than broad. Prothorax more than  $2 \times$  as broad as long, deeply and subevenly emarginate anteriorly; basal margin obtusely rounded; lateral margin subevenly convex, widest anterior to middle; anterior and posterior angles subevenly rounded; disc subevenly convex, finely and sparsely punctured. with a few larger punctures near side. Scutellum subtriangular, rounded at side and obtuse apically. Elytron  $2.25 \times$  as long as broad, subevenly rounded at side and apex; epipleuron broad in basal 1/3, more strongly narrowed to middle and then gradually narrowed to extreme apex; disc in large part irregularly punctured, with about 20 irregular rows of punctures which are mostly about as large to about 1/2 as large as interspaces. Ventral surfaces largely impunctate; abdominal sternites quite flat; last abdominal sternite weakly convex in middle and evenly rounded apically. Legs fairly short and stout; tibiae arched; hind tarsal segment 1 not quite as long as 2+3, but slightly shorter than last. Length 6.4 mm; breadth 5.3.

Paratypes: Length 5.8-6.8 mm; breadth 3.9-4.8.

DISTRIBUTION: NE China (Liaoning).

Holotype  $\mathcal{P}$  (Mus. G. Frey), Mukden;  $3 \mathcal{P}$  paratopotypes (Frey, Bishop), same data.

Differs from *versicolor* Laich. in being much larger, with sparser pronotal punctures and heavier and less regular elytral punctures.

## 103. Plagiodera cupreata Chen

Plagiodera cupreata Chen, 1934, Rech. Chrysom. Chine et Tonkin, 59 (Kweiyang; PARIS); 1936, Ent. Soc. France, Ann. 105: 172 (Kouy-Tcheou; Kouy-Yang, reg. de Pin-Fa; PARIS).

DISTRIBUTION: SW China (Kweichow, Szechuan).

SZECHUAN: 5, Yun-ling Mts. (FREY).

## 104. Plagiodera hanoiensis Chen

Plagiodera hanoiensis Chen, 1934, Rech. Chrysom. Chine et Tonkin, 58 (Hanoi, Tonkin; PARIS); 1936, Soc. Ent. France, Ann. 105: 170.—Bechyně, 1954, Ent. Arb. Mus. Frey 5: 668 (Shanghai).

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Plagiodera hanoiensis ab. rufivestis Bechyně, 1954, l. c. (Shanghai; FREY).

DISTRIBUTION: N. Vietnam (Hanoi), E. China (Kiangsu).

## 105. Plagiodera maculicollis Chen

Plagiodera maculicollis Chen, 1934, Rech. Chrysom. Chine et Tonkin, 59 (China; PARIS); 1936, Ent. Soc. France, Ann. 105: 171.

DISTRIBUTION: China.

#### 106. Plagiodera septemvittata Stål

Plagiodera septemvittata Stål, 1858, Ofv. Vet. Ak. Forh. 15: 252 (China; ?STOCKHOLM).—
Chen, 1934, Stylops 3: 67.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 57, fig. 44; 1936, Ent. Soc. France, Ann. 105: 169 (S. China, Tonkin).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 25, fig. 11 (Taiwan).

DISTRIBUTION: S. China, N. Vietnam, Taiwan, Philippines.

107. Plagiodera versicolora (Laicharting) Fig. 85, a-b.

Chrysomela versicolora Laich., 1781, Verz. Tirol. Ins. 1: 148 (Tyrol).

- Plagiodera versicolora var. coelestina Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 229.—
  Chen, 1934, Rech. Chrysom. Chine et Tonkin, 57; 1936, Ent. Soc. France, Ann. 105: 169 (Kiangsu: Kiang-yen, Shanghai; Chekiang: Hangchow; Kiangsi; Kouy-Tcheou; Hong-Kong).—Chûjô, 1957, Kagawa Univ. Fac. Lib. Arts & Ed., Mem. 2 (47): 3 (Kiangsu); 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 26, fig. 12 (Taiwan).
- Plagiodera versicolora var. distincta Baly, 1874, Ent. Soc. Lond., Trans. 1874: 174 (Nagasaki; BM).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 10 (Keisho-Hokudo, Korea).—1940, Mushi 13 (1): 6 (N. Korea); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 75 (Korea); 1942, Mushi 14 (2): 60 (Kwangtung).

Plagiodera chinensis Ws., 1898, Archiv Naturg. 64: 212 (Kiangsu, Chekiang, Kiangsi, Kweichow, Hongkong; ?ZMB).

- Plagiodera versicolora, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 12, 56, figs. 6-16; 1936, Ent. Soc. France, Ann. 105: 168 (Peiping, Kiangsi, Kouy-Tcheou, Japon, Siberie, Europe, Afrique, Inde, N. Amer.).—Chûjô, 1938, Mushi 11 (2): 163 (Tsingtau: Lao Shan).
- Plagiodera versicolora var. orientalis Chen, 1934, Rech. Chrysom. Chine et Tonkin, 56; 1936, Ent. Soc. France, Ann. 105: 169 (Peiping; Chekiang: Hangchow; Sze-chuan: Moupin, Ta-Tsien-Lou, Mo-sy-mien; PARIS).
- Plagiodera versicolora var. rufithorax Chen, 1934, Rech. Chrysom. Chine et Tonkin, 57; 1936, Ent. Soc. France, Ann. 105: 169 (Kieng-Tchang: Yalong, Mienning, Yunnan; PARIS).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 28, fig. 13 (Taiwan).

Since there seems to be little correlation between the color forms and geographical areas, we are provisionally disregarding the named varieties and subspecies, and tend to feel that color has no significance in this species, as the original name of the species implies.

DISTRIBUTION: Europe, N. Africa, Siberia, China (Liaoning, Kirin, Hopei, Kansu, Shantung, Kiangsu, Kiangsi, Chekiang, Anhwei, Hupeh, Kweichow), Korea, Japan, Taiwan,



Fig. 85. a-b, *Plagiodera versicolor* (Laicharting); a, larva; b, pupa; c, *Chrysomela* (*Microdera*) vigintipunctata (Scopoli), larva; d, *Chrysomela populi* Linnaeus, larva.

India.

YUNNAN: 6, Yunnan-sen (ZMB); 2, Kunming, 1900 m, VII. 1940, Gressitt (BISHOP); Kunming, VIII. 1944, C. L. Liu (US) ; 2, Soling-ho R. Vall. (FREY). SZECHUAN: Kuanhsien, 1000 m, 1930, Graham (US); Chengtu, 1933, Graham (US); Suifu, VII. 1929, Graham (US). SIKANG: 5, Nitou, Ta-tsien-lu, Reitter (FREY). HUPEH: many, Mo-tau-chi to Chi-au Shan 19. VII, Chi-au Shan to Wang-chia-ying, 20. VII. 1948, Gressitt; many, Hsiaoho, Lichuan, VIII. 1948, Gressitt (CAS); many, Liang-ho-keu, Lichuan, IX. 1948, Djou (BISHOP); many, Sui-sa-pa, Lichuan, VII–VIII. 1948, Gressitt (CAS); 4, Wu Shan Mts. (FREY). KIRIN: many, Shinkyo (Hsin-king), VII. 1939, Tagawa (KIMOTO); 5, Hun-chun, VIII. 1942, Nakao (KIMOTO); 2, Er-sen-tien-tze, VI. 1940, Weymarn (CAS); Mukden, VII. 1927, and Liao-yang, 30. VI. 1927, Loukashkin (CAS). SHENSI: Chin-Ling Mts., S. Shensi, V. 1904, Blackwelder (US). MONGOLIA: 3, Chan-heou, E. Mongolia (ZMB). SHAN-TUNG: 12, Tsingtao (ZMB). HOPEI: 1, Peiping, VIII. 1932, G. Liu (MCZ). ANHWEI: 1, Kiu-hua Shan, IX. 1932, Liu (MCZ). KIANGSU: 1, Nanking, IV. 1923. Van Dyke (CAS). CHEKIANG: 1, Ning-po (ZMB). FUKIEN: Foochow, Kellogg (CAS). HU-NAN: 4, Tai-kwong Village, Linma Distr. VII. 1934, To (LINGNAN).

HOSTS: Populus Maximosiczii Henry (Japan), Salix, Corylus.

## 108. Plagiodera yunnanica Chen

Plagiodera rufescens var. yunnanica Chen, 1934, Rech. Chrysom. Chine et Tonkin, 60 (Yunnan, Tonkin; PARIS); 1936, Soc. Ent. France, Ann. 105: 172, fig. 45.

Plagiodera yunnanica, Bechyně, 1954, Ent. Arb. Mus. Frey 5: 668 (Szechuan: Kwan-hsien). DISTRIBUTION: SW China (Yunnan, Szechuan), N. Vietnam (Tonkin).

## Genus Chrysomela Linnaeus

Chrysomela L., 1758, Syst. Nat. ed. 10, 368.-Fabricius, 1801, Syst. Eleuth. 1: 423.-Lat-

reille, 1804, Hist. Nat. Crust. et Ins. 11: 375 (type designated as *C. populi* L.).— Maulik, 1926, Fauna India, Chrys. Halt., 67.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 61; 1936, Soc. Ent. France, Ann. 105: 173.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 29.

Melasoma Stephens, 1831, Illustr. Brit. Ent., Mandib. 4: 349.—Weise, 1884, Naturg. Ins. Deutschl. 6 (3): 551.—Reitter, 1912, Fauna Germ. 4: 126.

Gymnota Gistl, 1837, Syst. Ins. Col.: 403.

- Lina Megerle, 1837, IN Dejean, Cat. Col., 402 (type: L. populi L.).-Redtenbacher, 1849, Fauna Austr., 551.-Chapuis, 1874, Gen. Col. 10: 375.
- Microdera Stephens, 1839, Man. Brit. Col., 307 (first species listed : C. 20-punctata F.). Type here designated as Chrysomela vigintipunctata Fabricius. Subgenus.

Macrolina Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 198 (type: 20-punctata F.).
 Macromela Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 31 (type: C. (Macromela) maculicollis insularis Chûjô; Taiwan). Subgenus.

#### KEY TO CHINESE SPECIES OF CHRYSOMELA

 Pronotum raised at side and with a depression more or less parallel to side....... 2 Pronotum evenly convex, without raised area or depression at side (subgenus *Macromela*); head dark; pronotum pale with 5 dark spots in a more or less transverse row across middle; elytron dark steely blue...... 112. maculicollis

#### Subgenus Chrysomela s. str.

## 109. Chrysomela (Chrysomela) parvicollis Jacob

DISTRIBUTION: C. Asia, NE Asia.

110. Chrysomela (Chrysomela) populi Linnaeus Fig. 85, d.

Chrysomela populi L., 1758, Syst. Nat. ed. 10, 370 (Europe; ?UPPSALA).—Maulik, 1926, Fauna India, Chrys. Halt., 68 (Himalayas, Assam, Europe, N. Africa, N. & W. Asia, China, Japan).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 61; 1936, Soc. Ent. France, Ann. 105: 174 (Peiping; S. Kansu; Sze-chouen; Moupin; Yunnan; Kiangsi; Kiangsu; Chekiang; Kouy-Tcheou).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 10 (Keisho-Hokudo, Korea); 1940, Mushi 13 (1): 5 (N. Korea); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 71 (S. Korea); 1942, Mushi 14 (2): 59 (Kwangtung).—Bechyně, 1954, Ent. Arb. Mus. Frey 5: 671 (synonymized asiatica, kitaica).—Chûjô, 1957, Kagawa Univ., Fac. Lib. Arts & Ed., Mem. 2 (47): 3 (Hunan).

Lina populi, Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 224 (Siberie).

Lina violaceicollis Motschulsky, 1860, l. c. (Siberia; nom. nud.).

Melasoma populi subsp. asiatica Jacob, 1952, Ent. Arb. Mus. Frey 3: 105, figs. (Transbaikalia; FREY).

Melasoma populi subsp. nigricollis Jacob, 1952, l. c. (Szechuan; FREY).

Melasoma populi subsp. kitaica Jacob, 1952, l. c. (Manchuria; FREY).

Bechye, in the above reference, cites *nigricollis* as a valid subspecies, and states that it is preoccupied by *violaceicollis* Motschulsky. We find no valid naming of the latter, however, which is merely cited by Motschulsky in 1860.

DISTRIBUTION: Europe, W. Asia, Siberia, China (Sinkiang, Liaoning, Hopei, Kansu, Kiangsu, Chekiang, Kiangsi, Hunan, Szechuan, Kweichow, Yunnan), Korea, Japan, India.

SZECHUAN: Ta-ning-ho, VI. 1904, Blackwelder (US); 7, nr. Weichow, VII. 1933. Graham (US); 2, O-er, N. Li-fan, VIII. 1910, Graham (US); 1, Sui-fu, V. 1924, Graham (US); 1, Uenchan, VIII. 1924, Graham (US); 1, Ta-ning-ho, V-VI. 1904 (US); 1, Hua-yinshan, 110 km N of Chung-king, VII. 1933, Graham (US); 1, Chung-king, VII. 1933, Graham (US); 3, Kuan-shien, VIII. 1924, Graham (US); 1, Ning-yuen-fu, 2000 m, VII. 1928, Graham (US); 1, Ngan-yang, VII. 1923, Graham (US). SIKANG: 2, Mu-ping, VII. 1929, Graham (US). YUNNAN: 1, Chao-tung, V. 1925, Graham (US); 3, Kunming, VIII. 1944, Liu (US); 3, Ma-chan, 1000 m (US). HUPEH: 1, Sui-sa-pa, 1000 m, 12. IX. 1948, Gressitt & Djou (CAS). KANSU: Hoei-S'un, S. Kansu (ZMB). SHENSI: 1, Tai-pai Shan, S. Shensi, 6. VI. 1936, Höne. MANCHURIA: 1, Weisohn, VIII. 1923, Van Dyke (CAS); 16, Phaltoku (ZSBS). KIRIN: 8, Shinkyo (Hsing-king), VII. 1939, Tagawa (Кімото); Chenhou-tze, VI. 1939, and Er-tao-ho-tze Station, Chinese Eastern Railway, 23. V. 1939, Loukashkin; Hunchun, 24. V. 1943, K. Nakao (Кімото). KOREA: Sui-gen, VI. 1927, Gardner (US); 30. V. 1961, KimHon-kyu (BISHOP); 2, Chemulpo (ZMB). SIBERIA: Kudia River, Amagu, VII. 1923, Cockerell; Kangaus, VIII. 1923, Cockerell (US); Vladivostok, 1923, Prinada (US).

Chrysomela parvicollis Jac., 1955, Naturh. Mus. Wien, Ann. 60: 231 (Persia, Turkestan, Tibet, Ussuri; ?WIEN).

## 111. Chrysomela (Chrysomela) tremulae Fabricius

Chrysomela tremulae F., 1787, Mant. Ins. 1: 69 (Europe; KφBENHAVN).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 62; 1936, Soc. Ent. France, Ann. 105: 174 (Peiping, Sze-chouen, Yunnan; Europe, Siberie, N. Amer.).—Chûjô, 1940, Mushi 13(1): 6 (N. Korea).

DISTRIBUTION: Siberia, China (Hopei, Szechuan, Sikang, Yunnan, Anhwei, Kweichow), Europe, N. America.

YUNNAN: 1, Tche-ping-tcheou, S. Yunnan (US). SIKANG: 1, W. of Che-tu Pass, 4000 m, 12. VII. 1923, Graham; 2, nr. Ta-tsien-lu, 3000 m, 1. VII. 1928, Graham; 1, Muping, 2000 m, VII. 1929, Graham (US). SZECHUAN: Shin-kai-si, 1300 m, Mt. Omei, Graham (US). CHAHAR: 2, Shi-wan-tze, Hiu-mou, Kiang-keou (ZMB). KWEICHOW: 1, Shih-men-kan, VII. 1934, Graham (US). ANHWEI: 2, Tai-ping-shien, 1932, Liu (MCZ). MANCHURIA: 2, Phaltoku (ZSBS).

#### Subgenus Macromela Chûjô

112. Chrysomela (Macromela) maculicollis (Jacoby) Fig. 86, c.

Melasoma maculicollis Jac., 1890, Entomologist 23: 117, pl. 1, fig. 9 (Chang-yang; BM). Chrysomela maculicollis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 64, fig. 47; 1936, Soc.

Ent. France, Ann. 105: 176 (Chang-yang; Chekiang: Hangchow; Kouy-Tcheou).

DISTRIBUTION: S. China (Hupeh, Hangchow, Kweichow, Yunnan).

HUPEH: 8, Sui-sa-pa, Lichuan Distr., VIII. 1948, Gressitt (CAS, BISHOP). HOST: *Ficus* sp.



а

Fig. 86. a, Linaeidea aeneipennis (Baly); b, Chrysomela (Microdera) vigintipunctata (Scopoli); c, C. (Macromela) maculicollis (Jacoby).

#### Subgenus Microdera Stephens

## 113. Chrysomela (Microdera) collaris Linnaeus

Chrysomela collaris L., 1758, Syst. Nat. ed. 10, 371 (Europe; ?UPPSALA).

Melasoma collaris, Weise, 1884, Ins. Deutschl. 6 (3): 560 (C. Europe, Sibirien).

Chrysomela (Microdera) collaris, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 81 (Manchuria).

DISTRIBUTION: Siberia, N. China (Manchuria), Europe.

HOST: Salix.

## 114. Chrysomela (Microdera) hajeki Breit

Chrysomela (Microdera) hajeki Br., 1913, Ent. Blätter 9: 297 (Manchuria: Mukden; ?WIEN).

This species is not included in the key.

DISTRIBUTION: N. China (Manchuria).

## 115. Chrysomela (Microdera) lapponica Linnaeus

Chrysomela lapponica L., 1758, Syst. Nat. ed. 10, 371 (Europe; ?UPPSALA).

Melasoma lapponica, Weise, 1884, Ins. Deutschl. 6 (3): 556 (Europe, China).—Liu, 1935, Lingnan Sci. Jour. 14 (3): 434 (Manchuria).

DISTRIBUTION: Siberia, N. China (Manchuria, Chahar), Japan, Europe.

CHAHAR: 2, Shi-wan-tsze, 1167 m, VI-VII. (ZMB).

HOSTS: Betula, Salix, Alnus, Populus (Europe).

## 116. Chrysomela (Microdera) salicivorax (Fairmaire)

Lina salicivorax Fairm., 1888, Soc. Ent. Belg., Ann. 32: 40 (Kiangsi; PARIS).

- Melasoma octodecimpunctata Jacoby, 1888, Zool. Soc. Lond., Proc. 1888: 346 (Kiukiang; BM).
- Chrysomela (Microdera) salicivorax Chen, 1934, Rech. Chrysom. Chine et Tonkin, 62, fig. 46a; 1936, Soc. Ent. France, Ann. 105: 175 (Peiping, Chensi; Kiangsi, Kouy-Tcheou, Coree).—Chûjô, 1942, Mushi 14 (2): 59 (Liaoning: Kwantung).

DISTRIBUTION: China (Kiangsi, Kweichow, Hopei, Liaoning, Shensi), Korea.

KOREA: 5, Suigen, 3-8. VI. 1927, Gardner (US). FUKIEN: 1, Yun-ling shan, Koateng (ZMB). SHENSI: 1, S. Shensi, V. 1904, Blackwelder (US).

117. Chrysomela (Microdera) vigintipunctata (Scopoli) Figs. 85, c, 86, b & 87, a, c.

Coccinella vigintipunctata Scop., 1763, Ent. Carn., 78 (Europe).

- Chrysomela (Microdera) vigintipunctata, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 62; 1936, Soc. Ent. France, Ann. 105: 174 (Peiping, Sze-chuan, Yunnan, Moupin, Europe, Siberia, Japan).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 71 (Korea).
- Chrysomela (Microdera) vigintipunctata var. incontaminata, Chûjô, 1942, Mushi 14 (2): 59 (Dairen).

DISTRIBUTION: Siberia, Japan, China (Kirin, Liaoning, Shensi, Anhwei, Fukien, Szechuan, Yunnan), Korea.

KIRIN: 1, Yalu River, V. 1914, Sowerby (US). SHENSI: Tai-pai Shan, Tsin-ling

Mts., 12. V. 1936, Höne (ZMB); S. Shensi, V. 1904, Blackwelder (US). HUPEH: 2, Suisa-pa, 1000 m, Lichuan Distr., VIII. 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: 1, Liu-tun, Kien-yang, IV. 1942, Maa (BISHOP); 1, Yun-ling Shan, Koa-teng (ZMB). KOREA: 3, Chemulpo (ZMB); 5, Suigen, 3-8. VI. 1927, Gardner (US).

#### Genus Linaeidea Motschulsky

#### KEY TO CHINESE SPECIES OF LINAEIDEA

1.	Dorsum entirely metallic, generally golden green2
	Dorsum metallic on elytron, pale or partly pale on pronotum
2(1).	Antenna brown; legs largely greenish blue (Linnaeus, 1758; Europe, Siberia,
	Japan, fig. 87, d) aenea*
	Antenna with 4-5 distal segments blackish; legs yellowish brown (Bates, 1866;
	Taiwan) formosana*
3 (1).	Body less than 2/3 as broad as long, not very convex
	Body more than $2/3$ as broad as long, strongly convex; pronotum pale; elytron
	green or blue-green
4 (3).	Pronotum entirely pale, distinctly narrower anteriorly than posteriorly 118. a. adamsi
	Pronotum with central portion of disc largely green, and with small green or
	pitchy spot near middle of side; prothorax very slightly narrower anteriorly
	than posteriorly 119. adamsi emmerichi
5 (3).	Elytron with depressions rather indistinct and with punctures subregularly arrang-
	ed in more or less recognizable rows 121. aeneipennis
	Elytron with 3 distinct depressions near base and with punctures somewhat
	confused and hardly in recognizable rows (Chen, 1931; Laos, Cambodia)
	seximpressa*

#### 118. Linaeidea adamsi adamsi (Baly)

Melasoma Adamsi Baly, 1884, Ent. Soc. Lond., Trans. ser. 3, 2: 229 (Chekiang; BM).

- Chrysomela adamsi, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 63 (Kweichow, Yunnan); 1936, Soc. Ent. France, Ann. 105: 175 (Chekiang; Chusan; Kouy-Tcheou; Kouy-Yang, reg de Pin-Fa, Yunnan).
- Chrysomela (Linaeidea) adamsi, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 80 (Chekiang, Kweichow, Yunnan).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 70 (Korea); 1942, Mushi 14 (2): 59 (Kwantung, Liaoning).

DISTRIBUTION: China (Chekiang, Kweichow, Szechuan, Yunnan, Liaoning).

YUNNAN: 4, Ma-Chang, 1000 m (US); Yunnan Sen (ZMB); 3, Western Hills, 1800 m, nr. Kunming, VII. 1940, Gressitt (BISHOP).

119. Linaeidea adamsi emmerichi (Pic), NEW COMBINATION

Chrysomela Adamsi var. placida Chen, VI. 1934 (June), Rech. Chrysom. Chine et Tonkin, 63 (Ta-tsien-lu; Moupin; Ac. SIN.); 1936, Ent. Soc. France, Ann. 105: 176 (Homonym).

Linaeidea Mots., 1860, Schrenck's Reisen Amurl. 2: 199 (type: Chrysomela aenea L.; Europe).—Reitter, 1912, Fauna Germ. 4: 126.—Schaufuss, 1913, IN Calwer's Käferbuch ed. 6, 2: 961.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 56.

- Melasoma formosana var. Emmerichi Pic, VII. 1934 (July), Ent. Nachr. Bl. 8: 86(Ta-tsienlu; cotypes Senckenberg, BISHOP, BM, etc.)
- Chrysomela (Linaeidea) adamsi var. ornaticollis Chen, 1936, Notes d'Ent. Chinoise 3(5): 80 (new name for placida Chen, preoccupied; additional locality Ye-tsin, Yunnan).
- Chrysomela adamsi (subsp. placida?) ab. praecox Bechyně, 1954, Ent. Arb. Mus. Frey 5: 669 (no. loc.).

DISTRIBUTION: W. China (Szechuan, Sikang, Yunnan).

SZECHUAN: 17, Mt. Omei, 16. VII. 1932, Franck (BISHOP). SIKANG: Nitou, Tatsien-lu, Reitter (cotype).

120. Linaeidea adamsi minutior (Bechyně), NEW COMBINATION

Chrysomela adamsi subsp. minutior Bechyně, 1954, Ent. Arb. Mus. Frey 5:669 (Kulu, Manali).

Chrysomela adamsi minutior abb. viridana and metalla Bech., 1954, l. c.

DISTRIBUTION : Himalayas.

121. Linaeidea aeneipennis (Baly), NEW COMBINATION Figs. 78, f & 86, a.

Melasoma aeneipennis Baly, 1859, Ann. Mag. Nat. Hist. ser. 3, 4: 61 (N. China; BM).

Plagiodera Siemsseni Weise, 1922, Tijdschr. Ent. 65: 56 (Fukien; STOCKHOLM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 60; 1936, Ent. Soc. France, Ann. 105: 172. New Synonymy.

Chrysomela aeneipennis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 63; 1936, Ent. Soc.



Fig. 87. a, Chrysomela (Microdera) vigintipunctata (Scopoli), pupa; b, Gastrolina peltoidea (Gebler), subapical abdominal segments of pupa; c, Chrysomela (Microdera) vigintipunctata (Scopoli), subapical abdominal segments of pupa; d, Linaeidea aenea (Linnaeus), subapical abdominal segments of pupa; e, Gastrolinoides japonica (Harold, 1877; Japan), pupa. France, Ann. 105: 176 (Chine boreale; Chekiang: Hangchow; Kiangsi; Kouy-Tcheou: reg de Pin-fa).

The Kwangtung material seems to have the prothorax less deeply emarginate anteriorly suggesting a local race.

DISTRIBUTION: S. China (Chekiang, Kiangsi, Kweichow, Szechuan, Kwangtung, Fukien).

SZECHUAN: 2, Chengtu (ZMB); 2, Mt. Omei, VII-VIII. 1921, Graham (US); 2, Shinkai-si, Mt. Omei, V. 1934, Graham (US); 1, Si-gi-pin, VIII. 1934, Graham (US); many, Mt. Omei, VII. 1932, Franck (BISHOP). KWEICHOW: 1, Kweiyang, VII. 1940, Gressitt (BISHOP). KIANGSI: 5, Kiukiang (ZSBS). KWANGTUNG: 1, Fung-wan, 10. VI. 1911, Mell (ZMB); 3, Taam-yuen-tung, Linhsien Distr., VI. 1934, To (CAS, LINGNAN); 1, Lung-ping-hui, Linhsien Distr., 16. V. 1934, To (LINGNAN); Chiu-lien (Kau-lin) Shan, 800 m, Lien-ping Distr., 12. IV. 1940, Gressitt & To (LINGNAN).

## Genus Agasta Hope

Agasta Hope, 1840, Col. Man. 3: 177 (type: A. formosa Hope; SE Asia).—Baly, 1867, Ent. Soc. Lond., Trans. ser. 3, 4(2): 298.—Chapuis, 1874, Gen. Col. 10: 367.—Maulik, 1926, Fauna India, Chrys. Halt., 56.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 64; 1938, Soc. Ent. France, Ann. 106: 283.

This genus contains but a single known species.

#### 122. Agasta formosa Hope Fig. 88, a.

Agasta formosa Hope, 1840, Col. Man. 3: 177, pl. 2, fig. 3 (China;? OXFORD).—Baly, 1867, Ent. Soc. Lond., Trans. ser. 3, 4 (2): 298 (Java, Singapore, Siam).—Chapuis, 1874, Gen. Col. Atlas, pl. 123, fig. 4.—Baly, 1879, Cist. Ent. 2: 436 (Hills and plains of Assam).—Duvivier, 1891, Soc. Ent. Belg., C. R. 35: xliv (Kurseong).—Maulik, 1926, Fauna India, Chrys. Halt., 56, fig. 19.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 64, fig. 48; 1938, Soc. Ent. France, Ann. 106: 283 (Yao San).

Large, strongly convex; reddish with 4 purplish spots on pronotum and 7 large purplish spots on each elytron. Length 11-12 mm.

DISTRIBUTION: S. China (Kwangsi, Kwangtung), Himalayas, N. & E. India, Burma, Thailand, Vietnam, Laos, Java.

KWANGTUNG: 1, Tsha-jiu-san, VII-IX. 1910, Mell (ZMB); 1, Ting-wu Shan, 300 m, 7-12. VII. 1949, Gressitt (CAS).

## Genus Paropsides Motschulsky

Paropsides Mots., 1860, Schrenk's Reisen Amurl. 2: 192 (type: Paropsis duodecimpustulata Gebler; Siberia).—Chapuis, 1874, Gen. Col. 10: 442, 445.—Marseul, 1889, Abeille 27: 144.—Weise, 1901, Archiv Naturg. 67: 166, 168.—Maulik, 1926, Fauna India, Chrys. Halt., 71.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 65; 1938, Soc. Ent. France, Ann. 106: 284.

## Key to Chinese species of Paropsides

1. Pronotum with 2 or 4 black spots, or with no markings at all, antennal seg-



Pronotum with median spot forming a complete stripe from apex to base; lateral spot on each side of pronotum small; head entirely pale; length 10 mm (Chen, 1931; Tonkin)...... bouvieri\*

6 (5). Pronotum with 3 black spots
Pronotum black except for a median line and anterior and lateral borders
which are reddish brown; elytron pale with a longitudinal stripe near suture,
broadening at base, and with a black spot near middle of side
7 (6). Elytron with black spots arranged 5 : 5 : 5 : 1 123. duodecimpustulata hieroglyphica
Elytron with spots arranged 4:3:3:1 123. duodecimpustulata melli
8 (4). Pronotum black, without pale spots
Pronotum with 2 yellow spots; elytron with yellow spots arranged 2:1:1
9 (8). Yellow elytral spots arranged in 3 bands 10
Yellow elytral spots arranged in 4 bands: 2:2:1:1 123. d. duodecimpustulata
10 (9). Yellow elytral spots arranged 2:2:1 123. duodecimpustulata decempustulata

Yellow elytral spots arranged 1:1:1 ..... 123. duodecimpustulata sexmaculata

123. Paropsides duodecimpustulata (Gebler) Fig. 88, b.

Paropsis duodecimpustulata Gebl., 1825, in Hummel, Essais Ent. 4: 54 (E. Siberia).

Paropsides duodecimpustulata, Jacobson, 1893, Soc. Ent. Ross., Horae 27: 124, figs. 1-13 (Siberia).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 66, fig. 49 (E. Siberia, N. China; Peiping; Kiangsu: Chemo; Kiangsi: Kuling); 1938, Soc. Ent. France, Ann. 106: 285.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (219): 460 (Korea).

Paropsis hieroglyphica Gebl., 1825, in Hummel, Essais Ent. 4: 55 (Siberia).

Paropsides duodecimpustulata var. hieroglyphica Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (219): 460 (Korea).

Paropsides maculicollis Jacoby, 1890, Entomologist 23: 118, pl. 1, fig. 10 (Chang-yang; BM).

Paropsides duodecimpustulata var. melli Reineck, 1922, Deutsche Ent. Zeits. 1922: 370 (Lofau San, Kwangtung; ZMB).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 66; 1938, Soc. Ent. France, Ann. 106: 286 (Kweichow, Canton).

Paropsides 12-pustulata f. 6-maculata Reineck, 1922, Deutsche Ent. Zeits. 1922: 367 (Kiukiang; ZMB).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 66; 1938, Soc. Ent. France, Ann. 106: 286 ("Chekiang", Japan).

Paropsides duodecimpustulata var. hieroglyphica Maulik, 1926, Fauna India, Chrys. Halt., 73, fig. 23 (Assam, Burma, Siberia, China).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 66; 1938, Soc. Ent. France, Ann. 106: 286 (Kiangsu: Nanking, Chemo; Chekiang: Hangchow; Kiangsi; Kweichow; Yunnan; Tonkin).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 73 (Korea).

Paropsides duodecimpustulata var. suturalis Chen, 1934, Rech. Chrysom. Chine et Tonkin, 66; 1938, Soc. Ent. France, Ann. 106: 286 (China).

Paropsides duodecimpustulata var. decempustulata Chen, 1934, Rech. Chrysom. Chine et Tonkin, 66; 1938, Soc. Ent. France, Ann. 106: 286 (Kiangsi).

This species is highly variable, and for the present we are not separately recognizing the named subspecies. When extensive material is studied from throughout the range of the species, it may readily be possible to establish the subspecies on the basis of geographic distribution. In our material, *melli* seems to be consistent for the SE China mountain areas, *hieroglyphica* is represented from Yunnan, with 2 specimens apparently intermediate between *melli* and *hieroglyphica* from N. Kiangsi. We have *maculicollis* from W. Hupeh, sexmaculata from N. Kiangsi and decempustulata from N. Kiangsi. Thus 3 different color forms are represented from a single area in N. Kiangsi.

DISTRIBUTION: Siberia, China, Korea, Japan, N. Vietnam, Burma, Assam.

FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, V. 1942, Upper Kuatun, 1400 m, Chungan, Maa (BISHOP). KIANGSI: 2, Shanjao, 1934, Maa (BISHOP); 3, Sangjao, 1939; Kiukiang (US; ZSBS). SZECHUAN: 2, Suifu, Graham (US); Huang-ja-keo, 1100 m, Yunnan border, IV. 1927, Graham (US). YUNNAN: 1, Huang-hia-keo, IV. 1935, Graham (US); 6, Yunnan-sen (ZMB); 1, Ma-chang (US); Kunming, 1. VIII. 1944, C. L. Liu (US). HUPEH: 2, Leang-ho-peu, 4–10. IX. 1948, Gressitt & Djou (CAS, BISHOP). KWANGTUNG: 3, Taam-yuen-tung, 8, Lung-ping-hui, Lien-hsien Distr., V. 1934, To (LINGNAN).

## 124. Paropsides nigrofasciata Jacoby

Paropsides nigrofasciata Jac., 1888, Zool. Soc. Lond., Proc. 1808: 348 (Changyang; BM).—
Chen, 1934, Rech. Chrysom. Chine et Tonkin, 67 (Kuling, Mo-kan-san); 1938, Soc.
Ent. France, Ann. 106: 286 (Changyang, Kiangsi, Kouy-Tcheou, Yunnan, Coree; PARIS).

DISTRIBUTION: China (Hupeh, Kweichow, Yunnan, Kiangsi, Chekiang), Korea.

KIANGSI: 1, Kuling, VII. 1931, Watters (Hadden, BISHOP); 11, Kiukiang, VI. 1887, Pratt (Bowditch, US). HUNAN: 3, Changsha (ZMB). SZECHUAN: 2, Shin-kai-si, 1300 m, Mt. Omei, 1921, Graham (US). ANHWEI: 1, Tai-ping-shien, X. 1932, Liu (MCZ); Kui-hua Shan, IX. 1932, Liu (MCZ). CHEKIANG: Mokanshan, 18. VII. 1924, Illingworth (BISHOP).

#### Genus Asiparopsis Chen

Asiparopsis Chen, 1934, Rech. Chrysom. Chine et Tonkin, 69 (type: Paropsides pardalis Jac.); 1938, Ent. Soc. France, Ann. 106: 288.

#### 125. Asiparopsis pardalis (Jacoby)

Paropsides pardalis Jac., 1892, Mus. Civ. Genova, Ann. 32: 918 (Burma; ?GENOVA).-Maulik, 1926, Fauna India, Chrys. Halt., 72 (Burma, Assam; "type in BM").

Pyrgo pardalis var. convexa Ws., 1902, Deutsche Ent. Zeits. 1902: 368 (Montes Mauson).

Asiparopsis pardalis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 69; 1938, Soc. Ent. France, Ann. 106: 288 (Tonkin, Burma).

Asiparopsis pardalis var. convexa, Chen, 1934, l. c., 70, fig. 51; 1938, l. c. (Tonkin).

- Asiparopsis pardalis var. unicolor Chen, 1934, l. c., 70 (S. China, Tonkin); 1938, l. c., 289 (S. China, Tonkin; PARIS).
- Pyrgo masonensis Achard, 1934, Soc. Ent. France, Bull. 1934: 72 (Kwangsi: Pingnan, Yaosan; Tonkin;? PARIS).

DISTRIBUTION: Burma, Assam, Vietnam, (Tonkin), S. China (Kwangsi).

#### Genus Gonioctena Chevrolat

Gonioctena Chevr., 1837, IN Dejean, Cat. Col. ed. 3, 403.—Redtenbacher, 1845, Gatt. Deutschen Käferf., 116.—Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 180 (type: Chrysomela viminalis L.).—Chapuis, 1874, Gen. Col. 10: 432.—Wickham, 1896, Cana-

dian Ent. 28 (8): 199, 203.—Everts, 1903, Col. Neerlandica 2: 392, 437.

- Phytodecta Kirby, 1837, Fauna Bor.-Americana 4: 213 (type: Chrysomela rufipes DeGeer).
  —Chevrolat, 1843, IN d'Orbigny, Dict. Univ. Hist. Nat. Paris 3: 656.—Weise, 1884, Ins. Deutschl. 6 (3): 488.—Reitter, 1912, Fauna Germanica 4: 127.—Maulik, 1926, Fauna India, Chrys. Halt., 17, 77.—Chen, Rech. Chrysom. Chine et Tonkin, 29, 70; 1938, Soc. Ent. France, Ann. 106: 289.—Bechyně, 1947, Nar. Mus. Praze, Sbornik 3 B (3): 89 (mon.).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 60. Subgenus.
- Asiphytodecta Chen, 1935, Chinese Jour. Zool. 1: 126 (type: Phytodecta tredecimmaculatus Jac.).—Chen & Young, 1941, Sinensia 12 (1-6): 199.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 63.
- Sinomela Chen, 1935, Chinese Jour. Zool. 1: 126 (type: Phytodecta aeneipennis Baly; China). Subgenus.
- Platyphytodecta Bechyně, 1948, Nar. Mus. Praze, Sbornik 3B: 100 (type: Phytodecta flexuosus Baly; China). Subgenus.

Brachyphytodecta Bechyně, 1948, l. c., 101 (type: Spartophila fulva Mots.; Amur). Subgenus.

This genus, long known as *Phytodecta*, has been variously divided. Chen (1935), established the subgenera *Asiphytodecta* and *Sinomela* and later (1941) raised the former to the status of a genus. Bechyně (1947) established the subgenera *Platyphytodecta* and *Brachyphytodecta*, and recognized *Asiphytodecta* and *Sinomela* as separate genera. In spite of the character of presence or lack of setigerous punctures on the side of the prothorax, we prefer to consider all of these groups as congeneric for the time being. We are rather dubious of the validity of *Platyphytodecta* and *Brachyphytodecta* as subgenera, but are provisionally maintaining their use. A number of the species assigned by Chen to *Asiphytodecta*.

KEY TO CHINESE SPECIES OF GONIOCTENA

(partly after Chen, 1941)

1.	Prothorax lacking setigerous punctures on sides of anterior or posterior corners; preapical antennal segments flat, broader than long
	Prothorax with setigerous punctures on sides of posterior, or anterior and posterior corners
2 (1).	Punctures of elytron arranged in well defined longitudinal rows; lateral margin of prothorax not visible from above ( <i>Brachyphytodecta</i> )
	Punctures of elytron subregularly arranged, or entirely confused; lateral margin of prothorax barely visible ( <i>Asiphytodecta</i> )
3 (1).	Setigerous punctures present on posterior angle of side of prothorax
4 (3).	Body strongly convex; lateral margin of prothorax barely visible from above; preapical antennal segments as long as broad, not very flat ( <i>Gonioctena</i> s. str.)
	Body rather flat, oblong; lateral margin of prothorax distinctly visible from above; preapical antennal segments broader than long; aedeagus evenly and bluntly rounded anically ( <i>Platynhytodaeta</i> )
	and blundy founded apleany ( <i>Laryphylodecia</i> )

5 (4).	Castaneous with an aeneous tinge; humerus with a small rounded black spot surrounded by a yellowish ring; elytron with subregular rows of punctures;
	length 7.5-7.9 mm
	Without above combination of characters
6 (5).	Aedeagus long, narrowed apically
	Acceagus very short, broadened and truncate apically in dorsal view, rather
	eveniy tapered in lateral view (Oglobiin & Medvedev, 1950; L. Balkal)
7 (6)	A adaptive not your eventy tangend in lateral view rather abruptive on yngyon
/(0).	Acceagus not very eveniy tapered in lateral view, rather abruptly of uneven-
	Addeams rather evenly tapered in lateral view rather soutely and gradually
	nroduced anically in dorsal view 10
8(7)	Aedeagus rather abruptly narrowed or twice naurowed and widened in dorsal
• (1):	view not elongated after first narrowing
	Aedeagus in dorsal view narrowed preapically, then elongated and slightly
	widened before abrupt narrowing at apex, and somewhat sinuous in lateral
	view, with preapical enlargement; legs entirely reddish; head and pronotum
	largely black basally; elytron with 5 spots: 2:2:1
9 (8).	Aedeagus rather abruptly narrowed and briefly tridentate apically in dorsal
	view, somewhat sinuate in lateral view 126. cheni
	Aedeagus in dorsal view abruptly narrowed, then widened again and sudden-
	ly narrowed to a slender process which is slightly thickened and rounded
	apically; dorsum reddish with a broad basal black spot on pronotum;
	scutellum black; elytron with 5 black or pitchy spots, arranged 2:2:1,
	but the last 3 forming a subequilateral triangle on posterior $1/2$ 133. viminalis
10 (7).	Aedeagus in dorsal view simply narrowed and produced apically 11
11 (10)	Aedeagus in dorsal view twice narrowed before produced apex
11 (10).	Acceleration and control and strongly narrowed, then with a long
	A adaptive in dereal view comparishes and welly normalized then with a slightly
	produced subscute apex: proportion often dark and elytron with 5 rather
	small snots 129 gracilicornis
12 (10)	Aedeagus in dorsal view slightly narrowed preapically then slightly widened
(10)1	and then narrowed and subacutely produced at apex
	Aedeagus in dorsal view slightly widened preapically, then narrowed and
	widened again, then produced into a long terminal process 132. springlovae
13 (4).	Aedeagus barely sinuate in lateral view, slightly widened in dorsal view be-
	fore preapical constriction, and apex subevenly rounded; elytron sometimes
	pale and sometimes sinuously banded; length 6.5 mm 134. f. flexuosa
	Aedeagus distinctly sinuate in lateral view, not widened in dorsal view before
	preapical constriction, and apex broadly, subtruncately rounded; elyton
	always pale; length 7.2-8.6 mm 135. flexuosa melli
14 (2).	Legs entirely or almost entirely black
	Femora red, tibiae and tarsi black; general color of body red; length 12 mm
15 (14)	Benetum and alutean annual and alutean and a
13 (14).	Pronotum and clytron concolorous, reddish to brownish

## Gressitt & Kimoto: Chrysomelidae of China

	Pronotum and elytron not concolorous17
16 (15).	Scutellum black; length 5-6 mm 137. fulva
	Scutellum brown or dark brown; length 5.5-7.0 mm 136. flavipennis
17 (15).	Elytra distinctly longer than broad; pronotum blackish
	Elytra nearly as broad as long, strongly convex in middle; pronotum reddish 19
18 (17).	Head and prothorax pitchy or black, their sides and undersides generally
	reddish; elytron black or pitchy; aedeagus in dorsal view slightly widened
	preapically, somewhat suddenly narrowed and then with a long slender
	apical process which increases slightly in thickness to just before the blunt
	apex; length 4.5-5 mm 137. fulva
	Head (except appendages) and prothorax entirely black; elytron reddish, sometimes stained with black; length 5.5 mm (Baly, 1862; Japan) rubripennis*
19 (17).	Dorsum dark red; scutellum and lateral portion of elytron black; length 5.5 mm
	Head and pronotum red or yellowish red; elytron black; length 5-6 mm
20 (2).	Antenna entirely yellowish red; elytral puncturation confused or slightly con-
	fused 21
	Antenna with at least 4-5 distal segments black or pitchy; elytral punctura-
	tion largely arranged in paired rows 25
21 (20).	Pronotum with black spots in a transverse row
	Pronotum with a black median longitudinal stripe and a basal transverse black band, the former broadened anteriorly and latter enlarged at side; elytron with premedian transverse band and postmedian spots of black (Maulik, 1926: N. Burma) trilochana*
22 (21).	Pronotum with 3 spots; elytron with 6 spots, of which 2 posteriorly on suture are common to both elytra
	Proportium with 4 black spots: elytron with 7 spots none on sufficient length
	7 5-80 mm (Jacoby, 1889: Burma)
23 (22).	All elvtral spots separate
20 (22).	Premedian elytral spots more or less fused 143. tredecimmaculata cinctinennis
24(23)	Elytral spots large senarated by spaces parrower than diameters of spots
	143. t. tredecimmaculata
	Elytral spots small, separated by spaces as large as diameters of spots
	143. tredecimmaculata taiwanica
25 (20).	Elytron with several pale or dark spots
	Elytron blackish to castaneous with 2 subtransverse vellow spots : humeral and
	preapical; pronotum uniformly pitchy or reddish brown; length 6.5-7.0 mm
26 (25)	Used and proportion black : elytron uniformly red
20 (23).	Head and pronotum entirely or partially red: elytron bicolorous
27 (26)	Elytron with 11 rows of nunctures of 2 sizes: antenna and abdomen partly
21 (20).	red length 10 mm (Weise 1898 · Burma)
	Elytron with about 20 rows of nunctures antenna and venter black. length
	25 mm (Chen 1934 · Cambodia)
28 (26)	Dorsum shiny: elytron red with black markings
20 (20).	Dorsum opaque: propotum black with anterolateral area brownish: elutron
	Dorsan opaque, pronotani orack min anteroratoral area orowinshi, civilon



Fig. 89. a, Gonioctena (Platyphytodecta) flexuosa (Baly); b, Gonioctena (Asiphytodecta) subgeminata (Chen); c, G. (A.) t. tredecimmaculata (Jac.).

Subgenus Gonioctena s. str.

126. Gonioctena (Gonioctena) cheni (Bechyně) Phvtodzcta cheni Bech., 1948, Nar. Mus. Praze, Sbornik, Zool. 3 B (3): 102 (E. Siberia; PRAHA). DISTRIBUTION: E. Siberia.

127. Gonioctena (Gonioctena) coreana (Bechyně), NEW COMBINATIONFig. 90, b.Phytodecta coreanaBech., 1947, Nar. Mus. Praze, Sbornik, Zool. 3 B (3): 114 (Korea;

Praha).

DISTRIBUTION: Korea, NE China (Manchuria).

KIRIN:  $3 \Leftrightarrow \Diamond$ , Hsing-king (Shinkyo), 24. VI-4. VII. 1939, Tagawa (KIMOTO), may be referable here, or possibly to *gracilicornis*, and a  $\eth$  from "Tschen, Mandschurei" 24. IX. 1944 (FREY) is possibly *coreana*. The aedeagus of the latter is shown (fig. 90, b).



Fig. 90. 3 genitalia. a, Gonioctena (Platyphytodecta) flexuosa (Baly); b, G. (Gonioctena) coreana (Bechyně); c, G. (G.) viminalis (Linnaeus).

128. Gonioctena (Gonioctena) dinah (Bechyně)

*Phytodecta dinah* Bech., 1948, Nar. Mus. Praze, Sbornik, Zool. **3** B (3): 123 (Siberia; PRAHA). DISTRIBUTION : Siberia.

## 129. Gonioctena (Gonioctena) gracilicornis (Kraatz)

- Phytodecta gracilicornis Kr., 1879, Deutsche Ent. Zeits. 1879: 135 (Amur:? ZMB).—Weise, 1893, Ins. Deutschl. 6(6): 1129 (Transbaikal).—Bechyně, 1947, Nar. Mus. Praze, Sbornik, Zool. 3 B (3): 115, pl. 2, fig. 97; pl. 5, figs. 20-21.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 74 (Korea).
- Phytodecta gracilicornis var. signaticollis Mader, 1937, Ent. Zeits. 51 (30) : 285 (E. Siberia). --Chûjô, 1941, l. c., 75 (Korea).

Phytodecta gracilicornis varr. kiberi, munaguro Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209) : 74, 75 (Korea; TARI).

We have some 2 specimens from Manchuria which might be this species, or *coreana*. DISTRIBUTION: SE Siberia, Korea.

130. Gonioctena (Gonioctena) kanfani Chen

Phytodecta kanfani Chen, 1941, Sinensia 12: 191 (Hwang Shan, Anhwei; Ac. SIN.). DISTRIBUTION: E. China (Anhwei).

131. Gonioctena (Gonioctena) rufipes (DeGeer)

- Chrysomela rufipes DeG., 1775, Mem. 5: 295, pl. 8, fig. 25 (Europe).
- Phytodecta rufipes, Reitter, 1912, Fauna Germ. 4: 128.—Chûjô, 1940, Mushi 13 (1): 6 (N. Korea).—Bechyně, 1947, Nar. Mus. Praze, Sbornik, Zool. 3 B (3): 112, pl. 2, fig. 90, pl. 5, figs. 16–17.

DISTRIBUTION: Europe, Siberia, NE China (Manchuria), N. America.

132. \*Gonioctena (Gonioctena) springlovae Bechyně

Phytodecta springlovei Bech., 1948, Nar. Mus. Praze, Sbornik, Zool. 3 B (3): 116, pl. 2, fig. 98; pl. 5, figs. 22-23 (Japan; PRAHA).

Gonioctena (Gonioctena) springlovae, Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 153. DISTRIBUTION: Japan.

133. Gonioctena (Gonioctena) viminalis (Linnaeus) Fig. 90, c.

Chrysomela viminalis L., 1758, Syst. Nat. ed. 10, 371 (Europe).

Phytodecta viminalis, Reitter, 1912, Fauna Germ. 4: 129, pl. 145, fig. 17.—Achard, 1924, Casopis 21: 31.—Bechyně, 1947, Nar. Mus. Praze, Sbornik, Zool. 3 B (3): 106, pl. 1, figs. 17–18, pl. 5, figs. 14–15.

Phytodecta (s. str.) viminalis, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 86 (Manchuria).

Phytodecta (s. str.) viminalis varr. bicolor, rufus, Chûjô, 1940, Mushi 13 (1): 6 (N. Korea).

DISTRIBUTION: Europe, Siberia, China (Manchuria), Korea, N. America.

CHAHAR: Shi-wan-tze, Hiu-mou, Kiang-keou (ZMB).

#### Subgenus Platyphytodecta Bechyně

- 134. Gonioctena (Platyphytodecta) flexuosa flexuosa (Baly), NEW COMBINATION Figs. 89, a & 90, a.
- Phytodecta flexuosus Baly, 1859, Ent. Soc. Lond., Trans. ser. 2, 5: 156 (China; BM).—
  Chen, 1934, Rech. Chrysom. Chine et Tonkin, 73; 1938, Soc. Ent. France, Ann. 106: 292 (N. China; Kiangsu; Chemo, Shanghai, Soochow, Anhwei, Szechuan).
- Gonioctena quadriplagiatus Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9:75 (Moupin; PARIS).
- Phytodecta flexuosus var. inornatus Chen, 1934, Rech. Chrysom. Chine et Tonkin, 74; 1938, Soc. Ent. France, Ann. 106: 293 (Kiangsu: Nanking, Shanghai, Chemo, Anhwei, Canton).

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Phytodecta (Platyphytodecta) flexuosus, Bechyně, 1947, Nar. Mus. Praze, Sbornik, Zool. **3**B(3): 100, pl. 1, fig. 1, pl. 5, figs. 1-2.

DISTRIBUTION: China (Shensi, Kiangsu, Kwangtung).

SHENSI: 4. S. Shensi, V. 1904, Blackwelder. KIANGSU: 1, Nanking, V. 1923, Van Dyke (CAS). KWANGTUNG: 2, Tsha-jiu-san, V-VI. 1912, Mell (ZMB).

135. Gonioctena (Platyphytodecta) flexuosa melli Gressitt and Kimoto, n. subsp.

Male: Shiny black, more pitchy reddish on parts of ventral surfaces and reddish brown an antenna and parts of mouth parts; anterior borders of antennal segments 1-4testaceous; elytron entirely shiny yellow; abdominal sternite 5 broadly bordered with testaceous behind; tarsi and apical portions of tibiae reddish. Body glabrous above; antenna finely pubescent, with a few pair of thick hairs on anterior portions of segments 2-6; ventral surfaces nearly glabrous; legs with a few sparse hairs on tibiae and upper portions of tarsi.

Head short, shiny, moderately punctured; occiput convex; frontoclypeus short and flat, somewhat densely punctured, transverse anteriorly. Antenna fairly short, strongly flattened in distal half; segment 1 arched anteriorly, nearly as long as 2+3; 2-5 decreasing slightly in length; 6 as long as 5, broader; 6-10 gradually wider and flatter; 10 similar to 9: 11 longer than 10.

Prothorax nearly twice as broad as long, evenly rounded at side and slightly narrow anteriorly; basal margin moderately convex on anterior margin deeply incised, feebly convex in central portion of emargination; disc fairly smooth and evenly convex except near side, finely and irregularly punctured; grossly punctured near side and with a raised smoothish area parallel to and above lateral margin. Scutellum smooth, slightly bordered and long, rounded posteriorly. Elytron nearly  $3 \times$  as long as broad, subparallel and evenly rounded apically; disc with a partly compound suture row of punctures and 10 more or less complete rows of fine punctures with the interspaces minutely and sparsely punc-Ventral surfaces largely impunctate, in part finely and sparsely punctured on tulate. abdomen; side of metathorax with a few coarse shallow punctures. Length 8.4 mm; breadth 4.5.

Paratypes: Length 7-8.6 mm; breadth 3.2-4.5.

Holotype (Zool. Mus. BERLIN), Tscha-jiu San (Chia-chiu Shan), N. Kwangtung Prov., S. China, VII-IX. 1910, R. Mell; numerous paratopotypes (ZMB, BISHOP), same data.

Differs from *flexuosa* (Baly) in being consistently larger in size, and in having the elytron always entirely pale.

#### Subgenus Brachyphytodecta Bechyně

136. Gonioctena (Brachyphytodecta) flavipennis (Jacoby), NEW COMBINATION

Phytodecta flavipennis Jac., 1888, Zool. Soc. Lond., Proc. 1888: 347 (Kiukiang; BM).

Phytodecta scutellaris var. flavipennis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 73; 1938, Soc. Ent. France, Ann. 106: 290, 292 (N. China, Moupin, Kiu-Kiang, Chekiang, Tonkin).

DISTRIBUTION: S. China (Kiangsi, Kwangtung).



Fig. 91. a, Gonioctena (Gonioctena) japonica Chûjô and Kimoto (1960; Japan), pupa; b-c, G. (Brachyphytodecta) rubripennis (Baly, 1862; Japan) (b, larva; c, pupa).

KWANGTUNG: Kau-lin Shan, 900 m, Lienping Distr., 21. IV. 1940, Gressitt.

## 137. Gonioctena (Brachyphytodecta) fulva (Motschulsky), NEW COMBINATION

Spartophila fulva Mots., 1860, Etudes Ent. 9: 41 (Amur;? type lost).

Gonioctena thoracica Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, 10: 27 (N. Kiangsu; BM). Phytodecta scutellaris Baly, 1862, *l. c.* (N. Kiangsu; BM).

Phytodecta dichroa Fairm., 1888, Rev. d'Ent. 7: 153 (Pekin; PARIS).

Phytodecta fulva, Heyden, 1887, Soc. Ent. Ross., Horae 21: 262 (Korea).—Weise, 1893, Ins. Deutschl. 6 (6): 1127.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (209): 74 (Korea).

Phytodecta (Asiphytodecta) scutellaris, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 72; 1938, Soc. Ent. France, Ann. 106: 292 (Chekiang: Hangchow; Kiangsi: Kuling; Fukien: Kientchen).

Phytodecta (Asiphytodecta) thoracicus, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 73; 1938, Soc. Ent. France, Ann. 106: 292 (N. Chine; Kiangsi; Chekiang).

DISTRIBUTION: E. Siberia, Kirin, Hopei, Kiangsu, Chekiang, Kiangsi, Fukien, Kwangtung, Szechuan, N. Vietnam.

KIRIN: 2, Harbin Distr., VI. 1952 (BM, BISHOP). SZECHUAN: 5, Ta-ning-ho, V-VI. 1904, Blackwelder (US); many, Kuan-shien, V-VI. 1930, Graham (US). FUKIEN: Shui-pei-kai, Shaowu, V. 1942, Maa (BISHOP); Ta-chu-lan, VI. 1943, Maa (CAS, BISHOP); Liutun, Kienyang, V. 1945, Lin (LINGNAN). CHEKIANG: 2, Hangchow, V. 1923, Van Dyke (CAS). SIBERIA: 6, Kudia River, Amagu, VII. 1923, Cockerell (US); 1, Vladivostok, 1923, Prinada (US).

138. Gonioctena (Brachyphytodecta) lesnei (Chen), NEW COMBINATION Phytodecta (Asiphytodecta) lesnei Chen, 1931, Mus. Paris, Bull. 1931: 111; 1934, Rech. Chrysom. Chine et Tonkin, 72; 1938, Soc. Ent. France, Ann. 106: 291 (Yunnan, Tonkin).

Asiphytodecta lesnei, Chen & Young, 1941, Sinensia 12 (1-6): 206.

DISTRIBUTION: SW China (Yunnan), Tonkin.

139. Gonioctena (Brachyphytodecta) melanoptera (Chen and Young), NEW COMBINATION

Asiphytodecta melanoptera Chen & Young, 1941, Sinensia 12 (1-6): 209 (Kwangsi; Ac. SIN.).

DISTRIBUTION: SW China (Kwangsi).

## 140. Gonioctena (Brachyphytodecta) semiglobosa (Achard), NEW COMBINATION

Phytodecta semiglobosus Achard, 1924, Casopis 21: 33 (Kweichow; PRAHA).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 75; 1937, Ent. Soc. France, Ann. 106: 294 (Kong-Yang-Fou; ?PARIS).

Asiphytodecta semiglobosus, Chen & Young, 1941, Sinensia 12 (1-6): 206.

DISTRIBUTION: SW China (Kweichow).

#### Subgenus Asiphytodecta Chen

141. Gonioctena (Asiphytodecta) flavoplagiata (Jacoby), NEW COMBINATION

Phytodecta flavoplagiatus Jac., 1890, Entomologist 23: 117, pl. 1, fig. 8 (Changyang; BM). Phytodecta (Asiphytodecta) flavoplagiatus, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 76,

fig. 54; 1938, Soc. Ent. France, Ann. 106: 295 (Chang-Yang, Kouy-Tcheou; Tonkin; Annam).

Phytodecta eburoides Achard, 1924, Casopis 21: 34 (Annam, China).

Asiphytodecta flavoplagiatus, Chen & Young, 1941, Sinensia 12 (1-6): 207.

DISTRIBUTION: China (Hupeh, Szechuan, Kweichow), Tonkin, Annam.

HUPEH: 3, Sui-sa-pa, 1000 m, Lichuan, VII-VIII. 1948, Gressitt (CAS, BISHOP); 1, Leong-ho-kow, IX. 1948, Gressitt & Djou (BISHOP). SZECHUAN: 1, Mt. Omei, VII. 1932, Franck (US); 1, Washan, VII. 1922, Graham (US).

142. Gonioctena (Asiphytodecta) subgeminata (Chen), NEW COMBINATION Fig. 89, b.

Phytodecta (Asiphytodecta) subgeminatus Chen, 1934, Rech. Chrysom. Chine et Tonkin, 75, fig. 53 (Canton); 1938, Soc. Ent. France, Ann. 106: 294.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 67, fig. 23 (Taiwan).

Asiphytodecta subgeminatus, Chen & Young, 1941, Sinensia 12 (1-6): 208.

DISTRIBUTION: S. China (Kwangtung, Fukien), Taiwan.

KWANGTUNG: 3, Yao Shan (Mt. range), Linhsien, IV. 1934, To (LINGNAN). FU-KIEN: 3, Ta-chu-lan, 1000 m, Shaowu, III-IV. 1943, Maa & Lin (BISHOP, CAS); 30. IV. 1940, Maa.

143. Gonioctena (Asiphytodecta) tredecimmaculata (Jacoby), NEW COMBINATION

Phytodecta (Asiphytodecta) tredecimmaculatus Jac., 1888, Zool. Soc. Lond., Proc. 1885: 347 (China: Kiukiang; BM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 74; 1938, Ent. Soc. France, Ann. 106: 293 (Kiu-Kiang; Kouy-Tcheou: Kouy-Yang, Kan Chouen Fou; Amoy, Yunnan: Tali; Tonkin: environ de Tuyen Quan, Dong-Dang, environ de Lam, Hoa-Binh, Bao-Lac).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 64, fig. 22 (S. China, Yunnan, Tonkin, Formosa).

Paropsides nigrosparsus Fairm., 1888, Soc. Ent. France, Ann. ser. 6, 8: 373 (Kiangsi: Kiukiang; Fukien: Amoy; Kweichow: Kan-chouan; Yunnan: Tali; Tonkin).

Phytodecta tredecimmaculatus var. cinctipennis Ach., 1924, Casopis 21: 33 (Yunnan, Kweichow, Tonkin).

Asiphytodecta tredecimmaculatus, Chen & Young, 1941, Sinensia 12 (1-6): 207.

DISTRIBUTION: S. China (Kiangsi, Fukien, Kweichow, Yunnan), N. Vietnam (Tonkin), Taiwan.

FUKIEN: Many, Ta-chu-lan, 1000 m, Shaowu, IV-VI. 1942, III-IV. 1943, V. 1945, VI-VII. 1946, Maa (CAS, BISHOP); many, Sanchiang, Chungan, IV. 1943, Maa (BISHOP); 2, Cha-po-hui, Kien-yang Distr., V. 1933, Ngu (LINGNAN); Foochow, 1921, Kellogg (US); Niu-ling, Chang-ting, VIII. 1945, Maa. KWANGTUNG: 1, Yao Shan, Linhsien, V. 1934, To (LINGNAN); Yim-na Shan, 1-15. VI. 1936, Gressitt (CAS). KIANGSI: 1, Kwanche, Chienman, V. 1942, Maa (BISHOP); 1, Tai-au-hong, VII. 1936, Gressitt (CAS); 1, Wong-sashue, 8-11. VII. 1936, Gressitt. HUPEH: 3, Sui-sa-pa, Lichuan Distr., VII. 1948, Gressitt & Djou (BISHOP). SZECHUAN: Fu-lin, 2000 m, VII. 1928, Graham (US).

## Subgenus Sinomela Chen

## 144. Gonioctena (Sinomela) aeneipennis Baly

Gonioctena aeneipennis Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, 10: 27 (China: BM).

Phytodecta aeneipennis, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 72; 1938, Soc. Ent. France, Ann. 106: 291.

Phytodecta (Sinomela) aeneipennis, Chen, 1936, Notes d'Ent. Chinoise 3: 86.

DISTRIBUTION: China.

## 145. Gonioctena (Sinomela) fortunei Baly

Gonioctena fortunei, Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 228 (N. China; BM). Phytodecta fortunei var. extensus Ach., 1924, Casopis 21: 33 (Kweichow; PRAHA).

Phytodecta fortunei Chen, 1934, Rech. Chrysom, Chine et Tonkin, 75; 1938, Ent. Soc. France, Ann. 106: 294 (Chekiang: Hangchow; Kouy-Tcheou).

Phytodecta (Sinomela) fortunei, Chen, 1936, Notes d'Ent. Chinoise 3: 87.

DISTRIBUTION: S. China (Kiangsu, Chekiang, Hunan, Kweichow).

HUNAN: Chinkiang, 3. VI. 1940, Maa (BISHOP); 2, China (ZSBS). KWEICHOW: Kweiyang, 1000 m, 12. VII. 1940, Gressitt.

## 146. Gonioctena (Sinomela) nigroplagiata Baly

Gonioctena nigroplagiata Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, 10: 28 (Japan; BM).

Phytodecta robusta Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 209 (Japan; BM); 1862,

Ann. Mag. Nat. Hist. ser. 3, 10: 28 (China; BM).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 74; 1938, Soc. Ent. France, Ann. 106: 293 (Chine, Japan).

Phytodecta (Sinomela) nigroplagiatus, Chen, 1936, Notes d'Ent. Chinoise 3(5): 87.

DISTRIBUTION: E. China (Fukien), Japan.

FUKIEN: 1, Chang-ting, 3. VI. 1940, Maa (BISHOP).

## Genus Phratora Chevrolat

- Phratora Chev., 1837, IN Dejean, Cat. Col. ed. 3, 405.—Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 219 (type: vulgatissima L.).—Monrós & Bechyně, 1956, Ent. Arb. 7 (3): 1131.
- Phyllodecta Kirby, 1837, Fauna Bor. Amer. 4: 216.—Weise, 1884, Ins. Deutschl. 6 (3): 511.
  —Jacobson, 1900, Soc. Ent. Ross., Horae 25: 89.—Reitter, 1912, Fauna Germ. 4: 127.—Maulik, 1926, Fauna India, Chrys. Halt., 83 (type fixed as: Chrysomela vitellinae L.; Europe).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 77; 1936, Notes d'Ent. Chinoise 5 (3): 89; 1938, Ent. Soc. France, Ann. 106: 296.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 74.
- Chaetocera Weise, 1884, Ins. Deutschl. 6 (3): 514 (subgenus; type: Chrysomela vulgatissima L.; Europe).—Reitter, 1912, Fauna Germ. 4: 130.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 76.—Monrós & Bechyně, 1956, Ent. Arb. 7 (3): 1131.

Chaetoceroides Strand, 1935, Fol. Zool.-hydrobiol. 7: 285 (new name for Chaetocera Weise).

#### KEY TO CHINESE SPECIES OF PHRATORA

1. Base of pronotum unmargined 2
Base of pronotum finely margined; steel blue; elytron heavily and irregularly punctured; length 4.6-4.8 mm
2(1) Body fairly broad more than $1/2$ as broad as long 3
2 (1). Doly fairly broad, more than 1/2 as broad as fong
Body fairly narrow, about 2× as long as broad 4
3 (2). Elytral punctures somewhat irregular, in vague rows, the punctures coarse, about
25 in an approximate row on basal $1/2$ , slightly closer to suture than to ex-
ternal margin; pronotum bluish green; elytron bronzy purple; last abdominal
sternite brown posteriorly; length 5 mm; breadth 2.8 147. bicolor
Elytral punctures in regular series, quite fine; dorsum blue to green; last abdo-
minal sternite entirely black; length 4 mm 152. phaedonoides
4 (2). Length more than 3.5 mm 5
Length 3.0-3.3 mm; pronotum finely punctured; elytron with very regular distinct
rows of fine punctures, with interspaces vaguely and sparsely punctured; shiny
steel blue with parts of antenna, legs and abdomen brownish 151. parva
5 (4). Elytral interspaces rather sparsely punctured; occiput without a median groove 6
Elytral interspaces closely micropunctulate; occiput with a broad median groove;
dorsum green or blue; length 4-5 mm 149. laticollis
6 (5). Dorsum steely blue, sometimes greenish; frons without 2 longitudinal fine groov-
es; length 3.8-4.8 mm 150. multipunctata
Dorsum bronzy green; frons with 2 longitudinal fine grooves; length 4.5 mm

147. Phratora bicolor Gressitt and Kimoto, n. sp. Figs. 92 & 93, c.

*Male*: Metallic; head and pronotum blackish green; scutellum steely blue; elytron bronzy purplish with slightly greenish or bluish reflections; ventral surfaces greenish to

bluish black, slightly tinged with brownish on posterior borders of abdominal segments; legs greenish black, or pitchy brownish on tarsi and parts of apices of tibiae; antenna pitchy black, slightly metallic and slightly reddish brown on parts of first few segments; mouthparts reddish brown to pitchy. Dorsum nearly glabrous; ventral surfaces sparsely clothed with oblique pale hairs; legs with very few hairs except on tarsi and apices of tibiae.

Head not quite 2/3 as broad as prothorax, fairly smooth, and slightly convex above with a broad shallow depression between the oblique and slightly raised and punctate antennal tubercles; frontoclypeus short, slightly convex, and sparsely punctured; occiput with punctures fairly sparse but closer anterior to center and on side near eye. Antenna fully 1/2 as long as body, moderately slender; segment 1 slightly longer than broad, arched and



Fig. 92. Phratora bicolor n. sp.

nearly impunctate; 2 nearly as long as 1 and slightly shorter than 3; 4 slightly shorter than 2; 5 about as long as 4 but stouter; 5-11 of similar diameter and only weakly flattened, very slightly increasing in length to 9; 10 slightly shorter than 9; 11 distinctly longer, broadest beyond middle. Prothorax about 2/3 as long as broad, somewhat evenly rounded at side, narrower at apex down the base; basal margin slightly convex; anterior margin strongly and evenly emarginate, distinctly marginate; sides still more distinctly marginate; disc subevenly convex, with numerous minute irregular punctures, which become stronger near basal margin under the few still stronger ones scattered along side. Scutum slightly longer than broad, smooth, acute apically. Elytron  $2.5 \times$  as long as broad, nearly parallel-sided, very slightly wider behind middle, evenly narrowed to sutural angle; disc subevenly convex, slightly raised near suture behind base, behind which slightly depressed, moderately so above humerus; surface with fairly strong punctures which are arranged in largely irregular rows which cannot be separated on central portion, but are a little more distinct near base and apex, punctures in part as large

as interspaces. Ventral surfaces rather shiny, finely and irregularly punctured, with larger punctures on metepisternum and side of metasternum. Legs fairly shiny, with femora moderately swollen and nearly punctate; tibiae nearly straight, hind tarsal segment 1 as long as 2+3, nearly as broad as 3, about as long as 5. Length 4.6 mm; breadth 2.9.

Paratype: Length 4.8 mm; breadth 3.1.

DISTRIBUTION: W. China (Szechuan).

Holotype ♂ (U. S. Nat. Mus.), Wei-chow, 2000 m, Szechuan Prov., 1-4. VIII. 1933, D. C. Graham.

Differs from *phaedonoides* Chen in being larger, in being bronzy instead of green on elytron, and in having the elytral disc much more heavily punctured and the puncture-rows much less regular.



Fig. 93.  $\Im$  genitalia. a, Phratora multipunctata (Jacoby); b, P. inhonesta (Weise); c, P. bicolor n. sp.

148. Phratora inhonesta (Weise), NEW COMBINATION Fig. 93, b.

Phyllodecta (Chaetocera) inhonesta Ws., 1884, Ins. Deutschl. 6(3): 514 note (Kjachta; Sarepta; ZMB).—Marseul, 1889, Abeille 27: 121.

DISTRIBUTION: S. Siberia, N. Manchuria.

KIRIN: 4, Er-tao-ho-tze Station on Chinese Eastern Railway, 23. V. 1939, Loukashkin (CAS, BISHOP); Laha-susu, Mouth of Sungari R., 15. VII. 1928, Jettmar. SIBERIA: 1, Vladivostok, 1923, Prinada (US).

#### 149. Phratora laticollis (Suffrian), NEW COMBINATION

Phyllodecta laticollis Suff., 1851, Linn. Ent. 5: 262 (Europe).—Reitter, 1912, Fauna Germ.
4: 131 (hosts, key).—Chen, 1936, Notes d'Ent. Chinoise 3 (5): 89 (Mongolia).

DISTRIBUTION: Europe, Siberia, Asia Minor, Armenia, NW China (Mongolia).

HOSTS: Populus tremula, P. alba (Europe).

150. Phratora multipunctata (Jacoby), NEW COMBINATION Fig. 93, a.

Phyllodecta multipunctatus Jac., 1890, Entomologist 23: 117 (Chang-yang, Hupeh; BM).— Chen, 1934, Rech. Chrysom. Chine et Tonkin, 78; 1938, Soc. Ent. France, Ann. 106: 297.

There is a possibility that this species is the same as laticollis.

DISTRIBUTION: China (Hupeh, Yunnan, Szechuan, Kirin).

KIRIN: 3, Er-tao-ho-tze Sta., Chinese Eastern Railway, 23. V. 1939, Loukashikin; Ersen-tien-tze, 23. VI. 1940, Weymarn; 5, Yalu River, 250 km from mouth, Korean border, V. 1914, Sowerby (US). SZECHUAN: Ta-ning-ho, V-VI. 1904, Blackwelder (US); nr. Fu-lin, 2200 m, 18-20. VIII. 1928, Graham (US). 370

Figs. 94 & 95.

*Male*: Black, with greenish to bluish or purplish tinges: head bronzy black above; pronotum greenish to bluish black; scutellum and elytron bluish black with a slightly greenish tinge; ventral surfaces bronzy black; antenna pitchy brown, paler on parts of basal segments; mouthparts pitchy brown; legs bronzy green on femora, bronzy to reddish distally on tibiae, and reddish brown on tarsi. Body nearly glabrous but with a few minute pale hairs on ventral surfaces; legs moderately hairy on tarsi, distal portions of tibiae and ventral portions of femora.



Fig. 94. Phratora parva n. sp.



Fig. 95.  $\Im$  genitalia. Phratora parva n. sp.

Head less than 1/2 as broad as prothorax, very short, surface feebly convex behind level of eyes, slightly depressed along central portion and more narrowly so between the slightly raised antennal tubercles; occiput finely but distinctly punctured, the punctures somewhat larger along depressed central portion; frontoclypeus very short, transversely depressed, punctured and transversely raised between anterior portions of antennal insertions. Antenna less than 1/2 as long as body, moderately thickened in last 5 segments; segment 1 rather stout and arched, finely punctured; 2 slightly shorter than 1; 3 distinctly longer than 2 and somewhat longer than 4; 5 slightly shorter than 4; 6 to 9 gradually larger; 9 and 10 similar; last  $1.5 \times$  as long as 10, acute apically. Prothorax less than 2/3 as long as broad, sinuate at side with a slight constriction anterior to base and somewhat evenly rounded in anterior portion; basal margin feebly and subevenly convex; anterior margin deeply and evenly marginate; disc rather evenly convex, finely punctured, the punctures becoming slightly larger towards side; most of the punctures more widely separated than their diameter; scutellum subtriangular, slightly longer than broad and blunt apically. Elytron nearly  $3 \times$  as long as broad, roughly parallel-sided and slightly narrowed towards humerus and evenly narrowed towards sutural angle at apex; disc with a short sutural rows of punctures and 10 fairly complete and subregular rows of punctures which are mostly about as large as interspaces longitudinally and about 1/3 as large as interspaces transversely, the punctures quite distinct to apex and only slightly confused near middle of side. *Ventral surfaces* partly impunctate with some vague subglobular punctures on sides of abdominal sternites and a few large punctures on metasternum. *Legs* fairly short, with femora slightly swollen; hind tibia slightly sinuate; hind tarsus with segment 1 distinctly smaller than 2+3 combined and about 2/3 as broad as 3; 5 longer than 1. Length 3.2 mm; breadth 1.9.

*Paratypes*: General dorsal color varying from steel blue to greenish blue. Length 3-3.3 mm; breadth 1.7-1.95.

Holotype  $\mathcal{J}^{\Lambda}$  (CAS), Yablonya, Manchuria, 16–20. VI. 1940, M. A. Weymarn; allotype and 3 paratypes (CAS, BISHOP), same data.

Differs from *atrovirens* Cornelius in being smaller, in having the side of prothorax quite sinuate instead of nearly straight, and the vertex concave medially and raised at each side, instead of fairly flat.

## 152. Phratora phaedonoides (Chen), NEW COMBINATION

Phyllodecta phaedonoides Chen, 1934, Rech. Chrysom. Chine et Tonkin, 78 (Peiping; Ac. SIN.); 1938, Ent. Soc. France, Ann. 106: 297.

DISTRIBUTION: N. China (Hopei).

153. Phratora sinensis (Chen), NEW COMBINATION

Phyllodecta sinensis Chen, 1934, Arkiv Zool. 27 A (5): 4 (S. Kansu; Ac. SIN.).

There is a possibility that this species is also the same as laticollis.

DISTRIBUTION: NW China (S. Kansu).

#### 154. Phratora vitellinae (Linnaeus)

Chrysomela vitellinae L., 1758, Syst. Nat. ed. 10, 370 (Europe; ?UPPSALA).

Phyllodecta angusticollis Motschulsky, 1860, Schrenck's Reisen Amurl. 2:230 (N. Russia). Phyllodecta latipennis Mots., 1860, *l. c.*, pl. 11, fig. 16 (Ochotsk).

Phyllodecta (s. str.) phaedonoides, Chûjô, 1941 (nec Chen, 1934), Nat. Hist. Soc. Formosa, Trans. 31 (209): 73 (Korea) (Part).

?Phyllodecta (s. str.) vitellinae, Chûjô, 1941, t. c. (219): 461 (Korea).

Verification may be needed for Chûjô's record of this species from Korea.

DISTRIBUTION: Europe, Siberia, Korea.

## 155. Phratora vulgatissima (Linnaeus), NEW COMBINATION

Chrysomela vulgatissima L., 1758, Syst. Nat. ed. 10, 370 (Europe; ? UPPSALA).

Phyllodecta vulgatissima, Heyden, 1887, Soc. Ent. Ross., Horae 21: 262 (Korea).—Doi, 1927, Dobutsugaku Zasshi 39 (466): 337 (Korea).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (219): 460 (Korea) (part).

?Phyllodecta (s. str.) phaedonoides, Chûjô, 1941 (nec Chen), op. cit. 31 (209): 73 (Korea).

Verification may be needed for Chûjô's record of this species from Korea.

DISTRIBUTION: Europe, Siberia, Korea, N. America.

#### Genus Lycaria Stål

Lycaria Stål, 1857, Ofv. Vet.-Ak. Förh. 14: 59 (type: L. westermanni Stål).—Maulik, 1926, Fauna India, Chrys. Halt., 85.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 79; 1938, Ent. Soc. France, Ann. 106: 298.

## 156. \*Lycaria westermanni Stål

Lycaria Westermanni Stål, 1857, Ofv. Vet.-Ak. Förh. 14: 59 (Assam; STOCKHOLM).—Maulik, 1926, Fauna India, Chrys. Halt., 85 (Assam, Burma, Siam, Indochina).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 79; 1938, Ent. Soc. France, Ann. 106: 298 (Tonkin, Cambodge, Cochinchine).

DISTRIBUTION: NE India, Burma, Thailand, Cambodia, Vietnam.

#### Genus Phyllocharis Dalman

Phyllocharis Dalm., 1824, Ephem. Ent., 20 (type: Chrysomela cyanicornis F.).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 79; 1938, Soc. Ent. France, Ann. 106: 298.

This genus occurs primarily in Australia and New Guinea, and is barely represented in SE Asia.

#### 157. \*Phyllocharis undulata (Linnaeus)

Chrysomela undulata L., 1763, Amoen. Acad. 6: 393 ("India").

Phyllocharis undulata, Baly, 1867, Ent. Soc. Lond., Trans. ser. 2, 4: 283 (Java, Singapore, Malacca, Timor).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 80, fig. 55; 1938, Ent. Soc. France, Ann. 106: 299, fig. 55 (Tonkin, Cambodia, Laos).

DISTRIBUTION: SE Asia, W. Indonesia, Timor.

#### Genus Phola Weise

- Phola Ws., 1890, Soc. Ent. Ross., Horae 24: 482 (type: P. Keyserlingi Ws.=Chalcolampra octodecimguttata F.; Szechuan).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 80; 1936, Notes d'Ent. Chinoise 3 (5): 90; 1938, Ent. Soc. France, Ann. 106: 299.—Chûjô, 1958, Taiwan Mus., Quart. Jour. 11 (1-2): 79.
- Chalcolampra, Chapuis, 1874, Gen. Col. 10: 425 (part).—Weise, 1916, Coleopt. Cat. 68: 198 (part).—Maulik, 1926, Fauna India, Chrys. Halt., 86.

The genus *Chalcolampra* Blanchard 1853 is Australian. *Phola* differs from it in structures of prosternum and metasternum, particularly. As pointed out by Chen, the type locality "Australia" for *octodecimguttata* Fabricius is undoubtedly erroneous. We are here synonymizing *Phola cybele* Stål with *octodecimguttata*, after seeing Stål's type specimen in the Riksmuseum.

#### KEY TO CHINESE SPECIES OF PHOLA

Elytron with roundish patches of pale yellow on dark background... 158. octodecimguttata Elytron with pale patches with dark centers (Maulik, 1926; Andaman Is.) ..... dipa\*

158. Phola octodecimguttata (Fabricius) Fig. 96, a

Chrysomela octodecimguttata F., 1775, Syst. Ent., 100 ("Australia"; København).
Chalcolampra cybele Stål, 1860, Ofv. Vet.-Ak., Förh. 17: 464 (Hong Kong; Stockholm). New Synonymy.

Chalcolampra Keyserlingi Weise, 1890, Soc. Ent. Ross., Horae 24: 482 (Szechuan; ?ZMB). Chalcolampra viticis Fairm., 1888, Soc. Ent. Belg., Ann. 1888: 39 (Kiangsi; PARIS).

Chalcolampra octodecimguttata, Maulik, 1926, Fauna India, Chrys. Halt., 87, fig. 31 (Ceylon; Burma; India; Australia; Malacca, Pulo Penang, China).

- Phola cybele, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 82; 1938, Ent. Soc. France, Ann. 106: 301 (Hong Kong).
- Phola octodecimguttata, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 81, fig. 56.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 81 (Ryukyu Is.).—Chen, 1936, Notes d'Ent. Chinoise 3 (5): 90; 1938, Ent. Soc. France, Ann. 106: 300, fig. 56 (Kiangsu, Chekiang, Kiangsi, Taiwan, Tonkin).—Chûjô, 1958, Taiwan Mus., Quart. Jour. 12 (1-2): 81, fig. 27 (Taiwan).

DISTRIBUTION: S. China, Taiwan, N. Vietnam (Tonkin), Burma, S. India, Ceylon, Malaya, Luzon.

KWANGTUNG: many, Yim-na Shan, VI. 1936, Gressitt (CAS); many, Mei-hsien, VI. 1936, Gressitt (BISHOP); 3, Ting-Wu Shan, VII. 1949, Gressitt (CAS); 2, Lung-tau-Shan, VI. 1947, Gressitt (BISHOP); 1, Naam-kong-paai, Yaoshan (Mt. Range), XI. 1934, To (LING-NAN); 1, Sha-chow, K'uhkiang Distr., VIII. 1932, Djou (BISHOP); 1, Tsao-kok-wan, 300 m, Lung-tau-Shan, VI. 1947, Gressitt & Lam (BISHOP); 1, Tsha-jiu San, V-VI. 1912, Mell (ZMB). FUKIEN: 2, Siemssen, IV. 1913 (US); 1, Shui-pei-kai, Shaowu, VI. 1942, Maa (CAS); 1, Shaowu, Si-men, IX. 1942, Maa (BISHOP); 2, Foochow, (US); 1, Shaowu, Ao-tow, VI. 1942; 1, Kwang-keng, Kienyang, Maa (BISHOP). KIANGSI: Tai-au-hong Wong-sa-shue, VII.



Fig. 96. a, Phola octodecimguttata (Fabricius); b, Potaninia polita Weise.

1936, Gressitt (BISHOP). ANHWEI: 1, Tai-ping-shien, 1932, Liu (LINGNAN). SHENSI: 1, S. Shensi, V. 1904, Blackwelder (US). SZECHUAN: 1, Chang-tang-ching, 300 m, VII. 1948, Gressitt & Djou (BISHOP). KWANGSI: 3, Nan-ning, Van Dyke Coll. (CAS). HAI-NAN: many, Fan-heang, VI. 1935, Gressitt (CAS).

HOSTS: Vitex spp.

#### Genus Potaninia Weise

- Potaninia Ws., 1899, Soc. Ent. Ross., Horae 23: 603 (type: P. polita Ws.; Szechuan).— Maulik, 1926, Fauna India, Chrys. Halt., 92.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 93, fig. 33; 1938, Ent. Soc. France, Ann. 106: 303.
- Suinzona Chen, 1931, Soc. Ent. France, Bull. 1931: 130 (type: S. laboissierei Chen); 1934, Rech. Chrysom. Chine et Tonkin, 84; 1936, Notes d'Ent. Chinoise 3(5): 90 (syn. of Potaninia); 1938, Ent. Soc. France, Ann. 106: 303.

The common forms from China and NE India have been somewhat confused. They have all been merged under one name (assamensis), but appear to represent a number of races, perhaps of two species. For this reason we are retaining the name polita for the principal Chinese populations, though recognizing that in W. China there may be a gradual merging with assamensis. In general the populations from C. China have the prothorax as long at side as at middle, whereas those from India generally have the prothorax shorter at side than at middle. Some from W. Szechuan are paler, somewhat greenish, and larger than most Chinese specimens.

### KEY TO CHINESE SPECIES OF POTANINIA

- Prothorax as long near side as in middle; length generally 5.0-6.5 mm...... 161. polita Prothorax shorter near side than in middle; length often 7-8 mm (but *collaris* Ws., considered synonym, is 5.5 mm (Baly, 1879; Assam, NE India)....... 159. assamensis\*
- - Elytron with punctures regular throughout; length 4.25 mm (Jacoby, 1885; Japan)... cyrtonoides\*

#### 159. Potaninia assamensis (Baly)

Entomoscelis assamensis Baly, 1879, Cist. Ent. 2: 437 (Assam; BM).

- Entomoscelis metallica Baly, 1888, Ent. Month. Mag. 25: 85 (Sikkim; BM).—Maulik, 1926, Fauna India, Chrys. Halt., 95 (Sikkim, Teste Valley).
- Potaninia assamensis, Jacoby, 1896, Soc. Ent. Belg., Ann. 40: 253 (Kanara, Sumatra, Perak, China).—Weise, 1905, Deutsche Ent. Zeits. 1905: 216.—Maulik, 1926, Fauna India, Chrys. Halt., 93, fig. 33 (Assam, Darjeeling).
- Potaninia collaris Ws., 1905, Deutsche Ent. Zeits. 1905: 216 (Darjeeling; ZMB).-Maulik, 1926, Fauna India, Chrys. Halt., 94 (Darjeeling).

The synonymy for this species (as suggested by Maulik and Chen, in part) is presented because *polita* was synonymized with *assamensis* by Chen. As suggested above, populations in Yunnan may be referable to *assamensis*. DISTRIBUTION: NE India, Assam, ?SW China (Yunnan).

YUNNAN: The specimens cited below from W. Yunnan might be referable to this species.

#### 160. Potaninia laboissierei (Chen)

Suinzona laboissierei Chen, 1931, Soc. Ent. France, Bull. 1931: 130, fig. 2 (Moupin; PARIS);
1934, Rech. Chrysom. Chine et Tonkin, 85, fig. 58; 1938, Ent. Soc. France, Ann.
106: 304 (Moupin).

Potaninia laboissierei, Chen, 1936, Notes d'Ent. Chinoise 3 (5): 91 (Mouping). DISTRIBUTION: W. China (Sikang).

161. Potaninia polita Weise Fig. 98, b.

Potaninia polita Weise, 1889, Soc. Ent. Ross., Horae 23: 604 (Szechuan; ?ZMB).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 84; 1938, Ent. Soc. France, Ann. 106: 303 (Kweichow, Yunnan, Tonkin).

DISTRIBUTION: S. China (Szechuan, Hupeh, Kweichow, Yunnan), N. Vietnam.

SZECHUAN: 1, Si-gi-pin, VIII. 1925, Graham (US); 1, nr. Suifu, IX. 1923, Graham (US); 1, Sui-fu, II. 1930, Graham (US); 1, nr. Washan, VII. 1925, Graham (US); 1, nr. Yueh-shi, VII. 1928, Graham (US); Wan-hsien, X. 1948, Djou (CAS); King-foo Shan, VII. 1932, G. Liu (MCZ). YUNNAN: 11, Chao-chow-fu, 2300 m, W. Yunnan, VIII-IX. 1914, Mell (ZMB); 1, Yunnan Sen (ZMB). HUPEH: many, Sui-sa-pa, 1000 m, Lichuan Distr., 25. VII-12. IX. 1949, Gressitt & Djou, some on *Populus* (CAS, BISHOP); 3, Ta-yin-ping to Sui-sa-pa, VIII. 1948, Gressitt & Djou (CAS); 61, Shao-ho, Lichuan, VIII. 1948, Gressitt & Djou (CAS).

HOST: Populus sp.

# Genus Semenowia Weise

Semenowia Ws., 1889, Soc. Ent. Ross., Horae 23: 605 (type: S. chalcea Ws.).

Apparently the following is the only known species of this genus.

#### 162. Semenowia chalcea Weise

Semenowia chalcea Ws., 1889, Soc. Ent. Ross., Horae 23: 605 (Amdo; ?ZMB).

Black, slightly golden iridescent above; pronotum finely punctured, with thick lateral callus and deep groove; elytra more sparsely and weakly punctured; length 6.5 mm.

DISTRIBUTION: C. Asia (Amdo).

#### Genus Entomoscelis Chevrolat

Entomoscelis Chev., 1837, IN Dejean, Cat. Col. ed. 3, 402; 1843, Dict. Hist. Nat. 3: 656.—
Redtenbacher, 1849, Fauna Austr., 552.—Motschulsky, 1860, Schrenck's Reisen Amurl.
2: 180 (type: Chrysomela odonidis F.).—Chapuis, 1874, Gen. Col. 10: 419.—Reitter, 1912, Fauna Germ. 4: 124.—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 82; 1936, Notes d'Ent. Chinoise 3 (5): 91; 1938, Ent. Soc. France, Ann. 106: 301.

Chrysomelopsis Achard, 1922, Fragm. Ent. 1922: 26 (type: C. ecoffeti Ach.; China).

#### Pac. Ins. Mon.

#### KEY TO CHINESE SPECIES OF ENTOMOSCELIS

# 163. Entomoscelis adonidis (Pallas) Fig. 97, a.

Chrysomela adonidis Pall., 1771, Reisen 1, 2: 463 (Hungary).

Entomoscelis adonidis, Redtenbacher, 1874, Fauna Austr. ed. 3, 2: 479.—Reitter, 1912, Fauna Germ. 4: 125, pl. 144, fig. 10.

DISTRIBUTION: S. Europe, Asia Minor, Siberia, Sinkiang, N. America.

SINKIANG: 12, Tien Shan, W. Valley of Tekestal, 1902, S. G. Wache (ZMB); 13, Tekesthal, 3, Naryu-Kol, Tien Shan (ZMB); 3, S. Chan-Tengri Mts. (ZMB).



Fig. 97. a, Entomoscelis adonidis (Pallas); b, E. orientalis Motschulsky.

164. Entomoscelis ecoffeti (Achard)

Chrysomelopsis Ecoffeti Ach., 1922, Fragm. Ent., 29 (Chine; PRAHA).

Entomoscelis ecoffeti, Chen, 1934, Rech. Chrysom. Chine et Tonkin, 83; 1938, Soc. Ent. France, Ann. 106: 302 (Peiping).

DISTRIBUTION: N. China (Hopei).

165. Entomoscelis orientalis Motschulsky Fig. 97, b.

Entomoscelis orientalis Mots., 1860, Schrenck's Reisen Amurl. 2: 222, pl. 11, fig. 4 (Amur).
—Doi, 1927, Dobutsugaku Zasshi 39 (468): 397 (Kung-chi-ling).—Chen, 1934, Rech. Chrysom. Chine et Tonkin, 82, fig. 57.—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 10 (Keisho-Hokudo, Korea).—Chen, 1938, Ent. Soc. France, Ann. 106: 301, fig. 57 (Peiping, Mongolia, Korea, Manchuria).—Chûjô, 1938, Mushi 11 (2): 163 (Tsingtau); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (309): 72 (Keisho-Hokudo, Korea).

DISTRIBUTION: E. Siberia, China (Mongolia, Kirin, Liaoning, Hopei, Kwangsi), Korea.

KIRIN: Liao-yang, 9. VII. 1927, on *Salix*, and 30. III. 1928, Loukashkin (CAS, BISHOP). KOREA: 7, Chemulpo (ZMB). SIBERIA: Vladivostok, 1923, Prinada (US).

HOST: Salix sp.

#### 166. Entomoscelis suturalis Weise

Entomoscelis suturalis Ws., 1882, Ins. Deutschl. 6 (2): 312, nota 1 (Greece; ?ZSBS).—Chen, 1936, Notes d'Ent. Chinoise 3 (5): 91 (Heau-tchoang, Kiangsu).

Chen does not mention this species in his monograph, though recording it in his catalog published shortly afterward. The indicated distribution seems rather odd.

DISTRIBUTION: Greece, Crimea, China (Kiangsu: Heau-tchoang).

## Genus Xenomela Weise

Xenomela Ws., 1884, Deutsche Ent. Zeits. 28: 226, 227 (type: X. kraatzi Ws.=Entomoscelis dohrni Solsky).

This genus only contains a few species, all limited to Central Asia.

### 167. Xenomela marginicollis (Ballion)

Chrysomela marginicollis Ball., 1878, Bull. Mosc. 53 (1): 382, 9 (Kuldsha).

Chrysomela fulvipes Ball., 1878, *l. c.*, 383, S (Kuldsha).—Jacobson, 1895, Soc. Ent. Ross., Horae 29: 274.

Chrysomela ovipennis Ball., 1878, l. c., 374, ♀ (Kuldsha).

Xenomela marginicollis, Jacobson, 1925, Mus. Zool. Leningrad, Ann. 26: 232 (Dungaria, Kuldja, Tian Shan).

Xenomela fulvipes Weise, 1916, Coleopt. Cat. 68: 218 (marginicollis wrongly synonymized).

Xenomela marginicollis ab. seriata Jacobson, 1925, Mus. Zool. Leningrad, Ann. 26: 232 (Heptapotamia; ?LENINGRAD).

Jacobson in 1895 had placed ovipennis in Oreomela, questionably as the same as his weisei. In 1925 he united it with marginicollis.

DISTRIBUTION: NW China (Sinkiang, Mongolia).

### Pac. Ins. Mon.

# Genus Oreomela Jacobson

Oreomel	a Jac., 1895, Soc. Ent. Ross., Horae 29: 272, 274 (type: Xenomela Heydeni Weise;
	$\frac{1}{2}$
Olcomel	a Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 236 (type: Oreomela suvurovi Jac.).
Leptome –	la Jac., 1925, I. c., 242 (type: Oreomela (Leptomela) kaznakovi Jac.).
Entomor	nela Jac., 1925, I. c., 242 (type: O. (Entomomela) oirata Jac.).
Crasped	omela Jac., 1925, l. c., 242 (type: O. (Craspedomela) avinovi Jac.).
Rhaphon	nela Jac, 1925, I. c., 242 (type: O. (Rhaphomela) timarchisca Jac.).
The	species of this genus are all found in Central Asia.
	Key to Chinese species of Oreomela (after Jacobson)
1.	Pronotum weakly convex longitudinally, forming a distinctly obtuse angle with
	elytron above; scutellum short2
	Pronotum strongly convex longitudinally, forming a weakly obtuse angle with
	elytron above; scutellum oblong (Entomomela); black, shiny; length 5.2-
	5.4 mm
2 (1).	Elytral epipleuron broad, strongly narrowed from base to middle of abdomen;
	species usually large; elytron distinctly broader than prothorax in $\mathcal{J}$
	Elytral epipleuron narrow, slightly narrowed to middle of abdomen; small
	species; elytral base briefly emarginate in outer $1/2$ ; elytron as broad as
	prothorax in 3 <sup>r</sup> (Leptomela)
3 (2).	Elytron seriate-punctate; pronotum with 2 or 3 different sizes of punctures
	( <i>Olcomela</i> ) 4
	Elytron irregularly punctured (Oreomela, s. str.)
4 (3).	Elytron oval, with 11 rows of punctures; elytra subcircular in $\mathcal{P}$ ; cinnabar
	red; pronotum broad, slightly narrowed towards base, paler 169. suvorovi
	Elytron subovate, with 9 rows of punctures; metallic black; pronotum narrow,
	strongly narrowed towards base, not pale 168. korolkovi
5 (3).	Pronotum with anterior angle distinct; surface with 2 or 3 sizes of punctures 6
	Pronotum with anterior angle rounded14
6 (5).	Basal border of pronotum unmargined7
	Basal border of pronotum margined
7 (6).	Pronotal punctures differing slightly in size, subequally spaced, with rugae,
	posterior angle obtuse to acute, and lateral margin straight or weakly sinuate
	in basal 1/2; legs brown (Weise, 1885; Fergana) fuscipes*
	Pronotal punctures strongly differing in size, larger ones widely spaced; pos-
	terior angle squarish to acute, and lateral margin sinuate in basal $1/2$ ; legs
	dull, rarely with knees and tarsi brown (Jacobson, 1895; N. shore Issyk-
	kul)semenovi*
8 (6).	Basal margin of pronotum narrow, much more finely punctured than lateral
	margin; antennal segment 3 slightly longer than 2; legs, antennal bases,
	mouth and pygidium brown9
	Basal margin of pronotum broad, similarly punctured to lateral margin; an-
	tennal segment 3 much longer than 2 10
<b>9</b> (8).	Body oblong; elytra of $P$ not subcircular; pronotum finely punctured; pos-

1B

	terior angle squarish, acuminate; elytron strongly and rugosely punctured
	Body short; elytra of ♀ subcircular; pronotum strongly punctured; posterior angle squarish, not acuminate; elytron finely and less rugosely punctured
10 (8).	Base of pronotum distinctly narrower than bases of elytra; posterior angle of pronotum squarish, and disc weakly declivitous toward side
11 (10)	border margined, except in middle
	Legs and antenna dull, slightly marked with yellowish; remainder of body dark; side of pronotum somewhat irregularly rounded, middle of disc gross- ly punctured
12 (11).	Pronotum slightly and unevenly rounded at side; elytron grossly rugose-punc- tate, with interspaces sulcate; scutellum and pronotum entirely dark
	Pronotum evenly rounded at side; elytron finely and subrugosely punctured, with interspaces very finely sulcate; scutellum and sometimes basal margin of pronotum, middle of elytron and epipleuron brownish; pronotal punctures sparse and finer in middle of disc
13 (10).	Legs brown; tarsi dark; antenna brown with segments all marked with pitchy; posterior angle of pronotum obtuse, and side strongly and regularly rounded and strongly declivous
	Legs entirely yellow; antenna yellow at base; pronotum with posterior angle squarish, distinct, and side less rounded; elytron less convex longitudinally 170 andreevi
14 (5).	Pronotum with punctures of 2 or 3 sizes, some very large foveate punctures near posterior angle; disc and side less convex and less narrowed posteriorly15 Pronotum with punctures subequal in size or uniform in spacing, hardly larger posterolaterally; disc and side strongly convex; base unmargined
15 (14).	Base of pronotum unmargined
16 (15).	Pronotum finely margined at side; disc strongly punctured, the punctures dispers- ed and non-rugose or weakly rugose; legs brown 185. tshernavini Pronotum broadly margined at side; antenna with segment 2 slightly shorter than 3; prothorax dilated anteriorly; elytron with vestigial puncture-rows; green: legs dull 171. calynhoides
17 (14).	Pronotum with anterior border unmargined, or margined only near anterior angle
	Pronotum completely margined anteriorly, or punctures substituted for margin in middle 1/3; antenna basally, and legs, brown
18 (17).	Base of elytron completely unmargined; large species $(4.5-5.9 \text{ mm } 3, 5.1-6.4 \text{ mm } 9)$
10 (19)	3.7 mm
17 (10).	Environ much more mery punctured man pronorum; metasternum and abdomen


	dark
	Elytron much more densely and rugosely punctured than pronotum; pronotum
	with posterior angle squarish; dorsum green; antennal base, legs, metaster-
	num, abdomen and epipleuron brown; elytron of $\mathcal{P}$ subrounded 174. kutzenkoi
20 (19).	Pronotum much broader than head, strongly rounded and widened anteriorly:
	dorsum dull blue or greenish blue
	Pronotum slightly broader than head, weakly rounded and widened anteriorly:
	disc subevenly subrugose-punctate; posterior angle obtuse; green; with an-
	tenna and legs dull: antennal segment 2 about 1/2 as long as 3: elytron
	moderately punctured
21 (20).	Pronotum with posterior angle squarish, weakly prominent or not prominent
== (=0)!	Pronotum with posterior angle acute with a tooth pointing slightly upward
	outward, and backward: pronotum convex, strongly narrowed posteriorly:
	antennal base. legs (except tarsi) ferrugineous: elvtron finely punctulate
22 (21).	Antennal segment 2 much shorter than 3: large species, 5.3–6.0 mm; elytron
():	strongly and densely punctured; legs and base of antenna brown; pronotum
	subrugose-punctate at side, more sparsely punctured; body short; elytra of
	9 short-ovate, subrounded
	Antennal segments 2 and 3 subequal; smaller species, 4.5-5.2 mm; elytron
	finely punctured; antenna and legs dull 183. shnitnikovi
23 (17).	Anterior margin of pronotum broad, similar to lateral margin; discal punctures
	sparser and stronger; posterior angle square to acute; elytron strongly punc-
	tured
	Anterior margin of pronotum narrow; discal punctures denser and finer; pos-
	terior angle subobtuse to rounded; elytron finely punctured 185. tshernavini
24 (23).	Antennal segment 2 as long as 3; elytron more strongly punctured than pro-
	notum
	Antennal segment 2 much shorter than 3; elytron more finely punctured than
	pronotum 177. przewalskii
25 (2).	Head punctures larger than elytral punctures; legs not dull; pronotum not
	subquadrate
	Head punctures smaller than elytral punctures; legs dull; pronotum subqua-
	drate; length 4.5 mm 189. koltzei
26 (25).	Pronotum with posterior angle obtuse or rounded: antennal segments short:

### Subgenus Olcomela Jacobson

# 168. Oreomela (Olcomela) korolkovi Jacobson

Oreomela (Olcomela) korolkovi Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 243 (Alatan, Heptapotamia-W. Dzhungaria; ?LENINGRAD).

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DISTRIBUTION: NW China (Sinkiang).

# 169. Oreomela (Olcomela) suvorovi Jacobson

Oreomela suvorovi Jac., 1910, Rev. Russe d'Ent. 10: 56 (Heptapotamia; ?LENINGRAD).

Oreomela (Olcomela) suvorovi, Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 242 (Ili).

DISTRIBUTION: S. Siberia (border Sinkiang).

Subgenus Oreomela s. str.

# 170. Oreomela (Oreomela) andreevi Jacobson

Oreomela (s. str.) andreevi Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 250 (Heptapotamia; ?LENINGRAD).

DISTRIBUTION: NW China (border Sinkiang).

## 171. Oreomela (Oreomela) celyphoides Jacobson

Oreomela (s. str.) celyphoides Jac., 1896, Mus. Petersb., Ann. 2: 76 (Dzhungaria); 1925, Mus. Zool. Leningrad, Ann. 26: 252.

DISTRIBUTION: NW China (Sinkiang).

# 172. Oreomela (Oreomela) dungana Jacobson

Oreomela (s. str.) dungana Jac., 1925, *l. c.*, 245 (SE Heptapotamia; ?LENINGRAD). DISTRIBUTION: S. Siberia (N. border Sinkiang).

### 173. Oreomela (Oreomela) dzhungara Jacobson

Oreomela (s. str.) dzhungara Jac., 1925, l. c., 262 (Dzhungaria). DISTRIBUTION: NW China (Sinkiang: Zungaria).

# 174. Oreomela (Oreomela) kutzenkoi Jacobson

Oreomela (s. str.) kutzenkoi Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 259 (Heptapotamia; ?LENINGRAD).

DISTRIBUTION: NW China (N. border Sinkiang).

#### 175. Oreomela (Oreomela) muzartea Jacobson

Oreomela (s. str.) muzartea Jac., 1925, l. c., 254 (Dzhungaria-Heptapotamia border; ?LE-NINGRAD).

DISTRIBUTION: NW China (N. border Sinkiang).

#### 176. Oreomela (Oreomela) pedaschenkoi Jacobson

Oreomela (s. str.) pedaschenkoi Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 257 (Heptapotamia, Issyk-kul; ?LENINGRAD).

DISTRIBUTION: NW China (N. border Sinkiang).

# 177. Oreomela (Oreomela) przewalskii Jacobson

Oreomela (s. str.) przewalskii Jac., 1896, Mus. Petersb., Ann. 2: 76 (Tian Shan; ? LENIN-GRAD); 1925, Mus. Zool. Leningrad, Ann. 26: 263 (Chantengri, Kashgar).

DISTRIBUTION: Sinkiang (Tien Shan).

#### 178. Oreomela (Oreomela) radkewiczi Jacobson

Oreomela (s. str.) radkewiczi Jac., 1926, Mus. Zool. Leningrad, Ann. 26: 260 (Heptapotamia; ?LENINGRAD).

DISTRIBUTION: S. Siberia (nr. border Sinkiang)

### 179. Oreomela (Oreomela) rueckbeili Jacobson

Oreomela (s. str.) rueckbeili Jac., 1925, l. c., 248 (SE Heptapotamia; ?LENINGRAD). DISTRIBUTION: S. Siberia (border of Sinkiang).

- 180. Oreomela (Oreomela) sapozhnikovi Jacobson
- Oreomela (s. str.) sapozhnikovi Jac., 1925, *l. c.*, 255 (Heptapotamia, Tian Shan; ?LENINGRAD). DISTRIBUTION: NW China (N. Sinkiang).

#### 181. Oreomela (Oreomela) sarydzhasea Jacobson

Oreomela (s. str.) sarydzhasea Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 246 (Heptapotamia; ?Leningrad).

DISTRIBUTION: NW China (N. border Sinkiang).

182. Oreomela (Oreomela) scutellaris Jacobson

Oreomela (s. str.) scutellaris Jac., 1925, *l. c.*, 247 (Heptapotamia; ?LENINGRAD). DISTRIBUTION: NW China (N. border Sinkiang).

- 183. Oreomela (Oreomela) shnitnikovi Jacobson
- Oreomela (s. str.) shnitnikovi Jac., 1925, l. c., 258 (W. Heptapotamia, ?LENINGRAD). DISTRIBUTION: S. Siberia (border Sinkiang).
- 184. Oreomela (Oreomela) tarantsha Jacobson
- Oreomela (Oreomela) tarantsha Jac., 1925, l. c., 249 (Heptapotamia; ?LENINGRAD) DISTRIBUTION: S. Siberia.
- 185. Oreomela (Oreomela) tshernavini Jacobson

Oreomela (s. str.) tshernavini Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 261 (W. Heptapotamia; ?LENINGRAD).

DISTRIBUTION : S. Siberia.

# 186. Oreomela (Oreomela) weisei (Jacobson)

Oreomela Weisei Jac., 1895, Soc. Ent. Ross., Horae 29: 278, 280. (Tian Shan: Issyk-kul); 1925, Mus. Zool. Leningrad, Ann. 26: 237, 246.

DISTRIBUTION: Border of Sinkiang.

# Subgenus Leptomela Jacobson

# 187. Oreomela (Leptomela) grumi Jacobson

Oreomela (Leptomela) grumi Jac., 1925, l. c., 264. (Nan Shan, border of S. Mongolia-NE Tibet; ?LENINGRAD). DISTRIBUTION: W. China (Tsinghai).

### 188. Oreomela (Leptomela) kaznakovi Jacobson

Oreomela (Leptomela) kaznakovi Jac., 1925, Mus. Zool. Leningrad, Ann. 26: 265 (Amnenkor, 4500 m, Kukunor; ?LENINGRAD).

DISTRIBUTION: W. China (Tsinghai).

189. Oreomela (Leptomela) koltzei (Weise)

Oreomela Koltzei Ws., 1896, Wien. Ent. Ztg. 15: 81 (Tian Shan: Issyk-kul; ?ZMB).

Oreomela (Leptomela) koltzei, Jacobson, 1925, Mus. Zool. Leningrad, Ann. 26: 242 (Tibet: Kukunor).

DISTRIBUTION: Border of Sinkiang (Tian Shan), Tsinghai.

### Subgenus Entomomela Jacobson

190. Oreomela (Entomomela) oirata Jacobson

Oreomela (Entomomela) oirata Jac., 1925, l. c., 267 (Kobdo, NW Mongolia; ?LENINGRAD). DISTRIBUTION: NW China (NW Mongolia).

#### Genus Apaksha Maulik

Apaksha Maul., 1925, Fauna India, Chrys. Halt., 95 (type: A. himalayensis Maul.; Himalaya). This genus contains but a single known species, recorded from the Himalayas.

# 191. Apaksha himalayensis Maulik

Apaksha himalayensis Maul., 1925, Fauna India, Chrys. Halt., 96 (Barphu, Gori Valley; BM).

Black, legs sometimes pitchy brown; head broad, rugose; antenna reaching middle of elytron, with segment 4 shorter than 3 and 5; prothorax widened anteriorly, strongly punctured; elytra narrow basally, with strong, but not very close, punctures. Length 5-8 mm.

DISTRIBUTION: Himalayas.

#### Genus Timarcha Latreille

Timarcha Latr., 1829, IN Cuvier, Regne Anim., ed. 2, 5: 150 (type: Chrysomela tenebricosa Panzer).

Timarchostoma Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 187 (type: Chrysomela coriaria Fabr.).

There are a few vague records for this genus from China, but all seem open to question. On the other hand, some species undoubtedly occur within the borders of Sinkiang. One specimen before us is labelled "Shanghai, Parshley," but undoubtedly this is an error. It appears to be a European species. T. tenebricosa (F.) has been recorded from Japan (Hokkaido), but this seems open to question.

#### Pac. Ins. Mon.

## Subfamily GALERUCINAE

This is the largest subfamily of Chinese Chrysomelidae, and 531 species and subspecies are treated in this paper.

### Tribe Galerucini

Galeruca (nos. 1-13) 1. barovski; 2. dahli vicina; 3. daurica; 4. extensa (=bang-haasi); 5. heydeni; 6. interrupta circumdata; 7. nigrolineata major; 8. pallasia; 9. reichardti; 10. sinensis; 11. spectabilis; 12. tanaceti incisicollis; 13. weisei. Sastra (n. 14) 14. costata. Pallasiola (no. 15) 15. absinthii. Theone (nos. 16-17) 16. octocostata; 17. silphoides. Nyctiphantus (no. 18) 18. hirtus. Diorhabda (nos. 19-22) 19. elongata sublineata; 20. persica; 21. rybakowi; 22. tarsalis. Triaplatarthris (=Formosogalerucella; nos. 23-26) 23. collaris; 24. marginata; 25. porphyrea; 26. pyrochroides. Menippus (no. 27) 27. canellinus. Mimastracella (nos. 28-32) 28. brunnea; 29. lateralis; 30. ochracea; 31. submetallica; 32. violacea. Doryxenoides (nos. 33-34) 33. tibialis; 34. hainana. Lochmaea (no. 35) 35. capreae. Pseudadimonia (nos. 36-38) 36. microphthalma; 37. rugosa; 38. variolosa. Anadimonia (no. 39) 39. potanini. Malaxioides (no. 40) 40. grandicornis. [Salaminia concinna] Clitena (nos. 41-42) 41. limbata; 42. maculipennis. Clitenella (nos. 43-45) 43. fulminans; 44. ignitincta; 45. purpureovittata.

Periclitena (nos. 46-48)

46. cyanea; 47. sinensis (=tonkinensis); 48. vigorsi.

Geinula (nos. 49-50)

49. jacobsoni; 50. nigra.

Swargia (no. 51) 51. nila.

Pterophthinus (no. 52)

52. viridipennis.

Apophylia (nos. 53-63)

53. eoa; 54. epipleuralis (=geniculata); 55. flavovirens; 55a. loukashkini; 55b. melli; 56. nigriceps; 57. pupurea; 58. rugiceps; 59. thalassina; 60. thoracica; 61. trinotata; 62. trochanterina; 63. variicollis (=savioi).

Chujoa (no. 64)

64. uetsukii.

Pyrrhalta (=Galerucella, part; nos. 65-105)

65. aenescens; 66. angulaticollis; 67. annulicornis; 68. brunneipes; 69. calmariensis; 70. chinensis; 71. corpulenta; 72. discalis; 73. dorsalis; 74. erosa; 75. fossata; 76. fulva; 77. fuscipennis; 78. gracilicornis; 79. griseovillosa; 80. hainanensis; 81. humeralis; 82. hupehensis; 83. kwangtungensis; 84. limbata; 85. lineola; 86. longipilosa; 87. luteola; 88. maculata; 89. maculicollis; 90. metallica; 91. nigromarginata; 92. ningpoensis; 93. ochracea; 94. orientalis; 95. pusilla; 96. ruficollis; 97. salicis; 98. sericea; 99. sikanga; 100. subaenea; 101. submetallica; 102. sulcatipennis; 103. tenella; 104. tibialis (=nigrimembris); 105. tumida. Galerucella (nos. 106–108)

106. grisescens (-vittaticollis, -distincta, -reducta); 107. nipponensis; 108. nymphaea.

# Tribe Luperini, Group 1

Merista (nos. 109–110)

109. elongata; 110. fraternalis (=yunnanensis,=fraternalis var. yunnanensis).

Trichocerophysa (Nos. 111-112)

111. latifascia; 112. hainana.

Oides (nos. 113–123)

113. andrewesi (=*indosinensis*); 114. bowringii (=*elegans*); 115. chinensis; 116. chrysomeloides; 117. decempunctata; 118. flava; 119. laticlava (=*epipleuralis*); 120. leucomelaena; 121. pectoralis; 122. tarsata (=*sordidum*); 123. thibetana; 123a. ustulaticia. Clerotilia (nos. 124–128)

124. bicolor; 125. capitata; 126. depressa; 127. flavomarginata; 128. terminata.

Aulacophora (nos. 129–142)

129. almora; 130. bicolor; 131. carinicauda; 132. coomani; 133. cornuta; 134. cruenta; 135. femoralis; 136. frontalis; 137. jacobyi; 138. lewisii; 139. nigripalpis; 140. nigripennis; 141. palliata; 142. yunnanensis.

Pseudocophora (nos. 143-145)

143. bicolor; 144. flaveola; 145. pectoralis.

Paragetocera (nos. 146-151)

146. fasciata; 147. flavipes; 148. involuta; 149. pallida; 150. p. parvula; 150a. p. metasternalis; 151. tibialis.

Agetocera (nos. 152-156)

152. deformicornis; 153. femoralis; 154. filicornis; 155. hopei; 156. mirabilis.

Hoplasoma (nos. 157-159)

157. majorina; 158. minor; 159. unicolor.

Luperini, Group 2

Haplomela (no. 160) 160. semiopaca.

Phyllobrotica (nos. 161–162) 161. spinicoxa; 162. signata.

Japonitata (no. 163)

163. unicostata.

Cerophysella (no. 164) 164. basalis.

Euliroetis (nos. 165–169)

165. lameyi; 166. melanocephala; 167. nigrinotum; 168. ornata (=ornata Jac.); 169. suturalis.

Paridea (Paraulaca, Semacia, Paridea; nos. 170-187)

170. angulicollis; 171. transversofasciata; 172. avicauda; 173. biplagiata; 174. flavipennis; 175. nigrocephala; 176. breva; 177. costata; 178. epipleuralis; 179. harmandi; 180. monticola; 181. octomaculata; 182. perplexa; 183. quadriplagiata (=verticalis); 184. sinensis; 185. testacea; 186. tetraspilota; 187. tuberculata.

Haplosomoides (nos. 188-194)

188. appendiculata; 189. costata; 190. e. egena; 191. e. occidentalis; 192. flava; 193. laticornis; 194. ustulata.

Taumacera (=Cerophysa; nos. 195–200)

195. zhenzhuristi; 196. bicolor; 197. biplagiata; 198. gracilicornis; 199. parasuturalis; 200. pulchella.

Fleutiauxia (nos. 201–204)

201. armata; 202. bicavifrons; 203. mutifrons; 204. septentrionalis (*=nigricornis*).

Pseudoliroetis (nos. 205–206) 205. fulvipennis; 206. nigriceps.

Arthrotidea (no. 207) 207. ruficollis.

Cneoranidea (no. 208) 208. signatipes.

Liroetis (nos. 209–215)

209. aeneipennis; 210. apicalis; 211. flavipennis; 212. leechi; 213. octopunctata; 214. reitteri; 215. spinipes.

Mimastra (nos. 216-225)

216. cyanura; 217. grahami; 218. guerryi; 219. limbata; 220. maai; 221. modesta: 222. pygidialis; 223. quadrinotata; 224. soreli; 225. unicitarsis.

Trichomimastra (nos. 226-231)

226. a. attenuata; 227. a. albida; 228. gracilipes; 229. jejuna; 230. pectoralis; 231. pellucida.

Cneorane (nos. 232–246)

232. abdominalis; 233. apicicornis; 234. cariosipennis; 235. crassicornis; 236. cribratissima; 237. ephippiata; 238. episcopalis; 239. femoralis; 240. fokiensis; 241. intermedia; 242. nigripennis; 243. rufocaerulea; 244. sikanga; 245. subcoerulescens; 246. violaceipennis.

Luperini, Group 3

Meristoides (nos. 247-249)

247. grandipennis; 248. oberthuri (=touzalini); 249. vigintiguttata.

Siemssenius (no. 250)

250. modestus.

Morphosphaera (nos. 251-259)

251. cavaleriei ; 252. cincticollis ; 253. collaris ; 254. gingkoae ; 255. japonica ; 256. metallescens ; 257. purpurea ; 258. sodalis ; 259. viridipennis.

Parexosoma (no. 260)

260. flaviventre.

Miltina (no. 261)

261. dilatata.

Luperus (nos. 262–266)

262. anthracinus; 263. biplagiatus; 264. cavicollis; 265. flavimanus; 265a. kusanagii; 266. semiflavus (=mandzhuricus).

Agelastica (no. 267)

267. coerulea.

Exosoma (nos. 268-274)

268. chujoi; 269. flaviventris; 270. hummeli; 271. minuta; 272. nigriventris; 273. pratti; 274. sikanga.

Calomicrus (nos. 275-286)

275. sp. 276. concolor; 277. coomani; 278. hainanicus; 279. ictericus; 279a. iniquus; 280. kelloggi; 281. lineatus; 282. maatsingi; 283. parvicollis; 284. punctatolineatus; 285. spurius; 286. suisapanus.

Hesperomorpha (nos. 287–289)

287. atra; 288. hirsuta; 289. potanini.

Stenoluperus (nos. 290-299)

290. flavimembris; 291. flavipes; 292. flaviventris; 293. lemoides; 294. nigrimembris; 295. nipponensis; 296. pallipes; 297. parvus; 298. potanini; 299. tibialis.

Sinoluperus (no. 300)

300. subcostatus.

Paraluperodes (nos. 301-302)

301. s. suturalis; 302. s. nigrobilineatus.

Atrachya (Luperodes; nos. 303-311)

303. bipartita; 304. caudata; 305. haemodera; 306. haemoptera; 307. fokiensis; 308. menetriesi; 309. pedestris; 310. rubripennis; 311. tricolor.

# Luperini, Group 4

Erganoides (nos. 312-319)

312. capito; 313. discalis; 314. occipitalis; 315. punctulatus (=hedini); 316. similis; 317. suturalis; 318. tibialis; 319. variabilis.

Euluperus (nos. 320–323)

320. aeneofuscus; 321. aenescens; 322. chinensis; 323. diadematus.

Brachyphora (no. 324)

324. nigrovittata.

Monolepta (nos. 325-371)

325. aglaonemae; 326. antennalis; 327. arundinariae; 328. bicavipennis; 329. brittoni; 330. capitata; 331. cavipennis; 332. discalis; 333. eoa; 334. epistomalis; 335. flavovittata; 336. h. hieroglyphica; 337. h. biarcuata; 338. hupehensis; 339. kwangtunga; 340. lauta; 341. leechi; 342. liui; 343. longitarsoides; 344. lunata; 345. maana; 346. meridionalis; 347. minutissima; 348. monticola; 349. mordelloides; 350. nebulosa; 351. occifluvis; 352. ovatula; 353. pallidula; 354. palliparva; 355. parenthetica; 356. postfasciata; 357. quadriguttata; 358. sauteri; 359. schereri; 360. selmani; 361. semenovi; 362. sexlineata; 363. shaowuensis; 364. signata; 365. subapicalis; 366. sublata; 367. subrubra; 368. yaosanica; 369. yunnanica; 370. xanthodera; 371. zonalis.

Sermyloides (nos. 372-378)

372. bimaculata; 373. coomani; 374. decorata; 375. inornata; 376. nigripennis; 377. semiornata; 378. varicolor.

Pseudosepharia (no. 379) 379. dilatipennis.

Paleosepharia (380-387)

380. basipennis; 381. excavata (=polychroma); 382. fasciata; 383. fulvicornis; 384. kolthoffi; 385. liquidambara; 386. posticata; 387. subnigra.

Macrima (nos. 388–394)

388. armata; 389. aurantiaca; 390. cornuta; 391. pallida; 392. rubricata; 393. straminea; 394. yunnanensis.

Aplosonyx (nos. 395–400)

395. ancora; 396. chalybaeus; 397. orientalis; 398. pictus; 399. rufipennis; 400. varipes.

Leptarthra (no. 401) 401. nigropicta.

Sphenoraia (nos. 402-406)

duvivieri (=amala); 403. nebulosa; 404. micans; 405. paviei; 406. rutilans.

Solephyma (nos. 407–412)

407. alticoides; 408. bicolor; 409. ocellata; 410. terminalis; 411. tinkhami; 412. tricolor.

Haplosaenidea (=Diaphaenidea,=Micraenida; nos. 413-422)

413. aerosa; 414. apicalis; 415. cavifrons; 416. coomani; 417. cornuta; 418. fragilis; 419. nitida; 420. pulchella; 421. salicis; 422. touzalini.

Trichobalya (nos. 423–425)

423. bowringii (=tonkinensis); 424. gularis; 425. varians.

Theopea (nos. 426–429)

426. aeneipennis; 427. azurea; 428. coerulea; 429. smaragdina.

Paraplotes (nos. 430-432)

430. antennalis; 431. clavicornis; 432. rugosa.

Epaenidea (no. 433)

433. subvirida.

Paraenidea (= Platyxanthoides; nos. 434–437)

434. aureipennis; 435. azurea; 436. occipitalis; 437. variceps.

Platyxantha (no. 438)

438. chinensis.

Palpoxena (no. 439) 439. laeta.

Acroxena (nos. 440-441)

440. nasta; 441. paradoxa.

Hyphaenia (nos. 442–443)

442. aenea; 443. cyanescens.

Proegmena (444–447)

444. bipunctata; 445. impressicollis (=fossicollis, =aeneipennis); 446. pallidipennis (=elongata,=crux); 447. smaragdina.

Arthrotus (=*Taphinella*; nos. 448–463)

448. bipartita; 449. brownelli; 450. chinensis (*=caeruleiceps*); 451. coerulea; 452. elongatus; 453. freyi; 454. liquidus; 455. longicornis; 456. maai; 457. micans; 458. nigricollis; 459. nigripennis; 460. nigrofasciatus; 461. ochreipennis; 462. purpurea; 463. testaceus.

**Dercetina** (=Dercetis; nos. 464-471)

464. amoena; 465. bifasciata (=*feae*); 466. **carinipennis**; 467. cyanipennis; 468. flaviventris (=*abdominalis*); 469. hainana; 470. minor; 471. varipennis (=*taiwana*).

#### Tribe Capulini

Capula (no. 472) 472. metallica

#### Tribe Gallerucidini

Doryida (nos. 473–474)

473. fraterna; 474. mouhoti.

Doryidomorpha (nos. 475-478)

475. fulva; 476. nigripennis; 477. sousyrisi; 478. variabilis.

Haemodoryida (no. 479)

479. sanguinea.

Laphris (no. 480)

480. emarginata.

Agelasa (no. 481)

481. nigriceps.

Gallerucida (=Hylaspes; nos. 482–527)

482. abdominalis; 483. aenea; 484. aeneomicans; 485. aenescens; 486. apicalis; 487. bifasciata; 488. bimaculata; 489. confusa; 490. facialis; 491. flava; 492. flavipennis; 493. flaviventris; 494. fulva; 495. gansuica; 496. gloriosa (=jacobsoni); 497. lutea; 498. maxima; 499. moseri; 500. nigrofoveolata; 501. nigropicta; 502. nigropunctatoides; 503. ornatipennis; 504. pallida; 505. pectoralis; 506. podontioides; 507. posticalis; 508. puncticollis; 509. reflecta; 510. reflexa; 511. rubrozonata; 512. rufometallica; 513. serricornis; 514. singuiaris (=gebieni); 515. speciosa; 516. spectabilis; 517. submetallica; 518. tenuefasciata(=potanini); 519. tenuicornis; 520. thoracica; 521. tibialis; 522. tienmushana; 523. tonkinensis; 524. tricincta; 525. tricolor; 526. trinotata; 527. variolosa.

# Key to Chinese tribes and genera of Galerucinae

1.	Mesosternum free, horizontal or inclined, not covered by metasternum 2
	Mesosternum largely covered by an anterior process of metasternum (Tribe Galle-
	rucidini) 100
2 (1).	Mid coxae contiguous or close, with space between them much less than width
	of a coxa; prosternum weak or lacking between coxae 3
	Mid coxae widely separated, with space between them at least as wide as a coxa;
	hind coxae more widely separated; prosternum broad; body form suggestive
	of Chrysomela (Tribe Capulini) Capula
3 (2).	Antennal insertions generally close, at level of anterior margins of eyes or farther
	anterior; occiput and pronotum deeply punctured; last abdominal sternite of
	$\partial$ with a triangular or rounded depression with posterior border often emar-
	ginate, but never 3-lobed (Tribe Galerucini) 4
	Antennal insertions generally separated, situated near, but behind, anterior bor-
	ders of eyes, but when weakly separated or placed farther forward, occiput
	and pronotum not heavily punctured; last abdominal sternite of $\mathcal{J}$ 3-lobed,
	with median lobe always distinct (Tribe Luperini)28
4 (3).	Anterior coxal cavities closed behind 5
	Anterior coxal cavities open or partly open behind11
5 (4).	Tarsal claws bifid or incised
	Tarsal claws simple
6 (5).	Lateral border of elytron with flat reflexed area; pronotum and elytron not
	covered by fine hairs 7
	Lateral border of elytron without flat reflexed area; pronotum and elytron thickly
	covered by fine hairs Menippus
7 (6).	Lateral border of pronotum rounded, widest near middle; elytra hardly wider
	than prothorax basally; antenna rather robust
	Lateral border of pronotum squarish; elytra distinctly wider than prothorax

Gressitt & Kimoto: Chrysomelidae of China

	basally; antenna rather slender, with remarkable sexual dimorphismTriaplatarthris
8(7).	Mid tibia spined in both sexes; onychium of hind tarsus no longer than segment
	1; 3 broad, simply emarginate apically; tibiae generally carinate; elytra
	generally widened behindGaleruca
	Mid tibia simple in $\varphi$ ; onychium of hind tarsus longer than segment 1; 3
	narrow, deeply emarginate, nearly bilobed; tibiae not carinate above Diorhabda
<b>9</b> ( <b>5</b> ).	Metasternum longer than mid coxa; hind wings developed10
	Metasternum shorter than mid coxa; hind wings lacking; elytron without humer-
	al callus, abbreviated; dorsum pubescent; hind tarsal segment 3 no broader
	than 2; mid tibia of J briefly spinedNyctiphantus
10(9).	Tarsal segment 3 simple, broader than 2; tarsi pubescent beneath in both sexes;
	dorsum of body with sparse oblique hairs; tibiae with fine hairs; mid tibia
	spined in both sexesPallasiola
	Tarsal segment 3 narrow, not broader than 2; tarsi with short spines beneath,
	in $\mathcal{J}$ glabrous except for slender stripes of hairs along borders, in $\mathcal{Q}$ glabrous
	or with a few hairs; dorsum of body glabrous; mid tibia spined in $\mathcal{J}$ and
	simple in $\mathcal{P}$
11(4).	Elytral epipleuron obsolete
	Elytral epipleuron distinct
12(11).	Side of pronotum distinctly marginedSwargia
	Side of pronotum not marginedGeinula
13(11).	Tarsal claws bifid or appendiculate14
	Tarsal claws simple; elytron metallic, with short pubescence; epipleuron narrow,
	reaching only to middle of elytronMalaxioides
14(13).	Primary setigerous pore on anterior part of lateral margin of pronotum15
	Primary setigerous pore on anterior corner of pronotum16
15(14).	Nearly wingless, lateral margin of pronotum feebly margined; claws bifid in
	both sexesPterophthinus
	Winged; side of pronotum unmargined; claws bifid in $\mathcal{J}$ , appendiculate in $\mathcal{P}$
	Apophylia
16(14).	Side of prothorax with lateral margin incomplete; tibiae unspined17
	Side of prothorax with complete lateral margin
17(16).	Side of prothorax without distinct lateral margin; dorsum pubescent, densely
	punctured but more heavily so on occiput and pronotum; anterior border of
	pronotum weakly margined
	Side of prothorax with margin disappearing towards anterior 1/3; dorsum gla-
	brous, densely and grossly punctured; anterior border of pronotum unmargin-
	ed; tibiae long Pseudadimonia
18(16).	Pronotum with separate lateral depressions, and median portion raised and often
	grooved19
	Pronotum with lateral depressions confluent, forming a deep transverse impres-
	sion occupying much of disc, but not reaching lateral margins; elytron densely
10 (10)	and nneiy punctureaAnadimonia
19(18).	Subbasal area of elytron raised and distinctly bordered behind by transverse
	uepression
	Subbasal area of crystron not separated from benind by transverse depression21

Pac. Ins. Mon.

20 (19). Elytral epipleuron distinct only in about basal 1/4Periclitena Elytral epipleuron distinct at least to apical 1/4Clitenella
21 (19). Dorsal surface entirely glabrous
<ul> <li>22 (21). Elytral epipleuron distinct in basal 1/3; large species, over 10 mm in length; elytron without any costa along lateral marginDoryxenoides Elytral epipleuron distinct for almost entire length; smaller species, about 6 mm in length; elytron with a costa along lateral marginLochmaea</li> </ul>
23 (21). Pronotum glabrous and elytra thickly or sparsely covered by hairs24
Pronotum and elytra thickly or sparsely covered by hairs
lateral margin, and with another costa extending posteriorly from humerus
(=Eriosardella)Sastra
<ul> <li>25 (23). Elytral epipleuron distinct at least in basal 1/2; lateral border of pronotum somewhat rounded or sinuate</li></ul>
<ul> <li>26 (25). Labrum with a transverse row of 6-8 setigerous pores; head deeply sunken into prothorax; occiput without a longitudinal groove; gena longer than eye; pronotum more or less convex</li></ul>
Labrum with irregular setigerous pores on each side; head large, not deeply sunken into prothorax; occiput with a longitudinal groove; gena shorter than eye; pronotum more or less concave; raised on anterior borderClitena
27 (26). Disc of pronotum with a large glabrous space at middle $(=Hydrogaleruca)$
Disc of pronotum entirely covered by hairs, but in some cases anterior and lateral margins glabrous (=Tricholochmaea, =Pyrrhalta, =Xanthogaleruca, =Clitenososia)
28 (3). Tarsal claws bifid29
Tarsal claws not bifid
29 (28). Anterior coxal cavities closed behind
<ul> <li>30 (29). Elytron glabrous; anterior and posterior borders of pronotum not margined or hairy</li></ul>
Trichocerophysa
31 (29). Pronotum without a transverse depression; disc subevenly convex
32 (31). Body elongate, subrectangular or parallel-sided; elytral epipleuron fairly narrow, simple
Body broadly ovate; elytral epipleuron wide, inferior, recurved basallyOides

33 (32). Labrum with 8 setigerous punctures in a row; facial carina narrow, convex;

	anterior border of pronotum unmargined; tibiae simple; prosternum not ex-
	tending between coxaeClerotilia
	Labrum with numerous irregular setigerous pores on each side; facial carina
	broad, triangular, weakly convex; anterior border of pronotum margined;
	tibiae spined; prosternum narrow but distinct between coxae Falsoexosoma
34 (31).	Tibiae distinctly spined apically35
	Tibiae not distinctly spined apically; elytral epipleuron narrow but distinct
	almost to apex
35 (34).	Elytral epipleuron strongly narrowed behind basal 1/3
	Elytral epipleuron gradually narrowed posteriorly
36 (35).	Elytral epipleuron abbreviated behind middleAulacophora
	Elytral epipleuron continued to apexPseudocophora
37 (35).	Elytron carinate behind humerusParagetocera
	Elytron not carinate behind humerusAgetocera
38 (28).	Tarsal claws appendiculate or simple
	Tarsal claws strongly lamellate but produced and appearing as it bind; eye
	large; segment 3 of maxillary palp strongly swollen; occiput grooved; protho-
20 (20)	rax 2 x as broad as long, unmargined anteriorly; tiblae unspined Hapiometa
39 (38).	Anterior coxal cavities open benind or partly open
40 (30)	Anterior coxal cavities closed bennitu
40 (39).	Taisal claws simple, each tible with a short spine at apex
41 (40)	Flytra not dehiscent and spread: hind wing developed: anterior border of
11 (10).	pronotum finely margined: body flattish (nart no known Chinese species)
	Luperus
	Elytra dehiscent, spread; hind wing not developed; anterior border of pronotum
	unmargined; body convex (Joannis, 1866; Asia minor, Syria, Palestine)
42 (40).	Lateral border of pronotum distinctly margined43
	Lateral border of pronotum unmargined; pronotum with distinct lateral depres-
	sions, obtusely prominent anterior angle; labrum with many irregular setige-
	rous pores Meristoides
43 (42).	Elytral epipleuron distinct
	Elytral epipleuron not developed; pronotum with a shallow transverse im-
	pression near base, and with anterior border unmargined; tibiae unspined
	Phyllobrotica
44 (43).	Metasternum between mid and hind coxae longer than mid coxa; elytra largely
	or entirely covering abdomen; hind wing developed45
	Metasternum snorter than mid coxa; elytra snort, only covering base of ab-
	domen, with appees obliquely truncate internally; find wing not developed;
A5 (AA)	Desterior tilic superiord
43 (44).	Posterior upia unspined
16 (15)	Anterior and posterior horders of property upmargined, property with a
TU (42).	distinct depression on each side or with a transverse depression 47
	Posterior margin of proportium margined 50
	reserver margin or promotum margineu

47 (46).	Posterior border of pronotum rectangularly emarginate near angle, which is
	displaced anteriorly48
	Posterior border of pronotum without rectangular emargination near angle.
	sometimes obliquely truncate
48 (47).	Elvtron with 2 carinae behind humerus
10 (11)1	Elytron without carinae behind humerus Euliroetis
49 (47).	Prothorax no broader than long, with a longitudinal depression on each side;
	basal margin twice angularly raised near scutellum; antennal segments 4-8
	each less than $2 \times$ as long as broad; body slender, parallel Cerophysella
	Prothorax at least $1.5 \times$ as broad as long, with a transverse groove behind
	middle which reaches side; basal margin simple; antennal segments beyond
	3 at least $3 \times$ as long as broad; body ovoid, broadened behindParidea
50 (46).	Anterior border of prothorax unmargined51
	Anterior border of prothorax margined; elytron more or less glabrous55
51 (50).	Pronotal disc with distinct depressions
	Pronotal disc convex, without depressions; body large, elongate oval; elytron
	without carinae or erect hairs; epipleuron narrowPseudoliroetis
52 (51).	Elytron non-carinate
	•

- Elytron longitudinally carinate behind humerus, generally with a groove separating 2 carinae posteriorly; gena short; eye very large in  $\partial$ .....Hoplasomoides 53 (52). Gena much shorter than depth of eye; groove behind postantennal tubercles Gena not shorter than smallest diameter of eye; groove behind postantennal tubercles complete; antennal segment 4 shorter than 3; from sof  $\vec{\sigma}$  with a large deep cavity and with a prominent process near antennal insertions ...
- 54 (53). Dorsum with erect hairs; body slender, parallel-sided; occiput finely shagreened;
- penultimate segment of maxillary palp strongly swollen; antenna much more than 1/2 as long as body; similar in  $\mathcal{J}$  and  $\mathcal{P}$ , with segment 4 much longer than 5...... Trichomimastra Dorsum glabrous; body elongate-oval, widened posteriorly; occiput smooth; penultimate segment of maxillary palp moderately thickened; antenna slightly more than 1/2 as long as body, segments 3-6, or 7-8, or some of these, enlarged in ♂, 3-4 subequal in ♀...... Taumacera

56 (55). Maxillary palpal segment 3 large, 4 very small; elytra slightly wider than

- prothorax at base ...... Cneoranidea Maxillary palpal segment 3 as broad as long, 4 not much smaller than 3; elytra distinctly wider than prothorax at base.....Arthrotidea
- Elytral epipleuron narrow basally; antennal segments with close pubescence beyond segment 3, 4 not longer than 2+3..... Liroetis
- 58 (57). Labrum with a row of 6-8 setigerous pores; pronotum with distinct depressions; antennal segments with close pubescence beyond segment 4, 4 longer than 2+3; elytral epipleuron broad basally, gradually narrowing in basal

1/3;	; maxillary palp with penultimate segment long, somewhat thick, and last
long	; and acute
Labrur	m with numerous irregularly arranged setigerous pores on each side;
pron	notum convex; antennal segments with close pubescence beyond segment
3; e	lytral epipleuron broad basally, gradually narrowing to apex; maxillary
palp	with penultimate segment long and thick, and last short and conical
	Cneoran
59 (45). Basal	border of pronotum margined; pronotal disc without a transverse de-
press	sion, rarely with sublateral depressions6
Basal press	border of pronotum unmargined; pronotum with a broad transverse de- sion, deeper sublaterally; elytron with rows of punctures basally <b>Paridea</b> (part

60(59). Head simple; postgena shorter than diameter of eye; thorax never longer Head elongated behind eyes; postgena no shorter than smallest diameter of eye; prothorax longer than broad; elytron short (in Q), with short recum-

61 (60).	First	segment	of	posterior	tarsus	dis	tinctly	shc	orte	r than	remair	nder comb	oined	. 62
	First	segment	of	posterior	tarsus	as	long a	as, (	or	longer	than,	remainde	r com-	
	bin	ed	••••	•••••	•••••	••••	••••	• • • • • •		••••	•••••	• • • • • • • • • • • • • • • •	•••••	. 69

Elytral epipleuron narrow, abbreviated or obsolete at base.....Siemssenius

- 63 (62). Preapical segments of maxillary palp large, rounded, 4 much smaller than 3 Preapical segments of maxillary palpus not so large, slender, 4 not much smaller
- 64 (63). In  $\mathcal{J}$  antennal segments 2 and 3 minute and 4–10 with fairly long projections endoapically; in  $\bigcirc$  2 minute, 3 twice as long as 2, and 5–11 each somewhat flattened and 5-10 slightly produced endoapically; elytral epipleuron distinct until apex ......Miltina Antenna filiform but not very slender; elytral epipleuron distinct only before
  - middle .....Morphosphaera
- Elytron with posterior portion of suture reflexed upwards and forming a narrow smooth space; disc distinctly convex basally, then transversely impressed; epipleuron broad postmedially, narrowed apically ......Parexosoma
- Basal 1/2 of pygidium shiny, glabrous, finely shagreened, apical 1/2 densely punctured, pubescent; lateral margin of elytron visible from above; body ovoid, dilated posteriorly; tibiae carinate and finely grooved above ... Agelastica
- Antennal segment 3 almost, or more than,  $2 \times$  as long as 2; pygidium uniformly punctured throughout; external margin of elytron not clearly visible throughout from above; oblong-oval, weakly broadened posteriorly; tibiae not distinctly carinate.....Luperus
- 68 (67). Prosternal process elevated between coxal cavities, separating them, at least anteriorly; apices of epimera distant, never reaching infracoxal lobe; coxal

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	cavities open or partly open Exosoma
	Prosternal process narrow and not elevated between coxal cavities and not
	separating them; apices of epimera distant; coxal cavities openCalomicrus
69 (61).	Dorsal surface glabrous or elytron sparsely covered with short hairs70
	Dorsal surface thickly covered with fine hairs; densely and finely punctured;
<b>T</b> O ((0))	elytral epipleuron narrowed near middle
70 (69).	Elytral epipieuron wide at base
	Elytral epipteuron narrow, leebly and gradually narrowed from base to apex;
	lateral depressions : hind femur slighty thickened Standungrus
71 (70)	Antennal insertions situated at level of middle of inner margins of eves or
	slightly behind middle: anterior border of pronotum unmargined
	Antennal insertions situated just behind anterior margin of eyes; anterior bor-
	der of pronotum finely margined; setigerous pore at or near apex of anterior
	angle of pronotum Calomicrus (part)
72 (71).	Anterior margin of labrum entire; postantennal tubercles not widely separated
	by frons; frons not depressed but with a longitudinal interantennal ridge73
	Anterior margin of labrum emarginate; postantennal swellings widely separated
	by frons; frons broad, depressed in middle, without a longitudinal in-
72 (72)	terantennal ridge
13 (12).	corring inserted between these angles or confluent with them; gens short;
	antennal insertions at middle of eve: prothorax generally transverse; seti-
	gerous pore a short distance from anterior angle of prothorax: hind tibial
	spine longer than width of apex of tibia Atrachya
	Postantennal swellings elongate-triangular with anterior angles acute, inserted
	between antennal insertions and separated by a deep groove; gena slightly
	shorter than smaller diameter of eye; antennal insertions situated just behind
	level of anterior borders of eyes; prothorax no broader than long; setigerous
	pore set back $1/5$ to $1/6$ length of prothorax from anterior angle; hind
74 (20)	tibial spine no longer than width of apex of tibia Paraluperodes
74 (39).	tibic with a long gripe at apey.
	First segment of posterior tarsus usually shorter than or sometimes subequal
	to, remainder combined
75 (74).	Elytral epipleuron gradually narrowed behind, and wider at middle than $1/2$
	width in basal portion76
	Elytral epipleuron suddenly narrowed at end of basal 1/3 and distinctly
	narrower at middle than 1/2 width in basal portion Monolepta
76 (75).	Apex of elytron truncate77
	Apex of elytron not truncate but rounded Sermyloides
77 (76).	Dorsal surface of body not covered with fine pubescence
	Dorsal surface of body covered with fine pubescence; body oval (Laboissière,
70 (77)	1936; Tonkin)Trichosepharia*
18 (11).	Engina supparallel-sided or feebly rounded, truncated apically; elytral epipleuron
	not unusually while for Galerucinae

- 89(86). Elytral punctures regularly and longitudinally striated .......90 Elytral punctures not regularly striated (=Diaphaenidea, =Micraenidea) .....

94(93).	Elytron with several weakly raised costae and punctation with tendency to- ward longitudinal rows along these costae $(-Platwanthoides)$
	Elytral surface with transverse depression behind subbasal area without any
	longitudinal costae or puncture-rows (= Aenidea)
95(93).	Anterior border of pronotum unmargined. or indistinctly margined
	Anterior border of pronotum distinctly margined
96(95).	Gena $2/5$ to $1/2$ as deep as transverse diameter of eye; antennal segments
	4-10 flattened above; frons of 3 pitted or carinate
	Gena about 1/4 as deep as transverse diameter of eye; antennal segments
	4-10 cylindrical; frons of 3 <sup>th</sup> triangular, weakly convexEpaenidea
97(96).	Depression of pronotum feebly impressed; hind tarsal segment 1 distinctly
	shorter than remainder combined; in $\mathcal{J}$ from the segments
	4-10 with costa anteriorlyAcroxena
	Depression of pronotum deep; find tarsal segment I subequal in length to
	distinct interantennal longitudinal costa and antennal segments $3-11$ each
	with a long seta beneath Hyphaenia
<b>9</b> 8( <b>9</b> 5).	Gena distinctly narrower than 1/3 of transverse diameter of an eve
	Gena wider than, or subequal to, $1/3$ of transverse diameter of an eye; in $3$
	antennal segment 4 more than $3 \times$ as long as $2+3$ ; pronotum subquadrate
	Proegmena
<b>99</b> (98).	In $\mathcal{J}$ antennal segment 2 subequal to, or slightly longer than, 3; 4 more than
	$2 \times$ as long as $2+3$ (= <i>Taphinella</i> )Arthrotus
	In 3 <sup>o</sup> antennal segment 3 distinctly longer than 2; 4 distinctly shorter than
100(1)	2+3Dercetina
100(1).	Posterior tibia without any spine at apex
101(100)	Lateral margin of proportium straight and subparallel or constricted behind
101(100)	middle
	Lateral margin of pronotum roundedDoryida
102(101).	Anterior coxal cavity closed behind; antennae not covered with velvet hairs;
	lateral margin of pronotum almost straight and subparallel-sidedDoryidomorpha
	Anterior coxal cavity incompletely closed behind; antenna covered with velvet
	hairs; lateral margin of pronotum constricted at middle
103(100).	Antennal segment 3 subequal to, or $2 \times$ as long as, 2104
101(100)	Antennal segment 3 is $4 \times$ as long as 2Laphris
104(103).	Pronotum with or without a pair of depressions $(=Hylaspes)$ Galerucida
	Pronotum with a transverse furrow which is narrow and runs more than $3/4$
	width of pronotumAgelasa

# Tribe GALERUCINI

# Genus Galeruca Geoffroy

Galeruca Geoff., 1762, Hist. Ins. 1: 251.—Müller, 1764, Fauna Friedrichsdal., XIV.—Latreille, 1810, Considerationes Generales, Paris, 432 (type: Chrysomela tanaceti Linn.).—Crotch,

1873, Ac. Philad., Proc., 55.—Weise, 1886, Ins. Deutschl. 6(4): 578, 637.—Stephens, 1834, Ill. Brit. Ent. Mand. 4: 287; 1839, Man. Col., 288.—Bedel, 1892, Col. Bass. Seine 5: 158; 1897, *t.c.*, 164; 1900, *t.c.*, 281.—Reitter, 1903, Wien. Ent. Ztg. 22: 133; 1912, Fauna Germ. 4: 135. —Maulik, 1936, Fauna India, Galeruc., 97.—Ogloblin, 1936, Fauna USSR 26, 1: 32.

Adimonia Laicharting, 1781, Verz. Tyrol. Ins., 190.—Redtenbacher, 1845, Gatt. Deutsch. Käferf., 114; 1849, Fauna Austr., 522; 1874, ed. 3, 2: 486.—Seidlitz, 1891, Fauna Transsylv., 789.

# KEY TO CHINESE SPECIES OF GALERUCA

1.	Hind wing present; elytron not abbreviated and flattened; metasternum not abbreviated
	Hind wing lacking; elytron somewhat abbreviated and flattened, small in rela- tion to pronotum; head nearly as broad as pronotum at base; pronotum black; elytron pale with black suture and 3 discal stripes, the latter fusing posteriorly; length 5-6.3 mm
2 (1).	Elytron with fairly distinct costae; flattened expansion of elytral margin continuing Elytron with vague costae; flattened expansion of elytral margin continuing
	around humeral angle to middle of anterior margin; prothorax somewhat obtuse at side; length 10 mm
3 (2).	Pronotum with a broad lateral depression parallel to lateral margin, rarely dis-
	tinctly emarginate at side behind middle4
	coming vague behind anterior end; side of prothorax distinctly indented behind middle
4 (3).	Apex of fore tibia not produced, normal
• •	Apex of fore tibia angularly or lobately produced, covering base of tarsal segment
	1; elytron with primary costae entire; length 6-9.5 mm 6. interrupta circumdata
5 (4).	Elytron with humerus not nearly hiding elytral margin below it (in dorsal view), and with discel costae guite distinct
	Elytron with humerus nearly hiding elytral margin below it (in dorsal view),
((5)	and with discal costae rather feeble; length 6.3–9.5mm
0(5).	teriorly: elvtral costae sometimes interrunted
	Prothorax not distinctly widest anterior to middle, with margins not strongly curved upward anteriorly: elytral costae largely entire
7 (6).	Lateral portion of pronotum not deeply impressed anteriorly, with margin moder-
. (-)-	ately elevated
	Lateral portion of pronotum deeply impressed anteriorly, with margin strongly
	elevated; dorsum ochraceous with darker elytral costae 5. heydeni
8 (7).	Lateral margin of prothorax feebly rounded externally in anterior $1/2$ ; elytral puncturation largely finer than that of pronotum; primary elytral costae $1-2$
	fused posteriorly; length 11-12.2 mm 4. extensa
	Lateral margin of prothorax strongly rounded externally in anterior $1/2$ ; elytral

puncturation stronger than that of pronotum; primary elytral costae 1 and 9 (6). Primary elytral costae very rarely testaceous, but if so, secondary costae lacking; side of prothorax not dilated anteriorly .....10 Primary elytral costae testaceous like remainder of surface; secondary costae lacking; side of prothorax dilated anterior to middle and emarginate just behind middle, and slightly so near anterior angle; elytral punctures larger than those of pronotum; length 6-11 mm ...... 13. weisei 10 (9). Elytral puncturation similar to that of pronotum in size; occiput very densely punctured; elytral costae narrow.....11 Elytral puncturation finer than that of pronotum; occiput shiny, sparsely punctured: primary elytral costae broad, convex, black; elytral disc yellowish except for costae and suture; length 7.5-11.0 mm ...... 7. nigrolineata major 11 (10). Lateral margin of prothorax raised or curved externally in anterior portion; prothorax 2.5× as wide as long .....12 Lateral margin of prothorax not raised or curved externally in anterior portion; prothorax  $2 \times$  as wide as long; elytral costae broad; length 5.6-8 mm 12 (11). Elytral costae prominent, pitchy; about 4 punctures in an approximate row between suture and costa 1, and between costae 1 and 2; pronotum reddish Elytral costae weak, pale like rest of disc; about 6 punctures in an approximate row between suture and costa 1, and between costae 1 and 2; pronotum dark, narrowly pale anteriorly and basally; length 8.5 mm.... 10. sinensis

#### 1. Galeruca barovskyi Jacobson

Galeruca barovskyi Jacobs., 1925, Ac. Sci. Russie, C. R., 1925 (A): 51; 1926, Revue Russe d'Ent. 19: 164, fig. (E. Tibet: Kham).—Ogloblin, 1936, Fauna USSR 26, 1: 47, 380, fig. 18 (Kam, Tibet, Szechuan).

DISTRIBUTION: W. China (E. Tibet, Sikang).

SIKANG: Liang-ho-kou, 1. VIII. 1938, Sage (AMNH); 28, Se-lang, Wassuland, 7. VIII. 1934, Friedrich (FREY).

#### 2. Galeruca dahli vicina Solsky

- Adimonia vicina Solsky, 1872, Soc. Ent. Ross., Horae 8: 255 (Vladivostok; ? ZMB).—Reitter, 1903, Wien. Ent. Ztg. 22: 137 (key).
- Galeruca (Galeruca) Dahli, Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10(51): 12, pl. 2, fig. 2 (Jehol).
- Galeruca dahli subsp. vicina, Ogloblin, 1936, Fauna USSR 26, 1: 50, 381, fig. 19 (Transbaikal, Amur, Manchuria, Korea, Zaidam).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31(211): 159 (Kogen-Do, Korea).

DISTRIBUTION: SE Siberia, N. China (Kirin, Jehol), Korea.

KIRIN: 1, Ertao-ho-tze Sta., Chinese Eastern Railway, 23. V. 1939, Loukashkin (CAS); 1, Wei-sohn, 31. VIII. 1923, Van Dyke (CAS). E. SIBERIA: Sotka-Gora, v. Bodemeyer (FREY).

HOST : Chûjô & Kimoto (1961, Pacific Ins. 3: 162) record dahli japonica from Plantago asiatica L.

### 3. Galeruca daurica Joannis

Galeruca daurica Joann., 1866, Abeille 3: 11, 52 (Dauria).—Jacobson, 1925, Mus. Martianov 3, 1: 36 (part).—Ogloblin, 1936, Fauna USSR 26, 1: 49, 380 (S. Siberia).

Galeruca Sedakovi Joann., 1866, Abeille 3: 13, 14, 54 (E. Siberia).— Weise, 1866, Ins. Deutschl. 6(4): 644 (E. Siberia).—Kolbe, 1886, Archiv Naturg. 52: 230 (Korea).

Galeruca mongolica Csiki, 1903, IN Reitter, Wien. Ent. Ztg. 22: 136 (E. Siberia, Mongolia; ?WIEN).

Ogloblin listed sedakovi and mongolica as aberrations of daurica.

DISTRIBUTION: N. China (Mongolia); Siberia; Korea.

MONGOLIA: Lake Dalai Nor, Barga, VIII-X. 1941, Loukashkin (CAS); 1, Ushuk, VI. 1922; 1, Tsagan-nor, VIII. 1922, Ac. 23974 (AMNH).

#### 4. Galeruca extensa Motschulsky

Galeruca extensa Mots., 1861, Etudes Ent. 10: 22 (Japan; ?Moscow).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 11 (Korea).

Galeruca Bang-Haasi Ws., 1894, Deutsche Ent. Zeitschr. 1894: 168 (Yokohama; ZMB).-Ogloblin, 1936, Fauna USSR 26, 1: 43, 379, fig. 14b (Ussuri, Manchuria, Japan).-Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 162 (host). New Synonymy.

DISTRIBUTION: Japan (Honshu), Korea, NE China (Manchuria), SE Siberia. HOSTS: Allium spp. (Japan).

#### 5. Galeruca heydeni Weise

Galeruca Heydeni Ws., 1887, Soc. Ent. Ross., Horae 21: 272 (Korea; ?Moscow).—Ogloblin, 1936, Fauna USSR 26, 1: 42, fig. 14h (Ussuri, Korea).

DISTRIBUTION: Korea, NE China (Kirin), SE Siberia.

KIRIN: 1, Er-tao-ho-tze Sta., Chinese Eastern Railway, 23. V. 1939, Loukashkin (CAS).

### 6. Galeruca interrupta circumdata Duftschmidt

Galleruca circumdata Duft., 1825, Fauna Austr. 3: 219 (Wien; ? WIEN).—Mannerheim, 1844, Bull. Mosc. 1844: 199.

Adimonia florentina Redtenbacher, 1849, Fauna Austr., 522.

- Galeruca Sequensi Reitt., 1903, Wien. Ent. Ztg. 22: 138 (Irkut, E. Siberia; Mongolia; ? WIEN).
- Galeruca interrupta circumdata, Ogloblin, 1936, Fauna USSR 26, 1: 35, 381, fig. 10 (Caucasus, Asia Minor, Syria, W. Siberia, Mongolia, Tibet).

DISTRIBUTION: Caucasus, Asia Minor, Syria, W. Siberia, NW China (Irkutzk, Mongolia, Tibet).

# 7. Galeruca nigrolineata major Jacobson

Galeruca nigrolineata subsp. major Jacobs., 1901, Ofv. Finsk. Vet. Soc. Förh. 43: 138 (Kan-

dyktau, Dshilaryk; ? LENINGRAD).

Galeruca nigrolineata subsp. major, Ogloblin, 1936, Fauna USSR 26, 1: 45, 380, fig. 16.

DISTRIBUTION: Semiretchie, Ferghana, Chungan, Boukhara, Sinkiang.

SINKIANG: 2, Issyk-kul, Ton R. (ZMB); 4, Tekesthal, Thian-S. (Tien Shan) (ZMB).

8. Galeruca pallasia Jacobson Fig. 98, a.

Galeruca pallasia Jacobs., 1925, Revue Russe d'Ent. 19: 165 (Gansu; Tibetia; Nanshanji: Jamatyn-umru, Kham, Kukunoor, Yangtsekiang; ? LENINGRAD).—Ogloblin, 1936, Fauna USSR 26, 1: 48, 380.

DISTRIBUTION: NW China (Kansu, Tsinghai, E. Tibet).



Fig. 98. a, Galeruca pallasia Jacobson; b, G. reichardti Jacobson.

9. Galeruca reichardti Jacobson Fig. 98, b.

Galeruea reichardti Jacobs., 1925, Revue Russe d'Ent. 19: 167 (Siberia: Primorskaja; Meridiussuriensis; Manchuria; Korea; ? Moscow).—Ogloblin, 1936, Fauna USSR 26, 1: 44, 379, fig. 15 (Ussuri, E. Manchuria, Kansu, Korea).—Chûjô, 1938, Mushi 11 (2): 164 (Tsingtau); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 159 (Heian-Nando, Korea).

Galeruca extensa, Chûjô, 1936 (nec Motchulsky), Umeno Ent. Lab., Bull 3: 11 (Korea).

DISTRIBUTION: N. China (Liaoning, Shantung, Hopei, Kansu, Szechuan, Sinkiang), E. Siberia, Korea.

SINKIANG: 5, Kuldscha (ZMB). KANSU: 7, Tu-kiang (ZMB). SHANTUNG: 3, Tsingtau, 10. VI. 1936, Höne (ZMB); 4, W. Shantung, X-XI. 1903, Blackwelder, 6149 (US). LIAONING: Dairen, 7. VI. 1933, Loukashkin (CAS). HOPEI: Inn Shan, 980-2100 m, Kalgan (ZMB). SZECHUAN: Gin-yuen-see, 4500 m, C. Szechuan, Reitter (FREY). KO-REA: 2, Chemulpo (ZMB).

### 10. Galeruca sinensis Laboissière

Galeruca sinensis Lab., 1937, Soc. Ent. France, Bull. 42: 30 (Se-Tchouen, Tatsien-lou to Kiu-lung; PARIS).

DISTRIBUTION: W. China (Szechuan, Sikang).

SIKANG: "China-Tibet border", nr. Ja-ze-la Pass, 4500-5200 m, 13. VIII. 1930, Graham (US).

### 11. Galeruca spectabilis Faldermann

Galeruca spectabilis Fald., 1837, Soc. Nat. Moscou, Nouv. Mém. 5: 326, pl. 12, fig. 4 (S. Russia; ? Moscow).—Joannis, 1866, Abeille 3: 24 (Caucasus).—Weise, 1886, Naturg. Ins. Deutschl. 6(4): 646.—Reitter, 1903, Wien. Ent. Ztg. 22: 136 (orientalis var. spectabilis?).—Ogloblin, 1936, Fauna USSR 26, 1: 41, 378 (spectabilis and spectabilis orientalis; S. Russia, Turkey, Iran, Syria).

Galeruca extensa, Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 162 (hosts).

There seems to be a gap in the recorded distribution of this species. We are using the species name proper rather than the subspecies *orientalis*, for lack of sufficient comparative material.

DISTRIBUTION : Turkey, Syria, Iran, S. Russia, China, (Sikang, Hupeh, Fukien), Japan.

SIKANG: 21, Se-long, 4000m, Wassuland, 7. VIII. 1934, Friedrich (FREY). HUPEH: 1, Lichuan, W. Hupeh, 11. IX. 1948, Djou, on willow. FUKIEN: San-chiang, Chungan, 17. X. 1941, Maa (BISHOP).

HOSTS: Salix sp. (Hupeh); Cirsium spp., Petasites japonicus (S. & Z.) Max. (Japan).

#### 12. Galeruca tanaceti incisicollis Motschulsky

Galeruca incisicollis Mots., 1869, Schrenck's Reisen Amurl., 232 (Daourie, Kamtschatka;
?type lost).—Weise, 1886, Ins. Deutschl. 6(4): 641 (Daurien, Amur).—Reitter, 1903,
Wien. Ent. Ztg. 22: 134 (Ostsibirien, Mongolia, Kamtschatka).

Galeruca tanaceti incisicollis, Ogloblin, 1936, Fauna USSR 26, 1: 34, 377.

The typical tanaceti L. occurs in Europe.

DISTRIBUTION: NW China (Mongolia, Damen, Sinkiang); E. Siberia, Kamtschatka. SINKIANG: 1, Kuldscha (ZMB).

### 13. Galeruca weisei Reitter

Galeruca Weisei Reitt., 1903, Wien. Ent. Ztg. 22: 137 (Irkut, Mongolia; ? WIEN).—Ogloblin, 1936, Fauna USSR 26, 1: 49, 380 (N. Kazakhstan, S. Yakut, Amur, Ussuri).

### Pac. Ins. Mon.

DISTRIBUTION: N. China (N. Mongolia, Kirin), S. Siberia, Kazakhstan, E. Siberia. KIRIN: 2, Er-tao-ho-tze Sta., Chinese Eastern Railway, 23. V. 1939, Loukashkin (CAS).

#### Genus Sastra Baly

- Sastra Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 253 (type: S. placida Baly=Galeruca viridipennis Boisduval).—Chapuis, 1875, Gen. Col. 11: 198, 206.—Maulik, 1936, Fauna India, Galeruc., 254.
- Eriosardella Chûjô, 1935, Arb. Morph. Tax. Ent. Berlin-Dahlem 2: 219 (type: E. costata Chûjô; China). New Synonymy.

This genus is distributed from India to New Guinea and northern Australia. It is at present rather heterogeneous in constitution, but *placida* and *costata* are congeneric.

#### 14. Sastra costata (Chûjô), NEW COMBINATION

Eriosardella costata Chûjô, 1935, Arb. Morph. Tax. Ent. Berlin-Dahlem 2: 219 (China; DEI).

Head, prothorax and legs yellowish brown; elytron and venter dark brown. Head with postantennal tubercles prominent, triangular; antennal segment 1 long, thickened apically; prothorax rectangular, about  $2 \times$  as broad as long, slightly rounded at side anteriorly, with angles tuberculate, and disc remotely punctured and grooved transversely and medially; scutellum large, triangular, nearly impunctate; elytron slightly widened posteriorly, with apex bluntly prominent at sutural angle, and disc with close punctures, adpressed pubescence and 2 sublateral longitudinal costae. Length 9 mm.

DISTRIBUTION: China (no further data).

### Genus Pallasiola Jacobson

Pallasia Weise, 1886 (nec Rob.-Des. 1840), Ins. Deutschl. 6(4): 577 (type: C. absinthii Pall.). Pallasiola Jacobs., 1925, Acad. Sci. Russie, C. R. 1925(A): 51 (new name for Pallasia Ws.).

15. Pallasiola absinthii (Pallas) Fig. 99, a.

Chrysomela absinthii Pall., 1773, Reise 2(2): 725 (Siberia).

Adimonia absinthii, Joannis, 1866, Abeille 3: 59.

- Pallasia absinthii, Weise, 1886, Ins. Deutschl. 6(4): 577, note (E. Siberia).—Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10(51): 16, pl. 2, fig. 3 (Jehol).—1889, Soc. Ent. Ross., Horae 23: 569 (Kan-ssu, Szetschuan).
- Pallasiola absinthii, Jacobson, 1925, Acad. Sci. Russie, C. R. 1925(A): 51.—Ogloblin, 1936, Fauna USSR 26, 1: 56, 382, fig. 22 (Kazakstan, Kuldsha, S. Siberia, N. Mongolia, Ordos, Ganssu, Se-Tchouen).

DISTRIBUTION: S. Russia, S. & E. Siberia, N. & W. China (Sinkiang, Mongolia, Kirin, Jehol, Kansu, Szechuan, Sikang, Yunnan).

CHAHAR: 6, Shi-wan-tsze, 1160 m, and Kiu-mou Kiang-keou, VI-VII (ZMB). SI-KANG: Lao-lu, 3000m, 24. VII. 1937, Graham (US). YUNNAN: Yun-nan sen (ZMB). HOPEI: Inn Shan, 980–2100 m, Kalgan (ZMB). LIAONING: Anto (Antung), 16. VIII.



Fig. 99. a, Pallasiola absinthii (Pallas); b, Theone octocostata (Weise).

1931, Gressitt coll. (CAS). KIRIN: 1, Kirin, 7. IX. 1923, Van Dyke (CAS).

# Genus Theone Gistl

 Theone Gistl, 1857, Handb., 173 (type: Galeruca silphoides Dalman).—Laboissière, 1925, Encyclop. Ent. Coleopt. 1, 1: 57.—Ogloblin, 1936, Fauna USSR 26, 1: 57, 368, 382.
 Leptosonyx Weise, 1885, Deutsche Ent. Zeits. 29: 315; 1886, Ins. Deutschl. 6(4): 576, note

(first species: *silphoides* Sahlb.).—Maulik, 1936, Fauna India, Galeruc., 74. *Leptonyx* Jacobson, 1895, Soc. Ent. Ross., Horae **29**: 555, note (emendation).

### KEY TO CHINESE SPECIES OF THEONE

Pronotum partly smooth and shiny; elytron rather flat and feebly costate.....17. silphoides Pronotum almost entirely heavily punctured; elytron convex and with strong costae...

16. octocostata

16. Theone octocostata (Weise) Fig. 99, b.

- Leptosonyx octocostata Ws., 1912, Archiv Naturg. 78A 2: 92 (Kashmir; ? ZMB).—Maulik, 1936, Fauna India, Galeruc., 75.
- Theone octocostata, Ogloblin, 1936, Fauna USSR 26, 1: 61, 382, fig. 25 (Ferghana, Pamir, Beluchistan).

DISTRIBUTION: C. Asia, China (Tibet?, Hopei).

TIBET: 2, Khalatse, 4600 m (ZMB). We are not certain of this locality. HOPEI: 1, Peking (ZMB). This label might be questioned.

#### 17. Theone silphoides (Dalman)

Adimonia silphoides Dalm., 1823, Ent., Anal. 77 (Europe).—Joannis, 1866, Abeille 3: 15, 61 (Caucasie, Russie, Sarepta, Turquie).

Leptosonyx silphoides, Weise, 1886, Ins. Deutschl. 6(4): 576, note 2 (Sarepta, Altai).— Jacobson, 1895, Soc. Ent. Ross., Horae 29: 556 (Russia; Altai; Dshungaria: Kuldsha).

Leptosonyx costipennis Jacobson, 1893, Soc. Ent. Ross., Horae 27: 245 (W. Turkestan: Postigau).

Leptosonyx artemisiae Jacobs., 1895, op. cit. 29: 555 (W. Turkestan).

Theone silphoides, Ogloblin, 1936, Fauna USSR 26, 1: 59, 382, fig. 23.

DISTRIBUTION: SE Europe, Transcaucasus, Kazakstan, N. Iran, C. Asia, NW China (Sinkiang).

SINKIANG: 4, Ton R., Issyk-Kul; 4, Oberer Ili, Kuldscha; 2, N. Mts., Kuldja (ZMB); 2, Ober-Ili-Thai, 1897, Hauser (LEIDEN). S. SIBERIA: 1, W. Mujunkum, Akmolinsk, Krieheldorf (LEIDEN).

#### Genus Nyctiphantus Semenov

Nyctidromus Sem., 1895 (nec Gould, 1838), IN Jacobson, Soc. Ent. Ross., Horae 29: 556. Nyctiphantus Sem., 1902, Rev. Russe d'Ent. 11: 353 (type: Leptosonyx hirtus Weise).

### 18. Nyctiphantus hirtus (Weise)

Leptosonyx hirtus Ws., 1885, Deutsche Ent. Zeitschr. 29: 315 (Mongolia, Ili; ZMB); 1886, Ins. Deutschl. 6(4): 577, note.

Leptosonyx (Nyctidromas) hirtus, Semenov, 1895, IN Jacobson, Soc. Ent. Ross., Horae 29: 556 (Heptapotamica, Ili).

Nyctiphantus hirtus, Semenov, 1902, Rev. Russe d'Ent. 11: 353.

DISTRIBUTION: NW China (Ili, Mongolia).

## Genus Diorhabda Weise

Diorhabda Ws., 1883, Deutsche Ent. Zeits. 32: 316 (type: Galerucella elongata Brullé); 1886, Ins. Deutschl. 6(4): 578, 633.—Jacobson, 1901, Ofvs. Finska Vet.–Soc. Förh. 43: 137, note.—Reitter, 1912, Fauna Germ. 4: 135.—Laboissière, 1934, Soc. Ent. France, Ann. 103: 52. —Maulik, 1936, Fauna India, Galeruc., 232.

Radymna Reitter, 1912, Fauna Germ. 4: 135 (type: Diorhabda rickmersi Ws.). Prophyllis Reit., 1912, l. c.: 135 (hairy species).

#### KEY TO CHINESE SPECIES OF DIORHABDA

1. Pronotum and elytron glabrous, sometimes with hairs along lateral margins ..... 2 Dorsum clothed with recumbent white hairs; antenna short, segments 6–10 no

#### Gressitt & Kimoto: Chrysomelidae of China

broader than long; borders of pronotum not flattened; length 4.3-6 mm... 20. persica

#### 19. Diorhabda elongata sublineata Lucas

Diorhabda elongata ab. sublineata Luc., 1849, Expl. Alger. Ent. 2: 542, pl. 44, fig. 8 (Hippône). —Weise, 1890, Soc. Ent. Ross., Horae 24: 484 (C. Mongolia).

Diorhabda elongata, Ogloblin, 1936, Fauna USSR 26, 1: 77, 384, fig. 30 (part).

DISTRIBUTION: N. Africa, Asia Minor, W. Asia, NW China (Mongolia).

# 20. Diorhabda persica (Faldermann)

Galeruca persica Fald., 1837, Soc. Nat. Moscou, Nouv., Mém. 5: 331 (Caucasus).—Joannis, 1866, Abeille 3: 87.

Galeruca damascena Joannis, 1866, Abeille 3: 82, 96 (Syria, Damascus).

Galeruca sareptana Stierlin, 1863, Soc. Nat. Moscou, Bull. 4: 501 (Sarepta).

Diorhabda persica, Ogloblin, 1936, Fauna USSR 26, 1: 72, 383, fig. 27p, 28 (W. Caspian, Syria, Iran, Daghestan, Kazakstan, Afghanistan, C. Asia, Kuldsha).

DISTRIBUTION: W. & C. Asia, W. China (Sinkiang).

### 21. Diorhabda rybakowi Weise

Diorhabda Rybakowi Ws., 1890, Soc. Ent. Ross., Horae 24: 484 (C. Mongolia; ?Moscow).
—Ogloblin, 1936, Fauna USSR 26, 1: 30, 384, fig. 33 (Dshungarie, Mongolie, Alachan, Ganssu).

DISTRIBUTION: NW China (Sinkiang, Mongolia, Kansu).

## 22. Diorhabda tarsalis Weise

Diorhabda tarsalis Ws., 1889, Soc. Ent. Ross., Horae 23: 569, 623 (C. Mongolia, Kanssu;
?ZMB).—Laboissière, 1914, Soc. Ent. France, Bull. 1914: 84.—Ogloblin, 1936, Fauna USSR 26, 1: 80, 384, fig. 32 (S. Transbaikal, Mongolia, Alachan).

DISTRIBUTION: NW China (Mongolia; Kansu), SE Siberia.

#### Genus Triaplatarthris Fairmaire

Triaplatarthris Fairm., 1878, Soc. Ent. France, Ann. ser. 5, 8: 138 (type: T. pyrochroides

Fairm.; China).

Formosogalerucella Pic, 1928, Mel. Exot. Ent. 51: 32 (type: F. brevithorax Pic; Formosa). New Synonymy.

#### Key to Chinese species of Triaplatarthris

- 4. Prothorax with lateral margin somewhat depressed and concave at middle; head and pronotum medially striped with pitchy; dorsum dusky reddish...26. pyrochroides Prothorax with lateral margin fairly horizontal and straight; head and pronotum hardly striped medially; dorsum largely bright orange (Pic, 1928; NEW COM-BINATION; Taiwan) ......brevithorax\*

### 23. Triaplatarthris collaris Gressitt and Kimoto, n. sp. Fig. 101, a.

Pitchy black to pale orange; head orange, with a large pitchy triangle on upper portion and somewhat reddish-brown on sides and labrum; antenna dull-brown; prothorax orange, slightly brownish in depressions along median line; scutellum and elytron pitchyblackish, latter margined externally and apically with orange. Ventral surfaces dark castaneous, in part slightly blackish along lateral portions; legs dull reddish-brown. Body moderately clothed with short adpressed pale hairs which are finer and more numerous above and sparser and longer beneath.

Head not quite as broad as prothorax, abbreviated anteriorly; occiput rather deeply and closely punctured; postantennal area smooth and slightly depressed medially; antennal insertions fairly close and divided by a weak ridge; fronto-clypeus short and broad with a transverse ridge almost connected at middle with inter-antennal ridge. Antenna shorter than body, moderately stout; segment 1 fairly stout, more than  $2 \times as$  long as 2; 3 slightly longer than 1 and slightly longer than 4; 4–7 subequal in length; 7–10 progressively shorter; 11 about as long as 7. Prothorax slightly more than  $2 \times as$  broad as long, transverse anteriorly and subtransverse and slightly sinuate basally with sides broadening somewhat evenly from base to apex, but anterior and posterior corners not very distinctly angulate. Disc uneven, with a premedian and a postmedian depression on the median line and a deeper transverse depression on each side just anterior to middle, as well as a smaller depression
just internal to posterior corner. Scutellum elongate trapeziform, closely punctured. Elytron parallel-sided, more than  $4 \times$  as long as broad, evenly rounded apically; disc rather evenly convex, entirely covered with close subrugose irregular punctures, in part forming irregular subtransverse corrugations. Ventral surfaces somewhat smooth and shiny, with fine scattered punctures, except for coarser rugose punctures on metapisternum; last abdominal tergite fairly large and convex, largely smooth; last sternite no longer than preceding, barely concave apically and somewhat hairly on central portion. *Aedeagus* strongly tapered in basal portion, both in lateral and dorsal views, slender and straight apically, subrounded at tip. Legs moderately stout, not very long; hind tarsus fairly broad, segment 1 somewhat longer than 2 and slightly longer than 3, 5 longer than 1. Length 6.0 mm; breadth 2.35.

*Female*: Antenna nearly 4/5 as long as body; last abdominal sternite obtusely emarginate apically and not very hairy. Length 5.6 mm; breadth 2.6.

Paratypes: Pronotum sometimes entirely orange. Length 5.6–6.7 mm; breadth 2.3–2.6.

# DISTRIBUTION: S. China (Szechuan, Fukien, Chekiang).

Holotype & (BISHOP 3264), Be-luh-din, 1800m, N. of Chengtu, Szechuan Prov., W. China, 20. VIII. 1940, Gressitt; allotype  $\mathcal{P}$  (LINGNAN), Cha-po-hui, Kien-yang Distr., Fukien Prov., 10–18. V. 1933, D. C. Ngu; 1 paratype (CAS), same data as allotype; 3 paratypes (FREY, BISHOP), Tien-mu Shan, Chekiang Prov.

Differs from *pyrochroides* Fairm. in being stouter, and in having the surface more uniform, more convex and more coarsely sculptured on elytral disc, and the color darker on elytron and redder and less black on pronotum.

# 24. Triaplatarthris marginata Gressitt and Kimoto, n. sp. Figs. 100 & 101, b.

*Male* : Reddish-brown, in part pale orange or dark pitchy brown: head orange testaceous, dull reddishbrown on antennal supports, pitchy brown on gena and side of occiput and pitchy black on most of upper portion of occiput except for a narrow pale border between dark area and eyes and behind antennal supports; antenna dull pitchy brown; prothorax orange, with a broad median pitchy stripe which broadens posteriorly and most of lower side dark reddish brown including area of lateral margin in anterior 1/2; scutellum pitchy; elytron orange with a broad reddish pitchy stripe from base adjacent to scutellum extending almost to apex and leaving a moderately broad sutural stripe and much wider external stripe of orange; ventral surfaces dull red dish-brown, darker on tibiae, swollen portions of femora and most of upper surfaces of tarsi. Body moderately clothed with short adpressed golden pubescence above and sparser and longer suberect pale buff hairs beneath.

Head barely broader than prothorax, narrowed posteriorly; occiput closely reticulate-punctate; area

Fig. 100. Triaplatarthris marginata n. sp.

1963

behind antennal insertions flat, impunctate and medially grooved; interantennal area slightly raised medially and grooved on each side; frontoclypeus short, transversely ridged. Antenna 3/4 as long as body, moderately stout; segment 1 slightly arched, distinctly punctured; 2 about 1/5 as long as 1; 3 as long as 1, slightly longer than 4; 4-7 subequal; 7-10 decreasing somewhat regularly in length and diameter; 11 about as long as 6. Prothorax not quite  $2 \times$  as broad as long, subrectangular with corners slightly rounded; anterior margin nearly straight and posterior margin transverse but slightly sinuate; side very slightly indented just behind middle; disc somewhat uneven, with a depression behind anterior margin and another near base on median portion and a slight depression on middle of side of disc and another small one just internal to hind corner; surface closely and subrugosely punctured. Scutellum subelongate, narrowed and rounded apically and subrugose-punctate. Elytron  $4 \times$  as long as broad, subparallel-sided but very slightly narrowed posteriorly; apical portions strongly rounded; disc very densely rugose-punctate to subreticulate. Ventral surfaces somewhat shiny, in large part finely and sparsely punctured but more closely and coarsely punctured on metasternum; last abdominal tergite fairly convex; sparsely punctured; last abdominal sternite rounded-emarginate at middle, rather smooth and feebly punctured in Aedeagus rather strongly flattened, widened distal to middle; apical central portion. portion slightly narrower, rounded apically and acute at tip. Legs stout and not very long; femora strongly swollen, particularly hind femur; tibiae slightly arched; hind tarsus with segment 1 distinctly longer than 2 or 3 and nearly as long as 5. Length 7.5 mm; breadth 2.7.

*Female*: Basal antennal segments stout and flattened, particularly segments 3-6; following segments much narrower and tapering. Pygidium moderately convex, subtriangular apically; last abdominal sternite subobtusely emarginate, smooth on central portion. Hind femur much less swollen than in  $\mathcal{J}$ . Length 7.5 mm; breadth 2.9.

Paratypes: Length 7.2-7.6 mm; breadth 2.7-3.0.

DISTRIBUTION: SE China (Fukien, Chekiang).



Fig. 101.  $\exists$  genitalia. a, Triaplatarthris collaris n. sp.; b, T. marginata n. sp.

Holotype  $\mathcal{J}$  (BISHOP 3265), Ta-chulan, 1000 m, Shaowu Distr., Fukien Prov., 6–9 Jan. 1943, T. C. Maa; allotype  $\mathcal{P}$ (FREY), Tien-mu Shan, Chekiang Prov., Reitter; 5  $\mathcal{J}$  paratypes (FREY, BISHOP), same data as allotype.

Differs from *pyrochroides* Fairm. in being stouter, with elytron more even, more heavily punctured and more reticulate, and in being more contrastingly colored, with distinct orange stripes, not formed by pubescence but by ground color.

- 25. Triaplatarthris porphyrea (Fairmaire), NEW COMBINATION
- Galerucella porphyrea Fairm., 1889, Soc. Ent. France, Ann. 58: 76 (Mou-

pin; PARIS).

DISTRIBUTION: China (Sikang, Szechuan, ?Kiangsi).

SZECHUAN: 2, Beh-luh-din, 1800 m, 50 km N. of Chengtu, 11. VIII, VII-VIII. 1933, Graham (US). KIANGSI: 1, slightly questionable, Hong Shan, 25. VI. 1936, Gressitt.

# 26. Triaplatarthris pyrochroides Fairmaire

Triaplatarthris pyrochroides Fairm., 1878, Soc. Ent. France, Ann. 47: 138 (C. China; PARIS). There is a possibility that brevithorax (Pic) may be the same as this species. DISTRIBUTION: C. China (Hupeh).

HUPEH: 2, Sui-sa-pa, 1000 m, Lichuan Distr., 23, 31. VII. 1948, Gressitt & Djou (CAS).

# Genus Menippus Clark

Menippus Clark, 1864, Jour. Ent. 2: 257 (type: M. cynicus Clark; Queensland).—Chapuis, 1875, Gen. Col. 11: 220, 222.—Fairmaire, 1889, Soc. Ent. France, Ann. ser. 6, 8: 375.
 —Maulik, 1936, Fauna India, Galeruc., 241.

This genus is new to China. It extends from India and Nepal to the Philippines and New Guinea.

# 27. Menippus canellinus Fairmaire

Menippus canellinus Fairm., 1888, Soc. Ent. France, Ann. ser. 6, 8: 374 (Tonkin; ?PARIS). DISTRIBUTION: Vietnam (Tonkin, Annam), Hainan I., S. China (Kwangsi).

KWANGSI: 1, Tai-ping-fu, Sungshen Distr., 5–6. VIII. 1934, Tinkham (LINGNAN). HAI-NAN: 2, Ta-hau, W. of No-doa, 5. VII. 1935, Gressitt (CAS). VIETNAM: 3, Chiem-Hoa, C. Tonkin, VIII–IX, Fruhstorfer; 1, Phuc-Son, Annam, XI–XII, Fruhstorfer (ZMB).

## Genus Mimastracella Jacoby

Mimastracella Jac., 1903, Soc. Ent. Belg., Ann. 47: 120 (type: M. hirsuta Jac. ♀; S. India). —Maulik, 1936, Fauna India, Galeruc., 208.

Eriosarda Jac., 1903, Soc. Ent. Belg., Ann. 47: 121 (type: E. metallica Jac. 3; S. India).

# KEY TO CHINESE SPECIES OF MIMASTRACELLA

Elytron metallic green except side somewhat broadly brownish; scutellum black;

Prothorax reaching 4/5 distance from suture to angle of humerus, with disc shiny, feebly punctured, and margins in large part strongly raised; length 8-10 mm...
 32. violacea
 Prothorax reaching 2/3 distance from suture to angle of humerus, with disc irregular, somewhat strongly punctured, and margins not strongly raised, but disc somewhat raised to margins in part; length 6.8-7.1 mm......31. submetallica

# 28. Mimastracella brunnea Gressitt and Kimoto, n. sp. Fig. 102, a.

*Male*: Almost entirely pale testaceous, slightly more ochraceous on dorsum with margins of prothorax and elytron in part slightly reddish; apex of mandible reddish. Body very finely clothed above with short oblique pale golden hairs; ventral surfaces with slightly denser and longer pale golden hairs.

*Head* distinctly narrower than prothorax; occiput broad and somewhat flattened, slightly depressed medially and covered with deep, moderately close punctures; areas behind antennal insertions smooth and slightly raised, grooved medially; interantennal area moderately broad, rugose-punctate; frontoclypeus very short, transversely raised. Antenna about 2/3 as long as body; segment 1 stout, smooth and sparsely punctured; 2 nearly 1/2 as long as 1; 3 longer than 1+2 and about 1/3 longer than 4; 4-6 subequal; 6-10 decreasing subregularly in length; 11 about as long as 9. Prothorax  $2.5 \times$  as long as length at middle, longer towards side; anterior margin evenly and arcuately emarginate; basal margin subtransverse in central portion and oblique towards side; lateral margin strongly sinuate, rounded convex just anterior to middle; disc shiny but uneven, with a shallow depression behind middle of central portion and a much deeper one on each side of central portion of disc and a depression just internal to posterior angle. Scutellum rounded-trapeziform, finely punctured. Elytron  $2.5 \times$  as long as broad, distinctly widened behind middle and broadly rounded apically; disc smooth and even, quite closely and irregularly punctured, the punctures mostly larger than interspaces. Ventral surfaces shiny, in large part smooth and finely punctured; last abdominal tergite convex, evenly rounded apically; last sternite emarginate at center, rather evenly punctured and pubescent. Legs moderately stout; hind tarsal segment 1 as long as 2+3, and slightly longer than 5. Length 7 mm; breadth 3.7.

*Female*: Last abdominal sternite shallowly emarginate. Length 7.4 mm; breadth 4. *Paratypes*: Length 6.5–7.8 mm; breadth 3.2–4.1.

### DISTRIBUTION: Hainan Island.

Holotype ♂(CAS), Sam-kok Leng (Dome Mt.), 795 m, SW of No-doa, Hainan I., 12. VII. 1935, Gressitt; allotopotype ♀ (Bishop 3266), same data; 1 paratype (CAS), No-doa, 30. V. 1935, Gressitt; 1 paratype (Bishop), Ta-hau, 25 m, W. of No-doa, 6. VII. 1935, Gressitt; 1 paratype (LINGNAN), Lin-fa Shan, 600 m, SE of No-doa, 9. VI. 1932, Lau & To; 1 paratype (US), No-doa, 17. VI. 1932, Lau & To.

Differs from *ochracea* Chen in being much broader, with antennal segment 2 barely 1/4 as long as 3, prothorax more than  $2 \times$  as broad as long, and its disc without a transverse depression near middle of anterior border.



Fig. 102. a, Mimastracella brunnea n. sp.; b, M. violacea (Weise).

#### 29. Mimastracella lateralis Chen

Mimastracella lateralis Chen, 1942, Notes d'Ent. Chinoise 9: 21 (Szechuan: Mouping; U. NANKING).

DISTRIBUTION: W. China (Sikang).

#### 30. Mimastracella ochracea Chen

Mimastracella ochracea Chen, 1942, Notes d'Ent. Chinoise 9: 22 (Sikang: Kanting; Ac. SIN).

DISTRIBUTION: W. China (Sikang).

# 31. Mimastracella submetallica Gressitt and Kimoto, n. sp.

*Female*: Largely purplish to bluish black, in part yellowish testaceous: head black with tinges of purplish and greenish; mandible and palpi reddish; antenna dull reddishbrown, slightly metallic on basal 2/3 of scape; prothorax black with a bluish or greenish tinge; scutellum black with a slightly purplish tinge; elytron purplish-black with slightly bluish or greenish reflections; thoracic sterna pitchy with purplish to reddish tinges; abdomen pale yellowish testaceous; legs pitchy black with slight reddish or purplish tinges. Body thinly clothed above with subadpressed dark reddish hairs; ventral surfaces somewhat thinly clothed with slightly longer more oblique golden buff hairs; legs largely clothed with denser auburn hairs.

*Head* rather small, considerably narrower than prothorax; occiput fairly flat, slightly depressed medially, impressed with large deep punctures, and a transverse depression behind postantennal swellings which are divided by a median groove; interocular area nearly level but finely grooved at side; frontoclypeus subtriangular and transversely raised. *Antenna* fairly slender, 3/4 as long as body; segment 1 moderately stout, 1/2 again as long as 2; 3

1B

longer than 1+2 and slightly longer than 4; 4-7 subequal in length; 8-11 shorter, subequal; 11 shorter than 7. Prothorax  $2.4 \times$  as wide as long, widest anterior to middle and longest near middle; anterior margin subtransverse but weakly sinuate and slightly emarginate at middle; posterior margin weakly arcuate, distinctly emarginate at middle; lateral margin strongly sinuate, constricted just behind middle and broadened and obtusely rounded anterior to middle, with anterior corner fairly distinct but rounded and posterior corner less distinct and somewhat broadly rounded; disc uneven, largely depressed and thus anterior and posterior borders appearing to be raised; surface with rather coarse punctures mostly more widely separated than their diameters and with a median depression anterior to middle and a larger one posterior to middle as well as lateral depression near middle. Scutellum fairly large, round and triangular and slightly rugose. Elytron  $3 \times as$  long as broad, gradually and distinctly widened to slightly behind middle and then evenly and broadly rounded apically; lateral margin rather distinctly expanded, but apex evenly declivitous on sutural side; disc subevenly convex, depressed on the scutellum side of humerus and at side behind humerus; surface entirely covered with irregular fine punctures most of which are not quite as large as interspaces. Ventral surfaces somewhat shiny, in large part finely and shallowly punctured or slightly shagreened, more distinctly wrinkled on metepisternum; last abdominal sternite rather broad, slightly concave and fairly smooth, barely emarginate apically. Legs fairly stout and femora rather strongly flattened; hind tarsal segment 1 somewhat longer than 2 or 3 and slightly shorter than 5. Length 7.4 mm; breadth 4.75.

*Male*: Antenna 4/5 as long as body, rather slender; pronotum and elytron more purplish brown and rest bluish; thoracic sterna reddish brown with feeble metallic tinges. *Aedeagus* rather broad apically and suddenly narrowed and with a short acute tip, slightly concave and flat beneath and concave above as well. Length 6.6 mm; breadth 3.4.

DISTRIBUTION: SE China (Fukien, NE Kwangtung).

Holotype ♀ (BISHOP 3267), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 10. VI. 1942, T. C. Maa; allotype ♂ (LINGNAN), Kau-lin San (Chiu-lien Shan), 700–900 m, Lien-p'ing Distr., NE Kwangtung, 23. IV. 1940, Gressitt and To.

Differs from *violacea* (Weise) in having prothorax smaller, much narrower than elytra, much less smooth and even, with irregular depressions and much heavier punctures, and in being slightly smaller and less shiny bluish.

32. Mimastracella violacea (Weise), NEW COMBINATION Fig. 102, b.

Sastra violacea Ws., 1922, Tijdschr. Ent. 65: 66 (Fokien; Tonkin: Montes Mauson; Stock-HOLM).

DISTRIBUTION: SE China (Fukien, Kiangsi, Kwangtung); Vietnam (Tonkin).

KIANGSI: 3, Hong Shan, 1000 m, 25–30. VI. 1936, Gressitt (CAS). KWANGTUNG: 2, Yim-na Shan, 650 m, 10–15. VI. 1936, Gressitt (CAS).

# Genus Doryxenoides Laboissière

Doryxenoides Lab., 1927, Soc. Ent. France, Ann. 96: 58 (type: D. tibialis Lab.; monobasic; China).

# Key to Chinese species of Doryxenoides

Pronotum somewhat unevenly concave across central portion; antennal segment 2 about

Pronotum evenly and strongly concave across central portion; antennal segment 2 nearly 1/2 as long as 3; scutellum nearly impunctate; legs entirely brownish; length

#### 33. Doryxenoides tibialis Laboissière

Doryxenoides tibialis Lab., 1927, Soc. Ent. France, Ann. 96: 58 (Yunnan: Yun-Nan-Fou; ? PARIS).

DISTRIBUTION: SW China (Yunnan, Hupeh).

YUNNAN: 7, Yunnan sen; 1, coll. Hauser; 3 unlabelled (ZMB). HUPEH: 1, Sui-sapa, 1000 m, 12. IX. 1948, Gressitt & Djou; 1, Leung-ho-keu, Lichuan, 9. IX. 1948, Djou (CAS).

# 34. Doryxenoides hainana Gressitt and Kimoto, n. sp. Fig. 103.

*Female*: Body almost entirely ochraceous; antenna rather dull ochraceous to dull brown beyond segment 2; mandible pitchy. Body nearly glabrous above with some very minute pale hairs on elytron and some more distinct hairs on elytral epipleuron; antenna rather closely clothed with adpressed and some oblique pale hairs beyond segment 3 and with a few hairs on segment 3; ventral surfaces moderately clothed with oblique pale hairs; legs with more adpressed pale hairs.

Head slightly narrower than prothorax, not greatly abbreviated but longer than broad; occiput subevenly convex, shiny and sparsely and finely punctured and with a shallow me-

dian groove posteriorly and arcuate depression anteriorly behind postantennal swellings which are smooth and separated by a median groove extending between antennal insertions; frontoclypeus quite short and with an arcuately transverse ridge. Antenna about 3/5 as long as body, rather slender basally and slightly stouter distally; segment 1 fairly long, slightly arched and gradually thickened apically; 2 not quite 1/2 as long as 1; 3 slightly shorter than 1, subequal to 4; 5 slightly shorter; 5-10 increasing slightly in length; 11 about as long as 8, subfusiform. Prothorax  $2.5 \times$  as broad as long, widest just anterior to middle; anterior margin transverse, weakly emarginate at middle; basal margin very feebly convex on central portion and curving obliquely forward towards side; lateral margin sinuate, slightly emarginate between base and middle and strongly emarginate anterior to middle; with anterior angle fairly distinct and nearly a right angle in dorsal view and posterior angle strongly and obtusely rounded; disc smooth and shiny, transversely depressed across entire central portion and with distinct widely separated punc-



Fig. 103. Doryxenoides hainana n. sp.

tures throughout. Scutellum large, subtriangular, broadly rounded posteriorly. Elytron not quite  $3 \times as$  long as broad, subregularly widened to somewhat behind middle and broadly rounded apically; lateral margin distinctly flattened and visible from above; disc strongly convex, weakly depressed at end of basal 1/4 and somewhat constricted at side behind humeral swelling, surface entirely covered with small distinct punctures which are mostly almost as large as interspaces and in part larger. Ventral surfaces shiny, very weakly and in part sparsely punctured; last abdominal sternite fairly even, transverse apically. Legs rather short and not very stout; hind tarsal segment 1 not quite as long as 2+3, and 5 barely as long as 1. Length 10.4 mm; breadth 5.5

Paratype: Antenna nearly black beyond segment 2. Length 11.5 mm; breadth 6.0.

DISTRIBUTION: Hainan Island.

Holotype ♀ (CAS), Ta-hian, 600 m, foot of Five Finger Mts., Hainan I., 14. VI. 1935, Gressitt; paratopotype ♀ (BISHOP), same data except 18. VI.

Differs from *tibialis* Laboissière in having pronotum much more concave, and more evenly so, scutellum nearly impunctate, and elytron more closely and heavily punctured.

# Genus Lochmaea Weise

Lochmaea Ws., 1883, Deutsch Ent. Zeitschr. 27: 316 (type: Chrysomela capreae L.; Europe); 1886, Ins. Deutschl. 6(4): 575, 610.—Fowler, 1890, Col. Brit. Isl. 4: 325.—Seidlitz, 1891, Fauna Transsylv., 176.—Reitter, 1912, Fauna Germ. 4: 135.

## 35. Lochmaea capreae (Linnaeus)

Chrysomela Caprea L., 1758, Syst. Nat. ed. 10: 376 (Sweden; ? UPSSALA).

Chrysomela Capreae, L., 1761, Fauna Suec. ed. 2: 516.

Chrysomela griseonitida DeGeer, 1775, Mém. Ins. 5: 325 (Europe).

Chrysomela polygonata Laicharting, 1781, Verz. Tyrol. Ins. 1: 193 (Austria).

Chrysomela pallida Herbst, 1783, Fuessly, Arch. 4:66

Chrysomela livida Geoffroy, 1785, IN Fourcroy, Ent. Parisiensis 1: 103 (France).

Chrysomela longicornis Gmelin, 1790, ed. Linn. 1(4): 1688.

Chrysomela pallescens Gmelin, 1790, ed. Linn. 1(4): 1724.

Galeruca saturata Stephens, 1834, Illustr. Brit. Ent. Mand. 4: 288 (England).

Adimonia Capreae Kraatz, 1867, Berl. Ent. Zeits. 11: 387 (Germany).

Lochmaea capreae, Weise, 1886, Ins. Deutschl. 6(4): 611 (Europe, Asia, Japan).—Heyden, 1887, Soc. Ent. Ross., Horae 21: 263 (Korea); 1890, Soc. Ent. Ross., Horae 24: 484 (Kan-ssu).—Fowler, 1890, Col. Brit. Isl. 4: 325 (England).—Jacobson, 1911, Käfer Russl. 9, pl. 60, fig. 1.—Okamoto, 1924, Agr. Exp. Sta. Chosen, Bull. 1 (2): 194 (Korea & Quelpart I.).—Ogloblin, 1936, Fauna USSR 26, 1: 85.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31(211): 161 (Korea).

Lochmaea capreae cribrata, Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 165.

Chûjô (1941) also recorded *L. crataegi* Forster from Korea, but we are dubious about this. DISTRIBUTION: Europe, Siberia, N. China (Kirin), Korea, Japan.

KIRIN: 1, Djalantung, VII. 1938, Weymarn (CAS); 1, Harbin, 2. VIII. 1923, Van Dyke (CAS). KOREA: Masan, 5. VII. 1953, Bearden (US); 1, Fune, 20. V. 1911, Thompson

#### Genus Pseudadimonia Duvivier

Pseudadimonia Duv., 1891, Soc. Ent. Belg., C. R. 35: XLVI (type: Colaspis variolosa Hope; Nepal).—Maulik, 1936, Fauna India, Galeruc., 92.—Ogloblin, 1936, Fauna USSR 26, 1: 68, 368.

# KEY TO CHINESE SPECIES OF PSEUDADIMONIA

- 36. Pseudadimonia microphthalma Achard (correction of typograph)
- Pseudadimonia microphtalma Ach., 1922, Soc. Ent. France, Bull. 1922: 37 (Sze-Tchouan; ? PARIS).—Laboissière, 1927, Soc. Ent. France, Ann. 96: 57.—Pseudadimonia microphthalma, Ogloblin, 1936, Fauna USSR 26, 1: 69.
  DISTRIBUTION: W. China (Szechuan).

## 37. Pseudadimonia rugosa Laboissière

Pseudadimonia rugosa Lab., 1927, Soc. Ent. France, Ann. 96: 57 (Yunnan Sen; ? PARIS). DISTRIBUTION: SW China (Yunnan).

# 38. Pseudadimonia variolosa (Hope)

Colaspis variolosa Hope, 1831, IN Gray, Zool. Miscell., 30 (Nepal; ? OXFORD).
Pseudadimonia variolosa, Duvivier, 1891, Soc. Ent. Belg., C. R. 35: XLVII (Bengal, Burma).
—Maulik, 1936, Fauna India, Galeruc., 94, fig. 29 (Assam, Manipur, Yunnan, Siam).

DISTRIBUTION: Nepal, NE India, Burma, Thailand, SW China (Yunnan).

#### Genus Anadimonia Ogloblin

Anadimonia Ogl., 1936, Fauna USSR 26, 1: 127, 391 (type: A. potanini Ogl.; monobasic; W. Szechuan).

Only the following species is known for this genus. We have seen no material.

# 39. Anadimonia potanini Ogloblin

Anadimonia potanini Ogl., 1936, Fauna USSR 26, 1: 128, 392, fig. 55 (Se-Tchouen betw. Yan-

tshin-myu & Tshun-tsin; ? Moscow). DISTRIBUTION: W. China (W. Szechuan).

# Genus Malaxioides Fairmaire

Malaxioides Fairm., 1888, Revue d'Ent. 7: 155 (type: M. grandicornis Fairm.; monobasic; China).—Ogloblin, 1936, Fauna USSR 26, 1: 144, 369.

We have not seen material of this genus, and apparently neither had Ogloblin. There is a possibility that this species may be the same as *Apophylia thalassina* (Fald.).

#### 40. Malaxioides grandicornis Fairmaire

Malaxioides grandicornis Fairm., 1888, Revue d'Ent. 7: 155 (Pekin; ? PARIS).—Ogloblin, 1936, Fauna USSR 26, 1: 144.

DISTRIBUTION: N. China (Hopei).

#### Genus Salaminia Heller 1898

# Salaminia concinna (Baly)

It is very unlikely that this Celebes species occurs in China. In describing Agetocera sinensis from China, Fairmaire (1888, Soc. Ent. Belg., Ann. 32:44) compared it with this species. This may account for the record of this species as from China in the Coleopterorum Catalogus.

#### Genus Clitena Baly

Clitena Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 229 (type: C. limbata Baly; monobasic; Siam).—Weise, 1902, Archiv Naturg. 68: 157.

Mesodonta Baly, 1865, Ent. Monthly Mag. 2: 99 (type: M. limbata Baly).—Chapuis, 1875, Gen. Col. 11: 198, 205.

Many of the species placed in this genus need to be removed to other genera.

# KEY TO CHINESE SPECIES OF CLITENA

Pronotum with 2 dark spots; elytral disc blackish with pale borders; terminal antennal segments not concave beneath; length 8.5-11 mm......41. limbata

Pronotum with 3 dark spots; elytral disc with 7 large spots, 1 common sutural spot; terminal antennal segments concave beneath; length 3.8-4.2 mm..... 42. maculipennis

#### 41. Clitena limbata Baly

Clitena limbata Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 230 (Pachyburi, Siam; BM); 1865, Ent. Monthly Mag. 2: 99; 1879, Ann. Mag. Nat. Hist. ser. 5, 4: 111.—Weise, 1902, Archiv Naturg. 68, 1: 157.—Maulik, 1936, Fauna India, Galeruc., 229 (Borneo, etc.).

Hymenesia limbata Jacoby, 1896, Soc. Ent. Belg., Ann. 40: 297 (Burma; ? BM).

Clitena cincta Laboissière, 1927, Soc. Ent. France, Ann. 96: 51, fig. 7 (Laos; ? PARIS). DISTRIBUTION: Burma, Thailand, Laos, Vietnam (Tonkin), Borneo.

# 42. Clitena maculipennis Chen

Clitena maculipennis Chen, 1942, Notes d'Ent. Chinoise 9: 12 (Kansu: Pei-la-hia; HOANGHO-PAIHO).

DISTRIBUTION: NW China (Kansu).

# Genus Clitenella Laboissière

Callopistria Chevolat, 1837 (nec Callopistria Huebner, 1821), IN Dejean, Cat. Col. ed. 2, 378; ed. 3, 402 (type: Galleruca fulminans Fald., 1835, monobasic).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 619.

Clitenella Lab., 1927, Soc. Ent. France, Ann. 96: 53 (type: Galeruca fulminans Fald.; China).—Ogloblin, 1936, Fauna USSR 26, 1: 135, 392.

Hincks treated *Callopistria* as a synonym of *Periclitena*, but *fulminans* is the type of both of the above two genera, and the former is a homonym.

# KEY TO CHINESE SPECIES OF CLITENELLA

- 2. Dorsal puncturation fairly fine, about 12 punctures in an imaginary median line on pronotum; pronotum greenish in most lights; elytron with 2 large purplish coppery spots, occupying much of 1st and 2nd halves, respectively; rarely dorsum entirely steely blue with slight purplish reflections; abdomen yellow.....43. fulminans

#### 43. Clitenella fulminans (Faldermann)

Galeruca fulminans Fald., 1835, Ac. Petersb., Mem. 2: 438, pl. 5, fig. 8 (China; ? LENINGRAD). Clitena fulminans, Jacobson, 1911, Käfer Russl., 9, pl. 59, fig. 2.

Periclitena fulminans, Weise, 1924, Coleopt. Cat. 78: 64.

Clitenella fulminans, Laboissière, 1927, Soc. Ent. France, Ann. 96: 54; 1929, op. cit. 98: 269.—Ogloblin, 1936, Fauna USSR 26, 1: 136, 393 (Mongolia, Szechuan, Tonkin, Formosa).

One of the specimens from Sui-sa-pa is entirely steely blue, but we found no structural

characters to separate it from the others. It may represent a color variety.

DISTRIBUTION: S. China (Szechuan, Hupeh, Hopei, Chekiang, Fukien), Taiwan.

HUPEH: Many, Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh, Rubus & Celtis, 15–30. VIII. 1948, Gressitt & Djou; 1, Hsiao-ho, Lichuan, 10. VIII. 1948, Gressitt. HOPEI: 1, Si-ling, Peking, 16. V. 1936, Chi. CHEKIANG: 1, Pei-ten-tong, 31. VII. 1923, C. Ping. FUKIEN: 1, nr. Foochow, 1921, Kellogg (US).

HOSTS: Rubus sp., Celtis? sp. (Hupeh).

# 44. Clitenella ignitincta (Fairmaire)

Lina ignitincta Fairm., 1878, Soc. Ent. France, Ann. ser. 5, 8: 135 (C. China; ? PARIS).

Clitenella ignitincta, Jacoby, 1888, Zool. Soc. Lond., Proc. 1888: 351.—Laboissière, 1929, Soc. Ent. France, Ann. 98: 269 (Moupin).—Ogloblin, 1936, Fauna USSR 26, 1: 137, 393 (Moupin).

Weise (1924, Col. Cat. 78: 65) synonymized this species with *Periclitena vigorsi* (Hope), and Jacoby (1888) synonymized it with *fulminans* (Fald.). However, Laboissière and Maulik (1936) correctly separated it. Besides differences indicated by Ogloblin, this species has scutellum hairy and external margin of elytron not entirely blue.

DISTRIBUTION: S. China (Sikang, Kiangsi, Fukien, Kwangtung).

KIANGSI: 1, Hong San, 1000 m, SE Kiangsi, 23. VI. 1936, Gressitt (CAS). FUKIEN: 3, Yen-ping, 17. VI. 1917 (AMNH Ac. 5148); 1, Tsing-wo, 22–27. V. 1945, Maa (BISHOP). KWANGTUNG: 1, Yim-na Shan, 10–15. VI. 1936, Gressitt (CAS).

#### 45. Clitenella purpureovittata Chen

Clitenella purpureovittata Chen, 1942, Notes d'Ent. Chinoise 9: 20 (Szechuan; U. NANKING). DISTRIBUTION: W. China (Szechuan).

# Genus Periclitena Weise

- Clitena, Clark (nec Baly), 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 257, 259.—Chapuis, 1875, Gen Col. 11: 198, 203.
- Periclitena Weise, 1902, Archiv Naturg. 63: 157 (type: Galleruca vigorsi Hope, 1831; Nepal).
   —Maulik, 1936, Fauna India, Galeruc., 210.—Ogloblin, 1936, Fauna USSR 26, 1: 133, 368.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 619.

## KEY TO CHINESE SPECIES OF PERICLITENA

46. Periclitena cyanea (Clark) Fig. 104, a.

Clitena cyanea Clark, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 259 (Java; ? BM).—Jacoby, 1889, Mus. Civ. Genova, Ann. 27: 208.

Periclitena cyanea, Maulik, 1936, Fauna India, Galeruc., 213 (key).

Weise (1924, Col. Cat. 78: 64) synonymized this species with *vigorsi* Hope. However, as pointed out by Maulik (1936), the two species are distinct.

DISTRIBUTION: Java, SE Asia, Hainan I.

HAINAN: 2, Ta-hian, 600 m, nr. Five Finger Mts., 13-14. VI. 1935, Gressitt (CAS).



Fig. 104. a, Periclitena cyanea (Clark); b, P. sinensis (Fairmaire).

47. Periclitena sinensis (Fairmaire) Fig. 104, b.

Agetocera sinensis Fairm., 1888, Soc. Ent. Belg., Ann. 32: 43 Q (Kiangsi; ?PARIS).

Periclitena sinensis, Laboissière, 1929, Soc. Ent. France, Ann. 98: 268 (notes based on Fairmaire's description).—Ogloblin, 1936, Fauna USSR 26, 1: 134, fig. 57.

Periclitena tonkinensis Lab., 1929, Soc. Ent. France, Ann. 98: 266 (Tonkin, Kweichow; PARIS). New Synonymy.

In spite of the purported differences given by Laboissière, based on Fairmaire's description, we are synonymizing *tonkinensis* with this species. Color differences are to be expected, and the antennal characters do not appear to be outside the range of intra-specific variation. DISTRIBUTION: S. China (Kiangsi, Kwangtung, Kwangsi, Kweichow, Szechuan), N. Vietnam (Tonkin).

KWANGTUNG: 1, summit Lung-tau Shan, 1200 m, 6. VI. 1947, Gressitt & Lam. This may possibly represent another species. KWANGSI: 4, Ping-loo, 1933, G. Liu (MCZ). SZECHUAN: 1, "Szechuan, Graham"; 1, Shin-kai-si, 1300 m, Mt. Omei, 1921, Graham (US).

#### 48. Periclitena vigorsi (Hope)

Galleruca Vigorsi Hope, 1831, IN Gray, Zool. Miscell., 29 (Nepal; BM).

Galleruca coerulans Hope, 1831, l.c. (Nepal; BM).

Clitena igneipennis Baly, 1865, Ent. Monthly Mag. 2: 99 (India; BM).

- Periclitena Vigorsi var. viridissima Weise, 1922, Tijdschr. Ent. 65:66 (Bengal; ?STOCKHOLM).
- Periclitena Vigorsi var. fulgida Laboissière, 1927, Soc. Ent. France, Ann. 96; 53 (N. Annam; PARIS).
- Periclitena vigorsi, Maulik, 1936, Fauna India, Galeruc., 211 (India, Sikkim, Assam, Burma, Penang, Tonkin).

DISTRIBUTION: India, Burma, Vietnam, Malaya, Hainan I.

HAINAN: 1, Fan-ta-ts'uen to Kap-wa-ts'uen, Hung-wo-tung, K'iung-shan Distr., 6. V. 1929, Lingnan U. 5th Hainan Exped.

### Genus Geinula Ogloblin

Geinula Ogl., 1936, Fauna USSR 26, 1: 142, 394 (type: G. jacobsoni Ogl.; monobasic; Tibet).

# KEY TO CHINESE SPECIES OF GEINULA

# 49. Geinula jacobsoni Ogloblin

Geinula jacobsoni Ogl., 1936, Fauna USSR 26, 1: 143, 395 (Tibet: Surman; ? Moscow). DISTRIBUTION: Tibet.

50. Geinula nigra Gressitt and Kimoto, n. sp. Fig. 105, a.

Male: Body largely black, quite shiny above: head black, becoming pitchy brown on anterior portion of frontoclypeus and on anterior borders of gena and slightly brownish on labrum as well as parts of mandible; antenna brownish black, largely orange-brown on segments 1-2; coxae and trochanters pale brown; posterior borders of abdominal segments partly ochraceous brown; tibiae and parts of tarsi somewhat reddish brown. Body sparsely clothed above with very short pale hairs and clothed beneath with fairly sparse but longer pale hairs which form a denser pubescence on side of thorax; legs moderately clothed with subadpressed pale hairs.

Head barely as broad as prothorax, abbreviated anteriorly; occiput fairly smooth and evenly convex, very finely grooved medially and with widely scattered punctures; postantennal swellings rather short, largely between antennal insertions and separated posteriorly by a median groove; interantennal area with a small subtriangular depression in center which is transverse anteriorly; frontoclypeus moderately convex and smooth; labrum somewhat deeply emarginate apically. Antenna 3/4 as long as body, moderately stout; segment 1 gradually and moderately swollen, smooth and very finely punctured; 2 nearly 1/2 as long as 1; 3 longer than 2 and shorter than 1; 4 slightly longer than 3; 4–10 gradually decreasing slightly in length; 11 very slightly longer than 10. Prothorax 1/2 again as broad as long, suboblong; anterior margin very weakly concave and posterior margin weakly sinuated and slightly concave in central portion; lateral margin weakly convex, slightly widened anteriorly and subevenly rounded at anterior and posterior angles; disc slightly irregular but largely smooth and shiny with a few moderate punctures on central portion and slightly denser and subrugose punctures towards side, the surface slightly depressed anterior to center and again depressed on each side of disc just behind center; lateral portion slightly irregular and lateral margin placed largely below edge in dorsal view. Scutellum rather broadly triangular, broadly rounded behind, rather shiny and almost impunctate. *Elytron* somewhat abbreviated,  $4 \times$  as long as breadth at base and  $3 \times$  as long as breadth somewhat before apex, gradually broadened posteriorly to behind middle and rounded apically but very strongly and obliquely truncate on inner portion of apex exposing part of abdomen; disc largely smooth and shiny but with a shallow depression behind scutellum near suture and another one in central portion at end of basal 1/3; surface largely covered



Fig. 105. a, Geinula nigra n. sp.; b, Swargia nila Maulik.

with fairly strong punctures most of which are slightly smaller than interspaces; elytral epipleuron blackened. *Ventral surfaces* fairly smooth and rather feebly and sparsely punctured; metasternum fairly short; last abdominal tergite subtriangular and strongly convex near apex; last sternite with a subarcuate depressed area in middle which occupies about 1/2 length of median line, and apical margin somewhat deeply and evenly emarginate. *Legs* fairly slender; hind femur not quite reaching to elytral apex; hind tibia fairly straight; hind tarsal segment 1 nearly  $2 \times$  as long as 2 and as long as 2+3 combined, slightly longer than last segment. Length 4.4 mm; breadth 1.8.

*Female*: Abdomen much larger, bright orange along lateral borders between sternites and on lateral and posterior edges of median segments; antenna somewhat paler, browner than in  $\mathcal{J}$ ; last abdominal tergite moderately convex apically; last sternite with a small rugose median apical area but not strongly concave and hardly emarginate in central portion. Length 5 mm to end of abdomen (3.75 to end of elytron); breadth 1.8.

DISTRIBUTION: W. China (Sikang).

Holotype ♂ (U. S. NAT. MUS.), Wa-hu Pass, 4500 m, China-Tibet border, 7. VIII. 1930, D. C. Graham; allotopotype ♀ (BISHOP 3268), same data.

Differs from *jacobsoni* Ogloblin in being almost entirely black, in lacking metallic reflections, in having elytron much smoother, sparsely punctured and hardly rugose at all, and pygidium sparsely punctured and not shagreened.

#### Genus Swargia Maulik

Swargia Maul., 1936, Fauna India, Galeruc., 275 (type: S. nila Maul.; Himalayas).

51. Swargia nila Maulik Fig. 105, b.

Swargia nila Maul., 1936, Fauna India, Galeruc., 276 (Tibet: BM).

This species has a large yellowish pronotum with pitchy spots and short bluish elytron with apical border strongly oblique, and no hind wing.

DISTRIBUTION: Tibet.

TIBET: 4, Teng-kya, 4400 m, Mt. Everest Exped. BM 1937–210 (FREY); 5, Thangu, 3800 m, Schafer Exped. (ZMB).

## Pterophthinus new genus

Galerucini. Prothorax very feebly margined; anterior coxal cavities adjacent, open posteriorly; prosternal process incomplete, middle and hind coxal cavities slightly separated; elytra almost complete, dehiscent; elytral epipleuron distinct; hind wing vestigial, reduced to a fairly narrow flap barely reaching beyond the reduced metasternum; tarsal claws bifid.

Type species: Pterophthinus viridipennis n. sp.

Head narrower than prothorax, interantennal space concave, slightly wider than an antennal insertion; labrum emarginate, with 2–3 large hairs on each side; gena 1/2 as deep as eye; eye small, not prominent; maxillary palp 3-segmented, last segment swollen basally, slender apically; antenna with segment 5 longest, 2 slightly longer than broad, and rest subequal in length; prothorax subtrapeziform, wider anteriorly, uneven but shiny above, with only a weak trace of lateral margin, and with primary setigerous pore behind anterior

corner; elytron nearly entire, dehiscent, with wrinkled or granulose surface and with epipleuron distinct throughout and fairly broad basally; metasternum not much longer than mesosternum; coxae rather large; hind femur rather broad; tibiae unarmed apically; hind tarsal segment 1 as long as 2+3 united, 2 much longer than 3, and 1 longer than last.

This genus differs from *Swargia* Maulik and *Geinula* Ogloblin in having distinct elytral epipleura and in having elytron almost entire and not strongly oblique apically. It differs from *Apophylia* Chevrolat in having hind wing greatly reduced, prothorax feebly margined at side and tarsal claws bifid in both sexes.

# 52. Pterophthinus viridipennis Gressitt and Kimoto, n. sp. Fig. 106.

*Male*: Bright metallic golden green to black and pale yellowish testaceous; head shiny black behind antennal insertions, pale yellowish testaceous anteriorly except for ochraceous brown labrum and partly pitchy or reddish mandible; antenna yellowish basally and pale brown beyond segment 3; prothorax yellowish testaceous with a large somewhat diamond-shaped black spot on central portion reaching almost from apex to base and a very large black area covering most of lateral portion both above and below lateral line but excluding anterior and posterior margins; scutellum black; elytron bright metallic golden-green; ventral surfaces almost entirely pitchy black with some narrow ochraceous brown posterior borders on abdominal segments; legs including coxae yellowish testaceous. Body finely clothed above with scattered recumbent pale hairs which are nearly lacking on pronotum; ventral surfaces with longer partly suberect pale hairs and legs moderately clothed with sparse fine silvery hairs.

Head nearly as broad as prothorax, abbreviated anteriorly; occiput smooth and shiny, sparsely but distinctly punctured and with a fine median groove and a shallow depression

behind postantennal swellings, the latter subtriangular, convex and divided by a median groove; interantennal area shallowly concave; frontoclypeus moderately short, transversely swollen and only partly punctured, labrum transverse, slightly emarginate apically; gena about 1/2 as wide as diameter of eye. Antenna nearly as long as body, moderately stout; segment 1 arched, shiny and slightly punctured; 2 just over 1/3 as long as 1; 3 nearly as long as 1; 4 nearly as long as 2+3; slightly longer than 5; 5-10 decreasing gradually in length; 11 about as long as 9. Prothorax  $1.5 \times$  as broad as long, subtrapeziform; anterior margin evenly and shallowly concave; basal margin nearly straight; lateral margin very slightly sinuate and slightly convex anterior to middle; anterior and posterior corners somewhat evenly rounded; lateral margin almost obsolete; disc convex, slightly irregular, with a depression just anterior to center and another near middle of base and some smaller somewhat connected depressions towards middle of side; surface rather sparsely and not very heavily punc-



Fig. 106. *Pterophthinus viridipennis* n. gen. and n. sp.

tured, the punctures stronger in depressed areas and those on raised areas mostly much smaller than respective diameters. *Scutellum* subtrapeziform, round and truncate apically, slightly convex with a few moderate punctures. *Elytron* reaching to end of abdomen,  $3 \times$  as long as broad, nearly parallel-sided and rather broadly rounded apically with sutural angle strongly dehiscent; disc rather closely punctured with moderately small punctures and with intervening areas partly finely granulose and partly rugulose or subcorrugate, part of punctures near suture in anterior 1/2 arranged in subregular rows; hind wing very small, about 1/3 as long as elytron. *Ventral surfaces* moderately punctured and slightly irregular in surface contour (partly the result of contraction); last abdominal tergite subevenly convex and sparsely punctured near apex; last sternite with a large semi-circular depression reaching almost to base and with posterior margin somewhat concave. *Legs* fairly stout; hind femur fusiform, nearly reaching apex of abdomen; hind tibia fairly straight; hind tarsal segment 1 distinctly longer than 2+3, 2 about  $2 \times$  as long as 3 and last distinctly shorter than 1. Length 3.2 mm; breadth 1.7.

*Female*: Antenna quite pale, ochraceous brown beyond segment 3; pronotum with pale areas, in part pitchy reddish and tending to merge central and lateral black spots on basal portion; elytral disc quite closely rugose punctate; hind wing short as in  $\mathcal{J}$ ; abdomen extending beyond apex of elytron and pale on borders of sclerites. Length 5.4 mm; breadth 2.5.

*Paratypes*: Color of pronotum varying from black with anterior marginal pale spot on each side to testaceous with a fairly large central pitchy black spot and a lateral blackish spot. Length 4–6 mm; breadth 1.8–2.6.

DISTRIBUTION: W. China (Sikang, Szechuan).

Holotype ♂ (U. S. NAT. MUS.), near Moupin, 900-2200 m, Sikang Prov., 1-3. VII. 1929, D. C. Graham; allotopotype ♀ (US), same data; 6 paratypes (US, BISHOP): 3 paratopotypes, same data as types; 2 paratypes, nr. Moupin, 2300-3300 m, 8-9. VII. and 3900-4200 m, 7. VII; 1 paratype, Tseo-jin-geo, 900 m, S of Suifu, Szechuan, IX. 1929, Graham.

This species differs from *Geinula jacobsoni* Ogloblin in being larger, in having elytron almost entire and green instead of black, pronotum partly yellow or orange, and legs pale, besides generic characters cited above.

## Genus Apophylia Duponchel and Chevrolat

- Apophylia Dup. & Chev., 1842, IN d'Orbigny, Dict. Univ. Hist. Nat. 2: 31.—J. Thomson, 1858, Arcana Ent. 2: 221.—Allard, 1889, Soc. Ent. Belg., Bull. 33: lxxi.—Jacoby, 1903, Ent. Soc. Lond., Trans. 1903: 22.—Weise, 1896, Deutsche Ent. Zeits. 1896: 296; 1907, Archiv Naturg. 73, 1: 217.—Laboissière, 1919, Soc. Ent. France, Bull. 1919: 265; 1922, Rev. Zool. Afr. 10: 148.—Maulik, 1936, Fauna India, Galeruc., 78 (type: Apophylia chloroptera Thomson; Africa).—Ogloblin, 1936, Fauna USSR 26, 1: 138, 369. Not Apophylia Chapuis, 1875, Gen. Col. 11: 183.
- Malaxia Fairmaire, 1878, Soc. Ent. France, Ann. ser. 5, 8: 139 (type: M. flavovirens Fairm.).
  —Allard, 1889, *ibid.* ser. 6, 8: 331; 1889, Soc. Ent. Belg., Bull. 33: lxxx.—Baly, 1887, Ent. Monthly Mag. 23: 268; 1889, Ent. Soc. Lond., Trans. 1889: 309. —Weise, 1896, Deutsche Ent. Zeits. 1896: 296.

Glyptolus Jacoby, 1884, Leyden Mus., Notes 6: 62 (type: G. viridis Jac.; Sumatra); 1887,

*ibid.* **9**: 243; 1889, Mus. Civ. Genova, Ann. **27**: 216.—Baly, 1887, Ent. Monthly Mag. **23**: 268.—Allard, 1889, Soc. Ent. France, Ann. **57**: 331.

Galerucesthis Weise, 1896, Deutsche Ent. Zeits. 1896: 296 (type: Auchenia? thalassina Fald.).

# KEY TO CHINESE SPECIES OF APOPHYLIA

1.	Pronotum entirely yellowish brown
	Pronotum at least partly darker, black or pitchy
2 (1).	Eye small, gena about as wide as 1/2 transverse diameter of eye; abdomen
	entirely yellowish brown; length 5.8-6.0 mm 55a. loukashkini
	Eye large, gena narrower than $1/2$ transverse diameter of eye; abdomen entirely
	black; length 4.5-5.8 mm55. flavovirens
3 (1).	Pronotum with 3 black spots on disc
	Pronotum with one large spot or entirely black or blackish
4 (3).	Elytron with 2 ridges extending back from humerus
	Elytron without distinct lateral ridges 58. rugiceps
5 (4).	Larger species, length 6.2-7.0 mm; pronotum subquadrate 59. thalassina
	Smaller species, length 4.0-4.5 mm; pronotum widest before middle and strongly
	narrowed anteriorly and posteriorly
6 (3).	Length usually more than 5.0 mm; elytron green or bronzy green
	Length 4.5 mm; pronotum reddish brown with middle infuscate; elytron violet
	purple
7 (6).	Abdomen largely black
	Abdomen entirely yellowish 55b. melli
8 (7).	Hind trochanter without a sharp spine at apex9
	Hind trochanter with a sharp curved spine at apex; black; elytron green; an-
	tenna and legs entirely yellowish brown; length 4.6 mm 62. trochanterina
9 (8).	Head entirely black or blackish; pronotum entirely black 10
	Head black with anterior 1/2 yellowish 11
10 (9).	Antenna slender; legs largely yellowish brown with tarsi and apical portions
	of tibiae more or less infuscated 56. nigriceps
	Antenna more robust than in preceding species and narrower in apical 3-4 seg-
	ments; tarsi and dorsal surfaces of femora and tibiae blackish 63. variicollis 3
11 (9).	Legs largely yellowish brown 12
	Legs entirely blackish; postantennal tubercles subquadrate and strongly convex;
	head largely black with anterior part yellowish; pronotum yellowish with large
	black marking; length 7.0-8.5 mm (=geniculata Pic) 54. epipleuralis
12(11).	Prothorax more than $2 \times$ as wide as long, postantennal tubercles largely black-
	ish; pronotum largely black with anterior and posterior margin narrowly
	yellowish brown; legs yellowish brown with tarsi and dorsal sufaces of femora
	and tibiae darker; length 5.0-6.2 mm (=savioi Pic) 63. variicollis $\Im$
	Prothorax not quite $2 \times$ as wide as long; postantennal tubercles largely yellow-
	ish; pronotum with black marking at middle, in many cases this marking
	covering entire surface ; legs entirely yellowish brown ; length 5-6 mm60. thoracica

53. Apophylia eoa Ogloblin

Apophylia eoa Ogl., 1936, Fauna USSR 26, 1: 140, 393 (Ussuri; ? Moscow).-Chûjô,

1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 156 (Heian-Hokudo, Korea).

DISTRIBUTION: SE Siberia, Korea.

## 54. Apophylia epipleuralis Laboissière Fig. 107, a.

Apophylia epipleuralis Lab., 1927, Soc. Ent. France, Ann. 96: 60 (Tonkin: Ha-Giang; Yunnan: Pe-Yen-Tsin; PARIS).

Apophylia geniculata Pic, 1931, Mel. Exot. Ent. 57: 21(China; ? PARIS). New Synomymy.

DISTRIBUTION: S. China (Yunnan, Szechuan, Sikang, Kwangtung), Hainan I.

SZECHUAN: 2, Omei Shan, Shin-kai sze, 1600 m, 15. VIII. 1940, Gressitt (LINGNAN). SIKANG: 1, San-kiang, Wassuland, VIII. 1934, Friedrich (FREY). KWANGTUNG: 5, Yim-na Shan, 10. VI. 1936, Gressitt (CAS); Canton, 1909–10, Mell (ZMB). HAINAN: 1, Tai-tsing-lam-ts'uen, back of Lai-mo-ling, Ting-an Distr., 22. VI. 1935, To (LINGNAN); 3, Ta-hian, nr. Five Fingers Mts., 14. VI. 1935, Gressitt (CAS); 2, Hainan, 10–25. VII. 1909, Schoede (ZMB).



Fig. 107. Apophylia epipleuralis Laboissière; b, A. flavovirens (Fairmaire); c, A. melli n. sp.

55. Apophylia flavovirens (Fairmaire) Figs. 107, b & 108, a.

Malaxia flavovirens Fairm., 1878, Soc. Ent. France, Ann. ser. 5, 8: 139 (C. China; ? PARIS). —Allard, 1889, Soc. Ent. France, Ann. ser. 6, 8: 332.

Apophylia flavovirens, Baly, 1887, Ent. Monthly Mag. 23: 268 (China).—Weise, 1922, Tijdschr.
Ent. 65: 108 (Fokien).—Ogloblin, 1936, Fauna USSR 26, 1: 141, 393 (Tonkin, Annam).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 12 (Hokusammen, Korea); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 156 (Keiki-Do); 1942, Mushi 14(2): 60 (Kwangtung).

DISTRIBUTION: China (Fukien, Anhwei, Chekiang, Hopei, Hupeh, Szechuan, Sikang, Kwangtung), Hainan I., Korea.

HOPEI: 2, Nan-?, 150 km S of Peiping, 2. VII. 1933, Chi; 4, Peiping, VIII. 1932, G.



Fig. 108. S genitalia. a, Apophylia flavovirens (Fairmaire); b, A. nigriceps Laboissière; c, A. rugiceps n. sp.

Liu (MCZ). ANHWEI: 6, Tai-ping-shien, X. 1932, G. Liu (MCZ). CHEKIANG: 1. Chu-chou-fu, 9. VI. 1926, Wright; 2, Mo-kan-san, 8. IX. 1927, Wright; 1, Tunglu, 10. IX. 1926, Wright (CAS). FUKIEN: 6, Kwang-keng, Kien-yang, Maa (CAS); 3, Sui-pei-chia, Shaowu, VIII. 1941, Maa; 1, Wing-an, 3. V. 1940, Maa (CAS, BISHOP). SIKANG: 1, San-kiang, Wassuland, VIII. 1934, Friedrich (FREY); 2, Ya-chow, 23. VI. 1929, Graham (US); 1, nr. Mu-ping, 1. VII. 1929, Graham (US). SZECHUAN: 6, Mt. Omei, Graham (US); 1, Weichow, 2500 m, 26. VII. 1933, Graham (US); 3, Sui-fu, VII. 1930, Graham (US); 2, Chungking, VI. 1932, Liu; 2, Pei-bay, VI. 1932, Liu (MCZ); 1, Pe-pei, 300 m, 26. VII. 1940, Gressitt; 1, Chang-ta-ching, 300 m, 18. VII. 1948, Gressitt & Djou (CAS). HUPEH: many, Sui-sa-pa, 1000 m, VIII., Hsiaoho, VIII., Liang-ho-keu, IX., Chi-au-Shan to Wang-chia-ying, 20. VII., all 1948, Gressitt & Djou (CAS, BISHOP). KWANGTUNG: 1, Canton, 16. V. 1932, Djou; 2, Keung-tin heung, Lin Distr., 15. VII. 1934, To; 1, White Cloud Mt., 21. V. 1934, Tinkham (LINGNAN); 5, Lo-fau San, V. 1914, Mell (ZMB); 1, Hong Kong, 1909, Thompson (CAS). HAINAN: 1, Hoihow, 28. III., 11. IV. 1932, To (LINGNAN); 6, Ta-hian, 600 m, 19. VI. 1935, Gressitt (CAS); 3, Ta-hau, W. of No-doa, 6. VII. 1935, Gressitt; 2, No-doa, 28. VI.; 1, Dwa-bi (Tai-pin), 19. VII. 1935, Gressitt; 1, Vo-lau, 2. VII. 1935 Gressitt (CAS); 15, Hainan, 10. III. 1909, Schoede (ZMB).

## 55a. Apophylia loukashkini Gressitt and Kimoto, n. sp. Fig. 109, a.

*Female*: Ochraceous to metallic green or black: Head ochraceous, pitchy black behind antennal insertions and eyes; antenna ochraceous basally, pitchy brown in distal 1/2; pronotum ochraceous with some duller brown areas; scutellum pitchy brown with a bluish tinge; elytron metallic golden green with some coppery reflections; ventral surfaces and legs pale ochraceous, darker reddish brown on last sternite, femora, tarsi and apices of tibiae. Dorsum moderately clothed with silvery buff hairs, those on head and pronotum

reclining forward and those on elytron reclining backward; ventral surfaces subevenly clothed with whitish hairs, sparser on femora and denser on tibiae; antenna sparsely clothed on basal segments, moderately clothed on remainder.

*Head* slightly narrower than prothorax ; eye broadly ovate, distinctly deeper than wide; interocular space nearly  $3 \times as$  wide as an eye; occiput large, fairly flat, coarsely rugosepunctate, weakly depressed along median line and with a fovea at center; antennal insertion midway between median line and eye, raised and foveate in center, continuous with transversely raised area of frons, which is finely grooved medially; labrum emarginate apically. Antenna 3/4 as long as body; segment 1 strongly swollen preapically; 2 fully 1/2 as long as 1; 3 a little longer, and more slender, than 2; 4 as long as 1; 4–10 gradually decreasing in length; 11 about as long as 7. Prothorax fully  $2 \times$  as broad as long, shorter in middle; anterior margin subevenly and distinctly emarginate; basal margin emarginate at middle; lateral margin obliquely subemarginate near base, wider and subrounded anteriorly and narrowed to anterior angle; disc strongly depressed near middle of side, slightly depressed before and behind center; surface strongly punctured, the punctures mostly as large as, or larger than, interspaces. Scutellum fairly broad, rounded behind, distinctly punctured. Elytron slightly broadened behind middle, broadly rounded apically,  $4 \times$  as long as broad; epipleuron distinct, completely margined above, subevenly narrowed; disc completely and densely rugose-punctate, the punctures mostly larger than interspaces, not distinctly ridged behind humerus. Ventral surfaces somewhat densely punctured, more sparsely so on posterior portions of abdominal sternites, more finely and densely so on metepisternum; last abdominal tergite convex and punctured; last sternite slightly emarginate at apex, depressed across middle. Legs moderately stout; hind tarsal segment 1 slightly longer than 2 + 3; last slightly longer than 3. Length 5.7 mm; breadth 2.25.



Fig. 109. a, Apophylia loukashkini n. sp.; b, A. trinotata n. sp.; c, A. trochanterina n. sp.

Paratypes: Length 5.6-6.0 mm.

DISTRIBUTION: NE China (Liaoning).

Holotype Q (CAS), Mukden, Liaoning, S. Manchuria, 8. VIII. 1927, A. S. Loukashkin;

4 ♀ paratypes (CAS, BISHOP, KU), same data.

Differs from *flavovirens* (Fairm.) in being slightly larger, in having abdomen pale instead of black, and eye smaller, with gena as wide as 1/2 transverse diameter of eye.

# 55b. Apophylia melli Gressitt and Kimoto, n. sp.

*Female*: Testaceous to green, reddish coppery or blackish: Head reddish brown, blackish behind antennal insertions and eyes; antenna pitchy black on segments 1–4 with bases pale (rest missing); pronotum reddish brown with central portion blackish; scutellum pitchy black; elytron bright green with a slight golden tint, with side and apex reddish coppery above and purplish blue beneath; ventral surfaces testaceous on prosternum and abdomen, and pitchy to blackish on hind thorax; legs largely testaceous but pitchy on anterior borders of femora and slightly darkened on hind borders of hind tibia. Body with grayish white pubescence, much thinner on elytron and much of metasternum than on remainder; antenna feebly clothed above on basal segments.

Head distinctly narrower than prothorax; occiput moderately convex, irregularly rugosepunctate, with a slightly depressed median line anteriorly; postantennal swellings distinct, subtriangular, with a groove between; frons transversely convex, raised and punctured in middle. Antenna with segment 1 arched and thickest just before apex; 2 fairly stout, 1/2as long as 1; 3 nearly as long as 1; 4 as long as 1 (rest missing). Prothorax 2.5 × as broad as length at middle, longer at side; anterior margin subevenly concave; basal margin weakly concave in middle; lateral margin weakly convex, with fore and hind angles slightly projecting; disc with a strong oblique depression on each side, shallowly depressed before and behind center; surface closely punctured throughout. Scutellum subtriangular, blunt apically, somewhat punctured and convex in center. Elytron subparallel-sided, more than 4 × as long as broad, obliquely rounded apically; disc very finely vermiculate-punctate, a strong swollen ridge paralleling, and close to, lateral and apical margins. Ventral surfaces finely punctured, very weakly so on much of metasternum, and more densely so on metepisternum than on abdomen; abdominal sternite 5 rounded apically, followed by a narrow tapering segment. Legs not very stout; femora flattened. Length 7.0 mm; breadth 2.85.

DISTRIBUTION: SW China (Yunnan).

Holotype  $\mathcal{P}$  (Zool. Mus. BERLIN), Chao-chow-fu, 2300 m, W. Yunnan, 23. VIII-21. IX. 1914, R. Mell.

Differs from *thalassina* (Fald.) in having pronotum less quadrate and with 1 instead of 3 black marks on disc, in lacking ridges extending back from humerus, but with a broad paramarginal ridge.

56. Apophylia nigriceps Laboissière Fig. 108, b.

Apophylia nigriceps Lab., 1927, Soc. Ent. France, Ann. 96: 62 (Yunnan-Fou; ?PARIS).

DISTRIBUTION: S. China (Yunnan, Fukien).

YUNNAN: 17, Yunnan-sen (ZMB); 2, Chao-chow, 2300 m, W. Yunnan, 23. VIII-24. IX. 1914, Mell (ZMB). FUKIEN: 3, Ta-chu-lan, 1000 m, Shaowu, 25. VI. 1942, Maa (CAS, BISHOP).

57. Apophylia purpurea (Allard), NEW COMBINATION

Malaxia purpurea All., 1889, Soc. Ent. France, Ann. ser. 6, 8: 332 (China; ? PARIS); 1889, Soc. Ent. Belg., C. R. 33: LXXXI (China).

1963

DISTRIBUTION: China.

# 58. Apophylia rugiceps Gressitt and Kimoto, n. sp. Fig. 108, c.

*Male*: Ochraceous brown to black and bright metallic green; head black above and on post-genae below eyes; ochraceous anteriorly to anterior portions of post-antennal swellings, labrum somewhat pitchy; antenna largely dull brown, ochraceous on scape with upper portion slightly reddish pitchy; prothorax ochraceous with a large irregular central spot of bluish black nearly touching anterior and posterior margins and a large irregular lateral spot of bluish black likewise not touching anterior and posterior margins; scutellum black; elytron bright golden metallic green, more goldish towards side and bluish pitchy on epipleuron; ventral surfaces largely pitchy black with a bronzy sheen; coxae pitchy to purplish; legs ochraceous, becoming duller brown on tarsi; upper borders of femora striped with blackish. Body moderately clothed above with subadpressed silvery hairs which are denser on elytron; ventral surfaces less regularly clothed with longer pale hairs; legs more thinly clothed with silvery white hairs.

*Head* nearly as broad as prothorax; occiput feebly but evenly convex, without a median groove and coarsely rugose-punctate; postantennal swellings smooth and shiny, subtriangular; interantennal area concave and grooved medially, raised anteriorly and joining obtusely transverse ridge of frontoclypeus which is highest at center; labrum distinctly emarginate apically. Antenna nearly as long as body, moderately stout; segment 1 fairly stout and distinctly punctured; 2 about 1/2 as long as 1; 3 as long as 1; 4 distinctly longer than 3 and barely longer than 5; 5–10 decreasing gradually in length; 11 about as long as 8. Prothorax not quite  $2 \times$  as broad as long, longer at side and middle; anterior margin evenly and moderately emarginate; basal margin feebly and evenly concave; lateral margin irregularly rounded with widest portion well anterior to middle, and anterior and posterior corners rounded; disc slightly uneven, with a shallow depression anterior to center, a larger subtransverse depression on each side of middle and a feeble transverse depression near center of base; surface coarsely rugose-punctate, the punctures larger on pale portions and smaller on darker areas on center and side of disc. Scutellum rounded trapeziform, convex and distinctly punctured. Elytron  $4 \times$  as long as broad, very slightly widened behind middle and broadly rounded apically with sutural angle slightly dehiscent; disc evenly convex and rather coarsely rugose-punctate on basal 1/3 and more finely so posteriorly; surface more coarsely rugose near side; epipleuron fairly distinct and gradually narrowed to apex. Ventral surfaces shiny and rather finely punctured; last abdominal tergite convex. distinctly punctured and rounded apically; last sternite with a semicircular depression in center for entire length and with margins only moderately raised and apex emarginate. Legs fairly long and stout; hind tarsus with segment 1 not quite as long as remainder and about  $2 \times$  as long as 2, 2 nearly  $2 \times$  as long as 3 and last distinctly longer than 2. Length 4.5 mm; breadth 1.85.

Allotype: Antenna 3/4 as long as body; pygidium moderately punctured, rounded-truncate apically; last abdominal sternite fairly smooth and flat, and narrowly and briefly emarginate at middle of apex. Length 6 mm; breadth 2.25.

Paratypes: Length 4.6-6 mm; breadth 1.8-2.35.

DISTRIBUTION: W. China (Sikang, Szechuan).

Holotype 3<sup>A</sup> (Mus. Frey), Se-long, 4000 m, San-chiang-kou, Wassuland, Sikang, 7. VIII.

1934, Friedrich; allotopotype ♀ (FREY), same data; 22 paratopotypes (FREY, BISHOP), same data; 1 paratype (US), Song-pan, Szechuan, 11–16. VII. 1924, Graham.

Differs from *variicollis* Lab. in having prothorax narrower, less broadened anteriorly, less depressed on disc, and with 3 distinct black spots instead of entirely dark across central portion, and femora with black anterior edges. Differs from *epipleuralis* Lab. in being shorter, with pronotum more oblong, narrower, less depressed on disc and with 3 black spots.

# 59. Apophylia thalassina (Faldermann)

Auchenia thalassina Fald., 1835, Mem. Ac. Petersb. 2: 437 (Mongolia; ?LENINGRAD).

Galerucella thalassina, Weise, 1889, Soc. Ent. Ross., Horae 23: 569 (Kan-ssu, Sze-tschuan).
Jacobson, 1904, Mus. Petersb. 8: XVI; 1911, Käfer Russl., 9, pl. 59, fig. 5.—Doi, 1927, Dobutsugaku Zasshi 39 (468): 398 (Kungchi-ling, Liaoning).

Apophylia thalassina, Weise, 1924, Coleopt. Cat. 78: 184.—Ogloblin, 1936, Fauna USSR 26, 1: 140, 393, fig. 60.—Chūjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 156

(Keiki-Do, Korea).

DISTRIBUTION: N. China (Kansu, Mongolia, Kirin, Liaoning, Hopei), Korea.

KIRIN: 5, Hsing-king, 24. VI. 1939, Tagawa (KIMOTO). HOPEI: 1, Kalgan (ZMB). KOREA: 1, Kongju, VII. 1911, Thompson (CAS); 1, Kodai Zan, Tetsugen-gun, Kogendo, 20. VI. 1937, Kusanagi.

# 60. Apophylia thoracica Gressitt and Kimoto, n. sp. Fig. 110, a.

*Male*: Body ochraceous to pitchy and bright metallic green: head black behind postantennal swellings, largely ochraceous on sides and ventral surfaces, reddish on mandible; antenna ochraceous brown, slightly duller distally; prothorax reddish brown, duller to pitchy on central portion and pitchy reddish on lateral portion; scutellum pitchy black; elytron bright metallic golden green, somewhat reddish pitchy on epipleuron; ventral surfaces largely ochraceous to reddish brown, paler on pro and mesosterna and on coxae; legs pale ochraceous, slightly duller on distal portions of tarsi. Body moderately clothed above with subadpressed pale silvery golden hairs; pubescence more whitish and longer on ventral surfaces and whitish and rather thin on legs.

Head not quite as wide as prothorax; occiput evenly convex on each side, shallowly grooved medially and rather densely reticulate-punctate; postantennal swellings impunctate, shiny, subtriangular and separated by a median groove; interantennal area shallowly grooved but raised apically to join transverse ridge of frontoclypeus; gena about 1/3 length of eye; labrum shallowly emarginate apically. Antenna nearly as long as body, fairly slender; segment 1 arched and shiny, feebly punctured; 2 about 1/2 as long as 1; 3 not quite as long as 1; 4 distinctly longer than 3 and barely longer than 5; 5–10 decreasing slightly in length; 11 slightly longer than 10. Prothorax about  $2 \times$  as broad as long, slightly longer at side than at middle; anterior margin feebly and obtusely emarginate at middle; basal margin very slightly and evenly emarginate in central portion; lateral margin strongly rounded, with widest point slightly anterior to middle, and anterior and posterior corners rounded; disc strongly swollen on each side anteriorly, with swollen portion transverse and strongly but not very closely punctured and somewhat shiny, and a large broad oblique depression on each side of center rather closely and finely punctured and median slightly

raised area with punctures of intermediate size and about as large as those near posterior lateral portion, which is also slightly raised. Scutellum somewhat narrowly triangular. rounded apically, somewhat convex and granulose. Elytron slightly more than  $4 \times$  as long as broad, parallel-sided, broadly rounded apically with sutural angle briefly dehiscent; disc evenly convex and very finely and densely rugose-punctate; epipleuron broad anteriorly and very slightly and gradually narrowing to near apex. Ventral surfaces rather finely punctured, somewhat sparsely so in center of metasternum and more closely so on metepisternum; last abdominal tergite broad, moderately convex, densely punctured and rounded apically; last sternite with a deep semicircular depression occupying posterior 2/3 of central portion and with margins of depression raised and distinct and the depression quite hairy. Aedeagus rather broad, largely parallel-sided, slightly arched and with apical portion somewhat asymmetrical but somewhat broadly rounded and with a short acute tip at middle of end. Legs moderately stout; hind tarsus nearly as long as hind tibia, segment 1 longer than remainder combined and 2 nearly  $2 \times as$  long as 3 and last slightly longer than 2. Length 5 mm; breadth 1.7.



Fig. 110. *I* genitalia. Apophylia thoracica n. sp.; b, A. trochanterina n. sp.; c, A. yariicollis Laboissière.

*Female*: Pronotum with anterior swollen portion and middle of basal portion reddish chestnut brown; metepisternum quite pale in contrast to pitchy metasternum and abdomen except for extreme apex; last abdominal tergite fairly flat and moderately punctured; last sternite slightly depressed but fairly flat in central portion with apical margin slightly raised and feebly emarginate at middle. Length 6 mm; breadth 2.1.

*Paratypes*: Pronotum varying from pitchy with anterior margin dark reddish brown to largely ochraceous with central triangular area pitchy. Length 4.8–6.0 mm; breadth 1.6–2.3.

DISTRIBUTION: S. China (Fukien, Hupeh).

Holotype & (BISHOP 3269), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 25. VI. 1942, T. C. Maa; allotopotype ♀ (BISHOP), same data; 55 paratypes (BISHOP, CAS, US, AC. SIN.): 53 paratopotypes, 25. VI. 1942, 14. VII. 1946, 24. VII. 1944, Maa; 2 paratypes, Kwang-keng, Kienyang Distr., Maa. 4 specimens (CAS, LINGNAN), Sui-sa-pa, 1000 m, Lichuan

Distr., W. Hupeh Prov., 6-30. VIII. 1948, Gressitt & Djou; 1, Gau-yu-tai to Wang-chia-ying, 1200 m, Lichuan Distr., Hupeh, 20. IX. 1948, Djou.

Differs from *variicollis* Lab., in having prothorax narrower, pronotum more strongly raised anteriorly and more depressed on center, thoracic sterna not entirely black and abdomen largely dark on last segment.

# 61. Apophylia trinotata Gressitt and Kimoto, n. sp. Fig. 109, b.

*Male*: Pale testaceous to bright golden green: head shiny black behind antennal insertions, pale testaceous anteriorly except for slightly reddish labrum, mandible and palpi; antenna testaceous (missing beyond segment 1); prothorax yellowish testaceous with 3 moderately large blackish spots which are pitchy to reddish near borders, 1 central and occupying most of median line, another large one on side occupies considerable area above and below lateral line, but not very closely approaching to anterior or posterior margin; scutellum black; elytron bright golden green with a slightly bluish tinge; ventral surfaces largely black or pitchy, with coxae, apical margins of abdominal segments 1–3, and much of apex of 5, testaceous or ochraceous; legs yellowish testaceous, very slightly duller towards apices of tarsi. Body moderately clothed with silvery white pubescence, fairly dense on elytron and sparser on pronotum, of moderate length on ventral surfaces and slightly sparser on metasternum, fairly thin on legs.

Head not quite as broad as prothorax; occiput rather strongly convex, quite closely and moderately strongly punctured and finely grooved medially; postantennal swellings moderately convex, impunctate, transverse behind and separated by a median groove; interantennal area concave in middle and raised apically where it joins with oblique ridges on frontoclypeus; labrum short, distinctly emarginate apically; gena about 1/3 diameter of eye. Antenna with segment 1 moderately stout and hardly longer than length of eye. Prothorax 2/3 as long as broad, transversely oblong but rather broadly rounded at side; anterior margin nearly straight; very weakly emarginate at middle; basal margin very feebly emarginate in central portion and obliquely rounded at side; anterior and posterior margins rather broadly rounded and setigerous tubercles located a fair distance from anterior and posterior margins respectively; disc slightly uneven, with a small central depression and another near middle of base and one on each side on central portion, and also a slight transverse elevation slightly behind anterior margin; surface rather densely punctured throughout, the punctures somewhat smaller posteriorly than anteriorly. Scutellum roundedtriangular, broadly rounded behind, and rather finely and closely punctured. Elytron  $4 \times$ as long as broad, subparallel-sided, broadly rounded externally at apex and slightly dehiscent at sutural angle; surface with a feeble ridge extending posteriorly from humerus and a depression at middle of side above this ridge almost suggesting another weak ridge along median portion but originating from area of humerus; surface closely punctured throughout; the interspaces tending to be somewhat transversely or obliquely rugose. Ventral surfaces in large part finely punctured, more sparsely so on central portion of metasternum; last abdominal tergite moderately convex, distinctly punctured, broadly rounded apically; last sternite with a deep semicircular depression extending nearly to base and with apical margin strongly emarginate. Legs relatively slender, but hind femur moderately swollen; hind tibia nearly straight; hind tarsal segment 1 as long as remainder combined, 2 nearly 1/2again as long as 3 and last slightly longer than 3. Length 4.2 mm; breadth 1.55.

Paratypes: Length 4.5 mm; breadth 1.6.

# DISTRIBUTION: W. China (Szechuan).

Holotype & (U. S. NAT. MUS.), O-er, 2200–2800 m, nr. Wei-chow, Szechuan Prov., W. China, 6–16. VIII. 1933, D. C. Graham; paratype & (BISHOP), Uen-chuan to Meng-tseo, 900 m, 8. VII. 1924, Graham; paratype & (FREY), Wo-lung, 1000 m, Sankiang-keu, Wassuland, Sikang, 7. X. 1934, Friedrich.

Differs from *flavovirens* (Fairm.) in having prothorax less trapeziform, with 3 distinct black spots, and in having coxae pale, and terminal cavity of  $\mathcal{J}$  abdomen shallower and with less carinate sides.

# 62. Apophylia trochanterina Gressitt and Kimoto, n. sp. Figs. 109, c & 110, b.

*Male*: Tricolorous: testaceous black and golden green; head black, somewhat ochraceous on labrum, mandible and palpi; antenna testaceous; prothorax entirely black; scutellum black; elytron bright golden green, more golden near external margin which is somewhat bluish; ventral surfaces black except for pale coxae, trochanters and terminal area of abdomen; legs testaceous. Body thinly clothed above with short adpressed pale hairs which are denser on elytron and depressed areas of pronotum as well as on scutellum; ventral surfaces moderately clothed with silvery white hairs; legs somewhat more thinly clothed with short pale hairs.

*Head* nearly as broad as prothorax; eyes nearly round and separated by a space nearly double diameter of an eye; occiput broad, subevenly convex, slightly depressed along median line and rather densely punctured; postantennal swellings distinct, smooth and evenly convex, with a groove between; interantennal area slightly concave in center and raised at side; frontoclypeus rather short with an arcuate transverse ridge on each side, the two meeting at center; labrum rather short and slightly concave apically. Antenna 4/5 as long as body, moderately stout; segment 1 strongly thickened apically and slightly arched and shiny; 2 fully 2/3 as long as 1; 3 about as long as 1; 3-5 subequal; 5-10 decreasing slightly in length (last missing). Prothorax  $2 \times as$  long as broad, shorter in middle than near side; anterior margin evenly and arcuately concave; basal margin weakly concave; lateral margin rather strongly convex, with greatest width just anterior to middle and anterior and posterior corners rounded with setigerous tubercles at short distance from anterior and posterior margins respectively; disc rather irregular, with a small fairly deep depression on median line near anterior margin and a much larger sinuate depression on each side which is transverse anteriorly and extends obliquely backwards in direction of middle of basal margin; surface irregularly punctured, the punctures larger and sparser on anterior transversely raised area between anterior margin and sublateral depressions and closer and finer on central and postlateral raised areas. Scutellum rounded triangular, rather finely and closely punctured. Elytron  $4 \times$  as long as broad, very slightly widened behind middle. broadly rounded apically with sutural angle also rounded; epipleuron distinct throughout and somewhat ridged on upper edge; surface subevenly convex without distinct ridges and with very close subrugose punctures. Ventral surfaces rather finely and sparsely punctured. more closely so on metepisternum; last abdominal tergite convex, broadly rounded and somewhat curved forward apically; last sternite with a subtrapeziform fairly deep depression with a slightly oblique distinct ridge on each side and apical margin deeply emarginate; hind trochanter with a strongly produced curved spine from inner apex. Legs moderately stout; fore tarsal segment 1 as long as 2+3; 2 nearly  $2 \times$  as long as 3 and last distinctly shorter than 1. Length 4.7 mm; breadth 1.75.

DISTRIBUTION: W. China (Szechuan).

Holotype & (U. S. NAT. Mus.); between Hueh-shi and Bao-ngan, 1800–2300 m, Szechuan Prov., 12. VIII. 1928, D. C. Graham.

Differs from all species we have seen in the peculiar hooked development of hind trochanter. Differs from *nigriceps* Lab. in having head more deeply punctured and more extensively black, pronotum more oblong and more deeply impressed on disc, and in having antenna and legs stouter.

63. Apophylia variicollis Laboissière Fig. 110, c.

Apophylia variicollis Lab., 1927, Soc. Ent. France, Ann. 96: 61 (Yunnan; ?PARIS). Apophylia Savioi Pic, 1931, Mel. Exot. Ent. 57: 22 (China; ? PARIS). New Synonymy.

DISTRIBUTION: SW China (Yunnan).

YUNNAN: 13, Yunnan-sen (ZMB); 9, Yunnan (ZMB); 1, Western Hills, 2100 m, nr. Kunming, 7. VII. 1940, Gressitt (LINGNAN).

#### Genus Chujoa new genus

Galerucini: Head nearly as broad as prothorax; postantennal swellings large and distinct; interantennal space narrower than an antennal insertion; frons short; labrum large and hardly emarginate apically; maxillary palp short, apical segment conical and slightly larger than penultimate; gena very short, with margin nearly touching eye; eye large, subrounded and coarsely facetted; antenna with segment 2 short, 3 as long as 1, 4–10 each distinctly shorter than 3, and 11 as long as 3; prothorax subrectangular, broader than long, emarginate apically and basally and weakly obtuse at side, almost completely margined, with setigerous pore near anterior corner and disc with a median depression and lateral depression; elytron long, subparallel-sided, irregularly punctured, hairy, flattened at side, and with epipleuron distinct only in about basal 1/5; anterior coxal cavities adjacent and open posteriorly, with sternum terminating anterior to middle of coxae; mid coxal cavities narrowly separated by mesosternum; hind coxal cavities raised and separated; last abdominal sternite angularly emarginate apically; legs long and straight; tarsal segment 1 of each leg of  $\mathcal{J}$  broad, much longer than 2+3 or last segment; tarsal claws bifid in both sexes.

Type species: Atysa uetsukii Chûjô.

Differs from *Pyrrhalta* Joannis in having prothorax rectangular, much narrower, and barely broader than head, as well as antenna more slender, with segment 3 much longer, and elytral epipleuron much shorter, only about 1/5 as long as elytron. Differs from *Clitena* Baly and *Galerucella* Crotch largely in same characters. Named in honor of Dr. Michio Chûjô, eminent authority on the Chrysomelidae.

# 64. \*Chujoa uetsukii (Chûjô), NEW COMBINATION Fig. 78, d

Atysa uetsukii Chûjô, 1954, Mushi 26(1): 2, pl. 1, fig. 1 (Okayama Pref., Japan; cotypes CHUJO, KU).

DISTRIBUTION: S. Japan.

HOST: Fagus crenata.

#### Genus Pyrrhalta Joannis

Pyrrhalta Joann., 1866, Abeille 3: 82 (type: Galeruca viburni Paykull; Europe).—Weise, 1924, Coleopt. Cat. 78: 61.

Galeruca, Fabricius, 1792, Ent. Syst. 1, 2: 12.—Redtenbacher, 1849, Fauna Austr., 524 (part).

Galerucella (Pyrrhalta), Weise, 1880, Ins. Deutsch. 6 (4): 621.—Seidlitz, 1891, Fauna Balt. ed. 2, 705.—Reitter, 1912, Fauna Germ. 4: 138.—Ogloblin, 1936, Fauna USSR 26, 1: 97.

? Hoplostines Blackburn, 1890, Linn. Soc. N. S. Wales, Proc. ser. 2, 5: 361 (type: Hoplostines viridipennis Blackburn, 1890).

Galerucella (Galerucella), Reitter, 1912, Fauna Germ., 4: 139 (part).—Ogloblin, 1936, Fauna USSR 26, 1: 112, 387.

Clitenososia Laboissiere, 1931, Wien. Ent. Ztg. 48: 43 (type: Clitena fulva Lab.; China).

Lochmaea (Tricholochmaea) Laboissière, 1932, Mus. Nat. Hist. Natur. Paris, Bull. ser. 2, 4: 963 (type: L. (T.) indica Lab., India).—Ogloblin, 1936, Fauna USSR 26, 1: 91.

Xanthogaleruca Lab., 1934, Soc. Ent. France, Ann. 103: 29, 67 (type: luteola Müller; Europe). —Ogloblin, 1936, Fauna USSR 26, 1: 100 (subgenus of Galerucella).

Galerucella, Maulik, 1936, Fauna India, Galeruc., 214 (part).—Ogloblin, 1936, Fauna USSR 26, 1: 92.

Weise, Reitter, Laboissière, Maulik, Ogloblin and others overlooked the fact that Pyrrhalta preoccupies Galerucella. Therefore, the former cannot be a subgenus of the latter. On the other hand, Maulik designated nymphaea Linnaeus as type of Galerucella. Laboissière's genus Hydrogaleruca (type nymphaea), as Maulik pointed out, is a synonym of Galerucella. But nymphaea is not congeneric with viburni, the type of Pyrrhalta. Thus true Galerucella (Hydrogaleruca) does not fall as a synonym of Pyrrhalta, but most of the species which have been assigned to Galerucella in the past must be transferred to Pyrrhalta, or other genera or subgenera, depending on elucidation of the actual relationships in this group. Tentatively, Clitenososia, Xanthogaleruca and Tricholochmaea are considered synonyms of Pyrrhalta because of weak or intergrading characters for the assigned species. For instance, the characters of elytral costae and elytral epipleura break down in the Chinese species, so that the latter cannot be clearly assigned to Xanthogaleruca and Tricholochmaea. Tentatively, species were first assigned as follows, but with many contradictions, and particularly with problems raised by some of the new species described below. Thus we decided to abandon the use of subgenera at this time, until a comprehensive study can be made. including a study of some species not before us.

Pyrrhalta [actually to tentatively include all the generic groups below except Galerucella (Hydrogaleruca)]: annulicornis Baly; humeralis Chen; viburni dorsalis Chen.

Xanthogaleruca (we are tentatively suppressing this as meaningless considering Chinese species): aenescens Fairmaire; kwangtungensis n. sp.; luteola; maculicollis Motschulsky; griseovillosa Jacoby; nigromarginata Jacoby; orientalis Ogloblin; sericea Weise; subaenea Ogloblin; submetallica Chen; sulcatipennis Chen.

Tricholochmaea (described as subgenus of Lochmaea, but we are relegating it to synonymy of Pyrrhalta): limbata Chen; chinensis Jacoby; gracilicornis Chen; longipilosa Chen.

Clitenososia Laboissière (established for Clitena fulva Lab.; this can hardly be separated from Xanthogaleruca) : fulva Laboissière; maculipennis Chen; tibialis (?=nigrimembris Fairm.) other species assigned to Clitena by Ogloblin.

"Galerucella s. str." (this we are suppressing, as largely used previously, to synonymy

with *Pyrrhalta*, but the actual type and a few others make up the unit including the following: calmariensis Linnaeus; fossata Chen; lineola Fabricius; pusilla Duftschmidt.

Galerucella (=Hydrogaleruca): grisescens Joannis (=distincta Baly,=reducta Chen); nipponensis Laboissière; nymphaea (type species of both Galerucella and Hydrogaleruca)

## Key to Chinese species of Pyrrhalta

1.	Elytron greenish, pronotum yellowish with 3 black spots
	Dorsum not with above combination of characters 4
2 (1).	Puncturation of elytron large and strong; sublateral and subapical areas steeply
	declivitous to lateral and apical margins; sutural angle of elytron subangulate 3
	Puncturation of elytron finer; sublateral and subapical areas, especially the latter,
	gradually declivitous to lateral and apical margins; sutural angle obtuse;
	length 7-8.5 mm
3 (2).	Postantennal tubercles without punctures; yellowish brown; middle of occiput
	and 3 spots on pronotum black; length 5.5-7 mm 100. subaenea
	Postantennal tubercles distinctly punctured; yellowish brown; middle of occiput,
	3 spots on pronotum, metasternum and abdomen, except sides, black; length
	5 mm
4 (1).	Elytron without 5 black spots
	Reddish brown ; middle of occiput, 3 spots across middle of pronotum, scutellum,
	5 spots on elytron, and metasternum, black; in $\mathcal{J}$ antennal segment 3 with a
	sharp spine at apex; length 4.0-4.5 mm 88. maculata
5 (4).	Occiput, 3 black spots on pronotum, scutellum largely, and humeri, black 6
	Dorsum without such combination of characters 8
6 (5).	Antenna almost as long as body; pronotum and elytron thickly covered by hairs7
	Antenna almost $1/2$ length of body; pronotum and elytron sparsely covered with
	erect hairs; dorsum reddish brown with middle of vertex, 3 spots on pro-
	notum, scutellum (except apical area reddish), and humeri, blackish; length
	6–7 mm
7 (6).	Antennal segment 3 more than $2 \times as$ long as 2; a broad stripe on lateral margin
	of prothorax, a small spot on middle of base and a spot on humerus black;
	length 5.5–6.5 mm
	Antennal segment 3 is $1.5 \times$ as long as 2; a broad stripe on side, a small basal
	spot on middle of pronotum; a spot on humerus black; length 8 mm
8 (5).	Ground color of elytron reddish brown or red, with basal, lateral and sutural
	margins black
	Elytron without above combination of characters 10
9 (8).	Oblong, subparallel-sided; yellowish brown; middle of vertex, scutellum and all
	margins of elytron blackish, metathorax and 3 spots on pronotum much darker
	than ground color; length 3.7–4.5 mm 91. nigromarginata
	Oval, lateral margin of elytron distinctly rounded; reddish; all margins of elytron,
	and tibiae and tarsi, black; ground color of elytron yellowish brown; length 3.5
10(0)	-4.6 mm
10(8)	. Pale yellowish brown; dorsal surface of legs, apex and dorsal surface of antenna,

lateral margin of elytron and epipleurae black; elytron with metallic lustre, sutural margin with bronzy black area which in basal portion covers inner 11 (10). Elytron dark bronzy brown with basal, lateral and sutural margins and a stripe from humerus to near apex, yellowish brown; elytron with 2 shallow longitudinal furrows on elytral disc of which outer one entirely overlapping with pale stripe; length 5–7 mm ...... 102. sulcatipennis Elytron without above combination of characters ...... 12 12 (11). In  $\varphi$  elytron with a longitudinal costa in line with humerus; in  $\mathcal{J}$ , not as conspicuous; entirely yellowish brown; lateral margin of pronotum almost straight in basal 3/4; pronotum flat as a whole; elytral epipleuron distinct only in basal 1/3; length 5.5-6.2 mm...... 80. hainanensis 13 (12). Elytral surface not smooth as a whole but with short ridges or depressions.... 14 15 (14). Black; elytron bronzy black; frontal tubercles, 2 roundish markings on occiput, border of pronotum, scutellum (except middle of base), sides of thoracic sterna, abdomen (except sides of apical 2 segments), bases of femora, and Dorsal surface reddish brown with slight greenish lustre; ventral surface more greenish ..... sp. Elytron with a depression in sublatero-postmedian area; length 4.0-4.6mm..... 17 (16). Hairs covering elytron long; pale yellow or brownish red; in many cases with slight metallic lustre; elytron in some cases darker or black, except borders; ventral surface of thorax, abdomen, upper edges of tibiae and tarsi black; in some cases underside of antennal segments 3-6 stained with brownish red; scutellum darker; vertex and pronotum in some cases with a transverse Hairs covering elytron shorter compared with preceding species; less convex; yellowish brown; vertex, disc of pronotum and elytron in some cases darker or black; antenna black with undersides of basal segments paler; upper edges of tibiae (and in some cases femora partly) blackish; tarsi and apices 18 (13). Pronotum with 5 black spots; pale yellow with greenish bronzy lustre; occiput, thorax, abdomen partly, scutellum and antenna black; length 4.8mm...... 19 (18). Lateral margin of pronotum not constricted 1/3 from base but entirely rounded or almost straight in basal 2/3 and narrowed anteriorly...... 20 Lateral margin of pronotum constricted 1/3 from base, and from there widened to posterior corner until 1/3 from front and then narrowed to anterior cor-

	ner; punctures of pronotum and elytron large and strong, especially in former, compared with other species of genus; brown or dark brown; in some cases pronotum with a pair of black markings laterally; antenna, 2 or 3 basal segments paler, apex of femora, base and apex of tibiae and tarsi black; hairs of dorsal surface rather sparse and robust; length 5–6 mm 79. griseovillosa
20 (19).	Elytron entirely bronzy black or brownish black
21 (20).	Bronzy black with greenish lustre; antenna black with segments 1–3 paler than apical ones; legs pale brown with apices of femora, upper edges of tibiae and tarsi black; dorsal surface rather strongly and fairly closely punctured, hairs covering elytron rather sparse; frontal tubercles distinctly raised and shining, impunctate; length 5.2–5.4 mm
	Brownish black; elytron blackish brown; antenna black, with segments 1-3 or 1-2 paler; legs dark or blackish brown; elytron distinctly and closely punctured; elytron very thickly covered by fine hairs; frontal tubercles not
	distinctly raised and closely punctured; length 6.3-7.0 mm 68. brunneipes
22 (20).	Larger than 6.6 mm; elytral epipleuron not always distinct in apical 1/3 or 1/2 23 Smaller than 6.5 mm
23 (22).	Antennal segment 3 distinctly longer than 2 (usually more than $1.33 \times 2$ ); ver-
	tex vellowish brown or brown 24
	Antennal segment 3 as long as or slightly shorter than second ; vertex black
	Antennal segment 5 as long as of signify shorter than second, vertex black,
	pronotum yellowish brown with side partiy blackish; antenna blackish with
	undersides of segments 2-4 yellowish; length 6.5 mm (Japan; Jacoby 1885,
	NEW COMBINATION) seminigra*
24 (23).	Dorsal surface entirely yellowish brown or brown
	Yellowish brown or brown; pronotum with a black spot near side; apices of
	femora and bases of tibiae black; length 6.5-7.5 mm
25(24)	Postantennal tubercles distinctly punctured or smooth but not covered by fine
20 (21)1	hairs 26
	Postantannal tubercles thickly covered by fine bairs: elytral punctures very
	large consciolly laterally and subconfluent in many places; lateral margin
	alge, especially laterally, and subconnuclit in many places, lateral margin
	of eight not visible in dorsal view, reduish blown, underside more reduish
	than dorsal surface; antenna, apices of femora, tiblae and tarsi black; length
	7.3–7.6 mm 105. tumida
26 (25).	Frontal tubercles distinctly-punctured or not distinctly raised; appendages partly
	blackish or infuscated
	Frontal tubercles distinctly raised and shining, without any punctures; antennal
	segment 3 is $1.33 \times$ as long as 2; entirely yellowish brown except eye and
	apex of mandible; length 6.8-7.0 mm
27 (26).	Antennal segment 2 more than $2 \times$ as long as wide and nearly or more than
	1/2 length of 3
	Antennal segment 2 slightly longer than wide and almost 1/3 of length of 3.
	vellow elytron slightly nale: antennal segments 8-11 and anex of 7 black
	and aney of 2 and entire segment 3 of tarsi brownish · length 0.5 mm
	and upon of 2 and entrie segment 5 of tarsf brownish, relight 7.5 lilli

28 (27).	Pronotum distinctly punctured at middle; antennal segment 3 nearly $1.3 \times as$
	Pronotum thickly covered by fine hairs, with almost invisible punctures in middle; antennal segment 3 almost $2 \times as$ long as second; almost entire antenna tibiae and tarsi black: length $6-8 \text{ mm}$ 104 tibialis
29 (28).	Basal 2/3 of lateral margin of pronotum subparallel-sided and narrowed an- teriorly; posterior corner of pronotum almost a right angle; pronotum and elytron strongly and closely punctured; a pair of depressions of each side of pronotum rather deep; elytron slightly widened posteriorly; reddish brown; antenna, apices of femora, tibiae and tarsi black; length 8.0-8.5 mm 92. ningnoensis
	Prothorax widest at 1/3 from apex, side narrowed anteriorly and posteriorly; posterior corner of pronotum with angle of 120°; pronotum and elytron more finely punctured than in preceding species; a pair of depressions on each side of pronotum shallower than preceding species; elytron distinctly widened posteriorly; brown; antenna darker than rest of body; length 8 mm 98 sericea
30 (22).	Elytral epipleuron at most reaching to external part of apical margin
31 (30).	Pronotum transverse, almost or more than $2 \times as$ wide as long
32 (31).	Lateral reflexed border of elytron rather wide and without longitudinal costa along margin; elytron subparallel-sided; prothorax and elytron strongly and fairly closely punctured; middle of vertex, scutellum, except apical area, humerus, metasternum and antenna, except base of each one of basal and middle segments, black; pronotum sometimes with lateral medial spots, which are mostly ill-defined; rest brown; length 4.5 mm
	Lateral reflexed border of elytron very narrow, and with longitudinal costa along margin; elytron distinctly widened posteriorly; prothorax and elytron closely but finely punctured; reddish brown; dorsal edges of tibiae and tarsi and apical 1/2 of head black; antenna reddish brown; length 4.6–5.8 mm 
33 (30).	Lateral reflexed border of elytron rather wide and without longitudinal costa along lateral margin
34 (33).	Antenna blackish with bases of basal segments yellowish; anterior border of pronotum glabrous; apex of scutellum truncated at apex; testaceous; some- times vertex black at middle; elytron testaceous usually with humeri black; meso- and metathorax and in some cases abdominal segments 1–3 also black- ish; length 3.5–3.8 mm

occiput largely black : scutellum black with apex vellowish : underside black : legs reddish brown: length 3.0-4.2 mm...... 103. tenella 35 (33). Head entirely black or black with postantennal tubercles reddish; dorsal edges Head entirely vellowish or brownish, in some cases middle of vertex slightly 36 (35). Head entirely and apical area of pronotum blackish; rest of pronotum, scutellum and elytron red; aedeagus asymmetrical, twisted at apical 1/3; length Head black with frontal tubercles reddish: pronotum and scutellum entirely red; elytron vellowish brown; aedeagus slightly asymmetrical, left side distinctly constricted before middle in dorsal view; length 4 mm..... 82. hupehensis 37 (35). Pronotum more than  $2 \times$  as wide as long; pronotum and elytron closely covered by fine hairs: brown: antenna blackish with ventral surfaces of Pronotum hardly  $2 \times$  as wide as long; pronotum and elytron more sparsely 38 (37). Dorsum pale yellowish; prothorax feebly rounded at side with disc slightly Dorsum reddish brown; prothorax obtuse at side with disc not raised on each 

# 65. Pyrrhalta aenescens (Fairmaire), NEW COMBINATION Fig. 111, a.

Galeruca aenescens Fairm., 1878, Soc. Ent. France, Ann. 47: 140 (C. China; ?PARIS).

Galerucella aenescens, Fairm., 1887, Rev. d'Ent. 6: 334 (Pekin).-Weise, 1896, Deutsche Ent. Zeits. 1896: 296.

Galerucella (Xanthogaleruca) aenescens, Ogloblin, 1936, Fauna USSR 26, 1: 100, 386 (Tientsin).



Fig. 111. a, Pyrrhalta aenescens (Fairmaire); b, P. brunneipes n. sp.; c, P. corpulentina n. sp.

1B

Apophylia thalassina, Yuasa, 1936, First Sci. Exp. Manchoukuo, Rep. 5, 1, 10 (51): 14, pl. 2, fig. 1 (Jehol).

DISTRIBUTION: N. China (Kirin, Jehol, Hopei, Shantung, Kiangsu).

KIRIN: Many, Mukden, 13. IX. 1927, Loukashkin (CAS); 4, Mukden, VIII. 1931, G. Liu (MCZ); 2, Mukden, 13. VIII. 1923, Van Dyke (CAS). HOPEI: Peiping, 2. IX. 1935, Chi (KIMOTO); 25, Peking, 1–10. V. 1913, Schoede (ZMB); 8, Schoede & Müller; 3, Peking, VIII. 1932, G. Liu (MCZ); 1, Peking, summer 1913, Meyer (US); 1, Peking, 25. VIII. 1924, Illingworth (BISHOP). SHANTUNG: 2, Yen-chow-fu, 20. VI. 1936, Höne (ZMB). KIANG-SU: 11, Suchow-fu, on elm, 16. VIII. 1924, Illingworth (BISHOP).

HOST: Ulmus sp.

# 66. Pyrrhalta angulaticollis Gressitt and Kimoto, n. sp. Fig. 112, a.

*Male*: Pale testaceous to reddish ochraceous or reddish brown: head reddish ochraceous, duller between eyes and on mandible; antenna reddish brown; somewhat pitchy on upper portion of scape and toward apices of most of segments; prothorax pale ochraceous; scutellum reddish ochraceous; elytron ochraceous, more reddish on basal 1/3 and apical 2/5; ventral surfaces pale testaceous, darker on metathorax; legs ochraceous, slightly more reddish towards apices of tarsi. Body moderately clothed above with adpressed silvery buff pubescence which lies in different directions giving a slightly variable pattern; ventral surfaces rather thinly clothed with whitish hairs and legs moderately clothed.

Head slightly narrower than prothorax at anterior end; occiput moderately convex, rather closely and finely rugose-punctate; postantennal swellings rather large, impunctate, separated by a median groove; interantennal area rather strongly raised and carinate anteriorly, the carina joining obtuse ridge of frontoclypeus; labrum hardly emarginate an-Antenna 4/5 as long as body, not very stout; segment 1 thickest just beyond teriorly. middle, feebly arched, distinctly punctured; 2 about 2/3 as long as 1; 3 not quite as long as 1+2; 4 distinctly shorter than 3; 4–10 decreasing very slightly in length; 11 about as long as 9 and fairly acute. Prothorax nearly 2/3 as long as broad, broadly oblong; anterior margin nearly straight; basal margin strongly sinuate, concave at center and curving obliquely forward towards side; lateral margin more or less with 4 corners with intervening 3 portions subequal in length, the anterior one almost as strongly oblique as posterior one and the middle portion slightly oblique and broadening anteriorly; anterior corner quite distinct and second angle rounded, third angle (actual hind angle) slightly protruding with setigerous tubercle and hindmost angle (angulation in basal margin) rounded; disc broadly depressed across central portion and slightly more so on middle of each half and again near middle of basal margin and slightly depressed along median line; surface rather closely and finely rugose-punctate, in part somewhat granulose. Scutellum triangular, swollen at center, rugose-punctate. Elytron  $2.65 \times$  as long as broad, distinctly widened from humerus to slightly behind middle and then narrowed and broadly rounded apically, with sutural angles slightly dehiscent; epipleuron quite broad to behind middle and then narrowing and disappearing on apical margin; disc slightly uneven, with a distinct cavity just behind center and slightly closer to external margin and to suture and a smaller depression on apical declivity towards side, as well as slight suggestion of a ridge post-medially closer to suture than to margin; surface granulose-punctate, the punctures mostly more widely separated than their diameters and the granules indistinct and in part forming corrugations of rugo-
sities. Ventral surfaces fairly smooth and shiny, with fine punctures or fine corrugations; pygidium evenly rounded apically; last abdominal sternite nearly vertical, with a subtriangular apical depression which nearly reaches to basal margin where it is rounded, and its borders fairly distinct and slightly hairy. Legs moderately slender; hind tarsal segment 1 slightly longer than 2, 2 slightly longer than 3, and last distinctly longer than 1. Length 4.5 mm; breadth 2.6.

Paratypes: Length 4.0-4.5 mm; breadth 2.1-2.6.

DISTRIBUTION: W. China (W. Hupeh).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 25. VII. 1948, Gressitt & Djou; 3 & paratypes (CAS, BISHOP, LINGNAN); 2 paratopotypes, 25–29. VII; 1 paratype, Liang-ho-keu, Lichuan, 1. IX. 1948, Gressitt & Djou.



Fig. 112.  $\mathcal{J}$  genitalia. a, Pyrrhalta angulaticollis n. sp.; b, P. chinensis (Jacoby); c, P. discalis n. sp.; d, P. griseovillosa (Jacoby); e, P. hainanensis n. sp.

Differs from *longipilosa* Chen and *gracilicornis* Chen in lacking distinct elytral costae, and with a postmedian sublateral depression. Differs from *submetallica* Chen in being stouter, in lacking an emargination on posterolateral portion of prothorax and in lacking distinct spots on occiput and pronotum.

### 67. Pyrrhalta annulicornis (Baly)

Galleruca annulicornis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 177 (Hiogo, Japan; BM). Galerucella (Pyrrhalta) viburni annulicornis, Ogloblin, 1936, Fauna USSR 26, 1: 100, 385 (Manchuria).

Galerucella (Pyrrhalta) annulicornis, Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211):

160 (Keiki-Do, Korea).

Pyrrhalta annulicornis, Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 168 (hosts).

DISTRIBUTION: Japan, NE China, SE Siberia. No Chinese materal seen.

HOSTS: Sambucus Sieboldiana Blume, Viburnum Awabuki K. Koch, V. dilatatum Th., V. Sargenti Kohene, V. Sieboldii Miq. (Japan).

# 68. Pyrrhalta brunneipes Gressitt and Kimoto, n. sp. Fig. 111, b.

Male: Ochraceous to dark reddish brown: head rather pale ochraceous, slightly duller on central portion of occiput; antenna dull reddish brown, slightly paler on undersides of segments 2–5 and extreme apices of 1 and 2. Prothorax orange ochraceous; scutellum ochraceous; elytron dull reddish brown with a slightly purplish tinge, ochraceous at extreme base; ventral surfaces brown, slightly pitchy on central portion of metasternum and most of basal 2/3 of abdomen, testaceous on coxae, margins of segments and last abdominal segment; dull brown on legs, slightly darker distally but claws reddish. Body rather thinly and evenly clothed above with silvery buff pubescence; ventral surfaces more sparsely and irregularly clothed; legs thinly clothed, quite sparse on femora.

Head as broad as prothorax at apex; occiput rather long, slightly uneven and rather densely and finely rugose except on borders; postantennal swellings fairly distinct, moderately raised and punctured; interantennal area broader than an antennal insertion, largely depressed but very slightly raised along median line; transverse ridge of frontoclypeus nearly straight; labrum weakly convex apically; gena about 1/4 as deep as eye. Antenna 2/3 as long as body, moderately stout; segment 1 subcylindrical, finely punctured; 2 nearly 3/4 as long as 1; 3 as long as 1; 4 barely longer than 3; 4-6 subequal; 7-10 slightly shorter; 11 slightly longer than 4. Prothorax  $2.3 \times$  as broad as long, longer at side than in middle; anterior margin strongly and subevenly emarginate; basal margin distinctly and obtusely emarginate in center and curved forward towards lateral margin; side subevenly rounded, anterior corner distinct and with a slightly projecting setigerous tubercle; basal angle fairly far forward and nearly obsolete but with a very slightly projecting setigerous tubercle; disc largely concave, border near anterior margin strongly raised and anterolateral portion strongly raised and deeply punctured; depressed areas rather finely rugose-punctate and deepest at middle near side and anterior and posterior to center, a slight raised area on each side of center and another on each side a short distance from middle at side of base. Scutellum narrowed and rounded truncate apically, convex and finely punctured. *Elytron* 3.35  $\times$  as long as broad, subparallel-sided but slightly expanded just behind middle, broadly rounded apically; lateral margin slightly flattened and with a feeble ridge parallel to margin; epipleuron gradually decreasing in length from base and terminating just after beginning of apical 1/4; disc rather evenly convex, nearly vertical at side and rather steeply declivitous apically; surface closely and rather finely punctured and subrugose, the rugae extending obliquely or transversely in large part. Ventral surfaces somewhat shiny, finely punctured; densely granulose-punctate on metepisternum; pygidium evenly rounded apically; last abdominal sternite obtusely emarginate and with a narrow deep cavity at middle of emargination, reaching almost to middle of segment and somewhat hairy at borders. Legs moderately stout; hind tarsal segment 1 broad,  $1.25 \times as \log as 2$ , 2 barely longer than 3, and last as long as 1+2. Length 6.8 mm; breadth 3.5.

Female: Last abdominal sternite evenly rounded apically, rather sparsely punctured

near apex. Length 6.5 mm breadth 3.4.

Paratypes: Length 6.3-7.0 mm; breadth 2.4-2.6.

DISTRIBUTION: S. China (Kwangtung).

Holotype  $\mathcal{J}$  (ZOOL. MUS. BERLIN), Tsha-jiu San, N. Kwangtung Prov., VII-IX. 1910, R. Mell; allotopotype  $\mathcal{Q}$  (ZMB), same data;  $3 \mathcal{Q}$  paratopotypes (ZMB, BISHOP), same data.

Differs from *Chujoa uetsukii* (Chûjô), in being slightly shorter, with antennal insertions more widely separated, occiput longer, pronotum much wider and elytral margin less expanded.

# 69. Pyrrhalta calmariensis (Linnaeus), NEW COMBINATION

Chrysomela calmariensis L., 1767, Syst. Nat. ed. 12: 600 (Europe; ?UPSSALA). Galerucella calmariensis, Weise, 1886, Ins. Deutschl. 6(4): 629.—Reitter, 1912, Fauna Germ.

4: 139.—Liu, 1935, Lingnan Sci. Jour. 14: 636 (Jehol).—Ogloblin, 1936, Fauna USSR
26, 1: 115, 388, figs. 46, 47b, 48.—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 162.
DISTRIBUTION: Europe; N. China (Jehol?). We question the Chinese record.
HOST: Lythrum stachys (Europe).

70. Pyrrhalta chinensis, (Jacoby), NEW COMBINATION Fig. 112, b.

Galeruca chinensis Jac., 1890, Entomologist 23: 166 (Chang-yang; MCZ). Lochmaea (Tricholochmaea) semifulva ab. chinensis, Ogloblin, 1936, Fauna USSR 26, 1: 91.

DISTRIBUTION: S. China (Hupeh; Kwangtung).

KWANGTUNG: 1, Canton (FREY). Identification somewhat uncertain.

71. Pyrrhalta corpulenta Gressitt and Kimoto, n. sp. Fig. 111, c.

*Female*: Testaceous to pale ochraceous, slightly tinged on head, segments 1-2 of antenna, and legs with reddish; vaguely tinged with reddish pitchy on parts of anterior and basal portions of pronotum and on scutellum; elytron somewhat more reddish ochraceous along lateral margin and on apical 1/3. Body moderately clothed above with subadpressed pale buff pubescence; more sparsely clothed beneath with longer more erect pale hairs; legs rather thinly clothed particularly on femora.

Head about as wide as prothorax at anterior end; occiput concave on each side and depressed medially, somewhat heavily and rather closely punctured; postantennal swellings smooth, moderately raised, divided by median groove; inter-antennal area about as wide as an antennal cavity, raised on each side and grooved medially; frontoclypeus very strongly raised in a transverse ridge; gena nearly 1/3 as wide as eye; eye nearly hemispherical. Antenna 3/5 as long as body, not very stout; segment 1 feebly arched, not very distinctly punctured; 2 nearly 3/4 as long as 1; 3 nearly as long as 1; 4=1; 4-10 decreasing slightly in length; 11=9. Prothorax  $2 \times$  as broad as long, longer at side than in middle; anterior margin moderately concave in middle; basal margin slightly concave in middle and slightly convex on each side; lateral margin subevenly rounded; apex slightly narrower than base; anterior angle distinct, with prominent setigerous tubercle; basal angle rounded-obtuse with setigerous tubercle at angle but not very prominent; disc moderately smooth but uneven, concave along median line and again concave on each side of central portion; surface rather strongly punctured near base and towards side, more finely and sparsely punctured

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on central portion. Scutellum subtriangular but truncate apically; surface slightly convex and feebly punctured. Elytron nearly  $3 \times as$  long as broad, distinctive but evenly widened behind middle and broadly rounded apically; lateral margin only slightly broadened and flattened; epipleuron broad basally, narrowing somewhat gradually and disappearing at about beginning of apical 1/5; disc rather evenly convex and smooth, with surface entirely covered with close fine irregular punctures, the punctures mostly slightly larger than interspaces and in part tending to form subtransverse or oblique rows. Ventral surfaces rather smooth and shiny, in large part finely and sparsely punctured, subgranulose on metepisternum; pygidium subtriangular, broadly rounded apically, slightly convex and shallowly punctured; last abdominal sternite hardly longer than preceding, rather smooth and feebly punctured, subtruncate apically. Legs moderately stout but not very long; hind tarsal segment 1 slightly longer than 2+3, 2 slightly longer than 3, last about as long as 1. Length 6.9 mm; breadth 3.55.

Paratypes: Length 6.8-7.0 mm; breadth 3.5-3.6.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 27. VII. 1948, Gressitt & Djou; 2 ♀ paratopotypes (CAS, BISHOP), 24, 29. VII.

Differs from *sericea* Weise in having vertex grooved between antennal insertions, occiput more depressed medially, pronotum weakly punctured in central portion and more coarsely punctured basally and laterally, and elytron less finely punctured.

## 72. Pyrrhalta discalis Gressitt and Kimoto, n. sp. Fig. 112, c.

Male: Tricolorous: ochraceous reddish and pitchy black: head bright reddish, slightly pitchy on each side of middle of occiput and on apex of mandible; antenna pitchy reddish, paler reddish on segments 1–2; prothorax bright reddish; scutellum reddish, pitchy near borders; elytron ochraceous, with a moderately broad pitchy black band around entire margin and pitchy on epipleuron; ventral surfaces ochraceous, more reddish on sides of thorax; legs reddish ochraceous, pitchy on outer portions of tibiae and somewhat pitchy reddish on tarsi. Body clothed above with very brief oblique pale hairs; ventral surfaces with denser short golden buff hairs; legs sparsely clothed on femora and more densely clothed on tibiae and tarsi with oblique golden buff hairs; hairs on antenna largely recumbent and denser after basal segments and with a few short oblique hairs at apices of segments.

Head nearly as broad as prothorax at anterior end; occiput moderately convex, rugosepunctate, slightly depressed medially; postantennal swellings nearly fused, slightly grooved medially; interantennal area strongly raised, finely carinate anteriorly and the carina meeting obtuse ridge of frontoclypeus; labrum rounded anteriorly; gena about 1/3 as long as eye. Antenna 3/5 as long as body, moderately stout; segment 1 slightly arched, shiny and feebly punctured; 2 about 2/3 as long as 1; 3 nearly as long as 1, slightly longer than 4; 4-10 decreasing slightly; 10 about 2 × as long as broad; 11 about as long as 3. Prothorax about 2 × as broad as long; anterior margin weakly concave; basal margin straight in center and obliquely rounded at side; lateral margin obtusely rounded, widest anterior to middle, slightly concave between middle and base; anterior corner bluntly rounded; basal corner somewhat obtuse with setigerous tubercle at angle; disc depressed anterior to center and external to a slight ridge on each side of median depression with anterior portion and lateral portion somewhat swollen; surface rather closely punctured, the punctures somewhat irregular in size and mostly small in central portion and larger toward side. Scutellum triangular, rounded behind, convex and rugose-punctate. Elytron not quite  $3 \times as$  long as broad, slightly convex at side and widest just behind middle, evenly narrowed and broadly rounded apically; epipleuron broad, gradually narrowing and disappearing at beginning of apex; disc evenly convex, deeply and coarsely punctured, the punctures mostly larger than interspaces and numbering approximately 26 in a row across middle. Ventral surfaces moderately shiny, rather finely and somewhat closely punctured; pygidium obtusely rounded apically; last abdominal sternite with a narrowly triangular apical depression which reaches nearly to base where it is subacute, and with punctures on apical portion of depression and smooth on anterior portion and lateral ridges fairly distinct and not very hairy. Legs rather short and moderately stout; hind tarsal segment 1 slightly longer than 2, 2 distinctly longer than 3, last slightly longer than 1. Length 3.45 mm; breadth 2.05.

*Female*: Pronotum with a few small vague pitchy spots near center; scutellum partly reddish; elytron with margins more narrowly pitchy than in type; last abdominal sternite very slightly emarginate at center of apex. Length 3.95 mm; breadth 2.15.

*Paratypes*: Elytron with borders generally more narrowly pitchy than in type. Length 4.0–4.5 mm; breadth 1.9–2.2.

DISTRIBUTION: W. China (W. Hupeh).

Holotype & (CAS), Ridge N of Sui-sa-pa, 1200–1500 m, Lichuan Distr., W. Hupeh Prov., W. China, 25. VII. 1948, Gressitt & Djou; allotype (CAS), Sui-sa-pa, 1000 m, 23. VII; 8 paratypes (CAS, BISHOP, US, BM, LINGNAN), Sui-sa-pa, 22–25. VII, 17. IX. 1948, Gressitt & Djou.

Differs from *nigromarginata* (Jac.) in being stouter and more oval in dorsal outline, with pronotum much more finely punctured and anterior margin less raised, and elytron more finely punctured and more broadly margined with blackish.

### 73. Pyrrhalta dorsalis (Chen), NEW COMBINATION

Galerucella viburni subsp. dorsalis Chen, 1942, Notes d'Ent. Chinoise 9: 16 (Shansi: Yaochan; HOANGHO-PAIHO).

This might be the same as annulicornis Baly.

DISTRIBUTION: N. China (Shansi).

### 74. Pyrrhalta erosa (Hope) ?

Galeruca erosa Hope, 1841, Ent. Soc. London, Proc. 1: 64 (Canton; ?Oxford); 1845, Ent. Soc. London, Trans. 4: 17.

Galerucella erosa, Weise, 1924, Coleopt. Cat. 78: 61.

We have not been able to locate the type of this species or determine its status.

DISTRIBUTION: S. China (Kwangtung).

## 75. Pyrrhalta fossata (Chen), NEW COMBINATION

Galerucella fossata Chen, 1942, Notes d'Ent. Chinoise 9: 19 (Sikang: Kanting; Ac. SIN.).

DISTRIBUTION: W. China (Sikang). No material seen.

## 76. Pyrrhalta fulva (Laboissière), NEW COMBINATION

Clitena fulva Lab., 1929, Soc. Ent. France, Ann. 98: 265 (Kouy-Tcheou; ?PARIS). DISTRIBUTION: SW China (Kweichow; Yunnan). No material seen.

### 77. Pyrrhalta fuscipennis (Jacoby), NEW COMBINATION

Galerucella fuscipennis Jac., 1885, Zool. Soc. Lond., Proc. 1885: 746 (Aomori, Japan; BM). Galerucella Rosinae Pic, 1905, L'Echange 21: 99 (Siberia; ?PARIS).

Clitena fuscipennis, Ogloblin, 1936, Fauna USSR 26, 1: 132, fig. 56.—Chûjô, 1941, Nat. Hist.
 Soc. Formosa, Trans. 31 (211): 157 (Kogen-Do, Korea).—Chûjô & Kimoto, 1961,
 Pacific Ins. 3 (1): 160.

This species is not included in the key.

DISTRIBUTION: Japan (Hokkaido to Yakushima), Korea, E. Siberia.

HOSTS: Acer spp., Populus spp.

## 78. Pyrrhalta gracilicornis (Chen), NEW COMBINATION

Lochmaea gracilicornis Chen, 1942, Notes d'Ent. Chinoise 9: 16 (Szechuan: Pehpei; Ac. SIN.).

DISTRIBUTION: W. China (Szechuan). No material seen.

79. Pyrrhalta griseovillosa (Jacoby), NEW COMBINATION Fig. 112, d.

Galeruca griseovillosa Jac., 1890, Entomologist, 23: 165 (Chang-yang; BM, MCZ).

Galerucella (s. str.) griseovillosa, Ogloblin, 1936, Fauna USSR 26, 1: 112, 387 (Nanking).

DISTRIBUTION: C. China (Hupeh, Kiangsu).

HUPEH: 5, Sui-sa-pa, Lichuan, 6–25. VIII. 1948, Gressitt & Djou; 8, Hsiao-ho, Lichuan, 8–16. VIII. 1948, Gressitt; 1, Leung-ho-keu to Wang-chia-ying, Lichuan, 18. IX. 1948, Djou (CAS, BISHOP).

80. Pyrrhalta hainanensis Gressitt and Kimoto, n. sp. Figs. 112, e & 114, a.

*Male*: Pale ochraceous brown, slightly reddish on mandible and on parts of ventral surfaces and legs. Body moderately clothed above with suberect and subrecumbent pale golden buff hairs; ventral surfaces clothed with finer pale hairs; legs moderately clothed with silvery to golden buff hairs.

Head as broad as prothorax; eyes strongly convex; occiput moderately convex with large fairly close shallow punctures; postantennal swellings distinct and impunctate, separated by a fine groove; inter-ocular area distinctly raised and connecting with obtuse ridge on frontoclypeus; labrum large, rounded truncate anteriorly; gena extremely short below eye. Antenna not quite 2/3 as long as body; segment 1 arched and shiny; 2 about 2/3 as long as 1; 3 nearly as long as 1; 4 not quite as long as 2+3; 4-10 decreasing gradually in length; 11 about as long as 7. Prothorax slightly more than  $2 \times$  as broad as long, subrectangular; anterior margin nearly straight; basal margin very slightly and subevenly convex but with a slight emargination at middle of base; lateral margin straight in basal 3/4, curving obtusely inward to anterior corner which bears a large tubercle with a very long seta; basal angle somewhat obtuse; disc somewhat unevenly convex, with a large shallow central depression and a smaller depression on each side as well as a very small

one near hind corner; surface somewhat closely and coarsely punctured, the punctures somewhat feebler on central portion. Scutellum triangular, slightly convex. Elytron  $3 \times$  as long as broad, slightly convex at side and broadly rounded apically; lateral margin somewhat flattened at side but evenly declivitous posteriorly; disc subevenly convex, with an indistinct ridge extending back from humerus and a slight depression above it in central portion; surface closely punctured, the punctures mostly larger than interspaces and slightly rugose anteriorly. Ventral surfaces rather smooth and shiny, finely and sparsely punctured; pygidium rounded apically; last abdominal sternite rather smooth, angularly emarginate apically with mid-apical portion impressed and preceded by a rugose-punctate area. Aedeagus slender, gradually tapering apically with the apex slender but blunt; preapical portion and opening slightly asymmetrical with borders of opening unequal. Legs fairly long and stout; hind tarsal segment 1 slightly longer than 2+3, 2 distinctly longer than 3, and last slightly shorter than 1. Length 5.4 mm; breadth 2.4.

Female: Length 6.8 mm; breadth 3.2.

Paratype: Length 6.5 mm; breadth 3.2.

DISTRIBUTION: Hainan Island.

Holotype ♂ (CAS), Ta-hau, 25 m, W. of No-doa, Hainan I., 3. VII. 1935, Gressitt; allotype ♀ (BISHOP 3270), Ta-han, SSE of No-doa, Hainan, 21. VI. 1935, Gressitt; paratype ♂ (LINGNAN), Loh-fung-tung, Yai Distr., S. Hainan, 27–28. II. 1935, F. K. To.

Differs from *humeralis* (Chen) in being uniformly pale, in having eye more prominent and more coarsely facetted, pronotum more convex and less even, and elytron more ridged at side of disc.

81. Pyrrhalta humeralis (Chen), NEW COMBINATION Figs. 114, b & 115, a.

Galerucella humeralis Chen, 1942, Notes d'Ent. Chinoise 9:17 (Liaoning: Asjörö; Kwangsi: Yangso; Yaosan; Ac. SIN.).

DISTRIBUTION : China (Liaoning, Szechuan, Hupeh, Anhwei, Kiangsi, Fukien, Kwangtung, Kwangsi).

SZECHUAN: 1, Ts'ao-po, nr. Wen-ch'uang, VIII. 1938, Graham (US); 1, Sui-fu, VI. 1928, Graham; 3, Szechuan, Graham (US); 1, NE of Mo-tau-chi, Wanhsien, 27. IX. 1948, Djou (CAS); 1, Chung-king, VI. 1932, G. Liu (MCZ). HUPEH: many, Sui-sa-pa, Lichuan, VII-IX. 1948, Vibrunum, Salix, Gressitt & Djou (CAS, BISHOP); many, Liang-ho-keu, Li-chuan, 4–10. IX. 1948, Djou; 10, Hsiao-ho, S of Sui-sa-pa, 15. VIII. 1948, Gressitt. ANHWEI: 3, Kiu-hua Shan, IX. 1932, G. Liu; 3, Tai-ping-shien, X. 1932, Liu (MCZ). KIANGSI: 1, Tai-au-hong, S of Sungwu, 5. VII. 1936, Gressitt (CAS); 1, Hong Shan, 1000 m, 25. VI. 1936, Gressitt. FUKIEN: 2, Ta-chu-lan, Shaowu, 14. VIII. 1946, Maa (CAS); 1, Ching-ping, Chin-shan-pu, 15. VI. 1940, Maa (BISHOP); 1, nr. Foochow, 1924, Kellogg (US); 1, Ta-chu-lan, Shaowu, 1. X. 1939, Maa. KWANGTUNG: 2, Tai-yong, NW of Swatow, 5. VIII. 1936, Gressitt (CAS); 1, Tsing-leong Shan, 5. VI. 1936, Gressitt; 1, Tin-tong, Lochang, 18. VIII. 1947; 1, Iu-ling-paai, Yao Shan, 9. X. 1934, To; 1, Keung-tin-heung, Lin Distr., 13. VII. 1934, To; 1, Fong-tong-ping, Hoh-kai-hon, Lin Distr., 7. VII. 1934, To (LINGNAN); 1, Sui-kwan San, Lochang, 25. VIII. 1947, Tsang (LINGNAN).

HOSTS: Viburnum sp., Salix sp.

## 82. Pyrrhalta hupehensis Gressitt and Kimoto, n. sp. Fig. 113.

Male: Ochraceous to reddish and pitchy black: head almost entirely black; palpi

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partly reddish; antenna pitchy with undersides of subbasal segments reddish; pronotum reddish pitchy anteriorly and reddish basally, and pitchy brown in center; scutellum reddish ochraceous; elytron reddish ochraceous basally becoming pale ochraceous posteriorly and along much of suture; ventral surfaces somewhat dirty ochraceous; legs pale ochraceous with sides of tibiae pitchy black. Body rather thinly clothed above with subadpressed gold-ish hairs which are much shorter on pronotum; ventral surfaces somewhat sparsely clothed with pale golden hairs; legs thinly clothed with slightly more whitish hairs, rather sparse on femora.

Head not quite as broad as prothorax at apex; occiput rather closely punctured except



Fig. 113. ♂ genitalia. Pyrrhalta hainanensis n. sp.

on borders and appearing dull compared with surrounding shiny black areas, shallowly depressed medially; postantennal swellings rather large, moderately convex and shiny, divided by a median groove; interantennal area rather narrow, finely carinate medially; frontoclypeus with an obtuse raised area; labrum convex apically; gena about 1/3 as deep as eye. Antenna 3/4 as long as body, moderately stout; segment 1 feebly arched, fairly stout; segment 2 about 3/4 as long as 1; 3 about 1/4 longer than 1; 4 subequal to 3; 5-10 decreasing slightly; 11 about as long as 8. Prothorax  $2 \times$  as broad as long, subrectangular; anterior margin straight; basal margin feebly sinuate, slightly concave at center and curved slightly forward toward side; lateral margin subevenly convex, apex only slightly narrower than base; anterior corner fairly distinct with slightly projecting setigerous tubercle; basal angle rounded obtuse, with barely projecting setigerous tubercle; disc raised along anterior border and in anterolateral portion and somewhat raised near side of basal margin and very strongly depressed over most of central portion, depressed area approaching fairly close to anterior margin at middle and fairly close to side at middle, but not so close to basal

margin in central portion where there is a slight cavity behind borders of central swelling; surface rather sparsely punctured on raised areas, much more finely punctured on depressed areas. Scutellum fairly narrow, truncate apically. Elytron  $3.5 \times$  as long as broad, subevenly convex at side and broadly rounded apically; femoral margin only slightly expanded but with a swollen narrow longitudinal ridge parallel to it; epipleuron quite wide and almost of uniform width from near base to somewhat behind middle and then narrowing and extending to extreme apex and almost to sutural angle; disc rather evenly convex and deeply impressed with rather close irregular punctures, the punctures mostly slightly larger than interspaces and numbering about 25 in an approximate row across middle. Ventral surfaces somewhat shiny and very feebly and sparsely punctured, more densely granulose-punctate on metepisternum; pygidium rounded apically; last abdominal sternite with a semicircular apical depression reaching to middle of sternite and with fine rugosities around depression. Legs moderately slender; hind tarsal segment 1 as long as 2+3, 2 slightly longer than 3 and last as long as 1. Length 4.0 mm; breadth 2.1.

*Female*: Pronotum more reddish on central portion; elytron almost entirely reddish ochraceous, but with marginal swelling slightly pitchy; legs distinctly reddish ochraceous;

last abdominal sternite rounded truncate apically and rather sparsely punctured near apex. Length 4.2 mm; breadth 2.25.

DISTRIBUTION: W. China (W. Hupeh).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 22. VIII. 1948, Gressitt & Djou; allotype ♀ (BISHOP 3271), Liang-hou-keu, Lichuan Distr., 10. IX. 1948, Djou.

Differs from *limbata* Chen in having occiput rougher and more pubescent, pronotum blackish anteriorly and much more strongly impressed and smoother in central portion of disc; aedeagus less twisted and asymmetrical than in *limbata*.

## 83. Pyrrhalta kwangtungensis Gressitt and Kimoto, n. sp. Fig. 115, b.

*Male*: Ochraceous, in part marked with pitchy or blackish: head pale ochraceous, very slightly duller on sides of occiput; mandible blackish apically and palpi partly pitchy; antenna ochraceous, very slightly duller distally; pronotum ochraceous with an oval black spot on each side not quite touching external margin and approaching base but quite distant from anterior margin; scutellum and elytron pale ochraceous; ventral surfaces reddish ochraceous; legs ochraceous with apices of femora and extreme bases of tibiae pitchy black; fore tarsus largely pitchy and apex of fore tibia pitchy reddish. Body moderately clothed above with pale silvery buff pubescence; ventral surfaces with slightly thinner pubescence on tibiae and tarsi.

Head nearly as broad as prothorax, somewhat flattish above; occiput rather closely and subrugosely punctured; post-antennal swellings subtransverse, nearly impunctate; interantennal area strongly ridged medially, the ridge connecting with subtransverse ridge of frontoclypeus; labrum nearly transverse anteriorly; gena about 1/6 as wide as eye. Antenna barely 3/5 as long as body, moderately stout; segment 1 slightly arched and feebly punctured; 2 nearly 2/3 as long as 1; 3 longer than 2, but shorter than 4; 4–10 decreasing slightly and regularly in length; 11 about as long as 5. Prothorax slightly more than  $2 \times$ as broad as long, suboblong; anterior margin nearly straight; basal margin barely convex in central portion and curving obliquely forward toward side; lateral margin unevenly convex, broadest well anterior to middle and subobtusely rounded, but nearly straight in posterior portion; anterior angle distinct, with setigerous tubercle slightly projecting; basal angle obtuse, with setigerous tubercle distinct, but not projecting; disc subevenly convex, very slightly depressed near middle of each side; surface rather evenly impressed with medium sized punctures which are slightly deeper towards side. Scutellum triangular, slightly convex and rugose-punctate. Elytron slightly more than  $3 \times as$  long as broad, slightly convex at side and widest just behind middle, broadly rounded apically; lateral margin somewhat expanded and slightly flattened; epipleuron fairly wide basally, slightly narrower beyond basal 1/4 and gradually narrowed and disappearing just after beginning of apical 1/4; disc subevenly convex, slightly swollen near base, impressed with rather dense punctures which are slightly smaller than those on pronotum and with interspaces in part slightly rugose. Ventral surfaces somewhat granulose or finely corrugated on side of metathorax, much smoother on central portion of metathorax, and rather finely punctured on abdomen; pygidium rounded apically; last abdominal sternite with a distinct subtriangular emargination about 1/3 as long as segment. Aedeagus slender, gradually tapering to an

acute tip and slightly arched in lateral view and gradually and slightly widening in dorsal view to a short distance before apex, apex rather suddenly tapering and subacutely rounded. *Legs* moderately stout; hind tarsal segment 1 as long as 2+3, and last nearly as long as 1. Length 7.5 mm; breadth 3.9.

*Female*: Last abdominal sternite evenly rounded-truncate apically and moderately punctured. Length 9.0 mm; breadth 4.4.

Paratypes: Length 7.5-8.0 mm; breadth 3.6-4.0.

DISTRIBUTION: S. China (Kwangtung).

Holotype  $\mathcal{F}$  (CAS), Lingnan University Campus, Honam I., Canton, VIII. 1950, Gressitt; allotype  $\mathcal{P}$  (ZMB), Wu-kiu, Lü, Kwangtung, R. Mell; paratype  $\mathcal{P}$  (BISHOP), Fung-wan, N. Kwangtung, 9. V. 1911, Mell; paratype  $\mathcal{F}$  (ZMB), Lo-fau San, 6. VIII. 1909, Mell; paratype  $\mathcal{F}$  (US), Hong Kong, 16. II. 1909, Bryant & Palmer coll.

Differs from *maculicollis* Motschulsky in being broader, more finely punctured, with epipleuron narrowing and disappearing farther forward, and in being paler, without medial pronotal spot and without dark spot on elytron.

84. Pyrrhalta limbata (Chen), NEW COMBINATION, NEW STATUS& 115, c.

Lochmaea semifulva subsp. limbata Chen, 1942, Notes d'Ent. Chinoise 9: 13 (Shansi: Hoyeping-chan; HOANGHO-PAIHO).

The specimens which agree with original description show a quite different  $\partial$  organ from *semifulva*.

DISTRIBUTION: C. China (Shansi, Hupeh).

HUPEH: 5, Sui-sa-pa, Lichuan, 24–29. VII. 1948, Gressitt & Djou; 1, Hsiaoho, Lichuan, 10. VIII. 1948; 1, Liang-ho-keu, Lichuan, 7. IX. 1948 (CAS, BISHOP).



Fig. 114. a, Pyrrhalta hainanensis n. sp.; b, P. humeralis (Chen); c, P. limbata (Chen).

85. Pyrrhalta lineola (Fabricius), NEW COMBINATION Fig. 115, d.

Crioceris lineola F., 1781, Spec. Ins. 1: 149 (Italy; K $\phi$ BENHAVN).

Galerucella lineola, Weise, 1886, Ins. Deutschl. 6 (4): 626.

Galerucella (Galerucella) lineola, Reitter, 1912, Fauna Germ. 4: 139.—Ogloblin, 1936, Fauna USSR 26, 1: 114, 388 (Europe to Ussuri).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 162.

DISTRIBUTION: Europe, N. Asia, NE China, Sachalin, N. Japan.

KIRIN: 1, Wei-scha-che, V. 1938 (FREY). SACHALIN: 1, M. Hori (FREY).

HOSTS: Salix, Corylus, Alnus (Europe).



Fig. 115.  $\Im$  genitalia. a, Pyrrhalta humeralis (Chen); b, P. kwangtungensis n. sp.; c, P. limbata (Chen); d, P. lineola (Fabricius).

86. Pyrrhalta longipilosa (Chen), NEW COMBINATION

Lochmaea longipilosa Chen, 1942, Notes d'Ent. Chinoise 9:15 (Sikang: Kanting; Yu-ling-kan; Tai-pa; Ac. SIN.).

DISTRIBUTION: W. China (Sikang). No material seen.

# 87. Pyrrhalta luteola (Müller), NEW COMBINATION

Chrysomela luteola Müll., 1766, Mel. Soc. Royal Turin 3: 187.

Galerucella luteola, Reitter, 1912, Fauna Germ. 4: 139.—Liu, 1935, Lingnan Sci. Jour. 14: 636 (Kansu, Shensi, Ordos).

Galerucella (Xanthogaleruca) luteola, Ogloblin, 1936, Fauna USSR 26, 1: 106, 387, figs. 42-44.

DISTRIBUTION: Europe; N. Africa, Siberia; N. China? (Kansu; Shensi; Ordos); N. America. We question the Chinese records.

HOSTS: Ulmus spp.

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## 88. Pyrrhalta maculata Gressitt and Kimoto, n. sp. Fig. 116, a.

*Male*: Reddish ochraceous, marked above with distinct pitchy black spots and with metasternum largely pitchy except near corners and along anterior portion; head with a subtriangular pitchy spot on occiput; pronotum with 3 moderately small rounded oval pitchy black spots spaced across central portion; scutellum pitchy; elytron with 5 moderately large pitchy black spots; 1) subrounded spot on middle of basal portion, not quite touching basal margin, 2) oblong oval spot on lateral declivity behind humerus and nearly reaching to middle, 3) subrounded slightly larger spot on disc near suture and reaching slightly behind middle, 4) large spot on lateral portion just behind middle and not reaching external margin, 5) narrower suboval spot adjacent to suture at beginning of posterior declivity and starting behind middle of 4. Body thinly clothed above with short silvery buff pubescence; more sparsely clothed beneath with suberect silvery golden hairs; legs not very densely clothed with oblique golden buff hairs.

*Head* distinctly narrower than prothorax; occiput uneven, rugose-punctate, depressed in center and raised anteriorly between posterior portions of eyes but medially grooved between swellings; interocular area slightly raised in middle and grooved behind anterior ridge joining with oblique ridges on frontoclypeus; labrum truncate anteriorly; gena about 1/3as wide as eye. Antenna 3/5 as long as body, moderately stout; segment 1 subcylindrical; 2 just over 1/2 as long as 1; 3 nearly as long as 1+2; 4 hardly longer than 2; 4–10 subequal in length; 11 distinctly longer than 4. Prothorax nearly  $2 \times$  as broad as long; anterior margin straight; basal margin feebly concave in central portion, curving obliquely forward toward side; lateral margin unevenly convex, widest just anterior to middle, with anterior corner subrounded and posterior corner slightly projecting; disc with a large shallow concave area on each side and a fairly narrow median depression, anterior portion transversely raised near anterior margin; surface rather closely subreticulate-punctate. Scutellum triangular, convex and rugose-punctate. *Elytron* not quite  $3 \times as$  long as broad, subparallelsided but feebly convex at side and broadly rounded apically, with external margin somewhat flattened and expanded; disc strongly convex, slightly uneven with a depression at beginning of second 1/4 and a suggestion of a raised median line posteriorly and a hori-



Fig. 116. a, Pyrrhalta maculata n. sp.; b, P. metallica n. sp.; c, P. ruficollis n. sp.

zontal swelling around side of apical declivity; surface coarsely and closely rugose-punctate with some of the punctures merged in groups of 2 or 3 between rugae. Ventral surfaces rather smooth and shiny, sparsely and finely punctured; pygidium broad and rounded apically; last abdominal sternite nearly vertical apically, with a deep subtrapeziform depression at center which extends 3/4 length towards base and with sides quite distinct and nearly carinate. Legs not very stout; hind tarsal segment 1 as long as 2+3, 2 nearly  $2 \times$  as long as 3, last about as long as 1. Length 4.2 mm; breadth 2.15.

Female: Dorsal spots slightly larger and rest blackish. Length 4.2 mm; breadth 2.4.

Paratype: Length 4.0 mm; breadth 1.9.

DISTRIBUTION: SE China (Fukien), Taiwan.

Holotype ♂ (BISHOP 3272), Ta-chu-lan, 1000 m, Shaowu Distr., Fukien Prov., 31. III. 1942, T. C. Maa; allotopotype ♀ (BISHOP), 14. VIII. 1946, Maa. One ♂ specimen (CAS), Musha (Wushe), C. Taiwan 1100 m, 19. V. 1932, Gressitt, agrees very closely with holotype.

Differs from *limbata* (Chen) in being much more strongly punctured above, with prothorax less evenly rounded at side and less reddish anteriorly, and with elytron less evenly convex and dorsum spotted.

# 89. Pyrrhalta maculicollis (Motschulsky), NEW COMBINATION

Galleruca maculicollis Motsch., 1853, Etudes Ent. 2:49 (Pekin; ?type lost).—Baly, 1874, Ent. Soc. London, Trans. 1874: 177 (Nagasaki, Yokohama; China; BM?).

Galerucella maculicollis, Weise, 1886, Ins. Deutschl. 6 (4): 628, Anm. (N. China; Amur).— Fairmaire, 1887, Rev. d'Ent. 6: 334 (Pekin).—Jacobson, 1904, Ann. Mus. Petersb. 8: 16.

Galerucella vageplicata Fairmaire, 1888, Revue d'Ent. 7: 154 (Pekin; PARIS).

Galerucella (Xanthogaleruca) maculicollis, Ogloblin, 1936, Fauna USSR 26, 1: 104, 387, fig. 41 (Nanking, Foochow, Hong Kong). (with ab. vittula Ogl., no loc.).—Chûjô, 1942, Mushi 14 (2): 61 (Kwantung); 1957, Kagawa Univ. Fac. Lib. Arts & Ed., Mem. 2 (47): 4 (Kiangsu).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 162.

DISTRIBUTION: SE Siberia, E. China (Liaoning, Hopei, Honan, Kiangsu, Chekiang, Fukien, Kiangsi, Kwangtung).

HOPEI: 1, Peking, VIII. 1913, Schoede (ZMB); 4, Pei-ping, VI. 1932, G. Liu (MCZ). HONAN: 1, Li-kio-chai Forest Sta., 25. IX. 1923, Van Dyke (CAS). CHEKIANG: Kiashing (ZSBS); 3 (ZMB); 1, Hang-chow, 22. V. 1923, Van Dyke (CAS); 1, Ning-po (ZMB); 1, Ning-po, Clermont (FREY). FUKIEN: 1, Yun-ling Shan (ZMB). KIANGSI: 1, Changtsin-cheng (ZMB). KIANGSU: 2 Nanking, 6. VI. 1923, Van Dyke (CAS).

HOSTS: Ulmus spp.

90. Pyrrhalta metallica Gressitt and Kimoto, n. sp. Figs. 116, b & 117, a.

*Male*: Dorsum largely bronzy black, with slight bluish to golden tinges; ventral surfaces largely pitchy reddish with purplish or bronzy tinges; head pitchy reddish anteriorly; antenna largely dull brown, paler on segments 1–3 except for parts of upper portions which are pitchy reddish; coxae and trochanters testaceous; femora testaceous on basal 3/4; remainder of legs largely pitchy brown with bronzy tinge. Body rather sparsely clothed above with oblique golden buff hairs, much finer and sparser on posterior portion of head and

pronotum; ventral surfaces very sparsely clothed with oblique golden buff hairs; legs rather thinly clothed, particularly on femora.

Head as broad as prothorax at apex; occiput slightly swollen on each side, shallowly grooved medially and rather shallowly but somewhat closely punctured; postantennal swellings distinct and subrounded, shiny; interantennal area nearly as broad as an antennal insertion, distinctly grooved medially; frontoclypeus with an oblique fairly sharp ridge on each side and a slight depression at middle; gena about 1/5 as deep as eye. Antenna 3/5 as long as body, slightly stout distally; segment 1 fairly short and subtriangular, feebly punctured; 2 more slender, nearly as long as 1; 3 slightly longer than 1; 3=4=5; 6-10 gradually slightly shorter; 11 about as long as 9. Prothorax slightly more than  $2 \times as$ broad as long; anterior margin moderately and evenly concave; basal margin feebly sinuate. hardly oblique at side of basal margin; lateral margin rather strongly and evenly convex; apex slightly narrower than base and with anterior angle distinctly swollen; posterior angle obtusely rounded; disc largely depressed, particularly along median portion and on large part of side, with anterior margin narrowly raised and anterolateral area strongly raised and feebly punctured, surfaces of depressed areas somewhat wrinkled or feebly punctured and oblique raised area on basal 1/2 of disc rather shiny and quite feebly punctured. Scutellum narrowed and truncate apically, convex and slightly granulose. Elytron not quite  $3 \times$  as long as broad, slightly widened to behind middle and rounded apically; lateral margin moderately expanded and obliquely declivitous; epipleuron gradually narrowed and terminating a short distance before apex; disc subevenly convex, somewhat swollen at top of apical declivity; surface with rather deep largely irregular punctures which are partly arranged in oblique or arcuate lines, about 17 punctures in an approximate row across middle. Ventral surfaces quite finely and sparsely punctured on metasternum and abdomen, rather closely but shallowly punctured on metepisternum; pygidium rounded apically and somewhat granulose; last abdominal sternite with a deep subtriangular emarginate cavity reaching nearly to basal 1/3, the margins of cavity quite sharp and in part hairy. Legs with femora moderately stout and tibiae fairly straight; hind tarsal segment 1 about as



Fig. 117. & genitalia. a, Pyrrhalta metallica n. sp.; b, P. ningpoensis n. sp.; c-e, P. ochracea n. sp. (c, Kiangsi; d, Fukien; e, Kwangtung).

long as 2+3, 2 nearly  $2 \times$  as long as 3, 5 slightly longer than 1. Length 4.6 mm; breadth 2.05.

*Female*: Elytron with a strong greenish tinge basally and largely purplish posteriorly with apical margin testaceous; abdomen testaceous on segments 1–4. Length 5.5 mm; breadth 2.7.

*Paratypes*: Pronotum somewhat violet bronzy; elytron metallic greenish pitchy, somewhat purplish near outer and apical margins. Length 5.6 mm; breadth 2.5.

DISTRIBUTION: W. China (Szechuan, Kweichow).

Holotype & (BISHOP 3273), Nien-hwo-shih to summit, Omei Shan, 2000-3100 m, Szechuan Prov., 10. VIII. 1940, Gressitt; allotype ♀ (USNM), near O-er, Nr. Weichow, 2500 m, 6. VIII. 1933, D. C. Graham; paratype & (LINGNAN), below Shin-kai-sze, 1000-1400 m, Omei Shan, 17. VIII. 1940, Gressitt; paratype & (CAS), Kweiyang, 1000 m, Kweichow Prov., 11. VII. 1940, Gressitt.

Differs from *submetallica* Chen in being almost entirely dark above, with coloration different beneath, with postantennal swellings impunctate and pronotum feebly punctate and more depressed.

## 91. Pyrrhalta nigromarginata (Jacoby), NEW COMBINATION

Galerucella nigromarginata Jac., 1885, Zool. Soc. Lond., Proc. 1885: 743, pl. 46, fig. 10 ("Japan"; BM).

Galerucella (Xanthogaleruca) nigromarginata, Ogloblin, 1936, Fauna USSR 26, 1: 112, 386.— Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 163.

The specimen cited below is the first reported since the type. No material has been seen in collections in Japan.

DISTRIBUTION: Japan (?), Hainan I.

HAINAN: 1, 10-25. III. 1909, Schoede (ZMB).

92. Pyrrhalta ningpoensis Gressitt and Kimoto, n. sp. Fig. 117, b.

*Male*: Body fairly broad and depressed: reddish brown with an ochraceous tinge; dull pitchy brown on antenna with segments 1-2 more reddish; mandible and palpi reddish; femora streaked or spotted with pitchy; tibiae pitchy black; tarsi pitchy black with reddish apices. Body moderately clothed with silvery buff pubescence which is nearly uniform.

Head slightly narrower than prothorax and apex; occiput heavily punctured and rugose with a small callosity on each side of center and another vague one on median line anteriorly; postantennal swellings distinctly raised but rugose-punctate; interantennal area broader than 1 antennal cavity, strongly carinate medially, the carina connecting with transverse carina of frontoclypeus; labrum short and rounded, truncate apically; gena about 1/4 as deep as eye. Antenna barely 3/5 as long as body, moderately stout; segment 1 fairly long, strongly swollen subapically and distinctly punctured; 2 about 3/5 as long as 1; 3 slightly shorter than 1; 4 barely shorter than 3; 4–7 subequal; 8–10 shorter and subequal; 11 as long as 1 and subacute. Prothorax  $1.7 \times$  as broad as long; anterior margin straight; posterior margin strongly sinuate, strongly rounded in anterior 2/3 and widest slightly anterior to middle, becoming nearly straight near basal angle; anterior angle fairly

1B

distinct and with a prominent setigerous tubercle; basal angle slightly rounded and with a moderately prominent tubercle; disc largely convex but somewhat uneven, with a shallow depression just anterior to center, another sublongitudinal one slightly closer to middle than to side and a shallow one just behind middle of side and another just internal to posterior angle; surface rather coarsely rugose-punctate, the punctures somewhat smaller at center and larger towards side and particularly on anterolateral portion. Scutellum subtrapeziform, rounded truncate apically and distinctly punctured. Elytron  $3 \times$  as long as broad, subparallel-sided but very slightly wider at middle, broadly rounded apically; lateral margin distinctly expanded and flattened with an irregular low ridge parallel to edge; epipleuron quite broad basally, distinctly narrowed at end of basal 1/3 and then decreasing in width very gradually until disappearing on apical margin; disc evenly convex and impressed with fairly large deep irregular punctures with interspaces distinctly narrower than punctures. and about 30 punctures in an approximate row across middle. Ventral surfaces very finely rugulose-punctate, subgranulose on metepisternum; pygidium rounded and slightly swollen apically; last abdominal sternite weakly emarginate apically and somewhat corrugate-rugose on surface. Legs moderately stout; hind tarsal segment 1 slightly longer than 2, 2 distinctly longer than 3, last barely longer than 1. Length 8.0 mm; breadth 4.0.

*Female*: Callosity on head somewhat differently placed; last abdominal sternite rounded apically with a very small indentation at extreme apex. Length 3.4 mm; breadth 4.1.

Paratype: Length 8.3 mm; breadth 3.9.

DISTRIBUTION: E. China (Chekiang).

Holotype  $\mathcal{F}$  (Zool. Mus. BERLIN), Ning-po, Chekiang (Tschekiang) Prov.; allotopotype  $\mathcal{P}$  (ZMB), same data; paratype  $\mathcal{P}$  (BISHOP), same data.

Differs from *sericea* Weise in being more oblong, less convex at side, with pronotum longer, more convex and much more rugose, and in having elytron more pubescent and more heavily punctured, with epipleuron wider a short distance before apex.

## 93. Pyrrhalta ochracea Gressitt and Kimoto, n. sp. Fig. 117, c-e.

*Male*: Reddish ochraceous, paler beneath and slightly duller to pitchy brown on upper and distal portions of antenna; slightly duller along median portion of occiput and median and lateral portions of pronotum. Body moderately clothed above with subrecumbent golden buff hairs; ventral surfaces with sparser pubescence; legs moderately clothed with whitish buff pubescence.

Head nearly as broad as prothorax at apex; occiput moderately swollen, slightly depressed medially and rather closely rugose-punctate; post-antennal swellings slightly raised, rugose-punctate, separated by a median groove; interantennal area slightly narrower than an antennal cavity and raised medially, higher anteriorly where ridge joins oblique ridge on frontoclypeus; labrum slightly concave apically; gena barely 1/3 as deep as eye. Antenna 3/4 as long as body, moderately stout; segment 1 rather short, feebly arched, distinctly punctured; 2 fully 2/3 as long as 1; 3 slightly longer than 1; 3-10 decreasing slightly in length; 11 about as long as 4. Prothorax  $1.65 \times$  as broad as long; anterior margin very slightly concave in middle; basal margin very weakly concave at center and curved obliquely forward towards side; lateral margin somewhat irregular, obtusely rounded at widest point well anterior to center and nearly straight from this point to basal angle, slightly convex anteriorly; anterior angle distinct and bearing a fairly prominent tubercle;

basal angle obtuse with a small tubercle and situated some distance from angle with central portion of posterior margin: disc largely depressed across central portion, with a moderately wide anterior raised area parallel to anterior margin and a large posterior lateral coarsely punctured raised area; depressed area somewhat finely and closely rugose-punctate. and subbasal raised area on each side a little more closely rugose-punctate. Scutellum subrounded apically, convex and somewhat rugose. Elytron slightly more than  $3 \times as$  long as broad, weakly convex on lateral margin and broadly rounded apically; lateral margin slightly expanded and with a narrow raised line parallel to edge; epipleuron moderately broad basally and decreasing rather evenly in length and reaching extreme apex and almost attaining sutural angle, quite broad on outer curve of apical portion; disc rather evenly convex, impressed with rather deep fairly close small punctures, roughly 25 punctures in an approximate row across middle. *Ventral surfaces* fairly smooth, finely and sparsely punctured but subgranulose on metepisternum; pygidium rounded apically, last abdominal sternite emarginate and deeply cleft to base in form of a deep V-shaped cavity with edges which are moderately sharp and in part somewhat hairy. Aedeagus asymmetrical but nearly parallel-sided in dorsal view, tapered at extreme apex which is subacute; moderately straight and somewhat gradually tapering in lateral outline but with extreme apex slightly curved and very slender; dorsal opening largely on left side and fairly elongate. Legs moderately slender; hind tarsal segment 1 slightly longer than 2, 2 distinctly longer than 3, last about as long as 1. Length 3.6 mm; breadth 1.8.

*Female*: Last abdominal sternite subtransverse apically with a slight shallow emargination at middle, and surface moderately punctured, and with a slight ridge medially near apex. Length 4.0 mm; breadth 1.8.

Paratypes: Length 3.6-4.2 mm; breadth 1.7-1.8.

DISTRIBUTION: SE China (SE Kiangsi, Fukien).

Holotype  $\mathcal{F}$  (CAS), Hong Shan, 1000 m, SE corner of Kiangsi, 25. VI. 1936, Gressitt; allotopotype  $\mathcal{P}$  (CAS), 15. VII. 1936, Gressitt; 8 paratopotypes (CAS, BISHOP), 15–29. VI, 16. VII, Gressitt. One  $\mathcal{P}$  paratype (BISHOP), Sui-pei-kai, Shaowu, 3. V. 1942, T. C. Maa. An additional  $3\mathcal{P}\mathcal{P}$  from Shaowu in Fukien, Mo-kan Shan in Chekiang, and Lichuan in Hupeh (CAS) are questionably placed here. Two additional  $\mathcal{F}\mathcal{F}$  from Tsin-leong Shan in Kwangtung (fig. e) and Shaowu in Fukien (fig. d) appear almost identical except for differing aedeagi, and may represent distinct races or species.

Differs from *limbata* Chen in being almost uniformly reddish brown above, with pronotum less depressed and less shiny on disc, and elytron less evenly convex and more densely and more rugosely punctured. Differs from *salicis* n. sp. in being smaller, with pronotum more broadly swollen along anterior margin and elytron with larger punctures.

### 94. Pyrrhalta orientalis (Ogloblin), NEW COMBINATION

Galerucella (Xanthogaleruca) orientalis Ogloblin, 1936, Fauna USSR 26, 1: 102, 390 (E. China: Schan-hai-kwan; BM).—Chûjô, 1942, Mushi 14 (2): 61 (Kwantung).
DISTRIBUTION: NE China (Shantung, Liaoning).

### 95. Pyrrhalta pusilla (Duftschmidt), NEW COMBINATION Fig. 119, a.

Galeruca pusilla Duft., 1825, Fauna Austr. 3: 230 (Europe).

Galerucella (s. str.) pusilla, Reitter, 1912, Fauna Germ. 4: 140.—Liu, 1935, Lingnan Sci. Jour. 14: 637 (Tientsin, S. Shansi, Mukden, Hongkong).—Ogloblin, 1936, Fauna USSR 26, 1: 117, 388, fig. 47, 3.

DISTRIBUTION: Europe; China (S. Shansi, Shantung, Kirin, Liaoning, Hong Kong). LIAONING: 3, Harbin, mid-Sept. 1930, Jettmar (ZMB).

## 96. Pyrrhalta ruficollis Gressitt and Kimoto, n. sp. Fig. 116, c.

*Female*: Ochraceous, slightly more brownish above and more orange beneath, with pronotum and posterior portion of head fairly bright reddish; anterior portion of head pitchy to blackish, blacker on frontoclypeus and gena; antenna dull reddish brown, paler on underside of basal segments; scutellum reddish ochraceous; tibiae pitchy black on external margins; tarsi reddish to slightly pitchy. Body thinly clothed above with short adpressed silvery buff hairs; ventral surfaces less evenly and in part more sparsely clothed; legs moderately clothed with pale buff hairs, more sparsely so on femora.

*Head* nearly as broad as prothorax at anterior end: occiput feebly convex, slightly depressed medially and rather closely and finely punctured; postantennal swellings not very distinct, nearly flat; interantennal area strongly raised medially and continuous with obtuse ridge on frontoclypeus; gena about 1/4 as deep as eye. Antenna 2/3 as long as body, not very stout, but slightly thickened distally; segment 1 slightly arched and fairly shiny; 2 about 3/5 as long as 1; 3 as long as 1, slightly longer than 4; 4-8 subequal; 8-10 slightly shorter; 11 about as long as 8. Prothorax nearly  $2 \times$  as broad as long; anterior margin very slightly and evenly concave; basal margin distinctly and obtusely concave in central portion and curved forward towards side; lateral margin subevenly convex, with apex slightly narrower than base; anterior corner fairly distinct with slightly projecting setigerous tubercle; basal margin obtusely rounded with setigerous tubercle hardly protruding; disc slightly depressed on major part of surface with anterior border area and anterolateral portion distinctly raised and with a slightly raised strip on each side of depressed median line and area on each side of middle of base slightly raised; surface rather finely punctured, indistinctly so on anterior portion of depressed area of disc. Scutellum longer than broad, slightly narrowed and broadly rounded apically, finely punctured. *Elytron* slightly more than  $3 \times$  as long as broad, gradually broadened to slightly behind middle and unevenly narrowed and broadly rounded apically; lateral margin rather feebly expanded and slightly thickened parallel to edge; epipleuron moderately broad basally and gradually decreasing in width to termination on extreme apex; disc evenly convex, smooth, finely and closely punctured, the punctures mostly larger than interspaces and in part tending to form transverse or arcuate rows. Ventral surfaces moderately shiny, very finely wrinkled on metasternum, granulose on metepisternum, and finely punctured or wrinkled on abdomen; pygidium evenly rounded apically; last abdominal sternite broadly rounded apically and somewhat finely and densely punctured near apex. Legs fairly stout and short; hind tarsal segment 1 nearly as long as 2+3, 2 is 1/2 again as long as 3, and last nearly as long as 1. Length 4.5 mm; breadth 2.25.

Paratypes: Length 4.6-5.8 mm; breadth 2.2-2.6.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 23. VII. 1948, Gressitt & Djou; 5♀ paratopotypes (CAS, LINGNAN, BISHOP), 23-25. VII.

Differs from *limbata* Chen in being slightly larger, with antennal segments 1–2 dull instead of pale, pronotum with disc feebly instead of strongly impressed on each side, and elytron with lateral margin less expanded.

### 97. Pyrrhalta salicis Gressitt and Kimoto, n. sp. Fig. 119, b.

Male: Pale ochraceous to fairly bright reddish or pitchy: Head ochraceous, reddish on mandible; antenna pitchy black, paler on undersides of segments 2–5 and apices of basal segments; pronotum ochraceous, in part tinged with reddish or pitchy; scutellum reddish with dense pubescence; elytron bright reddish brown; ventral surfaces testaceous, in part somewhat pitchy on transparent portions; legs ochraceous. Body moderately clothed above with silvery buff pubescence, more sparsely so on pronotum. Ventral surfaces more thinly clothed and pale; legs moderately clothed but sparsely so on femora.

Head barely broader than apex of prothorax; occiput subevenly convex, slightly grooved medially in anterior portion and rather coarsely and finely rugose-punctate; postantennal swellings fairly large, grooved medially and towards side; interantennal area distinctly raised and fairly narrow, highest at center; frontoclypeus with ridge arcuate and rather weak; labrum rounded apically; gena about 1/3 as deep as eye; eye nearly round in outline. Antenna 3/4 as long as body, moderately stout; segment 1 subcylindrical, feebly arched and weakly punctured; 2 about 2/3 as long as 1; 3 slightly longer than 1; 4 and 5 about as long as 3; 6-10 gradually shorter; 11 slightly longer than 3. Prothorax nearly  $2 \times$  as broad as long, suboblong; anterior margin straight and raised; basal margin weakly concave at center, curved forward toward side; lateral margin convex, with central portion slightly protruding; anterior and posterior angles obtusely rounded, with slightly projecting setigerous tubercles; disc largely depressed in central portion with border narrowly raised along anterior margin and anterolateral portion distinctly raised and rather coarsely punctured; central depressed portion slightly irregular, deeper along median line and on middle of outside, somewhat densely and not very heavily punctured, raised on each side near base. Scutellum narrowed and truncate apically, convex and finely granulose. Elytron slightly more than  $3 \times as$  long as broad, subparallel but very weakly convex in central portion of side, broadly rounded apically; lateral margin rather weakly expanded with a somewhat swollen ridge parallel to margin; epipleuron moderately broad, of almost uniform width from near base to fairly near apex, decreasing more rapidly in width than apical margin and very nearly reaching sutural angle; disc rather evenly convex, impressed with rather fine and very dense irregular punctures, the interspaces slightly rugose. Ventral surfaces largely shiny, very finely and sparsely punctured, subrugose on metepisternum; pygidium rounded apically; last abdominal sternite emarginate and deeply impressed apically with a subtriangular indentation on apical 2/3 and edges of indentation rather straight and subacute and very slightly hairy. Aedeagus rather strongly asymmetrical, somewhat sinuate in dorsal view and fairly straight and very slender in lateral view; apical portion nearly straight on right side, quite convex on left side and bluntly acute at apex, with terminal opening long and slender. Legs moderately slender; hind tarsal segment 1 slightly longer than 2, 2 is  $1.5 \times$  as long as 3, last slightly longer than 1. Length 4.2 mm; breadth 2.2.

*Female*: Last abdominal sternite evenly rounded apically and moderately punctured and finely grooved medially near apex. Length 4.6 mm; breadth 2.35.

Paratypes: Length 4.2–5.0 mm; breadth 2.0–2.3.

# DISTRIBUTION: W. China (W. Hupeh).

Holotype ♂ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., near Szechuan border, 25. VII. 1948, Gressitt & Djou; allotopotype ♀ (CAS), same data; 11 paratopotypes (CAS, BISHOP, LINGNAN), 1000–1300 m, 25. VII–20. VIII. 1948.

Differs from *limbata* Chen in being entirely pale above, in having occiput less shiny, pronotum less depressed and less shiny on disc, and elytron more closely and more rugosely punctured.

98. Pyrrhalta sericea (Weise), NEW COMBINATION Figs. 118, a & 119, c.

Galerucella sericea Weise, 1889, Soc. Ent. Ross., Horae 23: 569, 622 (Kan-ssu, Sze-tschuan; ZMB).



Fig. 118. a, Pyrrhalta sericea (Weise); b, P. sikanga n. sp.; c, Galerucella grisescens (Joannis).



Fig. 119. & genitalia. a, Pyrrhalta pusilla (Duftschmidt); b, P. salicis n. sp.; c, P. sericea (Weise); d, P. sulcatipennis (Chen).

Galerucella (s. str.) sericea, Ogloblin, 1936, Fauna USSR 26, 1: 113, 388.

DISTRIBUTION: China (Kansu, Szechuan, Hupeh, Fukien, Chekiang).

HUPEH: 6, Sui-sa-pa, Lichuan, W. Hupeh, 19. VIII-17. IX. 1948, Gressitt & Djou (CAS). FUKIEN: 4, Ta-chu-lan, Shaowu, 31. III. 1942, Maa (CAS, BISHOP). CHEKIANG: 1, Mo-kan Shan, 20. VIII. 1927, Wright (CAS). N. VIETNAM: 1, Hoa-binh, Tonkin, Cooman (FREY).

# 99. Pyrrhalta sikanga Gressitt and Kimoto, n. sp. Fig. 118, b.

*Male*: Pale testaceous yellow; tip of mandible reddish pitchy; eye reddish brown; metasternum dark reddish brown; abdomen largely dull brown on abdominal segments 1-4 except posterior margins; tibiae reddish brown on outer borders; antenna reddish brown, somewhat pitchy along upper border and paler beneath with most of segments 1-5 quite pale. Body moderately clothed above with oblique silvery buff hairs, sparsely clothed beneath with similar hairs which are nearly lacking in central portion of metasternum; legs moderately clothed, very thinly so on femora.

*Head* as broad as prothorax at apex; occiput very long, distinctly grooved medially, somewhat sparsely but distinctly punctured; postantennal swellings somewhat transverse, impunctate and separated by a median groove; interantennal area fully as broad as diameter of an antennal insertion, somewhat level but depressed in center with a slightly raised median ridge; anterior portion raised and joining strong arcuate transverse ridge of frontoclypeus; labrum somewhat obtusely rounded anteriorly; gena about 1/4 as deep as eye. Antenna not quite 3/5 as long as body, not very stout, segment 1 somewhat arched, shiny and feebly punctured; 2 nearly as long as 1; 3 as long as 1 and equal to 4; 5 slightly longer; 6 about as long as 4, 6-10 decreasing very slightly in length; 11 about as long as 7. Prothorax 2.3  $\times$  as broad as long; anterior margin somewhat strongly and obtusely truncate anteriorly; basal margin weakly sinuate, shallowly concave at middle and slightly curving forward toward lateral margin; apex distinctly narrower than base, with anterior angle somewhat rounded and without a projecting tubercle; basal angle obtusely rounded and with a weak tubercle; lateral margin weakly convex and slightly irregular, widest just anterior to center; disc in part depressed particularly along median line, on central portion of each side, and transversely parallel to central portion of basal margin, anterior margin with a narrow raised strip and anterolateral portion swollen and distinctly punctured, remainder of surface irregularly punctured and in general more closely and finely punctured in depressed areas, with sinuate oblique raised portion on each side of middle. Scutellum fairly long, weakly narrowed posteriorly and rounded truncate apically, surface somewhat convex and finely punctured. *Elytron* slightly more than  $3 \times as$  long as broad, feebly convex at side and broadly rounded apically; lateral margin slightly expanded and with a distinct swollen ridge parallel to margin; epipleuron moderately broad basally but decreasing in width fairly gradually and distinct to within a short distance of apical area; disc rather evenly convex, densely impressed with regular moderate punctures, nearly 30 punctures in an approximate row across middle. Ventral surfaces rather smooth and shiny, feebly punctured and strongly convex on central portion of metasternum, coarsely punctured on metepisternum; abdomen finely punctured and somewhat wrinkled; pygidium rounded apically and slightly curved forward at tip; last abdominal sternite with border concave and with a deep semicircular emargination at center which nearly reaches basal exposed portion, borders of depression fairly sharp and hairy. Legs not very stout; hind tarsal segment 1 longer than 2, 2=3, last slightly longer than 1. Length 6.2 mm; breadth 3.0. *Paratype*: Length 6.6 mm; breadth 3.2.

DISTRIBUTION: W. China (Sikang).

Holotype & (U.S. NAT. MUS.), Ta-Tsien-lu, 2600 m, 16. VIII. 1930, D. C. Graham; paratype & (BISHOP), Lu-ding-chiao, 1700 m, 18. VIII. 1930, Graham.

Differs from *limbata* Chen in being larger, much paler, with less evenly depressed pronotum and with larger and less crowded punctures on elytron, and from *salicis* n. sp. in being larger and paler, with prothorax feebly rounded instead of obtuse at side.

100. Pyrrhalta subaenea (Ogloblin), NEW COMBINATION

Galerucella (Xanthogaleruca) subaenea Ogloblin, 1936, Fauna USSR 26, 1: 102, 389 (Se-Tchouen: Siao-tshin-ho betw. Za-mi & Ta-pa; ?Moscow).

DISTRIBUTION: W. China (Sikang, Yunnan).

YUNNAN: 1, Soling-ho River Valley (FREY).

101. Pyrrhalta submetallica (Chen), NEW COMBINATION

Lochmaea submetallica Chen, 1942, Notes d'Ent. Chinoise 9: 14 (Szechuan: Pehpei; Ac. SIN.).

DISTRIBUTION: S. China (Szechuan, ?Kwangtung).

KWANGTUNG: 1, Tsha-jiu San, 5. V. 1911, Mell (ZMB). This identification is not certain.

102. Pyrrhalta sulcatipennis (Chen), NEW COMBINATION

Galerucella sulcatipennis Chen, 1942, Notes d'Ent. Chinoise 9: 18 (Szechuan: Omei Shan; U. NANKING).

DISTRIBUTION: W. China (Szechuan, Hupeh, Yunnan).

SZECHUAN: 1, Ning-yuen-fu, 2200 m, VII. 1928, Graham (US). HUPEH: 7, Sui-sa-pa, Lichuan, VIII. 1948, Gressitt & Djou (CAS); 2, Hsiao-ho, Lichuan, 11. VIII. 1948; 3, Liang-ho-keu, Lichuan, 1. IX. 1948. YUNNAN: 1, So-ling-ho River Valley (FREY).

103. Pyrrhalta tenella (Linnaeus), NEW COMBINATION

Chrysomela tenella L., 1761, Fauna Suec., ed. 2, 171 (Sweden).

Galeruca tenella, Joannis, 1866, Abeille 3: 81, 93.

Galerucella tenella, Weise, 1886, Ins. Deutschl. 6 (4): 632.

Lochmaea semenowi Rybakow, 1889, Soc. Ent. Ross., Horae 23: 288 (Kukunor, Zaidam).

Diorhabda semenowi, Weise, 1924, Coleopt. Cat. 78: 78.

Galerucella (s. str.) tenella, Ogloblin, 1936, Fauna USSR 26, 1:118, 388 (Mongolia, Kukunor, Gansu).

DISTRIBUTION: C. Asia (Mongolia, Tsinghai, Kansu).

HOST: Spiraea.

104. Pyrrhalta tibialis (Baly), NEW COMBINATION

Galleruca tibialis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 176 (Nagasaki; BM).

Galerucida nigrimembris Fairm., 1888, Soc. Ent. Belg., Ann. 33: 41 (Kiangsi; ?PARIS). New Synonymy.

Galerucella nigrimembris, Jacoby, 1890, Entomologist, 23: 217 (Chang-yang; BM).

Clitena tibialis, Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 161.

DISTRIBUTION: C. China (Kiangsi, Hupeh).

HOST: Celtis sinensis var. japonica (Japan).

105. Pyrrhalta tumida Gressitt and Kimoto, n. sp. Fig. 120.

*Male*: Pale ochraceous, in part pitchy or blackish: head reddish ochraceous, very slightly pitchy in part; mandible pitchy black apically; palpi largely pitchy; antenna pitchy black beyond segment 2, largely reddish to reddish pitchy on 1 and 2; prothorax pale ochraceous, darker to pitchy along anterior borders and slightly reddish at side; scutellum reddish ochraceous; elytron pale ochraceous; ventral surfaces reddish ochraceous; legs reddish brown, pitchy black on apices of femora and tibiae, bases of tibiae and on tarsi. Body rather thinly clothed above with fine adpressed whitish hairs; ventral surfaces more sparsely clothed with slightly longer less recumbent whitish hairs; legs in large part rather densely clothed with whitish hairs.

Head as broad as prothorax at anterior end, fairly long; occiput evenly convex and

rather finely and closely punctured, in part finely rugose; postantennal swellings feeble, finely punctured; interantennal space rather broad, carinate medially, the carina connecting with transverse ridge on short frontoclypeus; labrum rounded truncate anteriorly. Antenna 3/5 as long as body, moderately stout; segment 1 slightly arched and punctured; 2 about 3/5as long as 1; 3 distinctly longer than 2 and shorter than 1; 4 slightly longer than 3; 5 as long as 3; 5-10 decreasing very slightly in length; 11 about as long as 8 and fairly stout. Prothorax fully  $2 \times as$  broad as long; anterior margin slightly and evenly concave; posterior margin slightly sinuate, feebly concave at center and slightly bending obliquely forward toward side; lateral margin subevenly rounded, narrower at apex than at base; anterior corner fairly distinct, with setigerous tubercle slightly projecting and basal corner rounded; disc feebly convex, slightly depressed in central portion and again before and behind middle of lateral portion; surface in part with fairly large shallow punctures and with



Fig. 120. ♂ genitalia. *Pyrrhalta tumida* n. sp.

very fine punctures scattered over much of surface including interspaces between larger punctures which are mostly on basal portion or towards side. Scutellum broadly rounded apically, slightly rugose. Elytron nearly  $3 \times as$  long as broad, very slightly and evenly widened to behind middle and broadly and evenly rounded apically; lateral margin very slightly expanded; epipleuron broad basally and gradually narrowed and disappearing at beginning of apical quarter; disc rather evenly convex; side largely vertical or nearly so; surface with fairly coarse punctures and partly subrugose, the punctures in part tending to form subtransverse lines or arcs and mostly larger than interspaces transversely and in part about as large as interspaces longitudinally. Ventral surfaces granulose or punctate at side of metathorax and nearly smooth on central portion of metasternum; abdomen rather finely and not very closely punctured; pygidium rounded apically; last abdominal sternite with a deep triangular cavity reaching to end of basal 1/3, edges of cavity sharp and hairy. *Aedeagus* relatively short and stout, strongly arched and fairly heavy in lateral view and tapering rather suddenly to acute tip; gradually broadening apically in dorsal view and asymmetrical preapically with sides somewhat evenly and rather strongly tapering to a slightly protruding subacute apex. *Legs* fairly stout; hind tibia somewhat sinuate; hind tarsal segment 1 stout, nearly as long as 2+3, 2 slightly longer than 3, and last barely longer than 1. Length 7.2 mm; breadth 3.6.

*Female*: Slightly paler than type, with apices of femora and bases of tibiae more briefly blackish, tibiae pale apically and tarsi largely reddish to wholly slightly pitchy; last abdominal sternite very feebly emarginate at apex, rather heavily punctured in central pre-apical portion. Length 7.3 mm; breadth 3.5.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♂ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 19. VIII. 1948, Gressitt *et al.*; allotopotype ♀ (BISHOP 3274), 27. VII.

Differs from *tibialis* (Baly) in having antenna stouter, pronotum flatter, much more strongly punctured and elytron much more heavily and less regularly punctured, and subrugose. Differs from *fulva* Lab. in being smaller, more extensively reddish, with antenna darker, and prothorax broader and more heavily punctured.

### Genus Galerucella Crotch

Galerucella Crotch, 1873, Acad. Sci. Philad., Proc. 1873: 55.—Weise, 1886, Ins. Deutschl. 6 (4): 575, 622.—Reitter, 1912, Fauna Germ. 4: 139 (part).—Maulik, 1936, Fauna India, Galeruc., 214 (designated Chrysomela nymphaeae L. as type).

Hydrogaleruca Laboissière, 1922, Rev. Zool. Afr. 10: 32 (type: Chrysomela nymphaeae L.; Europe).

Galerucella (Hydrogaleruca), Ogloblin, 1936, Fauna USSR 26, 1: 119.

### KEY TO CHINESE SPECIES OF GALERUCELLA

 Sutural angle of elytron elongated in form of a tooth; antennal segments 7-10 not more than 1.5 × as long as broad ......2
 Sutural angle of elytron obtusely rounded; antennal segments 7-10 each 2 × as long as broad; glabrous discal area of pronotum strongly widened anteriorly, reaching anterior angles; tip of aedeagus forming a narrow rounded point;

Prothorax 1.5 × as broad as long; glabrous pronotal area rounded laterally at base and not reaching anterior angle; tip of aedeagus lancet-shaped; length 4.8-6.0 mm......107. nipponensis
 Prothorax 2 × as broad as long; glabrous pronotal area reaching side at base;

tip of aedeagus forming a slender triangular point; length 6-8 mm.....108. nymphaea

106. Galerucella grisescens (Joannis) Fig. 118, c.

Galeruca grisescens Joann., 1866, Abeille 3: 98 (Sicily).

Galerucella (Galerucella) grisescens, Reitter, 1912, Fauna Germ. 4: 139.

Galerucella sagittariae ab. grisescens, Weise, 1924, Coleopt. Cat. 78: 59.

- Galleruca vittaticollis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 178 (Nagasaki; BM).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 165. New Synonymy.
- Galleruca distincta Baly, 1874, Ent. Soc. London, Trans. 1874: 178 (Nagasaki; ?BM).—Chûjô & Kimoto, 1961, Pacific Ins. 3: 165 (as syn. of grisescens).

Galerucella distincta, Kolbe, 1886, Archiv Naturg. 52 (1): 230 (Söul, Korea).

Galerucella sagittariae var. distincta, Weise, 1889, Soc. Ent. Ross., Horae 23: 569 (Szetschuan).

Galerucella distincta var. jureceki Pic, 1921, L'Echange p. 2 (China; ?PARIS).

- Galerucella (Hydrogaleruca) grisescens, Laboissière, 1934, Soc. Ent. France, Ann. 103: 69, 73.—Ogloblin, 1936, Fauna USSR 26, 1: 120 (Ordos).
- Galerucella (Hydrogaleruca) grisescens subsp. distincta, Chûjô, 1938, Mushi 11 (2): 164 (Tsingtau).

Galerucella (Hydrogaleruca) distincta, Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 159 (Kankyo-Nando, Korea); 1942, Mushi 14 (2): 61 (Kwantung).

Galerucella reducta Chen, 1942, Notes d'Ent. Chinoise 9:19 (Kwangsi: Yangso, Yaosan; Yunnan: Tauyung; Sikang: Sichang; Ac. SIN.). New Synonymy.

It is possible that some races may have to be segregated later. Specimens from Yunnan have the legs partly darker. However, all the above appear to represent the same species.

DISTRIBUTION: Europe, Siberia, China.

KIRIN: 8, Hunchun, 12. VII. 1942, Nakao (Кімото); 16, Mukden, 22. VII. 1927, Loukashkin (CAS); 1, Weisohn, 30. VII. 1923, Van Dyke (CAS). LIAONING: many, Harbin, 15. IX. 1930, Jettmar (ZMB). HOPEI: 1, Pei-ping, VII. 1932, G. Liu (MCZ). SHANTUNG: 2, Tsingtau, Glaue (ZMB). ANHWEI: 1, Tai-ping-shien, X. 1932, G. Liu; 3, Kiu-hua Shan, IX. 1932, Liu (MCZ). KIANGSU: 1, Suchow-fu, 16. VIII. 1924, Illingworth (BISHOP); 2, Nanking, 10. VI. 1923, Van Dyke (CAS); 1, Shanghai, VI. 1909, Thompson (CAS). CHE-KIANG: Ningpo (ZMB); Kiao-shing (ZSBS). KIANGSI: T'en-gan (ZMB). FUKIEN: 5, Bohea Hills, Chungan, 14. VII. 1939, Maa (CAS); 1, Wu-i, Chungan, 10. VII. 1939, Maa; 2, Liu-tun, Kienyang, 22. VIII. 1942, Maa; 12, Yungan City, 4. IV. 1940, Maa; 1, Niu-ling, Changting, 21. IV. 1941, Maa; Tin-chow, V. 1937, Hoyer (FREY). SZECHUAN: 1, Chungking, VI. 1932, G. Liu (MCZ); 1, Yua-ying Shan, VIII. 1932, Liu (MCZ); 1, Yachow, 3. VII. 1930, Graham (US); 1, Sui-fu, X. 1930, Graham (US); 1, Kuan-hsien, V. 1930, Graham. HUPEH: 1, Leung-ho-kou to Wang-chia-ying, 18. IX. 1948, Djou (CAS); 7, Shiao-ho, 13. VIII. 1948, Gressitt (CAS, BISHOP); 5, between Mo-tai-chi & Sang-mou-ken, 2, Lung-chü-pa, Hupeh-Szechuan border, 19. VII. 1948, Gressitt & Djou; 1, S. of Hwang-mei, 1-6. VIII. 1933, Djou (LINGNAN); 1, Ichang (ZMB). YUNNAN: 10, Kunming, VIII. 1944, C. L. Liu (2001: 58; US); many, Chao-chow-fu, 2300 m, W. Yunnan, 21. IX. 1914, Mell (ZMB). KWANG-TUNG: 1, Canton, 23. V. 1934, Yeung (LINGNAN); 15, Yim-na Shan, 10-15. VI. 1936, Gressitt (CAS); 1, Hong Kong, 1909, Thompson (CAS); 3, N. River, V. 1909, Mell (ZMB). HAI-NAN: 1, No-doa, 18-22. III. 1935, To (LINGNAN). SIBERIA: 5, Okeanskya, VIII. 1923, Cockerell (US). VIETNAM: Hoa-binh, Tonkin, Cooman (FREY).

HOSTS: Polygonum spp., Rumex spp., Fragaria chiloensis var. ananassa (Duchesne) (Japan). Lysimachia vulgaris, Hydrocharis morsusranae (Europe).

## 107. Galerucella nipponensis (Laboissière)

Galleruca sagittariae, Baly, 1874, Ent. Soc. Lond., Trans. 1874: 178 (Hiogo).

Hydrogaleruca nipponensis Lab., 1922 (1 Jan.), Rev. Zool. Afric. 10: 120, nota (Japan; ?PARIS).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 164.

Galerucella paludosa Weise, 1922 (12 Oct.), Tijdschr. Ent. 65: 68 (Kioto).

Galerucella (Hydrogaleruca) nipponensis, Ogloblin, 1936, Fauna USSR 26, 1: 126, 389, figs.
52a, 54 (SE Siberia, Korea).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 160 (Keiki-Do, Korea).

DISTRIBUTION: Japan, Korea, SE Siberia.

HOSTS: Brasenia Schreberi J. F. Gmel., Ludwigia ovalis Miq., Lycopus lucidus Turcz, Trapa japonica Flerov. (Japan).

108. Galerucella nymphaea (Linnaeus)

Chrysomela nymphaea L., 1758, Syst. Nat. ed. 10, 376 (Europe).

Galerucella nymphaeae, Weise, 1886, Ins. Deutschl. 6 (4): 622.—Maulik, 1936, Fauna India, Galeruc., 214.

Hydrogaleruca nymphaeae, Laboissière, 1922, Rev. Zool. Afric. 10: 32.

Galerucella (Hydrogaleruca) nymphaeae, Ogloblin, 1936, Fauna USSR 26, 1: 122, 389, figs. 52:2, 53 (Ordos, Amur, Ussuri).

DISTRIBUTION: Europe, C. and NE Asia, Mongolia, N. America.

HOSTS: Nuphar luteum, Nymphaea alba (Europe).

# Tribe LUPERINI

# Luperini, Group 1

### Genus Merista Chapuis

Merista Chapuis, 1875, Gen. Col. 11: 224, 228 (type: Galleruca sexmaculata Kollar & Redt.). —Harold, 1880, Stett. Ent. Ztg. 41: 144.—Weise, 1922, Tijdschr. Ent. 65: 68.—Maulik, 1936, Fauna India, Galeruc., 141.

## Key to Chinese species of Merista

1.	Elytron uniformly pale	2
	Elytron marked with bands or spots	3
2.	Body green or blue with reddish brown elytron; length 12-15 mm (Baly, 1861; N.	
	India) dohrn	ni*
	Body black with pale vellow elvtron; body slender; length 9 mm 109, elonga	ita

 Elytron with narrow transverse metallic bands which are sometimes broken into spots and a small preapical dark spot; suture pale; length 10-12 mm...110. fraternalis Elytron with 2 basal spots, some median bands and an apical spot; length 11.513.5 mm (Harold, 1880; N. India, Tibet border) .....fallax\*

109. Merista elongata Jacoby

Merista elongata Jac., 1898, Soc. Ent. Belg., Ann. 42: 190 (Thibet; ?BRUXELLES). DISTRIBUTION: W. China (Tibet).

110. Merista fraternalis (Baly) Fig. 121, a.

Leptarthra fraternalis B., 1879, Cist. Ent. 2: 455 (The plains, Assam; BM).

Merista yunnanensis Laboissière, 1922, Soc. Ent. France, Bull. 1922: 101 (Peyen-tsin; ?PARIS). New Synonymy.

Merista fraternalis, Weise, 1922, Tijdschr. Ent. 45: 68.—Maulik, 1936, Fauna India, Galeruc., 146 (Burma, Yunnan).

Merista fraternalis var. yunnanensis Maulik, 1936, l. c. (Yunnan; BM). Homonym; New Synonymy.

DISTRIBUTION: Assam, Burma, SW China (Yunnan).

YUNNAN: 4, Ma-chang, 1000 m, W. Yunnan (US).



Fig. 121. a, Merista fraternalis (Baly); b, Trichocerophysa latifascia n. sp.

## Genus Trichocerophysa new genus

*Luperini*: Head about as broad as prothorax; frons short and raised; labrum feebly emarginate apically, with a group of setigerous pores on each side: maxillary palp short, with last segment largest and subconical; gena much shorter than eye; eye broad; antennal insertions as widely separated as width of one insertion; antenna with segment 2 more than

1/2 as long as 1, 3 longer than 2 and 4 about as long as 1; prothorax margined on all sides, concave on much of center of disc, more than  $2 \times as$  broad as long; elytron long, entirely covered with hairs, finely and irregularly punctured, with external margin expanded and epipleuron of moderate width and extending to apex; anterior coxal cavities adjacent with intercoxal process not visible between, but closed behind; mid coxae narrowly separated by mesosternum; hind coxal cavities narrowly separated by angulate extention of basal abdominal segment; last abdominal sternite angularly emarginate apically; legs moderately stout with tibiae unspined and hind tarsal segment 1 about as long as next 2 combined; tarsal claws bifid in both sexes.

Type species: Trichocerophysa latifascia n. sp.

This genus differs from *Apophylia* in having gena shorter, postantennal swellings broader, occiput, pronotum and elytron less heavily punctured, elytron with more expanded margin and broader and more horizontal epipleuron, and fore coxal cavities closed behind.

## KEY TO SPECIES OF TRICHOCEROPHYSA

Antennal segment 3 about $1.5 \times$ as long as 2, much shorter than 1; pronotum with a
broad oblique depression on each side of disc and median groove not always
clearly continuous; frons short111. latifascia
Antennal segment 3 is $2.5 \times$ as long as 2, slightly longer than 1; pronotum with a
narrow transverse depression on each side of disc and median groove continuous;
frons long112. hainana
-

## 111. Trichocerophysa latifascia Gressitt and Kimoto, n. sp. Fig. 121, b.

Male: Testaceous to dark pitchy brown: Head and prothorax pale testaceous to slightly reddish; antenna ochraceous basally and gradually becoming dull brown apically; scutellum pitchy black; elytron dark pitchy brown to nearly black with a broad testaceous band covering slightly more than central 1/3; ventral surfaces partly testaceous, dark pitchy brown in hind thorax and on central portions of abdominal segments; legs ochraceous. Body clothed with fairly fine subadpressed pale hairs above but with very few on pronutum; antenna moderately clothed with subadpressed pale hairs and a few suberect ones; ventral surfaces and legs thinly to moderately clothed with subadpressed pale golden hairs.

Head slightly narrower than prothorax; occiput feebly swollen, slightly uneven, with some shallow punctures and a feeble median depression; postantennal swellings large, oblique anteriorly and moderately swollen; interantennal area slightly wider than an antennal insertion, raised medially and continuous with strongly raised transversely obtuse portion of frons; labrum slightly emarginate apically; gena hardly 1/10 as deep as eye; eye subovate, more convex anteriorly than posteriorly, strongly swollen. Antenna 4/5 as long as body, moderately stout; segment 1 moderately arched, broadened apically; 2 nearly  $2 \times$  as long as broad; 3 nearly  $2 \times$  as long as 2;4 nearly as long as 1, slightly thicker apically; 4-10 decreasing slightly in length; 7–9 somewhat broadened and callous beneath; 11 distinctly longer than 10 and than 1. Prothorax 1/2 as long as broad; subtransverse anteriorly; weakly convex basally; slightly sinuate laterally and becoming somewhat broader anterior to middle; anterior angle moderately raised and weakly projecting; basal angle obtusely rounded; disc largely concave on central portion with a large strongly concave area extending obliquely slightly forward on each side and with median area less depressed but

slightly deeper near anterior and posterior margins; surface weakly and for most part sparsely punctured. Scutellum much longer than broad, narrowed and rounded apically, somewhat convex and finely punctured. Elytron nearly  $4 \times as$  long as broad, moderately widened in posterior 3/5, broadly rounded apically and with sutural angle rounded; lateral margin expanded slightly; epipleuron not very wide basally, moderately narrowed at end of basal 1/4 and more gradually narrowed posteriorly and disappearing on apex with width just before apex not much less than width before middle; disc subevenly convex, nearly vertical at side and slightly raised parallel to and above lateral margin; surface covered with very close irregular punctures, with more than 30 in an approximate row across middle, and also with 2 or 3 vague sublongitudinal raised lines. Ventral surfaces moderately shiny, not very distinctly punctured; last abdominal sternite subtruncate apically. Legs moderately stout and short; femora fairly flat; hind tibia nearly straight; hind tarsal segment 1 as long as 2+3 and slightly longer than last. Length 4.2 mm; breadth 2.05.

*Female*: Elytron broader, broadening after basal 1/4; antenna more slender, not distinctly callous beneath; last abdominal sternite somewhat produced and subtruncate apically. Length 4.6 mm; breadth 2.4.

Paratypes: Length 4.8-4.3 mm; breadth 2.0-2.4.

DISTRIBUTION: SW China (Kweichow).

Holotype  $\mathcal{F}$  (Mus. G. FREY), "Kiautschau, China"; allotopotype  $\mathcal{P}$  (FREY), same data; 4 paratopotypes (FREY, BISHOP), same data.

Differs from typical species of *Cerophysa* in lacking a greatly swollen antennal segment 8, in having pronotum margined anteriorly and grooved medially, and elytron closely clothed with adpressed hairs.

112. Trichocerophysa hainana Gressitt and Kimoto, n. sp.

*Male*: Pale reddish ochraceous to dark pitchy brown; head and pronotum reddish ochraceous; antenna dark brown, paler on basal 3 segments and pale ochraceous on segment 1; scutellum reddish brown; elytron dark reddish brown, nearly pitchy black on basal 1/4; ventral surfaces pitchy brown, paler anteriorly and in middle of metasternum; legs reddish brown, darker on hind femur; coxae and trochanters ochraceous. Body moderately clothed above with subadpressed auburn hairs, nearly lacking on pronotum; antenna moderately clothed with short oblique reddish brown hairs; ventral surfaces and legs thinly to moderately clothed with subadpressed reddish brown hairs.

Head nearly as broad as prothorax; occiput weakly convex, somewhat irregular, with some shallow punctures and a slight depression at middle of anterior portion; postantennal swellings distinctly raised, rarely feebly grooved between them; interantennal area slightly broader than an antennal insertion, moderately raised; frons rather long, shallowly depressed on each side of a narrow median ridge; gena nearly 1/4 as deep as eye; eye broadly ovate, strongly swollen. Antenna nearly as long as body, fairly slender; segment 1 slender basally, thickened apically and moderately arched; segment 2 nearly  $3 \times$  as long as broad; 3 long and slender, slightly longer than 1; 4 a little shorter than 3, slightly oblique apically; 5 barely shorter than 4, hardly oblique apically; 4-10 decreasing slightly in length; 11 slightly longer than 10. Prothorax a little more than 3/5 as long as broad; anterior margin somewhat convex but truncate at middle; basal margin deeply convex; lateral margin moderately and subevenly convex; anterior angle slightly swollen and rounded;

basal angle rounded-obtuse; disc somewhat uneven, grooved medially from near apex to near base and with a fairly narrow transverse groove on each side of middle as well as a lesser depression on each side of middle of base and another near posterolateral angle: surface unevenly punctured, impunctate or minutely punctulate on median portion but distinctly punctured on each side of middle and a little less closely punctured toward side. Scutellum narrowed and rounded apically, convex, finely punctured. Elytron  $4 \times as$  long as broad, weakly convex at side, gradually broadened from slightly behind humerus to just behind middle, broadly rounded apically with sutural angle also rounded; lateral margin slightly expanded but side oblique just above margin; epipleuron not very broad basally. gradually and slightly narrowed posteriorly and disappearing on apex: disc subevenly convex, weakly swollen near scutellum; surface finely and closely punctured, the punctures mostly slightly larger than interspaces and numbering at least 30 in an approximate row across middle. Ventral surfaces moderately shiny, weakly punctured on metathorax and finely punctured on much of abdomen; pygidium subacutely produced apically; last abdominal sternite narrowly and angulately emarginate apically. Legs fairly short, slightly thickened; hind tibia nearly straight; hind tarsal segment 1 slightly longer than 2+3 and slightly longer than last. Length 3.5 mm; breadth 1.7.

### DISTRIBUTION: Hainan I.

Holotype & (CAS), Dwa-bi (Tai-pin-tsuen), 325 m, foot of Loi Mother Mt., C. Hainan, 28. VII. 1935, Gressitt.

Differs from *latifascia* n. sp. in being more slender, in having longer and more slender antenna, much longer frons, more longitudinally grooved pronotum, and unicolorous elytron.

### Genus Oides Weber

- Oides Weber, 1801, Obs. Ent., 26 (type: Chrysomela bipunctata F.).—Blackburn, 1896, R. Soc. S. Austr., Trans. 20: 79.—Weise, 1902, Archiv Naturg. 68, 1 (2): 136.—Laboissière, 1922, Soc. Ent. France, Ann. 90: 194.—Ogloblin, 1936, Fauna USSR 26, 1: 145, 395.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 617.
- Adorium Fabricius, 1801, Syst. Ent. 1: 409 (type: Chrysomela bipunctata F.).—Blanchard, 1853, Voy. Pole Sud, Zool. 4: 334.—Boheman, 1859, Eugenie Resa, Col., 157.—Chapuis, 1875, Gen. Col. 11: 156.
- Ochralea Chevrolat, 1837, IN Dejean, Cat. Col. ed. 2, p. 375, ed. 3, p. 399 (Genotype: Adorium flavum Oliver, 1807, monobasic); 1945, IN D'Orbigny, Dict. Univ. Hist. Nat. 6: 5; 1846, loc. cit. 8: 713.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 617.

Boisduvallia (Boisduvallia) Montrouzier, 1855, Soc. Agr. Lyon, Ann. 7: 72.

- Rhombopalpa Chevrolat, 1837, IN Dejean, Cat. Col. ed. 2, 375; ed. 3. 399 (type: Adorium decempunctata Billberg, monobasic); 1845, IN D'Orbigny, Dict. Univ. Hist. Nat. 6: 5.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 617.
- Botanoctona Fairmaire, 1877, Petites Nouvelles Ent. 2 (185): 185; 1879, Mus. Godeffroy, Jour. 14: 113.—Weise, 1902, Archiv Naturg. 68, 1 (2): 136.

# Key to Chinese species of Oides

1. Elytron with discal spots or area of black or metallic ......2

Elytron without distinct black or metallic markings
2(1). Elytral disc with a broad discal stripe or area extending most of elytral length 3
Elytral disc with several spots or a single subterminal dark area 4
3 (2). Elytral disc almost entirely metallic blue or green 114. bowringii
Elytral disc with a broad shiny black stripe less than $1/2$ as broad as elytron;
pronotum with an irregular transverse pitchy mark; elytral epipleuron $1/3$ as
wide as elytron
4 (2). Elytron with several black spots, generally 2: 2: 1
Elytron with a single large subrounded postmedian black spot, occupying about
1/4 area of disc; pronotum unspotted; antenna pitchy in distal 2/3 bipunctata
5 (4). Elytral epipleuron at middle 1/4 as wide as disc; pronotum unspotted; elytron
with 5 distinct subrounded spots, each smaller than spaces between spots
Elytral epipleuron at middle about 1/10 as wide as disc; pronotum with 4 black
spots, each side with a large one near side and a small one near middle;
elytron with 5 large black spots, each more or less rhomboid in shape, and
the last appearing as if representing 2 merged spots 120. leucomelaena
6 (1). Elytral epipleuron less than 1/4 as broad as disc7
Elytral epipleuron about $1/3$ as wide as disc; pronotum and elytron minutely
punctured119. laticlava (part)
7 (6). Pronotum unspotted
Pronotum with 5 red or brownish spots: a rounded one on each side of middle,
a pair close to anterior margin, and one near basal margin opposite scutellum,
the spots sometimes merged and forming an undulating band; ventral surfaces
and legs black; last 7 antennal segments black 123a. ustulaticia
8 (7). Ventral surfaces partly black; body length 10-14 mm9
Ventral surfaces entirely brownish; basal margin of elytron straight; body length
8.5 mm 118. flava
9 (8). Head pale 10
Head largely blackish; elytral punctures of 2 sizes, the larger ones several times
as large as the small ones; antenna, legs and thoracic sterna largely black;
abdomen pale with a moderate-sized blackish spot on middle of side of each
sternite
10(9). Sides of metasternum and abdominal sternites partly black or pitchy 11
Side of metasternum with 2 black spots; abdomen entirely pale; elytron closely
and obsoletely punctured; length 11 mm 115. chinensis
11(10). Elytral punctures minute 122. tarsata
Elytral punctures moderately strong 123. thibetana

# 113. Oides andrewesi Jacoby

Chrysomela bipunctata Fabricius, 1781 (nec Linnaeus 1758), Spec. Ins. 1: 127 ("Cape of Good Hope"; KøβENHAVN); 1792, Ent. Syst. 1, 1: 329.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 618.

Adorium bipunctata F., 1801, Syst. Eleuth. 1: 409.

Oides bipunctata, Weber, 1801, Obs. Ent., 53.-Guerin, 1840, Icon. pl. 49, fig. 2.-Allard,

1963

1889, Soc. Ent. France, ser. 6, 9: 307 (Vietnam).—Weise, 1922, Tijdschr. Ent. 65: 56 (Darjeeling, Bangkok).

Galeruca bipunctata, Olivier, 1808, Entomologie 6: 627, no. 93, pl. 1, fig. 5.

- Oides andrewesi Jacoby, 1900, Soc. Ent. Belg., Mem. 7: 127 (Burma; BM).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 618.
- Oides indosinensis Laboissière, 1927, Soc. Ent. France, Ann. 96: 37 (Cochinchine; Annam, Laos, Tonkin, Assam). New Synonymy.
- Oides bipunctata F. v. andrewesi, Maulik, 1936, Fauna India, Galeruc., 109 (Burma: Tharrawaddy; BM).

DISTRIBUTION: India, SE Asia, Vietnam, Hainan I.

HAINAN: Tai-pin-tsuen (Dwa-bi), Lai-mo-ling, Kiung-shan Distr., IV. 1935, To (LING-NAN); VII. 1935, Gressitt (CAS); Hau-ying-tsuen, Lin-kao Distr., VII. 1932, To; No-kyuchun, nr. Nodoa, III. 1936, for Gressitt (BISHOP).

### 114. Oides bowringii (Baly)

- Adorium bowringii Baly, 1863, Ent. Soc. Lond., Trans. ser. 3, 1: 623 (Hong Kong; BM).— Fairmaire, 1889, Soc. Ent. France, Ann. 58: 74 (Korea, Moupin).
- Oides bowringii, Laboissière, 1919, Soc. Ent. France, Bull. **1919**: 161 ("N. China").—Ogloblin, 1936, Fauna USSR **26**, 1: 149 (Korea, Japan).—Hu, 1937, IN Wu, Cat. Ins. Sin. **3**: 860 (Amoy).—Chûjô & Kimoto, 1961, Pacific Ins. **3** (1): 167.
- Oides elegans Lab., 1919, Soc. Ent. France, Bull. 1919: 161 (Cho-ganh, Tonkin; ?PARIS); 1929, Soc. Ent. France, Ann. 98: 252 (Pe-yen-tsin, Yunnan; Szechuan).—Ogloblin, 1936, Fauna USSR 26, 1: 149, 396. New Synonymy.

In some specimens the suture is completely pale, but in some it is pale only in apical 1/4.

DISTRIBUTION: S. China (Kwangtung, Fukien, Kiangsi, Hupeh, Szechuan, Sikang), Korea, ?Japan.

FUKIEN: Ta-chu-lan, 1000 m, Shaowu, 14. VII. 1946, Maa (BISHOP); Bui-tau, 15. VII. 1928 (AMNH). KIANGSI: 9, Hong Shan (Kwangtung border), 900 m, 25–27. VI. 1936, Gressitt (CAS). KWANGTUNG: Iu-ling-paai, Yao Shan, Lin Distr., 4–6. X. 1934, To (LINGNAN); 7, Yim-na Shan, VI. 1936, Gressitt; 4, Lung-tau Shan, 400 m, 1. VI. 1947, Gressitt; Siu-ping-shek, Tin-tong, Lochang, 7. IX. 1947, Tsang & Lam (CAS). HUPEH: Liang-ho-keu (Leong-ho-kow), Lichuan Distr., Hupeh, 7–8. IX. 1948, Gressitt & Djou; Mo-tai-chi-to Chi-au Shan, 800 m, Szechuan-Hupeh border, 28. VII. 1948, Gressitt & Djou; Sui-sa-pa, 1000 m, Lichuan Distr., VII–IX. 1948, Gressitt & Djou; Hsiao-ho, Lichuan, VIII. 1948, Gressitt *et al.*; Chi-au Shan, 1200 m, 24. IX. 1948, Djou (CAS, BISHOP, LINGNAN). SZE-CHUAN: Kuanhsien, VIII. 1933, Graham (US); King-fu Shan, VIII. 1932, G. Liu (MCZ). SIKANG: Luk Shan & Mu-pin, 1400 m, 27. VI. 1929, Graham; betw. Ya-chow & Mu-pin, 900 m, 23. VI. 1929, Graham (US).

HOSTS: Kadsura japonica (Thunb.) Dunal; Schisandra nigra Maxim.

## 115. Oides chinensis Weise

Oides chinensis Ws., 1922, Tijdschr. Ent. 65: 57 (Fukien; STOCKHOLM).

There is a possibility that this species is a synonym of *tarsata*. DISTRIBUTION: SE China (Fukien).

### 116. Oides chrysomeloides Bates

Oides chrysomeloides B., 1866, Zool. Soc. Lond., Proc. 1866: 355 (Taiwan; BM).—Duvivier, 1884, Leyden Mus., Notes 6: 236 (Hong Kong).

This species is not in the key.

DISTRIBUTION: Taiwan, Hong Kong.

### 117. Oides decempunctata (Billberg)

- Adorium decempunctata Billb., 1808, IN Schönherr, Syn. Ins. 1, 2: 230, note (China; ?STOCK-HOLM).
- Rhombopalpa decempunctata, Redtenbacher, 1868, Reise Novara, Zool. 2, Col.: 206 (Hong Kong).
- Oides decempunctata, Jacoby, 1883, Zool. Soc. Lond., Proc. 1883: 400 (no locality; ?BM).
  —Kolbe, 1886, Archiv Naturg. 52: 230 (Korea: Söul).—Hoffmann, 1932, Lingnan Sci. Jour. 11: 565, pls. 21–22 (biology).—Liu, 1935, op. cit. 14: 634 (Peiping, Lushan, Hangchow, Amoy, Foochow, Taichow).—Ogloblin, 1936, Fauna USSR 26, 1: 148, 396, fig. 61 (Korea, N. China).—Hu, 1937, IN Wu, Cat. Ins. Sin. 3: 860 (Canton).
  —Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 167 (Korea); 1942, Mushi 14: 61 (Kwangtung: Dairen).
- Solanophila gigantea Roubal, 1929, Soc. Ent. Ital., Bull. 61: 96 (Korea; described in Coccinellidae).

DISTRIBUTION: China, as far west as Szechuan, Korea.

KIRIN: Kinshu, T. Kondo, pest of grape (US). HOPEI: Peiping, V. 1935, Chi (BI-SHOP); VII. 1932, G. Liu (MCZ); Pei-tai-ho, VIII. 1914, Sowerby; Tientsin, 1931, G. Liu (MCZ). HONAN: Chi-kung Shan, VIII. 1917, Meyer (US). Shao-wu, Tai Shan, Meyer (US). ANHWEI: Tai-ping-shien, IX. 1932, G. Liu (MCZ). KIANGSU: Nanking, 1920, Blackstone; Chin-kiang, VIII. 1924, Illingworth (BISHOP). CHEKIANG : Hangchow, VI. 1924, Illingworth (BISHOP). FUKIEN: Foochow, Gardner, Kellogg (US); Amoy, VI. 1934, Ling (CAS); Bohea Hills, Chungan, V. 1939, Maa (BISHOP). KIANGSI: Kiukiang (ZSBS). HUNAN: SW Hunan. SZECHUAN: Wen-tang, 350 m, S of Chungking, VI. 1933, Graham (US); Hua-yin Shan, N of Chungking, VII. 1933, Graham; Suifu, X. 1930, Graham (US); Chang-tang-ching, nr. Wanhsien, X. 1948, Djou (CAS); Wanhsien, X. 1948, Djou; Wa Shan, VII. 1925, Graham; Pe-pei, VII. 1948, Gressitt & Djou (CAS); Lungchue-pa, Chang-tang, IX, X. 1948, Gressitt & Djou (CAS). KWANGTUNG: Mei-hsien, V. 1936, Gressitt (CAS); Ting-wu Shan, VII. 1949, Gressitt (CAS); Tin-tong, Lochang, VIII. 1947, for Gressitt (CAS); Chung Shan Park, Hwei-yang Distr., VIII. 1933, Chan (LINGNAN); Shek-ki (ZSBS); Honam I., Canton, VIII. 1939, 1940, etc. Gressitt (LINGNAN). HAINAN: No-doa, VI., Ta-hau, W of Nodoa, VII; Fan-heang, VI. 1935, Gressitt; Leng-moon (Liamui), VIII. 1935, Gressitt (CAS). N. VIETNAM: Tonkin, Brancsik coll. (FREY).

HOST: Vitis vinifera (grape).

### 118. Oides flava (Olivier)

Adorium flavum Oliv., 1807, Entomologie 5: 611, no. 92b is, pl. 1, fig. 5.

Oides inornata Baly, 1879, Cist. Ent. 2: 444 (Assam; BM).

Oides albicans Duvivier, 1884, Leyden Mus., Notes 6: 237.

Oides flava, Maulik, 1936, Fauna India, Galeruc., 118 (India; Malay Peninsula; Sumatra; Java; SE Borneo; Philippines).

DISTRIBUTION : India, Malay Peninsula, Sumatra, Java, Borneo, Philippines, N. Vietnam, Hainan I.

HAINAN: 1, Sam-kwong-ts'uen, Lam-wan-tung, Kiung-shan Distr., 12. VIII. 1935, To (LINGNAN). N. VIETNAM: Hoa-binh, Tonkin, Cooman (FREY).

119. Oides laticlava (Fairmaire)

Adorium laticlavum Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 74 (Kweichow, Moupin; PARIS).

Oides laticlavata, Laboissière, 1929, Soc. Ent. France, Ann. 98: 252, fig. 1 (Yunnan-fu, Pin-fa).—Ogloblin, 1936, Fauna USSR 26, 1: 148, 396 (Szechuan).

Oides epipleuralis, Laboissière, 1929, Soc. Ent. France, Ann. 98: 254, fig. 2 (Formosa; ?PARIS). New Synonymy.

This species is sometimes entirely pale above, which accounts for the new synonymy above.

DISTRIBUTION: SW China (Sikang, Szechuan, Yunnan, Kweichow, Hupeh, Anhwei, Kiangsi, Hunan, Kwangtung), Taiwan.

SIKANG: Moupin. SZECHUAN: Kuanshien, 900 m, VII. 1935, Graham (US): many, Shin-kai-si, 1400 m, Mt. Omei, VIII. 1922, Graham (US); Beh-lu-tin, N of Chengtu, 1800 m, VIII. 1940, Gressitt (LINGNAN). YUNNAN: Chao-tung, VII–VIII. 1934, Graham. KWEI-CHOW: many, Shih-men-kan, VII. 1934, Graham (US). HUPEH: Liang-ho-keu (Leongho-kow), Lichuan, 4. IX. 1948, Djou; Wang-chia-ying to Sui-sa-pa, 1200 m, 21. VII. 1948, Gressitt & Djou; many, Sui-sa-pa, 1000 m, VII–IX. 1948, Gressitt & Djou (CAS, BISHOP, LINGNAN). ANHWEI: Tai-ping-shien, X. 1932, G. Liu (MCZ); Kiu-hua Shan, IX. 1932, G. Liu (MCZ). KIANGSI: Kuling, VII. 1931, Watters. HUNAN: Siu-kwong, Lin-mao Distr., VII. 1934, To (LINGNAN). KWANGTUNG: Cheung-nga San, Lochang, IX. 1947, Tsang; Fong-tong-ping, Hoh-kai-hon, Lin Hsien (Distr.), 4. VII. 1934, To (LINGNAN); Yimna Shan, Mei Hsien, VI. 1936, Gressitt (CAS).

120. Oides leucomelaena Weise Fig. 122, a.

Oides leucomelaena Ws., 1922, Tijdschr. Ent. 65: 58 (Fukien; STOCKHOLM).

DISTRIBUTION: S. China (Fukien, Hupeh, Anhwei).

HUPEH: Sui-sa-pa, 1000 m, VII. 1948, Gressitt & Djou, some on *Schizandra* (CAS, BISHOP). ANHWEI: Kiu-hua Shan, IX. 1932, G. Liu (MCZ). FUKIEN: Kua-tun, Chungan, 16. X. 1941, Lin (BISHOP).

HOST: Schisandra.

# 121. Oides pectoralis (Clark)

Rhombopalpa pectoralis Clark, 1865, Ann. Mag. Nat. Hist. ser. 3, 15: 144 (Siam; BM). Oides pectoralis, Jacoby, 1884, Leyden Mus., Notes 6: 87 (Siam).—Duvivier, 1891, Soc. Ent. Belg., C. R. 35: 45 (Balasor, Malaisie).—Maulik, 1936, Fauna India, Galeruc., 114, fig. 35 (Sikkim, Bengal, Assam, Manipur, Burma, Malay Peninsula, Sumatra, Siam). DISTRIBUTION: NE India, Burma, Malaya, Sunda Is., S. China.

FUKIEN: Ta-chu-lan, 1000 m, Shaowu, 6. V. 1943, Maa (BISHOP). KWANGTUNG: Above Tso-kok-wan, 400 m, Lung-tau Shan, 10. VI. 1947, Gressitt & Lam; summit Lung-tau Shan, 1200 m, 5. VI. 1947, Gressitt & Lam (CAS); Nam-kong-paai, Yao Shan, Yang-shan Distr., 15. X. 1934, To (LINGNAN).

### 122. Oides tarsata (Baly)

Adorium tarsatum Baly, 1865, Ent. Soc. Lond., Trans. ser. 3, 2: 435 (N. China; BM). Adorium sordidum Baly, 1865, *l. c.* (N. China; BM). New Synonymy.

Oides sordida, Ogloblin, 1936, Fauna USSR 26, 1: 147, 396 (China, Se Tchouen).

Oides tarsata, Ogl., 1936, t. c., 147, 395 (Peking).—Hu, 1937, IN Wu, Cat. Ins. Sin. 3: 861 (Soochow, Hangchow).

DISTRIBUTION: China (west to Szechuan, Sikang).

HOPEI: Peiping, VI. 1934, Chi. KIANGSU: Chin-kiang, VII. 1924, Illingworth (Bishop); VI. 1927, Wong. CHEKIANG: many, Hangchow, VI. 1924, Illingworth (Bishop); VI. 1927, Wong. FUKIEN: Tsing-ga-han-pu, Changting, VII. 1941, Maa; Sui-pei-chia, Shaowu, VIII. 1942, Maa. HUPEH: Sui-sa-pa, 1000 m, Lichuan, 30. VII–12. IX. 1948, Gressitt & Djou (CAS); S of Hwang-mei, VIII. 1933, Djou (LINGNAN). HUNAN: Tai-kwong, Linmao Distr., VII. 1934, To (LINGNAN). SZECHUAN: Wen-chuan, V. 1933, XI–XII. 1934, Graham. SIKANG: W of Yachow, 1–2000 m, VI. 1923, Graham; Mu-pin, 1200 m, 1929, Graham (US). KWANGTUNG: Iu-ling-pai, Yao Shan, Lin Distr., IX. 1934, To (LINGNAN).

## 123. Oides thibetana Jacoby

Oides thibetana Jac., 1900, Soc. Ent. Belg., Mem. 7: 128 (Tibet; BM).

DISTRIBUTION: W. China (Tibet).

## 123a. Oides ustulaticia Laboissière

Oides ustulaticia Lab., 1927, Soc. Ent. France, Ann. 96: 41 (Ta-li-fu & Peyen-tsin, Yunnan; ?PARIS).

DISTRIBUTION: SW China (Yunnan).

## Genus Clerotilia Jacoby

Clerotilia Jac., 1885, Zool. Soc. Lond., Proc. 1885: 751(type: C. flavomarginata Jac.; Japan). —Ogloblin, 1936, Fauna USSR 26, 1: 217, 370.

#### KEY TO CHINESE SPECIES OF CLEROTILIA



Fig. 122. a, Oides leucomelaena Weise; b, Clerotilia depressa n. sp.; c, C. bicolor n. sp.

## 124. Clerotilia bicolor Gressitt and Kimoto, n. sp. Fig. 122, c.

Body pale orange testaceous, brilliant golden metallic green on elytron with slight bluish to purplish reflections posteriorly and at side; antenna pitchy black, slightly pale on basal 1/2 of scape and bases of next few segments; legs pale with tarsi and distal 3/4 of tibia pitchy black. Body glabrous above, with a few pale hairs on anterior portion of head; ventral surfaces thinly clothed with small oblique pale hairs; legs with sparse pale hairs on femora and longer goldish hairs on tibiae and tarsi; antenna moderately clothed with fine pale hairs and a few longer oblique ones at apices of segments.

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Head not quite as wide as prothorax, about as long as broad, subrectangular anteriorly; occiput slightly convex, medially grooved to level of posterior borders of eyes; vertex transversely slightly raised between middle portions of eyes, briefly grooved medially; frontoclypeus carinate medially up to a level of upper posterior borders of antennal insertions, in part impunctate; labrum large, not distinctly punctured; mandible smooth, strongly arched, acute apically. Antenna 3/4 as long as body, fairly slender; segment 1 slender, slightly arched; 2 barely 1/2 as long as 1; 3 nearly as long as 1, slightly shorter than 4; 5 barely longer than 3, subequal to 6 and 7 and each slightly shorter; 11 hardly longer than 10, subacute apically. Prothorax  $2 \times$  as broad as long, suboblong, very slightly rounded at side with widest portion slightly anterior to middle and of about same width as anterior border, base slightly narrower; disc fairly even, smooth and shiny with rather widely scattered distinct punctures, the punctures becoming closer near anterior and posterior corners; posterior margin slightly convex and deeply sinuate, distinctly margined; anterior border almost straight in dorsal view. Scutellum fairly large, subequilaterally triangular and hardly punctured. Elytron about  $3.5 \times$  as long as broad, subparallel-sided but slightly wider a little behind middle, broadly and evenly rounded apically; disc closely and heavily punctured, particularly in central portion; basal 1/4 with a fairly distinct swelling centered slightly closer to suture than to humerus and with punctures slightly sparser and largely distinctly smaller than interspaces. Ventral surfaces feebly punctured. Legs fairly long; femora fusiform; tibiae fairly straight; hind tarsal segment 1 nearly as long as 2+3 combined. Length 7.5 mm; breadth 3.4.

Paratype: Length 7.0 mm; breadth 3.2.

DISTRIBUTION: SW China (Yunnan).

Holotype (Mus. G. FREY), Soling-ho River Valley, Yunnan Prov., SW China; paratype, same data.

Differs from *flavomarginata* Jacoby in being considerably larger and in having elytra much more brilliant metallic and much more closely and heavily punctured; differing further in having pronotum more distinctly punctured and antenna more hairy and more slender.

### 125. Clerotilia capitata Chen

Clerotilia capitata Chen, 1942, Notes d'Ent. Chinoise 9 (3): 23 (Kuanhsien, Szechuan; U. NANKING).

DISTRIBUTION: W. China (Szechuan).

126. Clerotilia depressa Gressitt and Kimoto, n. sp. Fig. 122, b.

Body largely metallic bronzy green above with somewhat reddish tinges to pronotum particularly on borders; antenna reddish pitchy brown, in part pale reddish; head anterior to antennal insertions ochraceous; ventral surfaces and legs testaceous. Body nearly glabrous above, with a number of fairly long hairs on anterior portion of head; antenna fairly hairy, with most of hairs oblique or erect and some longer ones at apices of segments; ventral surfaces sparingly clothed with pale pubescence and legs a little more densely clothed with oblique pale hairs.

*Head* slightly narrower than prothorax, about as broad as long, narrowed and rounded anteriorly; occiput with posterior portion moderately convex, finely grooved medially, an-

terior portion set off by an arcuate transverse groove and distinctly raised on each side of median groove; frontoclypeus with median ridge continuing between antennal insertions, and with surface largely impunctate; labrum only moderately large, with a few punctures; mandible shiny, arched and tridentate apically. Antenna as long as body, moderately slender; scape deeply arched, slightly wrinkled on surface; segment 2 barely 1/2 as long as 1; 3 shorter than 1, subequal to 4; 5 nearly as long as 4 and barely longer than 6; 7 equals 6, slightly longer than 8; 8-10 slightly shorter; 11 nearly as long as 1. Prothorax slightly less than  $2 \times as$  broad as long; side distinctly arched, widest slightly anterior to middle and distinctly narrowed to anterior corner; base distinctly narrower than width of apex; disc evenly and feebly convex, very smooth and shiny, very feebly and sparsely punctured. Scutellum rather small, rounded posteriorly. Elytron slender, nearly  $3.5 \times as$  long as broad, subparallel, barely wider behind middle, evenly rounded posteriorly; disc slightly uneven, convex in basal 1/5 near suture and slightly protruding near side at beginning of apical 1/5; rather weakly punctured, punctures in irregular rows in middle portion and quite irregular basally and apically, largest punctures mostly somewhat smaller than interspaces. Ventral surfaces fairly shiny, very finely and irregularly punctured; abdominal sternite 5 fully as long as 3+4, subevenly rounded apically with a very slight brief angular projection at middle of apex of sternite. Legs quite slender; femora and tibiae fairly straight; hind tarsal segment 1 about as long as 2+3 and slightly longer than 5. Length 5.7 mm; breadth 2.65.

DISTRIBUTION: SW China (Kweichow).

Holotype (BISHOP 3275), Kweiyang, 1000 m, Kweichow Prov., 11. VII. 1940, Gressitt. Differs from *flavomarginata* Jac. in having body flatter, almost entirely metallic bronzy green above, antenna slightly more hairy, prothorax widest near middle, elytra rather feebly punctured and legs more slender.

### 127. Clerotilia flavomarginata Jacoby

Clerotilia flavomarginata Jac., 1885, Zool. Soc. Lond., Proc. 1885 : 751, pl. 46, fig. 12 (Japan; BM).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1) : 160 (Honshu, Shikoku, Kyushu; host).

DISTRIBUTION: Japan, E. China (Chekiang).

CHEKIANG: 1, Tung-lu, 22. V. 1926, Wright (CAS); 11, Tien-mu Shan, Reitter (ZMB). HOST: *Rhamnella franguloides* (Maxim) Weberbauer.

# 128. Clerotilia terminata Chen

Clerotilia terminata Chen, 1942, Notes d'Ent. Chinoise 9 (3): 24 (Shensi; Kwangsi; Ac. SIN.).

DISTRIBUTION: Shensi, Kwangsi.

### Genus Aulacophora Chevrolat

Aulacophora Chev., 1837, IN Dejean, Cat. Col. ed. 2, 378; ed. 3, 402.—Duponchel & Chevrolat, 1842, IN d'Orbigny, Dict. Univ. Hist. Nat. 2: 337 (type: Galleruca quadraria Olivier; Europe).—Baly, 1874, Ent. Soc. Lond., Ann. 1874: 489.—Weise, 1886, Ins. Deutschl. 6 (4): 574.—Maulik, 1936, Fauna India, Galeruc., 169.—Hincks, 1949, Ann.

Mag. Nat. Hist. ser. 12, 2: 609; 1950, ser. 12, 3: 87.—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 373.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 609.

Raphidopalpa Chev., 1845, IN d'Orbigny, Dict. Univ. Hist. Nat. 6: 5 (type: Crioceris abdominalis Fab.; Europe).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 620; 1950, op. cit. 3: 88.

Rhaphidopalpa Rosenhauer, 1856, Thiere Andalus., 325 (type: Galleruca foveicollis Lucas; Europe).—Weise, 1924, Coleopt. Cat. 78: 7.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 621.

Ceratia Chapuis, 1876, Soc. Ent. Belg., C. R. 19: C (type: Aulacophora (Ceratia) marginalis Ch.).—Weise, 1924, Coleopt. Cat. 78: 9.—Strand, 1935, Folia Zool. Hydrobiol. 7: 284.

*Triaplatys* Fairmaire, 1877, Petites Nouvelles Ent. 2 (185): 186; 1879, Godeffroy Mus., Jour. 14: 118.

- Orthaulaca Weise, 1892, Deutsche Ent. Zeitschr. 1892: 392 (type: Galeruca similis Oliv.; SE Asia); 1922, Tijdschr. Ent. 65: 205.
- Cerania Weise, 1892, Deutsche Ent. Zeitschr. 1892: 392 (type Aulacophora cornuta Baly; SE Asia).

#### KEY TO CHINESE SPECIES OF AULACOPHORA

1.	Elytron pale or largely pale, sometimes with 2 or more black spots2
	Elytron black, or at least black on entire basal 1/2 6
2(1).	Elytron entirely pale
	Elytron with humerus bearing a small dark spot, or with 2 basal spots and often
	1 or 2 postmedian spots, each group sometimes merged into a large black
	area, but at least leaving pale antemedian and apical areas; pronotum with a
	broad groove; antenna simple; venter clothed with silvery pubescence130. bicolor
3(2).	Scutellum not black; antenna of $\mathcal{J}$ somewhat modified, at least middle seg-
	ments slightly swollen or scape broadened 4
	Scutellum entirely or largely black; in $\mathcal{J}$ side of humerus not distinctly hairy
	and antenna ordinary; legs largely pitchy; length 7 mm 129. almora
4(3).	Antennal scape broadened in $\overline{\sigma}$
	Antennal scape not broadened in $\mathcal{F}$ ; middle segments slightly thickened; pronotal
	groove deep, almost straight; length 6.5-7.0 mm142. yunnanensis
5(4).	In $\mathcal{J}$ antennal scape broadened, interantennal area specially modified, and hume-
	rus not covered with erect hairs; pronotal sulcus sometimes interrupted in mid-
	dle; elytron with suture and margin brown; length 8 mm 133. cornuta (part)
	In $\mathcal{J}$ antennal scape broadened but interantennal area not modified; in $\mathcal{J}$ hume-
	rus covered with erect hairs; length 6.4-7.5 mm 135. femoralis
6(1).	Elytron largely or entirely black
	Elytron black on basal 1/2; body somewhat reddish on remainder, pale beneath;
	pronotal groove distinct and straight; body broad134. cruenta
7(6).	Antenna of $\mathcal{J}$ in part specially modified
	Antenna of $\partial$ not specially modified, but sometimes rather stout
8(7).	Antennal segments 3–5 of 3 strongly broadened
	Antennal segments 3-5 of 3 not modified, but scape broadened and interantennal
	areas specially modified; pronotal sulcus sometimes interrupted in middle;

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1B

	elytron with suture and margin brown 133. cornuta (part)
9(8).	Antennal segment 3 of $\mathcal{J}$ longer than broad, flat and subtriangular 10
	Antennal segment 3 of 3 much broader than long, blade-like internally; legs
	nearly black 137. jacobyi
10(9).	Antennal segment 4 of $\mathcal{J}$ broader than long, quite flat, produced endoapically;
	median ridge of frontoclypeus of $2$ much shorter than scape 141. palliata
	Antennal segment 4 of $\mathcal{J}$ longer than broad, not very flat, incised apically
	and quite hairy around emargination; median ridge of frontoclypeus of $P$
	as long as scape136. frontalis
11(7).	Antenna of $\partial^{1}$ rather slender
	Antenna of $\mathcal{J}$ with segments fairly stout, but not otherwise modified; head
	entirely pale; elytron slightly uneven, not very shiny, with punctures mostly
	1/3 to $1/2$ as wide as interspaces
12(11).	Elytron entirely black
	Elytral apex narrowly bordered with yellow; disc with a bluish tint; tarsi
	black; tibiae black except for bases; pronotal groove straight, deeper at
	side; length 6.0-8.5 mm 139. nigripalpis
13(12).	Legs pale; median lobe of last sternite of $\partial$ transversely oblong 14
	Legs partly or entirely blackish; median lobe of last sternite of $3^{\circ}$ longitu-
	dinally oblong
14(13).	Antenna nearly as long as body; pronotal groove reaching side; length 5-6
	mm 132. coomani
	Antenna $3/4$ as long as body; pronotal groove not touching side; length 6
	mm 131. carinicauda
15(13).	Legs almost entirely black; apex of last abdominal sternite of $\varphi$ sinuate-
	emarginate 140. nigripennis
	Legs with femora and bases of tibiae pale; apex of last abdominal sternite of
	$\Upsilon$ nearly transverse

129. Aulacophora almora Maulik Fig. 123, a.

Aulacophora almora Maul., 1926, Fauna India, Galeruc., 170, fig. 51 (Himalayas, Assam; BM).

Aulacophora similis, Chen & Kung, 1959 (nec Olivier), Acta Ent. Sin. 9 (4): 376, 382 (Chekiang, Fukien, Szechuan, Yunnan).

DISTRIBUTION: Himalayas, Assam, Tibet, S. China, Hainan.

FUKIEN: many, Ta-chu-lan, 1000 m, V, VI, X. 1943, Maa (CAS, BISHOP). KWANG-TUNG: Tin-tong, Lochang, VIII. 1947, for Gressitt (CAS). SZECHUAN: Mt. Omei, 3300 m, V. 1934, Graham (US). "TIBET": F. 4722 (AMNH) probably from Sikang. HAINAN: III. 1909, Schoede (ZMB); Fan-heang, VI. 1935, Gressitt (CAS).

130. Aulacophora bicolor (Weber)

Galleruca bicolor Web., 1801, Obs. Ent., 56 (Sumatra).

Aulacophora bicolor, Baly, 1886, Linn. Soc. Lond., Jour. 20: 3, 4, 19 (Sumatra, Java); 1889, Ent. Soc. Lond., Trans. 1889: 299.—Allard, 1889, Soc. Ent. France, Ann. ser. 6, 8:



Fig. 123. a, Aulacophora almora Maulik; b, A. coomani Laboissière.

308, 320 (Borneo).—Maulik, 1926, Fauna India, Galeruc., 187 (India, Andaman Is., SE Asia, Formosa, Philippines).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 374, 383, fig. 14 (Chin-ping, Yunnan).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 158.
Aulacophora semiopaca Jac., Galeruca sexpunctata Oliv., Aulacophora sexpunctata, Allard, Aulacophora sexnotata Chapuis, teste Maulik, 1926.

DISTRIBUTION : Yunnan, Hainan, Taiwan, Ryukyu Is., Philippines, SE Asia, Indonesia.

HAINAN: Ta-hian (Ta-sian-kwan), 600 m, VI. 1935, Gressitt; Dwa-bi (Taipin), VII. 1935, Gressitt; Liamui (Ling-men), VIII. 1935, Gressitt (CAS, BISHOP). N. VIETNAM: 2, Hoa-binh, W. Tonkin, Cooman (FREY).

HOSTS: Cucurbitaceae.

### 131. Aulacophora carinicauda Chen and Kung

Aulacophora carinicauda Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 379, 386, fig. 8 (Nada, Hainan; Ac. SIN.).

DISTRIBUTION: Hainan I.

132. Aulacophora coomani Laboissière Fig. 123, b.

Aulacophora coomani Lab., 1929, Soc. Ent. France, Ann. 98: 257 (Tonkin; PARIS).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 380 (Vietnam).

DISTRIBUTION: N. Vietnam, SE China.

FUKIEN : 2, Ta-chu-lan, 1000 m, Shaowu, 31. V-7. VI. 1943, Maa (CAS, BISHOP). KWANGTUNG: 2, Canton, VII. 1935, Lai, on sugar cane (US); Tsha-jiu San, IX. 1910,

Mell (ZMB). N. VIETNAM: Hoa-binh, W. Tonkin, Cooman (FREY). HOST: Saccharum.

### 133. Aulacophora cornuta Baly

Aulacophora cornuta B., 1879, Cist. Ent. 2: 445 (Plains, Assam; BM); 1886, Linn. Soc. Lond., Jour. 20: 3, 5, 15 (Assam; Siam; Celebes; Ceram; Timor; Sulu Is.; Flores).
—Jacoby, 1904, Mus. Civ. Genova, Ann. 41: 496.—Maulik, 1926, Fauna India, Galeruc., 192 (Malacca, Celebes, Siam).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 382, fig. 13 (Yunnan).

Aulacophora (Cerania) cornuta, Laboissière, 1929, Ent. Soc. France, Ann. 98: 258 (Tonkin). DISTRIBUTION: NE India; SE Asia, Celebes, Yunnan.

### 134. Aulacophora cruenta (Fabricius)

Galeruca cruenta F., 1792, Ent. Syst. 2: 19 (E. Indies; KøBENHAVN).

- Aulacophora nigripeta, Duvivier, 1885, Stett. Ent. Ztg. 46: 389 (Ceylon).—Jacoby, 1887, Zool. Soc. Lond., Proc. 1887: 103.
- Aulacophora cruenta, Maulik, 1936, Fauna India, Galeruc., 194 (S. India, Ceylon).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 381, fig. 12 (Hainan).
- Aulacophora tonkinensis Laboissière, 1929, Soc. Ent. France, Ann. 98: 255 (Tonkin; PARIS). --Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 381.

DISTRIBUTION: India, Ceylon, SE Asia, Vietnam, Hainan.

HAINAN: Chung-kon (Cheung-kon-tsuen), C. Hainan, 18. VII. 1935, Gressitt (CAS). N. VIETNAM: 7, Hoa-binh, W. Tonkin, Cooman (FREY).

135. Aulacophora femoralis (Motschulsky) Fig. 124, a.

Raphidopalpa femoralis Mots., 1857, Etudes Ent. 6: 37 (Japan; ?Moscow).—Weise, 1892, Deutsche Ent. Zeitschr. 1892: 395 (Philippines).—Okamoto, 1924, Agr. Exp. Sta. Chosen, Bull. 1 (2): 194 (Korea, Quelpart I).—Masaki, 1934, Kontyu-Sekai 38 (477): 402 (Korea : Uturyo-To).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 11 (Korea : Hokusammen).—Ogloblin, 1936, Fauna USSR 26, 1: 154, 396 (Korea, ?China).

Rhaphidopalpa foveicollis, Liu, 1935, Lingnan Sci. Jour. 14: 635 (Amoy, Kustenland).

- Aulacophora similis, Baly, 1886, Linn. Soc. Lond., Jour. 20: 3, 5, 16 (Manchuria, Japan, N. India, China, Canton, Cochin China, Malay Archipelago).—Jacoby, 1896, Mus. Civ. Genova, Ann. 36: 458.—Weise, 1916, Arkiv Zool. 10 (20): 38, note.
- Raphidopalpa coffeae Allard, 1888, Soc. Ent. France, Ann. 57: 306 (no locality cited).— Weise, 1892, Deutsche Ent. Zeits. 1892: 395.
- Rhaphidopalpa chinensis Weise, 1892, Deutsche Ent. Zeitschr. 1892: 395 (Shanghai; ZMB).
  —Ogloblin, 1936, Fauna USSR 26, 1: 153, 396 (China, Mongolia, Annam).—Hu, 1937, IN Wu, Cat. Ins. Sin. 3: 861 (Amoy, Foochow, Changchow).
- Aulacophora femoralis, Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (221): 157 (Japan proper, Loo-Choo, Quelpart Is., Korea).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 158,

Aulacophora chinensis, Chûjô, 1942, Mushi 14: 60 (Kwantung: Koumeidai in Dairen City, Ryosuizi).

Aulacophora femoralis femoralis, Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 385.

Aulacophora femoralis chinensis, Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 384, figs.
16, 17, 20, 21 (Hopei, Shensi, Shantung, Kiangsu, Chekiang, Fukien Kwangtung, Kwangsi, Hupeh, Kiangsi, Szechuan, Kweichow, Yunnan, Vietnam).

DISTRIBUTION: E. Siberia, China, Hainan, Vietnam, Korea, Quelpart I., Japan.

SHENSI: Tsing-ling Mts., IV.-V. 1904, Blackwelder (US). SHANTUNG: Tsinan, 1922, Jacot (US); W. Shantung, X-XI. 1903, Blackwelder (US); Tsing-tao, VI. 1903, Kreyenberg (ZMB). KIANGSU: Chin-kiang, V. 1924, Illingworth (BISHOP); Nanking, VIII. 1919, Loomis. ANHWEI: Tai-ping-shien, X. 1932, G. Liu (MCZ). CHEKIANG: Mo-kan Shan, Gee (US); Ning-po (ZMB); Hangchow, VI. 1924, Illingworth (BISHOP); Tunglu, IV. 1926, Wright (CAS). FUKIEN: Yungan City, V. 1941, Maa; Kwang-keng, Kienyang, Maa; Foochow, 1928, Kellogg; Ta-chu-lan, Shaowu, VI. 1942, Maa (BISHOP); Liu-tun, Kienyang, VIII, 1942. Maa: Bohea Hills, Chungan, VI. 1939. Maa: Ho-tien, Changting, V. 1941. Maa. KIANGSI: Kiu-kiang (ZSBS); Sung-wu, VII. 1936, Gressitt; Wong-sa-shue, VII. 1936, Gressitt. HUPEH: Liang-ho-keu, Lichuan, IX. 1948, Djou; Sui-sa-pa, 1000 m, Lichuan, VII-VIII. 1948, Gressitt & Djou (CAS); Chi-au Shan, 1500 m, IX. 1948, Djou; Hsiao-ho, Lichuan, VIII. 1948, Gressitt (CAS, BISHOP, LINGNAN); Ichang, 1932, G. Liu (MCZ). SZE-CHUAN : Lau-tau-di to Chang-tin-kang, VII. 1948, Gressitt & Djou ; Lung-chue-pa & Changtang-ching, Wanhsien, X. 1948, Djou (CAS); Chengtu, V. 1929 (CAS); Chungking, VI. 1932, G. Liu (MCZ); Chang-tang-ching, VII. 1948, Gressitt & Djou; Pe-pei, 300 m, VII. 1940, Gressitt; Sui-fu, X. 1930, Graham; Kuanhsien, VIII. 1934, Graham; Shin-kai-si, Mt. Omei, 1934, Graham (US); Kiating, 1929, Graham; Hua-yin Shan, Graham; Mu dong, VI. 1933, Graham; Sui-fu, V. 1925, Graham. SIKANG: Ta-tsien-lu, 2000 m, 1930, Graham; Mu-pin, VII. 1929, Graham; Ya-chow, 1930, Graham. YUNNAN: 2, ?Kunming, 1. VIII. 1944, Liu 2029 (US). KWANGSI: Tai-ping-fu, Sungshen Distr., VIII. 1934, Tinkham (LINGNAN). KWEICHOW: Shin-men-kan, VII. 1934, Graham (US). KWANGTUNG: Tsin-leong Shan, nr. Meihsien, VI. 1936, Gressitt (CAS); Meihsien, V. 1936, Gressitt; Fei-ha to Fei-loi, VII. 1949, Gressitt; Lui-chow Peninsula, IX. 1950, for Gressitt; Sun-yi, Sin-i Distr., VII. 1932, Hoffmann (LINGNAN); Wui-tung, Chung Shan, III. 1935, Fung; Tin-tong, Lochang, VIII. 1947, for Gressitt; Hong Kong, IX. 1906, Muir; Lien-kao, VII. 1912, Mell (ZMB); New Territories, Hong Kong, VII. 1962, Gressitt (BISHOP). HAINAN: Fan-heang, VI. 1935, Gressitt; Dome Mt., VII. 1935, Gressitt; Ta-hau, VII. 1935, Gressitt; Taiping-tsuen, Kiung Shan Distr., VII. 1932, To; Hau-ying-tsuen, nr. No-doa, VII. 1932, To; Tsung-to (Dome Mt.), Linkao, VI. 1932. Lau & To (LINGNAN); Ta-hian, 600 m, VI. 1935, Gressitt; Hoihow, VI. 1932, Hoffmann (LINGNAN); No-doa, VII. 1935, Gressitt. N. VIETNAM: Hoa-binh, W. Tonkin, Cooman (FREY). KOREA: Seoul, 10. VII. 1956, Kim.

HOSTS: Cucurbitaceae.

#### 136. Aulacophora frontalis Baly

Aulacophora frontalis Baly, 1888, Linn. Soc. Lond., Jour. 20: 176, 181 (Sarawak; BM).—
Maulik, 1936, Fauna India, Galeruc., 183, fig. 57 (India, Ceylon, Siam, Philippines).
—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 381, fig. 9 (Yunnan, Kwangtung).



Fig. 124. a, Aulacophora femoralis (Motschulsky); b, A. lewisii Baly.

Aulacophora (Ceratia) frontalis, Laboissière, 1929, Soc. Ent. France, Ann. 98: 258 (Tonkin, Cambodia, Saigon, Java).

DISTRIBUTION: India, Ceylon, SE Asia, Sunda Is., Philippines, Vietnam, S. China.

KWANGTUNG: Canton, VIII. 1935, on sugar cane (\$52), Lai (US). N. VIETNAM: Hoa-binh, W. Tonkin, Cooman (FREY).

# 137. Aulacophora jacobyi Weise

Aulacophora denticornis Jacoby, XII. 1896 (nec Blackburn), Mus. Civ. Genova, Ann. 37: 137 (Mentawei; Tenasserim; ?GENOVA).

Aulacophora Jacobyi Ws., 1924, Col. Cat. 78: 10 (new name for *denticornis*).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 381, fig. 10 (Hainan, Yunnan).

Aulacophora (Ceratia) Jacobyi, Laboissière, 1929, Soc. Ent. France, Ann. 98: 258 (Tonkin). DISTRIBUTION: SE Asia, Vietnam, Hainan, Yunnan.

DISTRIBUTION. SE Asia, violiani, fiaman, faman.

N. VIETNAM: 6, Hoa-binh, W. Tonkin, Cooman (FREY).

138. Aulacophora lewisii Baly Fig. 124, b.

 Aulacophora lewisii Baly, 1886, Linn. Soc. Lond., Jour. 20: 5, 24, ♀ (China, Hongkong;

 BM); 1888, op. cit. 22: 179, ♂, ♀ (China, India, Malay Arch.); 1889, Ent. Soc.

 Lond., Trans. 1889: 301.—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 378.

Aulacophora intermedia Jacoby, 1892, Mus. Civ. Genova, Ann. 32: 942 (India).—Maulik, 1926, Fauna India, Galeruc., 181 (Punjab, United Provinces, Central Provinces, Bombay, S. India, Bihar, Ceylon, Assam, Burma).

- Aulacophora cattigarensis Weise, 1892, Deutsche Ent. Zeits. 1892: 397 (Shanghai, Japan; ZMB).—Ogloblin, 1936, Fauna USSR 26, 1: 156, 397 (Japan, China, Annam, Tonkin, Cochinchina).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 379, figs. 6-7 (Chekiang, Fukien, Kwangtung, Kwangsi, Yunnan, Szechuan, Hupeh).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 158.
- Aulacophora (Ceratia) cattigarensis, Laboissière, 1929, Soc. Ent. France, Ann. 98: 258 (Tonkin, Cochin-China).

DISTRIBUTION: India, Ceylon, SE Asia, China, Ryukyu Is., Japan.

SZECHUAN: 1, nr. Chengtu, VII. 1912, Weisz (ZMB); betw. Tsang-lin-shien & Tseojia-geo, IX. 1929, Graham; Sui-fu, IV. 1923, Graham (US), Lung-chü-pa to Chang-tau-ching, Wan, IX. 1948, Djou; Lung-chü-pa, Szechuan Hupeh border, and Lau-tau-di to Chang-tinkang, VII. 1948, Gressitt & Djou (CAS); Kuan hsien, 900 m, Graham; Kong-hsien, VIII. 1929, Graham; Tsang-senchiao, VI. 1933, Graham (US); Wanhsien, X. 1948, Djou; Chengtu, VII. 1912, Weise (ZMB); Shi-wan-tze, Kiu-mou, kiang-keou. HUPEH: Hsiao-ho, Lichuan, VIII. 1948, Gressitt (ZMB). KIANGSI: Kiu-kiang (ZSBS). ANHWEI: Tai-ping-shien, X. 1932, G. Liu (MCZ). FUKIEN: Foochow, VIII. 1934, Gressitt; Sui-pei-kai, Shaowu, III-V. 1942, Maa (BISHOP); Foochow (Futschau), VI. 1903, Siemssen (US); Kwang-keng, Kienyang, Maa; Bohea Hills, Maa (CAS). KWANGTUNG: Canton, IV, XII. 1933, Hoffmann; V, VI. 1932, Djou, To, V. 1948, Gressitt (LINGNAN); X. 1908, Mell; Fei-ha to Fei-loi, VII. 1949, Gressitt; Yim-na Shan, Mei, VIII. 1933, To (LINGNAN); Hong Kong, Koebele (CAS); many, Tscha-jiu San, 1400 m, VIII. 1913, Mell (ZMB); New Territories, Hong Kong, VII. 1962, Gressitt. KWANGSI: Kwei-ping, IV. 1933, G. Liu; Lung-chow, 1933, Liu (MCZ). HAINAN: Dome Mt., 795 m, nr. No-doa, 12. VII. 1935, Gressitt. N. VIETNAM: 3, Hoabinh, W. Tonkin, Cooman (FREY).

HOST: Cucurbitaceae.

# 139. Aulacophora nigripalpis Chen and Kung

Aulacophora nigripalpis Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 378, 386 (Yunnan; Ac. SIN.).

DISTRIBUTION: SW China (Yunnan).

### 140. Aulacophora nigripennis Motschulsky

- Galeruca atripennis Hope, 1841 (nec Fabr.), Zool. Soc. Lond., Proc. 1841: 64 (Canton; ?Oxford).
- Aulacophora nigripennis Mots., 1857, Etudes Ent. 6: 88 (Japan; ?Moscow).—Baly, 1886, Linn. Soc. Lond., Jour. 20: 2, 4, 5 (Manchuria, Japan, China).—Allard, 1888, Soc. Ent. France, Ann. ser. 6, 8: 309 (key).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 83 (Taiwan, Ryukyus).—Ogloblin, 1936, Fauna USSR 26, 1: 156, figs. 64, 65N (Amur).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 377, figs. 3–5 (Hopei, Shensi, Shantung, Kiangsu, Chekiang, Fukien, Kiangsi, Szechuan).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 159.

Ceratia nigripennis, Weise, 1922, Tijdschr. Ent. 65: 62.

DISTRIBUTION: E. Siberia, China, Korea, Japan.

HOPEI: Pei-ping, IX. 1935, Chi, KIANGSU: Nanking, VIII. 1919, Loomis (US);

Shanghai, VI. 1906, Thompson. ANHWEI: Chu-chow, IX. 1919, Loomis. FUKIEN: Ta-chulan, Shaowu, V. 1943, Maa; Shui-pei-kai, Shaowu, III. 1942, Maa; Tsi-li-chiao, 1000 m, Chungan, VI. 1942, Maa (CAS, BISHOP); Foochow, VIII. 1934, Gressitt (CAS). CHEKIANG: Mo-kan-Shan, VIII. 1927, Wright (CAS); Kiao-shing (ZSBS). HUPEH: Hsiao-ho, Lichuan, VIII. 1948, Gressitt & Djou. SIKANG: Mu-pin, 1200 m, VII. 1929, Graham; Ya-chow, 1000 m, VI. 1929, Graham (US). SZECHUAN: Sui-fu, X. 1924, Graham (US); Lung-chue-pa, Wanhsien, IX. 1948, Djou; Sui-fu, 1922, Graham (US); Tsan-ling-hsien to Tso-chia-geo, Graham; Lung-chue-pa to Chang-tan-ching, Wan, IX. 1948, Djou; Szechuan-Hupeh border, VII. 1948, Gressitt & Djou; Lau-tau-ti to Chang-lin-kang, VII. 1948, Gressitt & Djou; Wanhsien, X. 1948, Djou (CAS). KWANGSI: Kwei-ping, IV. 1933, G. Liu (MCZ). KWANG-TUNG: Tsha-jiu San, VII–IX. 1910, Mell (ZMB); Fei-ha to Fei-loi, VII. 1949, Gressitt; Canton, IV. 1933, Hoffmann (LINGNAN); Hau-leng, Tin-tong, Lochang, VIII. 1947, Tsang & Lam (CAS). HAINAN: Dome Mt., 795 m, nr. No-doa, VII. 1935, Gressitt; Lia-mui (Lingmen), VIII. 1935, Gressitt (CAS).

HOST: Glycine max (L.) Merr.

# 141. Aulacophora palliata (Schaller)

Chrysomela palliata Sch., 1783, Hall. Ges., Abh. 1: 279 (Tranquebar).

- Aulacophora palliata, Jacoby, 1884, Leyden Mus., Notes 6: 41 (India, Sumatra).—Chûjô, 1935, Arb. Morph. Tax. Ent. Berlin-Dahlem 2: 160 (Kankau, Formosa; Indo-China; India; Sunda Is.).—Maulik, 1936, Fauna India, Galeruc., 182, fig. 56 (Sunda Is.).—Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 375, 380, fig. 11 (Yunnan).
- Aulacophora (Ceratia) palliata, Laboissière, 1929, Ent. Soc. France, Ann. 98: 258 (Tonkin, Cochin-China).

DISTRIBUTION: India, Sunda Is., Vietnam, Hainan, Kwangtung, Yunnan.

HAINAN: Ta-hau, W of No-doa, VII. 1935, Gressitt (CAS). Two somewhat questionable specimens: Dome Mt., 795 m, VII. 1935, Gressitt, & Liamui (Ling-men), VIII. 1935, Gressitt (CAS, BISHOP). KWANGTUNG: 2, Canton, V-VII. 1911, Mell (ZMB). N. VIET-NAM: Hoa-binh, W. Tonkin, Cooman (FREY).

142. Aulacophora yunnanensis Chen and Kung

Aulacophora yunnanensis Chen & Kung, 1959, Acta Ent. Sin. 9 (4): 383, 387, fig. 15 (Yunnan; Ac. SIN.).

DISTRIBUTION: SW China (Yunnan).

# Genus Pseudocophora Jacoby

Pseudocophora Jac., 1884, Leyden Mus., Notes 6: 69, 214 (type: Galleruca buquetii Guerin; Java).—Baly, 1886, Linn. Soc. Lond., Jour. 20: 26; 1888: 168; 1889, Ent. Soc. Lond., Trans. 1889: 308.—Allard, 1889, Soc. Ent. France, Ann. ser. 6, 8: 234.—Maulik, 1936, Fauna India, Galeruc., 198.

### KEY TO CHINESE SPECIES OF PSEUDOCOPHORA

143. Pseudocophora bicolor Jacoby

Pseudocophora bicolor Jac., 1887, Zool. Soc. Lond., Proc. 1887: 111 (Balangoda; BM).-Maulik, 1926, Fauna India, Galeruc., 201 (Ceylon, S. India, Assam).

DISTRIBUTION: Ceylon, India, S. China (Kwangtung, Hainan).

KWANGTUNG: White Cloud Mt., Canton, 6. VII. 1932, Djou (LINGNAN). HAINAN: Hau-ying-tsuen, 10 km SE No-doa, 8. VII. 1932, To (BISHOP).

144. Pseudocophora flaveola Baly Fig. 125, a.

- Pseudocophora flaveola Baly, 1888, Linn. Soc. Lond., Jour. 20: 169, 173 (Andaman Is.; BM).
  —Maulik, 1936, Fauna India, Galeruc., 206, figs. 65–66 (Bengal, Burma, Tenasserim, Andaman Is.).
- Pseudocophora flava Allard, 1889, Soc. Ent. France, Ann. ser. 6, 8: 325 (Annam; ?PARIS). —Baly, 1890, Ent. Monthly Mag. ser. 2, 1: 14.

DISTRIBUTION: India, Burma, Andaman Is., Hainan I.

HAINAN: Cheung-kon, 11. VII. 1935, Gressitt; Dwa-bi (Tai-pin), 19. VII. 1935, Gressitt;



Fig. 125. a, Pseudocophora flaveola Baly; b, Paragetocera fasciata n. sp.

Liamui (Ling-men), 2. VIII. 1935, Gressitt (CAS, BISHOP).

### 145. Pseudocophora pectoralis Baly

Pseudocophora pectoralis B., 1888. Linn. Soc. Lond., Jour. 20: 169, 174 (Assam; BM).-Jacoby, 1892, Mus. Civ. Genova, Ann. 32: 958.-Maulik, 1936, Fauna India, Galeruc., 202, figs. 61-64 (NE India).

DISTRIBUTION: NE India, S. China (Kwangtung).

KWANGTUNG: many, Tsha-jiu San, bamboo forest, 1400 m, VI. 1910, V-VI. 1912, Mell (ZMB).

#### Genus Paragetocera Laboissière

Paragetocera Lab., 1929, Soc. Ent. France, Ann. 98: 262 (type: P. involuta Lab.; SW China).-Ogloblin, 1936, Fauna USSR 26, 1:162.-Chen, 1942, Notes d'Ent. Chinoise 9 (3):26.

This genus should perhaps be considered a subgenus of Agetocera. The character of inflated elytral margin of the type species is not possessed by the others. The character of basal margin of pronotum as cited by Ogloblin also does not hold true. The remaining character is that of elytron being carinate behind humerus. This varies in degree and further species that may be found may bridge the weak gap between this and Agetocera.

# KEY TO CHINESE SPECIES OF PARAGETOCERA .

1.	Elytron with humeral ridge weak, or extending for only basal 1/2 of elytral length2
	Elytron with humeral ridge strong, extending for well over 1/2 length4
2(1).	Humeral ridge fairly vague, with 2 inner vague raised lines; elytron entirely
	bluish, greenish or pitchy; basal border of pronotum not margined3
	Humeral ridge distinct but short; elytron blackish basally and apically with a
	broad creamy band slightly constricted at suture; venter black; basal border
	of pronotum margined; length 5.6-6.5 mm146. fasciata
3(2).	Elytron dark bluish or purplish; venter pale150. p. parvula
	Elytron greenish; metasternum black or pitchy150a. parvula metasternalis
4(1).	Elytron generally blue or purplish, more or less metallic5
	Body almost entirely pale; antenna and legs partly pitchy; elytron with sharp
	humeral ridge and sublineate punctures
5(4).	Elytral margin of $Q$ not greatly expanded and not bearing a swollen ridge6
	Elytral margin of $\mathcal{P}$ greatly expanded and bearing a swollen ridge; prothorax
	widened anteriorly and with transverse discal depression not quite interrupted
	at middle; length 5.5-6.5 mm148. involuta
6(5).	Body distinctly broadened posteriorly; tibiae and tarsi black; length 6 mm 151. tibialis
	Body not distinctly broadened posteriorly; tibiae and tarsi brownish; length
	4.5–5.5 mm147. flavipes

146. Paragetocera fasciata Gressitt and Kimoto, n. sp. Fig. 125, b.

*Male*: Fairly broad and somewhat flattened; body pale testaceous to reddish brown or slightly pitchy; head pale testaceous, nearly ochraceous on occiput and slightly pitchy on

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labrum and apex of mandible; antennna dark reddish brown, partly paler on basal segment; prothorax yellowish, pale ochraceous; scutellum reddish brown; elytron dark reddish brown with a very broad pale creamy band centered slightly behind middle and occupying more than middle 1/3 but slightly constricted at middle and not quite reaching suture or external margin; ventral surfaces dark chestnut brown except on prosternum and mesosternum; legs reddish brown, paler on trochanters and sides of apical portions of femora, darker brown on basal portions of femora. Body more or less glabrous above, with a few scattered pale hairs on anterior portion of head; ventral surfaces moderately clothed with suberect pale hairs; legs moderately clothed with more recumbent pale hairs.

*Head* distinctly narrower than prothorax, about as broad as long, somewhat gradually narrowed and rounded anteriorly; occiput smooth, moderately convex behind, transversely depressed between posterior portions of eyes; interocular area slightly raised on each side behind antennal insertions between which it is narrowly grooved; frontoclypeus broad, constricted at sides and with median raised area extending narrowly upward between antennal insertions; labrum fairly large, shallowly emarginate apically, and with a few large shallow punctures. Antenna (lacking last 2 segments) probably 3/4 as long as body, moderately stout; scape gradually thickened to apex, slightly arcuate; segment 2 is 1/2 as long as 1; 3 nearly 2  $\times$  as long as 2, subequal to 5-8; 8 barely shorter than 7 and very slightly longer than 9. Prothorax nearly 2/3 as long as broad, subtrapeziform, broadest near anterior corners; side feebly sinuate and slightly curved inward to anterior corner; posterior corner fairly prominent; posterior margin fairly straight but slightly emarginate opposite base of scutellum; anterior margin very weakly sinuate; disc strongly convex on anterior 2/3 and with only a few punctures, mostly near side, a fairly deep slightly sinuate transverse depression just behind middle and partly interrupted at median line, and again narrowly raised just before basal margin. Scutellum longer than broad, slightly convex, nearly impunctate and rounded apically. *Elytron* nearly  $3.5 \times$  as long as base, gradually and fairly strongly widened to well behind middle and then broadly rounded apically; external margin narrowly flattened; disc fairly convex, somewhat closely impressed with fairly deep punctures of differing sizes but mostly subequal to interspaces on basal 3/5 and in part arranged in somewhat longitudinal rows or groups of irregular rows, a fairly strong posthumeral ridge extending to well behind middle; lateral declivity quite steep. Ventral surfaces minutely and sparsely punctured; abdominal sternite 5 with a convex median lobe on each side of which is a fairly deep indentation. Legs fairly stout and straight; hind tarsus with segment 1 as long as 2+3. Length 5.8 mm; breadth 2.6.

*Female*: Dark portions of body slightly darker, becoming pitchy black on humeri, elytral apices and parts of ventral surfaces. Length 6.5 mm; breadth 3.1.

DISTRIBUTION: SW China (Yunnan).

Holotype & (Zool. Mus. BERLIN), Chao-chow-fu, 2800 m, W. Yunnan Prov., SW China, 23. VIII–2. IX. 1914, forested slope, Rudolph Mell; allotopotype  $\mathcal{P}$  (BISHOP 3276), same data.

Differs from the other known species in having elytron bicolorous. It also has elytron more broadened posteriorly than in most of species.

### 147. Paragetocera flavipes Chen

Paragetocera flavipes Chen, 1942, Notes d'Ent. Chinoise 9(3): 27 (Shensi; HOANGHO-PAIHO).

# DISTRIBUTION: N. China (Shensi).

# 148. Paragetocera involuta Laboissière

Paragetocera involuta Lab., 1929, Soc. Ent. France, Ann. 98: 263, fig. 5 (Yunnan, Kweichow, Sikang; PARIS).—Ogloblin, 1936, Fauna USSR 26, 1: 163, 397 (Szetchouen, Yunnan).
—Chen, 1942, Notes d'Ent. Chinoise 9(3): 26.

DISTRIBUTION: SW China (Sikang, Szechuan, Hupeh, Kweichow, Yunnan).

SIKANG: 6, nr. Mu-ping, 2000 m, 28. VI–2. VII. 1929, Graham (US). SZECHUAN: Beh-luh-din, N. of Chengtu, VIII. 1933, Graham; Uin-gin-shien, 1800 m, 14. VII. 1928, Graham; O-er, nr. Weichow, 8. VIII. 1933, Graham (US); King-foo Shan, VII. 1932, G. Liu (MCZ). HUPEH: Mo-tai-chi to Chi-au Shan, nr. Szechuan border, 28. VII. 1948, Gressitt & Djou; 8, Sui-sa-pa, 1000 m, Lichuan, 23. VII–2. VIII. 1948, Gressitt & Djou; Hsiao-ho, Lichuan, 15. VIII., Gressitt; Liang-hou-keu, Lichuan, 1. IX., Djou (CAS, BISHOP, LINGNAN).

# 149. Paragetocera pallida Chen

Paragetocera pallida Chen, 1942, Notes d'Ent. Chinoise 9 (3) : 25 (Kanting, Sikang; Ac. SIN.).

DISTRIBUTION: W. China (Sikang, Szechuan).

SZECHUAN: 1, nr. Fu-lin, 1000 m, 18–24. VIII. 1933, Graham (US).

# 150. Paragetocera parvula parvula (Laboissière)

Agetocera parvula Lab., 1929, Soc. Ent. France, Ann. 98: 261 (Ho-chan), Moupin; ?BRU-XELLES).—Ogloblin, 1936, Fauna USSR 26, 1: 161, 397, fig. 68 (Sze-Tchouen).

DISTRIBUTION: W. China (Sikang, Yunnan, Szechuan, Hupeh).

SIKANG: 1, Yü-ling, 2, Kiu-lung (FREY); 1, nr. Mu-ping, VII. 1929, Graham (US). SZECHUAN: 2, nr. Kuan-shien, 900 m, VIII. 1933, Graham; 1, nr. Wen-chuan, 1400 m, V-VIII. 1933, Graham (US). YUNNAN: 2, Tali (ZMB). HUPEH: 1, Hsiao-ho, Lichuan, 8. VIII. 1948, Gressitt.

# 150a. Paragetocera parvula metasternalis Chen

Paragetocera parvula subsp. metasternalis Chen, 1942, Notes d'Ent. Chinoise 9(3) : 27 (Zerdi, Sikang; Ac. SIN.).

DISTRIBUTION: W. China (Sikang).

SIKANG: 2, Ta-tsien-lu, 2000 m, VII. 1923, Graham (US).

### 151. Paragetocera tibialis Chen

Paragetocera tibialis Chen, 1942, Notes d'Ent. Chinoise 9 (3): 28 (Omei Shan, Szechuan; U. NANKING).

DISTRIBUTION: W. China (Szechuan).

### Genus Agetocera Hope

Agetocera Hope, 1840, Coleopt. Man. 3: 170 (type: Aegeloceris mirabilis Hope; India).— Chapuis, 1875, Gen. Col. 11: 177.—Maulik, 1936, Fauna India, Galeruc., 125.—Ogloblin, 1936, Fauna USSR 26, 1: 158, 397.

This genus is characterized by greatly deformed  $\mathcal{J}$  antenna. However, *filicornis* does not have this characteristic, though otherwise resembling members of the genus. It appears to intergrade towards *Paragetocera*, though also lacking its prime characters.

# KEY TO CHINESE SPECIES OF AGETOCERA

1.	Antennal segments 8-9 greatly deformed in 3 <sup>°</sup> ; 8 generally very large
2(1).	<ul> <li>Antennal segment 9 of ♂ considerably deformed</li></ul>
3(2).	<ul> <li>Antennal segment 4 of ♀ not deformed; segment 9 of ♂ lacking a large flat membrane-like surface</li></ul>
4(3).	<ul> <li>Antennal segment 9 of ♂ somewhat spiral, with elongate flat plate or complicated depressed area bordered by sharp ridges</li></ul>
5(4).	Antennal segment 8 of 3 broadest at apex, with a prominent hook in front and a spined flange behind; 9 extremely deformed with a longitudinal cavity bound- ed by high sharp ridges, and with a preapical protuberance; elytron purplish black; antenna largely dark; length 12.5-14.0 mm 152. deformicornis Antennal segment 8 of 3 broadest before apex, which is simple; 9 somewhat spirally flattened, with a long smooth area; elytron purplish blue; antenna pale in basal 1/2; length 11-12 mm (Chûjô, 1962; Taiwan) taiwana*
6(4).	Antennal segment 9 of 3 subcylindrical, with a depression bearing a small tubercle; elytron dull violet purple; antenna largely black; length 12.5-14.0 mm (Laboissière, 1929; N. Vietnam) chapana* Antennal segment 9 of 3 with a very strong external protuberance at base and a weaker one at apex, forming a deep crescent between; elytron greenish to purplish black; fore body pale yellow; last 2-3 antennal segments pitchy; length 11.5-12.0 mm

# 152. Agetocera deformicornis Laboissière

Agetocera deformicornis Lab., 1927, Soc. Ent. France, Ann. 96:45, fig. 3 (Siaolou, Szechuan; Yunnan-fu; ?BRUXELLES).

DISTRIBUTION: W. China (Szechuan, Yunnan, Kweichow).

SZECHUAN: Mt. Omei, VII-VIII. 1922, Graham (US); Mt. Omei, VII. 1932, Franck; Kwan-hsien, VII. 1928 (CAS). KWEICHOW: 1 (ZMB).

# 153. Agetocera femoralis Chen

Agetocera femoralis Chen, 1942, Notes d'Ent. Chinoise 9 (3) : 24 (Sikang, Szechuan; Ac. SIN.). DISTRIBUTION : W. China (Sikang, Szechuan).

SZECHUAN: Mt. Omei, 3300 m, 19. VIII. 1934, Graham (US).

# 154. Agetocera filicornis Laboissière

Fig. 126.

Agetocera filicornis Lab., 1929, Soc. Ent. France, Ann. 96: 49, fig. 6 (Tonkin; cotype, BM).

This species lacks the deformed  $\mathcal{J}$  antenna characteristic of this genus.

DISTRIBUTION: S. China (Sikang, Szechuan, Hupeh, Kiangsi, Fukien).

SIKANG: 2, Mu-ping, 2000 m, VII. 1929, Graham (US). SZECHUAN: 12, Wen-chuan, 1500 m, VII-VIII. 1933, Graham; 1, Fu-lin, 2000 m, VII. 1928, Graham; 1, Ning-yuen-fu, 2000 m, VII. 1928, Graham (US, BI-SHOP); Lung-chü-pa to Chang-tan-ching, 30. IX. 1948, Djou (CAS). HUPEH: 13, Sui-sa-pa, 1000 m, Li-chuan, VII-VIII. 1948, Gressitt & Djou; 2, Liang-ho-keu, Lichuan, IX. 1948, Djou. KIANGSI: 1 (FREY). FUKIEN: 2, Sha-kua-tun, 1100 m, Upper Kua-tun, 1400 m, Shaowu, VIII. 1945, Maa (BISHOP); 3, Yun-ling Shan (ZMB).

# 155. Agetocera hopei Baly

Agetocera hopei Baly, 1865, Ent. Soc. Lond., Trans. ser. 3, 2(5): 438 (N. India; BM).—Duvivier, 1891, Soc. Ent. Belg., C. R. 35: XLVI (Kurseong).—Maulik, 1936, Fauna India, Galeruc., 130 (India, Assam, Burma). —Laboissière, 1927, Soc. Ent. France, Ann. 96: 45, fig. 2; 1929, op. cit. 98: 261 (Tonkin).

Agetocera pulchella Chapuis, 1875, Gen. Col. 11: pl. 125, fig. 5 J.-Weise, 1902, Deutsche Ent. Zeits. 1902: 367.

DISTRIBUTION: NE India, Burma, Tibet, Java. TIBET: 4, Tibet, F 4722 (AMNH).

# 156. Agetocera mirabilis (Hope)

boissière.

Aegelocerus mirabilis Hope, 1831, IN Gray, Zool. Miscell., 29 (Nepal; BM).

Agetocera mirabilis, Hope, 1840, Coleopt. Man. 3: 170.—Laboissière, 1927, Soc. Ent. France, Ann. 96: 43: fig. 4 (Nepaul; Assam, Tonkin, Laos).—Maulik, 1936, Fauna India, Galeruc., 127, fig. 43 (India, Burma, Hainan, Laos).

Aplosonyx heterocera Redtenbacher, 1868, Reise Novara, Zool. 2, Col: 206 (Hong Kong;



WIEN).

1963

Agetocera heterocera, Duvivier, 1891, Soc. Ent. Belg., C. R. 35: xlvi (Tatara).

DISTRIBUTION: Nepal, NE India, Burma, Laos, Hainan I., Chekiang.

HAINAN: Fan-heang, 7. VI. 1935, Gressitt; Ta-hian, 600 m, 17. VI. 1935, Gressitt (CAS). CHEKIANG: 2, Hang-chow, 4. IX. 1919, Loomis (US); 1, Hang-chow, 27. VI. 1927, Wong (BISHOP).

# Genus Hoplasoma Jacoby

Hoplasoma Jac., 1884, Leyden Mus., Notes 6: 233 (type: H. apicalis Jac.; Celebes).—Allard, 1889, Soc. Ent. France, Ann. 57: 326.

Hoplosoma Baly, 1889, Ent. Soc. Lond., Trans. 1889: 308.

Haplosoma Jac., 1896, Soc. Ent. Belg., Ann. 40: 271, 273; 1891, Entomologist 24: 36; 1889, op. cit. 32: 82; 1903, Soc. Ent. Belg., Ann. 46: 120; 1904, op. cit. 48: 396.

#### KEY TO CHINESE SPECIES OF HOPLASOMA

- Prothorax with side slightly sinuate and with basal and apical angles prominent; pronotal disc with transverse depression barely reaching forward of middle; elytron subregularly punctured and without carinae on disc; length 7.0-8.5 mm ...
   159. unicolor

157. Hoplasoma majorina Laboissière Fig. 127, a.

Hoplasoma majorina Lab., 1929, Soc. Ent. France, Ann. 98: 258, fig. 3 (Pe-yen-tsin, Yunnan; ?BRUXELLES).

There is at least a superficial discrepancy between specimens cited below, as the one from Sikang is much smaller and paler than the others.

DISTRIBUTION: SW China (Sikang, Yunnan, Kwangtung).

SIKANG: 2, Yachow, V–VI. 1928, Graham (US). KWANGTUNG: 1, Yiu village, 600 m, above Tso-kok-wan, Lung-tau Shan, 10. VI. 1947, Gressitt. CHEKIANG: Tien-mu Shan, Reitter (FREY).

158. Hoplasoma minor Gressitt and Kimoto, n. sp. Fig. 127, c.

*Male*: Slender and pale, head and prothorax shiny yellowish testaceous; scutellum and elytron pale testaceous, nearly white, slightly yellowish along external margin on apex; antenna pale yellowish basally and gradually becoming reddish brown; ventral surfaces pale



Fig. 127. a, Hoplasoma majorina Laboissière; b, H. unicolor (Illiger); c, H. minor n. sp.

testaceous, slightly pale brown on center of thorax; legs pale testaceous; brownish on outer surfaces of tibiae, tarsi and distal portions of femora. Body very sparsely closed with scattered obliquely erect hairs on elytron and some on anterior portion of head; ventral surfaces moderately clothed with sparse pale hairs and legs a little more densely clothed on tibiae and tarsi.

*Head* slightly broader than prothorax, gradually narrowed posteriorly behind eyes; eyes strongly convex, almost entire, nearly round; occiput evenly convex, indistinctly punctured, with a short median groove in central portion; interocular area somewhat raised, separated from occiput by a fine subtransverse groove, and with a very distinct median groove; frontoclypeus with median line raised only between antennal insertions and depressed anteriorly, thus with an oblique raised area extending obliquely forward from interocular area. Antenna nearly as long as body, fairly slender; segment 1 moderately thickened preapically, slightly arcuate; 2 is 1/3 as long as 1; 3 nearly  $2 \times$  as long as 2 and 3/4 as long as 4; 5 slightly shorter than 4, subequal to 6; 7–10 subequal, each slightly shorter than 6; 11 barely longer than 10. Prothorax  $2 \times as$  broad as long, with sides slightly convex and anterior and posterior angles not very prominent; posterior and anterior margins fairly straight; lateral margin bordered by distinct margin and grooved; disc shiny, minutely and sparsely punctured, with a broad transverse depression which occupies more than basal 1/2 of central portion and becomes somewhat narrower towards sides. Scutellum smooth, slightly longer than broad and narrowed and rounded apically. *Elytron* nearly parallel-sided, obliquely narrowed and subrounded apically, nearly  $5 \times$  as long as broad; disc minutely and irregularly punctured, with a moderate convexity on sutural 1/2 of basal 1/4 and with 3 fairly distinct slightly sinuate raised lines extending from behind humerus to apical declivity: first 2 lines on median portion of disc and 3rd along edge of lateral declivity. Ventral surfaces rather finely and sparsely punctured; abdominal segment 2 with a pair of slender apical processes which are nearly as long as segment 3; 3 bearing a

much longer pair of processes which reach more than 1/2 way to apex of abdomen; sternite 4 greatly extended posteriorly to form a broad subtruncate lobe with a thickened apical margin which nearly hides sternite 5. Legs rather slender and fairly straight; hind tarsal segment 1 narrow, as long as 3-5 combined; 2 slightly longer than 3 and not quite as long as 5. Length 4.1 mm; breadth 1.35.

Paratypes: Length 4.1-4.4 mm; breadth 1.4-1.6.

DISTRIBUTION: W. China (Szechuan).

Holotype & (U.S. NAT. MUS.) Wei-chow, 2000 m, NW of Chengtu, 5. VIII. 1933, D. C. Graham; 5 paratypes, all & A, O-er, 2400 m, 6–16. VIII. 1933, Szechuan Prov., W. China, Graham (US, BISHOP).

Differs from *unicolor* (III.) in being much smaller, paler, with prothorax less trapezoid, with less prominent angles, and with pronotal depression wider in central portion, and also in having elytron bearing 3 fairly distinct subsinuate carinae on disc.

159. Hoplasoma unicolor (Illiger) Fig. 127, b.

Galleruca unicolor III., 1800, IN Wiedemann, Arch. für Zool. u. Zoot. 1, 2: 135 (Bengal). Galleruca unicolor, Olivier, 1808, Entomologie 6: 640, no. 93, pl. 3, fig. 46.

Haplosoma unicolor, Allard, 1889, Soc. Ent. France, Ann. ser. 6, 8: 327.—Jacoby, 1896, Soc. Ent. Belg., Ann. 40: 271.

Haplosoma corniculata, Jacoby, 1896, Soc. Ent. Belg., Ann. 40: 271.

Phyllobrotica unicolor, Jac., 1889, Mus. Civ. Genova, Ann. 27: 230.

Haplosoma abdominalis Jac., 1896, Soc. Ent. Belg., Ann. 40: 272 (Rangoon, Cashar, Tenasserim; BM).

Haplosoma simplicipennis Jac., 1896, Soc. Ent. Belg., Ann. 40 : 272 (Kanara, Belgaum, S. Bombay; BM).

Hoplosoma ventralis Baly, 1886, Ent. Soc. Lond., Trans. 1886: 27 (Borneo, Sarawak; BM). Haplosomoides unicolor Weise, 1924, Coleopt. Cat. 78: 125.

Hoplasoma unicolor, Maul., 1936, Fauna India, Galeruc., 161 (India, Burma, Andaman Is., Siam, Malay Pen., Sumatra, Java, Billiton Is., Borneo, Philippines, China, Korea).

DISTRIBUTION: India, Burma; S. China, Hainan, Korea (?), Malaya, Sunda Is., Philippines.

KWANGSI: 1, Yao Shan (Jaochan), Sin (ZMB). KWANGTUNG: 1, Yim-na Shan, 10. VI. 1936, Gressitt (CAS); 1, White Cloud Mt., Canton, 2. VIII. 1932, Djou; 12, Luichow Peninsula, 1. IX. 1950, for Gressitt; 3, Tsha-jiu San, V–VII. 1911, VII–IX. 1910, Mell (ZMB); 7, Ho-tsung, New Territories, Hong Kong, on *Clerodendron inerme*, 18. VII. 1962, Gressitt (BISHOP). HAINAN: Linfa-ling, Hau-ying-chuen, nr. No-doa, 20. VII. 1929, Lingnan U. 5th Hainan Exped.; Lok-kei, NW of No-doa, 20. VI. 1932, Lau & To; Sam-kwong-tsuen, Namwang-tsung, Kiung Shan Distr., 10. VIII. 1935, To (LINGNAN); Ta-hian, 600 m, 10. VI. 1935, Gressitt; Ta-hau, 22 m, Vo-lau, W of No-doa, VII. 1935, Gressitt; many, No-doa, 10. VII., Dwa-bi (Tai-pin), 19. VII; Dome Mt., 12. VII. 1935, Gressitt (CAS, BISHOP). N. VIETNAM: Hoa-binh, Tonkin, Cooman (FREY).

HOSTS: Clerodendron infortunatum, C. inerme.

### Luperini, group 2

# Genus Haplomela Chen

Haplomela Chen, 1942, Notes d'Ent. Chinoise 9 (3): 30 (Type: H. semiopaca Chen, monobasic; Kwangsi).

This genus, with only one known species, has not been seen by us. It is characterized as differing from *Hoplasoma*, *Haplosomoides* and *Liroetis* in having tarsal claws strongly lamellate and appearing as if bifid.

### 160. Haplomela semiopaca Chen

Haplomela semiopaca Chen, 1942, Notes d'Ent. Chinoise 9(3): 28 (Yao San, Kwangsi; Ac. SIN.).

DISTRIBUTION: SW China (Kwangsi).

# Genus Phyllobrotica Redtenbacher

Phyllobrotica Redt., 1845, Gatt. Deutsch. Käferf., 114 (type: Chrysomela quadrimaculata L.; Europe).—Chapuis, 1875, Gen. Col. 11: 163.—Laboissière, 1934, Soc. Ent. France, Ann. 103: 83.—Maulik, 1936, Fauna India, Galeruc., 491.—Ogloblin, 1936, Fauna USSR 26, 1: 185.

### Key to Chinese species of Phyllobrotica

- 2. Elytron with a subbasal and a preapical black spot; metasternum, hind femur and abdomen black; length 5-7 mm (Linnaeus, 1758; Europe, Siberia).. quadrimaculata\*

### 161. Phyllobrotica spinicoxa Laboissière

Phyllobrotica spinicoxa Lab., 1929, Soc. Ent. France, Ann. 98: 275, fig. 9 (Pe-yen-tsin, Yunnan; ?BRUXELLES).

DISTRIBUTION: SW China (Yunnan).

# 162. Phyllobrotica signata (Mannerheim)

Galleruca signata Mann., 1825, IN Hummel, Essais 4: 38 (Barnaul; ?Moscow).

- Phyllobrotica bisignata Gebler, 1830, Ledeb. Reise 2 (3): 219; 1848, Bull. Mosc. 21 (1): 15.
- Phyllobrotica signata, Joannis, 1866, Abeille 3: 111, 113 (Siberia).—Weise, 1886, Ins. Deutschl. 6 (4): 587 (Barnaul).—Jacobson, 1911, Käfer Russl. 9: pl. 59, fig. 24.—Ogloblin, 1936, Fauna USSR 26, 1: 195, fig. 87 (Kansu).—Chûjô, 1941, Nat. Hist. Soc.

Formosa, Trans. 31(219): 462 (S. & E. Siberia, Mongolia, N. China, Manchuria, Korea).

DISTRIBUTION: Siberia, N. China (Kansu).

HOST: Artemisia sp.

# Genus Japonitata Strand

Japonia Weise, 1922 (nec Gould), Tijdschr. Ent. 70 (type: Phyllobrotica nigrita Jacoby; Japan).

Japonitata Strand, 1935, Folia Zool. Hydrobiol. 7: 294 (new name for Japonia Weise, nec Gould, 1859).

# KEY TO CHINESE SPECIES OF JAPONITATA

- 1. Dorsum greenish or bluish ......2 Dorsum black (Jacoby, 1885; Japan) .....nigrita\*
- Elytron green, with 3 distinct costae, the middle one interrupted in middle [Tonkin; Laboissière, 1929; Hoa-binh, Tonkin, Cooman (FREY)] .....tricarinata\* Elytron purplish blue, with humeral costa distinct, the others vague.....163. unicostata

163. Japonitata unicostata (Laboissière)

Japonia unicostata Lab., 1929, Soc. Ent. France, Ann. 98: 274 (Yunnan-sen; ?BRUXELLES). DISTRIBUTION: S. China (Yunnan, Fukien).

FUKIEN: 1, Ta-chu-lan, 1000 m, Shaowu, 20. V. 1942, Maa (BISHOP).

# Genus Cerophysella Laboissière

Cerophysella Lab., 1930, Soc. Ent. France, Ann. 99: 352 (type: Cerophysella tonkinensis Lab.; Vietnam).—Ogloblin, 1936, Fauna USSR 26, 1: 169.

This genus has only a few known species, all in E. Asia, and they may all possibly belong to one species.

164. Cerophysella basalis (Baly) Fig. 128, a.

Aenidea? basalis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 181 (Japan, China; BM).

Cerophysella basalis, Laboissière, 1930, Soc. Ent. France, Ann. 99: 352. —Ogloblin, 1936, Fauna USSR 26, 1: 170, 399 (Japon, Chine).—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 160.

Cerophysella plagiata Lab., 1930, Soc. Ent. France, Ann. 99: 354 (Pe-yen-tsin, Yunnan; Choganh, Tonkin; PARIS). New Synonmy.

This species is highly variable in color. Possibly *C. tonkinensis* Lab. is also a synonym. The following forms may be distinguished: 1) elytron entirely black; 2) elytron black with a yellowish area in middle; 3) only basal part of elytron black, rest reddish; 4) elytron entirely reddish or yellowish.

DISTRIBUTION: Japan, E. China, Hainan I., N. Vietnam.



Fig. 128. a, Cerophysella basalis (Baly); b, Euliroetis melanocephala (Bowditch).

KIANGSI: 2, Ten-gan (ZMB). KWANGTUNG: 1, Mai-chan, Su-wen Distr., 26. VII. 1932, Hoffmann (LINGNAN). HAINAN: many, Ta-hian, 600 m, 15. VI. 1935, Gressitt; Fan-ta, 4. VI, Po-de, 5. VI, Gressitt; Cheung-kon, 17. VII. 1935, Gressitt; Ta-hau, 7. VII; Liamui (Ling-men), 2. VIII. 1935, Gressitt (CAS, BISHOP); Faan-na, S of No-doa, 10. VII. 1932, To; 1, Tai-pin-tsuen, 28. IV. 1935, To; Lin-fa Shan, 9. VI. 1932, Lau & To; Lingmoon, 23. IV. 1932, Hoffmann (LINGNAN).

### Genus Euliroetis Ogloblin

*Euliroetis* Ogl., 1936, Fauna USSR 26, 1: 197, 371, 403 (type: *Aenidea ornata* Baly; Japan, China).

This genus is only recorded from E. Asia.

# Key to Chinese species of Euliroetis

1.	Pronotum with some fine punctures on basal portion	2
	Pronotum without distinct punctures on basal portion	6
2(1).	Elytron partly pale, or largely reddish brown	3
	Elytron black; head, prothorax and abdomen testaceous; length 6.6 mm (Baly,	
	1874; Japan) abdominali	5*
3 (2).	Abdomen of $\overline{\partial}$ with short lobes or no lobes on middle portion of segments 2-3.	.4

1B

Abdomen of  $\mathcal{F}$  with very long lobes on each side of middle of sternites 2-3, and subterminal concavity very long and only moderately deep; head and thorax pitchy black; elytron and abdomen pale...... 167. nigrinotum 4 (3). Abdomen of  $\mathcal{J}$  with a fairly deep cavity and with sternites 1–2 neither divided Abdomen of  $\mathcal{F}$  with a very deep cavity preapically, and with sternites 1–2 divided medially and lobed behind; dorsum pitchy with preapical yellowish spot, or with 2 yellowish spots, or entirely reddish brown ...... 168. ornata 5 (4). Prosternum pale; legs testaceous with tarsi and upper borders of femora and Prosternum dark; legs nearly black except for apices of femora (Ogloblin, 1936; SE Siberia)...... obscuripes\* Elytron with a broad sutural stripe terminating before apex and a fairly broad stripe on lateral declivity, both brownish black; abdomen of  $\mathcal{J}$  with subterminal cavity very deep, with sternites divided and variously lobed, and with sternite 2 very broad and hiding 3 ..... 169. suturalis 7 (6). Head black; length 4.5 mm (Baly, 1874; Japan) ..... nigripes\* Head pitchy; length 5.5–6.5 mm; antenna slightly darkened; abdomen of 3 with subterminal cavity very deep and segment 2 with distinct posterior processes 

165. Euliroetis lameyi Laboissière

Liroetis lameyi Lab., 1929, Soc. Ent. France, Ann. 98: 278 (Tonkin; ?PARIS).—Ogloblin, 1936, Fauna USSR 26, 1: 199, 404 (Tonkin). DISTRIBUTION: N. Vietnam (Tonkin).

166. Euliroetis melanocephala (Bowditch) Fig. 128, b.

Hoplosoma melanocephala Bowd., 1925, Psyche 32: 246 (Fukien; ?MCZ).

Liroetis melanocephala, Laboissière, 1929, Soc. Ent. France, Ann. 98: 277 (Fukien; ?PARIS).

? Phyllobrotica ornata var. Jacoby, 1888, (nec ornata Baly), Zool. Soc. Lond., Proc. 1888: 349.

DISTRIBUTION: SE China (Fukien, Kiangsi, Chekiang, Kwangtung).

CHEKIANG: 1, Hangchow, 22. V. 1923, Van Dyke (CAS); Tung-lu, 23. IV. 1926, Wright. KIANGSI: Kiu-kiang (ZSBS). FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, IV-VI.1 942–43, Maa (CAS, BISHOP); Hotien, Chang-ting, IV. 1941, Maa; Bohea Hills, 24. IV. 1940, Maa; San-chiang, Kuatun & Sien-feng-ling, IV. 1942, Chungan, V. 1943, Maa (BISHOP). KWANGTUNG: 1, Yao Shan, Lin Distr., 27. IV. 1934, To (LINGNAN).

167. Euliroetis nigrinotum Gressitt and Kimoto, n. sp. Fig. 129, a.

*Male*: Body ochraceous brown; head and prothorax dark pitchy brown to nearly black; antenna dull brown, somewhat castaneous on scape; ventral surfaces dull testaceous, paler on distal 1/2 of abdomen; legs dull brown, slightly paler on under sides of tibiae. Body glabrous above, moderately hairy on anterior portion of head; antenna moderately

clothed with pale buff hairs; ventral surfaces with scattered fairly long silvery buff hairs; legs moderately clothed with subadpressed goldish hairs.

*Head* nearly as broad as prothorax, slightly broader than long, obtusely rounded anteriorly; occiput moderately convex, minutely vermiculate, depressed medially on anterior portion; an irregular subtransverse depression between posterior portions of eyes; interocular area transversely raised but deeply grooved medially; frontoclypeus short, with short raised posterior median ridge connecting with 2 subtransverse ridges extending towards lateral corners; labrum fairly narrowed, partly punctured. Antenna nearly 4/5 as long as body, moderately stout; scape arched and moderately shiny; segment 2 less than 1/2 as long as 1; 3 nearly as long as 1; subequal to 4 and 5; 6 and following slightly shorter and decreasing slightly in length beyond 7; 11 about as long as 7. Prothorax nearly 4/5 as long as broad, quite straight at side and increasing slightly in width from base to apex; side quite strongly margined; basal margin slightly sinuate, emarginate behind lateral angle; anterior margin nearly straight; disc rather strongly convex, slightly depressed at each side behind middle and feebly depressed near middle of base, with surface minutely punctured on parts of anterior, basal and lateral portions. Scutellum nearly square, slightly longer than broad. Elytron more than  $3 \times as$  long as broad, subparallel, slightly widened behind middle, evenly rounded apically; disc moderately and irregularly punctured, the punctures becoming finer near extreme apex. Ventral surfaces shallowly and irregularly punctured on metasternum and a little more closely punctured on sides of abdomen; abdomen strongly modified, with first 4 segments greatly abbreviated, segment 1 bearing a pair of short submedian lobes followed by a pair of much longer lobes on 2 and still slightly longer lobes on 3, last sternite greatly elongated and bearing a very large smooth concavity which is distinctly longer than broad and fully 2/3 length of abdomen, with longer hairs along its borders; pygidium bearing a pair of somewhat serrate angular processes besides a pair of slender teeth between them. Legs moderately stout and straight; hind tarsal segment 1 as long as 2+3 and distinctly longer than 5. Length 5 mm; breadth 2.

Female: Length 6.0 mm; breadth 2.6.

Paratypes: Length 6.0-6.5 mm; breadth 2.5-2.8.

DISTRIBUTION: SE China (Fukien, Chekiang).

Holotype & (BISHOP 3277), Ta-chu-lan, 1000 m, Shaowu, Fukien, 10. V. 1943, T. C. Maa; allotopotype ♀ (BISHOP), same data; 2 paratypes, (CAS), Hangchow, Chekiang Prov., 19. V. 1923, Van Dyke.

Differs from *nigripes* Baly in being larger, and from the other Chinese species in having abdomen of  $\mathcal{J}$  bearing a very long subterminal cavity which is much longer than broad and very smooth, and in having long slender lobes projecting from hind margins of abdominal segments 2 and 3.

168. Euliroetis ornata (Baly) Fig. 129, b.

Aenidea ornata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 180 (Nagasaki, Shanghai; BM).

Phyllobrotica ornata Jacoby, 1888 (homonym), Zool. Soc. Lond., Proc. 1888: 349 (Foochau;? BM). New Synonymy.

Liroetis ornata, Laboissière, 1929 (nec Baly 1874, but Jacoby 1888), Soc. Ent. France, Ann. 98: 277 (Fokien; Corée: Ile Quelpart).



Fig. 129. a, Euliroetis nigrinotum n. sp.; b, E. ornata (Baly).

Liroetis abdominalis Laboissière, 1929 (nec Baly), Soc. Ent. France, Ann. 98: 278 (Yunnan Sen).

*Euliroetis ornata*, Ogloblin, 1936, Fauna USSR 26, 1: 201, 404, fig. 89 (E. Siberia, Korea). —Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 161.

DISTRIBUTION: E. Siberia, Korea, Quelpart I., E. China (Manchuria Kiangsu, Fukien, Kwangtung), Japan (Kyushu).

KIANGSU: 4, Nanking, 4. VI. 1923, Van Dyke (CAS). FUKIEN: many, Ta-chu-lan, 1000 m, IV–VI. 1942–43, Maa; Sien-feng-ling, Chungan, IV. 1942, Maa (CAS, BISHOP); nr. Foochow, 1924, Kellogg (US). KWANGTUNG: 1, Canton, Mell (ZMB), Yao Shan, Lin Distr., 9. V. 1934, To (LINGNAN).

169. Euliroetis suturalis (Laboissière) Fig. 130.

Liroetis suturalis Lab., 1929, Soc. Ent. France, Ann. 98: 279, fig. 11 (Chung-King; ?BRU-XELLES).

Euliroetis suturalis, Ogloblin, 1936, Fauna USSR 26, 1: 202, figs. 91-92 (Kansu, Kweichow).

DISTRIBUTION: China (Kansu, Szechuan, Sikang, Hupeh, Kweichow, Kiangsu).

SZECHUAN: 5, Sui-fu, V. 1924, Graham (US); 1, Wa Shan, VII. 1923, Graham; 1, Shuin-chien-su, 400 m, V. 1924, Graham; 1, Kuan-hsien, 15. VII. 1940, Richardson; 1, Tsangling-shien, V. 1924, Graham; 1, Hua-ying Shan, VII. 1923, Graham. SIKANG: 1, betw. Ya-chow and Ta-tsien-lu, 2500 m, VII. 1930, Graham; 1, Yachow, VI. 1923, Graham; 1,



Fig. 130. *Euliroetis suturalis* (Laboissière).

Ta-tsien-lu, 2400 m, VIII. 1930, Graham (US). HU-PEH: 2, Sui-sa-pa, Lichuan, 27. VII–20. VIII. 1948, Gressitt & Djou (CAS, BISHOP). KIANGSU: 1, Nanking, 4. V. 1923, Van Dyke (CAS).

# Genus Paridea Baly

- Paridea B., 1886, Linn. Soc. Lond., Jour. 20: 26 (type: P. thoracica Baly=Galleruca tetraspilota Hope; India). —Laboissière, 1930, Soc. Ent. France, Ann. 99: 339. —Maulik, 1936, Fauna India, Galeruc., 498.
- Paraulaca Baly, 1888, Linn. Soc. Lond., Jour. 20: 168 (type: Rhaphidopalpa angulicollis Motschulsky; China).—Ogloblin, 1936, Fauna USSR 26, 1: 165, 397 (type put in subgenus Semacia!). Subgenus.
- Semacia Fairmaire, 1889, Soc. Ent. France, Ann.
  58: 82 (type: S. biplagiata Fairm.).—Ogloblin, 1936, Fauna USSR 26, 1: 167, 398 (subgenus of Paraulaca, but included type of latter).—
  Laboissière, 1930, Ent. Soc. France, Ann. 99: 330. Subgenus.

We are combining the above 3 names in one genus, but retaining each of the 3 as subgenera. Unfortunately, the differences seem to involve only secondary sexual characters, or questionable characters. However, for the present, it seems desirable to retain use of the names, until the generic characters in this subfamily are better understood, and until an adequate revision has been made. As may be seen from the synonymy, Baly and Maulik did not use *Semacia* or *Paraulaca*, Ogloblin did not use *Paridea* (and mistakenly put the types of *Paraulaca* and *Semacia* both in *Semacia*, and his *Paraulaca* s. str. is actually *Paridea*), and Laboissière used both *Paridea* and *Semacia*, calling them very closely related genera.

### KEY TO CHINESE SPECIES OF PARIDEA

1.	Last abdominal sternite emarginate apically in both sexes; prosternal intercoxal	_
	process complete but extremely narrow	2
	Last abdominal sternite entire in both sexes; pygidium also entire, not projecting,	
	as a rule beyond elytra; prosternal intercoxal process sometimes? incomplete	
	( <i>Paridea</i> , s. str.)	8
2 (1).	Pygidium of $\mathcal{P}$ entire, somewhat projecting beyond elytral apices; postscutellar	
	area depressed and with a raised pore on suture (Paraulaca)	3
	Pygidium of $\varphi$ deeply emarginate and projecting as a bilobed process beyond	
	elytra (Semacia)	4
a(a)	The second secon	

3 (2). Elytron with postmedian spot fairly broad, and common anterior sutural spot

distinct or lacking (NE China, Japan)..... 170. angulicollis Elytron with postmedian spot rather narrow, forming a slightly sinuous band, and common anterior spot reduced or lacking (SW China)...171. transversofasciata Dorsum with pronotum reddish and elytron with a large black postmedian spot and a small apical spot, of black; elytron of  $\mathcal{J}$  with a premedian cavity near external margin bearing a tubercle; length 4.5-6.5 mm......173. biplagiata 5 (4). Elytron of  $\mathcal{F}$  lacking 2 cavities anterior to middle of side; mesothoracic epi-Elytron of  $\mathcal{J}$  with 2 cavities anterior to middle of side; anterior one smaller, with a tufted process between; head and pronotum ochraceous; elytron very pale; length 5.0–5.5 mm...... 175. nigrocephala 6 (5). Elytron of  $\mathcal{F}$  with postscutellar common area elevated and/or depressed, not flat...7 Elytron of  $3^{\circ}$  with postscutellar common area fairly flat; length 5.75 mm (Laboissière 1930; Tonkin) ...... pectoralis\* 7 (6). Elytron of  $\vec{\sigma}$  with postscutellar common area elevated; elytral punctures nearly in lines; last abdominal sternite flat; length 5 mm...... 174. flavipennis Elytron of  $\mathcal{J}$  with postscutellar common area in part deeply impressed (parallel to suture); central portion of last abdominal sternite impressed, but flat; length 5.5–6.0 mm ...... 172. avicauda 8 (1). Elytral epipleuron with a large cavity at level of metasternum, behind which epipleuron becomes vertical; elytron with a broad submedian black band for most of length; head, pronotum and scutellum somewhat darkened; venter pale; length 5.5–6.0 mm ...... 178. epipleuralis Elytron with a large tubercle near top of apical declivity, and with basal and preapical broad black bands, both broken at suture; fore-body, appendages and venter entirely pale; length 6.5 mm ...... 187. tuberculata 11 (10). Elytron black, with a fairly long humeral carina and a shorter slightly oblique raised line extending back from near humerus; occiput and median portion of pronotum blackish; venter entirely pale...... 177. costata Elytron pale, with long humeral carina and several weaker carinae parallel to it and formed of raised interpunctural rows; fore-body dirty testaceous; metasternum black ...... 185. testacea 12 (9). Elytron with 2 black bands of one large spot or 2 small spots each, the bands Elytron with a broad postmedian black band and a narrow basal band connected broadly along lateral margin; rest of body black or pitchy black except for pale abdomen; pronotum impunctate; elytron with some distinct rows of punctures; length 4.6 mm...... 176. breva 

Length about 7.75 mm; metasternum black; abdominal sternites each with 3
black spots: 1 median and 1 on each side 182. perplexa
15 (14). Abdomen with segments 1-4 entirely blackish 181. octomaculata
Abdomen pale with only a few vague small spots at side, sometimes a spot
on side of each segment 179. harmandi
16 (13). Elytral spots not much larger than space between them, generally a little
smaller
Elytral spots much larger than space between them and than apical pale area;
pronotum more than $2 \times$ as broad as long; elytron with several slightly
sinuate rows of heavy punctures in central portion behind humerus
17 (16). Femora and tibiae generally striped externally with black; scutellum pale;
length 5.0-6.5 mm 18
Femora and tibiae not striped externally; scutellum dark; length 4-5 mm;
elytron with some fairly distinct and subregular puncture-rows; abdomen
entirely pale
18 (17). First 4 abdominal sternites black; pronotal disc moderately punctured; pale
coloration somewhat greenish
First 4 abdominal sternites pale; pronotal disc more or less impunctate; pale
coloration testaceous

### Subgenus Paraulaca Baly

This subgenus is more closely related to *Semacia* than it is to *Paridea*. Possibly later it may have to be united with *Semacia*.

170. Paridea (Paraulaca) angulicollis (Motschulsky), NEW COMBINATION Fig. 131, a.

Rhaphidopalpa angulicollis Mots., 1853, Etudes Ent. 2: 50 (China; ?Moscow).
Aulacophora angulicollis, Baly, 1874, Ent. Soc. Lond., Trans. 1874: 186 (Nagasaki, Pekin).
Paraulaca (Aulacophora) angulicollis, Baly, 1888, Linn. Soc. Lond., Jour. 20: 168.—Weise, 1922, Tijdschr. Ent. 65: 70 (Japan: Nishitake, Hiuga, Kiushiu, C. Japan).

Semacia nipponensis Laboissière, 1930, Soc. Ent. France, Ann. 99: 355 (Japan; PARIS). Paraulaca (Semacia) angulicollis, Ogloblin, 1936, Fauna USSR 26, 1: 168, 398 (Japon, Chine). Semacia (Semacia) angulicollis, Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 168 (hosts).

DISTRIBUTION: E. China (Kirin, Hopei, Kiangsu, Fukien), Taiwan, Japan.

KIRIN: Er-sen-tien-tze, 23. VII. 1940, Weymarn (CAS). KIANGSU: several, Nanking, 21. IV. 1923, Van Dyke (CAS). FUKIEN: Ta-chu-lan, 1000 m, Shaowu, 24. IV. 1942, Maa (BISHOP).

HOSTS: Gynostemma sp., Trichosanthes sp.

171. Paridea (Paraulaca) transversofasciata (Laboissière), NEW COMBINATION

Semacia transversofasciata Lab., 1930, Soc. Ent. France, Ann. 99: 335 (Pe-yen-tsin, Yunnan; ?BRUXELLES).

DISTRIBUTION: SW China (Yunnan, W. Hupeh).



Fig. 131. a, Paridea (Paraulaca) angulicollis (Motschulsky); b, P. (Semacia) avicauda (Laboissière).

HUPEH: 3, Sui-sa-pa, 1000 m, 27. VII-21. VIII.; 1, Hsiao-ho, 11. VIII.; 1, Liang-ho-keu, 7. IX., all Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP).

HOSTS: Gynostemma pentaphyllum (Thunb.) Makino, Trichosanthes cumeroides (Ser.) Maxim (Japan); Hydrangea sp. (Hupeh).

#### Subgenus Semacia Fairmaire

172. Paridea (Semacia) avicauda (Laboissière), NEW COMBINATION Fig. 131, b.

Semacia avicauda Lab., 1930. Soc. Ent. France, Ann. 99: 331, fig. 18 (Thibet; ?BRUXELLES). Paraulaca (Semacia) avicauda, Ogloblin, 1936, Fauna USSR 26, 1: 167, 398 (Se-Tchouen). DISTRIBUTION: W. China.

SZECHUAN: 1  $\varphi$ , nr. Kuan-hsien, 1000 m, VIII. 1933, Graham (US); 1  $\partial$ , Wenchuan-shien, 1200 m, 50 km NNW of Kuan-hsien, VIII. 1933, Graham.

173. Paridea (Semacia) biplagiata (Fairmaire), NEW COMBINATION Fig. 132, a.

Semacia biplagiata Fairm., 1889, Soc. Ent. France, Ann. 58: 82 (Moupin; PARIS).—Laboissière, 1930, op. cit. 99: 331 (Thibet).

Aeropa maculata Weise, 1889, Soc. Ent. Ross., Horae 23: 568, 622 (Sie-tschuan).

Paraulaca (Semacia) biplagiata, Ogloblin, 1936, Fauna USSR 26, 1:169, 398 (Se-Tchouen). DISTRIBUTION: S. China.

HUPEH: 3, Sui-sa pa, 1000 m, 24–25. VIII; 4, Liang-ho-keu, 7–10. IX; both Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: 2, Ta-chu-lan, 1000 m, Shaowu, 3. V. 1943, 2. VI. 1942, Maa (CAS, BISHOP).

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Fig. 132. a, Paridea (Semacia) biplagiata (Fairmaire); b, P. (S). nigrocephala (Laboissière).

174. Paridea (Semacia) flavipennis (Laboissère), NEW COMBINATION

Semacia flavipennis Lab., 1930, Soc. Ent. France, Ann. 99: 334 (Pe-yen-tsin, Yunnan; ?BRUXELLES).

DISTRIBUTION: SW China (Yunnan).

175. Paridea (Semacia) nigrocephala (Laboissière), NEW COMBINATION Fig. 132, b.

Semacia nigrocephala Lab., 1930, Soc. Ent. France, Ann. 99: 332 (Yunnan; ?BRUXELLES). The specimen below has the head more extensively reddish than in the type. DISTRIBUTION: S. China (Yunnan, Kwangtung).

KWANGTUNG: 1, Iu-ling-paai, Yao Shan, 30. IX, & 1, Naam-kong-paai, Yao Shan, Yang Shan Distr., 13. X. 1934, To (LINGNAN).

Subgenus Paridea s. str.

176. Paridea (Paridea) breva Gressitt and Kimoto, n. sp. Fig. 133, a.

*Female*: Rather short, pitchy black to pale testaceous; head and prothorax pitchy black, slightly more reddish in middle of occiput and near posterior margin of pronotum; antenna pitchy, more reddish near base; scutellum pitchy black; elytron pale testaceous with a fairly narrow basal band and broad preapical band of pitchy black joined by a fairly wide band along external margin, the basal band slightly extended on to humeral area; ventral surfaces pitchy black, somewhat more reddish on metasternum; abdomen pale testaceous legs dark pitchy brown, paler near apices of femora. Body more or less glabrous above and a few pale hairs on anterior portions of head; antenna moderately clothed with

pale adpressed oblique hairs; ventral surfaces very sparingly clothed with fine pale hairs; legs moderately clothed with fine pale hairs but more sparsely so on sides of femora.

Head distinctly narrower than prothorax, fully as broad as long, broadly rounded anteriorly; occiput moderately convex, smooth and nearly impunctate, depressed at middle; a straight transverse groove between posterior margins of eyes; interocular area moderately raised behind antennal insertions and with a fine median groove; frontoclypeus triangular, median raised line projecting to between antennal insertions, surface finely punctured; labrum transverse, with a few large punctures. Antenna more than 1/2 as long as body, moderately slender; scape arched and gradually thickened; segment 2 is 1/2 as long as 1; 3 slightly shorter than 1, subequal to 4; 5 and 6 slightly longer than 4, subequal; 7 and following slightly shorter. Prothorax nearly 2/3 as long as broad; sides slightly sinuate, distinctly widened anterior to middle; basal margin feebly convex; anterior margin nearly straight in dorsal view but slightly concave at middle; anterior corner slightly projecting but much narrower than premedian portion; disc fairly shiny, minutely and indistinctly punctured, rather strongly raised in anterior 3/5; transverse depression somewhat sinuate, nearly divided along median line. Scutellum slightly longer than broad, feebly convex at sides and rounded apically. Elytron slightly more than  $2 \times as$  long as broad, gradually widened to end of 2nd 1/3, broadly rounded apically; disc moderately punctured in partly subregular rows, punctures mostly about as large as interspaces longitudinally on central portion but weaker basally and postmedially. *Ventral surfaces* shiny, sparsely and feebly punctured but with a few depressions on sides of abdominal sternites; last tergite and sternite both evenly rounded apically. Legs fairly short and not very stout; tibiae nearly straight; hind tarsal segment 1 barely longer than 2+3, and barely longer than 5. Length 4.35 mm; breadth 3.05.

DISTRIBUTION: Hainan I.



Fig. 133. a, Paridea (Paridea) breva n. sp.; b, P. (P.) costata (Chûjô).

Holotype Q (CAS), Ta-han, 850 m, nr. Red Mist Mt., C. Hainan I., 22. VI. 1935, Gressitt.

Differs from the other Chinese species in its shorter build and different type of coloration. Differs from *sinensis* in being much smaller and shorter, and in having head and prothorax nearly black and elytron with a narrow basal band connected along margin with a preapical band.

# 177. Paridea (Paridea) costata (Chûjô), NEW COMBINATION Fig. 133, b.

Paraulaca costata Chûjô, 1935, Arb. Morph. Taxon. Ent. Berlin-Dahlem 2 (3): 164 (Taiwan; DEI).

Paraulaca (Paraulaca) costata, Ogloblin, 1936, Fauna USSR 26, 1: 166 (Kansu).

DISTRIBUTION: Taiwan, China (Kansu, Szechuan, Chekiang, Kiangsu).

SZECHUAN: 1, Kuan-hsien, 2. VIII. 1938, K. F. Chen (U. NANKING); Wan-hsien, 22. VIII. 1948, Gressitt & Djou (CAS). CHEKIANG: 2, Tien-mu Shan, Reitter (FREY). KIANGSU: 1, Nanking, 28. III. 1923, Van Dyke (CAS).

# 178. Paridea (Paridea) epipleuralis Chen

Paridea epipleuralis Chen, 1942, Notes d'Ent. Chinoise 9 (3) : 34 (Wei-tze-ping, Shensi ; HOANGHO-PAIHO).

We have not seen this species.

DISTRIBUTION: N. China (Shensi).

### 179. Paridea (Paridea) harmandi Laboissière

Paridea Harmandi Lab., 1930, Soc. Ent. France, Ann. 99: 340 (NE Yunnan, Sikkim; ?BRUXELLES).

DISTRIBUTION: S. China (Yunnan, Kiangsi, Fukien); Sikkim.

KIANGSI: Hong Shan, 1000 m, Kwangtung border, 22. VI. 1936, Gressitt (CAS). FUKIEN: 2, nr. Foochow, 1921–24, Keilogg (US).

180. Paridea (Paridea) monticola Gressitt and Kimoto, n. sp. Fig. 134, a.

*Male*: Pale testaceous to shiny pitchy black: head, prothorax and antenna entirely pale; elytron with a fairly large black humeral patch approaching to 1/4 width of elytron from suture and a still larger postmedian subrounded patch approaching slightly closer to suture and external margin; ventral surfaces with metathorax and abdominal segments 1–3 dark reddish pitchy and abdominal segment 4 slightly reddish; legs pale but with upper borders of femora and tibiae narrowly pitchy. Body glabrous above with a few hairs on anterior portions of head; antenna clothed with rather short mostly adpressed goldish hairs; ventral surfaces largely subglabrous with more hairs on median and apical portions of abdomen; legs rather finely and briefly clothed with goldish to slightly reddish hairs.

Head narrower than prothorax, narrowed and abbreviated anteriorly; occiput smooth and shiny, more or less impunctate, depressed at center between posterior portions of eyes; a fairly distinct transverse groove between hind parts of eyes; interocular area transversely raised and medially grooved; frontoclypeus with a distinct ridge extending nearly to posterior borders of antennal insertions. Antenna 2/3 as long as body, moderately slender; scape somewhat shiny, slightly arched, cylindrical apically; segment 2 as long as 1; 3 nearly as long as 1; 4 slightly longer than 3, subequal to next 3 segments; 8 slightly shorter; 9 slightly shorter than 8; 10 as long as 8; 11 longest. Prothorax 2/3 as long as broad, much wider in anterior 1/2 than in basal 1/2; side distinctly sinuate, constricted behind middle; basal margin feebly convex; anterior margin fairly straight in dorsal view with an anterior corner slightly projecting forward; disc shiny, shallowly but distinctly punctured. Anterior 2/3 of disc quite strongly convex and transverse to fairly deep and partly interrupted at middle. Scutellum triangular, longer than broad, rounded apically. *Elytron* not quite  $3 \times as$  long as broad, feebly convex at side but widest somewhat behind middle, subevenly rounded apically; disc rather evenly convex, with fairly strong punctures which are rather irregularly arranged and mostly about as large as interspaces on central portion, but becoming much finer behind middle. Ventral surfaces rather feebly and sparsely punctured; pygidium rounded apically; last sternite feebly emarginate in center with median lobe well set and slightly broader than long. Legs moderately slender, fairly straight; femora quite shiny; hind tarsus with segment 1 as long as 2+3 and fully as long as 5. Length 5.5 mm; breadth 3.0.

Female: Length 5.6 mm; breadth 3.3.

Paratypes: Length 4.6-5.8 mm; breadth 2.8-3.5.

DISTRIBUTION: SW China (Szechuan, Sikang, Yunnan).



Fig. 134. a, Paridea (Paridea) monticola n. sp; b, P. (P.) sinensis Laboissière.

Holotype ♂ (U. S. NAT. MUS.), nr. Wen-chuan, 1200 m, 50 km NNW of Kuanhsien, Szechuan Prov., V-VIII. 1933, D. C. Graham; allotopotype ♀ (USNM), same data; 3 paratopotypes, same data (US, BISHOP); 1, Kuan-hsien, VII. 1924, Graham; 1, Mt. Omei, 1200 m, Graham; 1, Mu-ping, 300 m, Sikang, VIII. 1929, Graham (US); 2, Solingho River Valley, Yunnan (FREY).

1963

Differs from *sinensis* Lab. in having pronotal disc moderately punctured, instead of impunctate, and in being more greenish and in having abdominal sternites 1–4 black instead of pale.

# 181. Paridea (Paridea) octomaculata (Baly)

Aulacophora octomaculata B., 1886, Linn. Soc. Lond., Jour. 20: 17 (India; BM).

Paridea octomaculata, Maulik, 1936, Fauna India, Galeruc., 504 (W. Himalayas, Assam).

The following specimen is referred here with slight doubt, as it differs slightly in color.

DISTRIBUTION: Himalayas, Tibet, Assam.

TIBET: 1, Po-o, SW Tibet (FREY).

182. Paridea (Paridea) perplexa (Baly)

Aulacophora perplexa B., 1879, Cist. Ent. 2: 447 (Assam; BM).

Paridea perplexa, Baly, 1889, Ent. Soc. Lond., Trans. 1889 : 304.—Maulik, 1936, Fauna India, Galeruc., 505 (Bengal, Assam, Burma).

We have not seen any Chinese material of this species, which is closely related to octomaculata and harmandi.

DISTRIBUTION: NE India, Burma, ?China.

# 183. Paridea (Paridea) quadriplagiata (Baly), NEW COMBINATION

Aulacophora quadriplagiata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 186 (Nagasaki; BM). —Allard, 1889, Soc. Ent. France, Ann. ser. 6, 8: 314 (key).

Paraulaca quadriplagiata, Weise, 1922, Tijdschr. Ent. 65: 70 (Japan).

Paridea verticalis Laboissière, 1930, Soc. Ent. France, Ann. 99: 343 (Yunnan; ?BRUXELLES). New Synonymy.

DISTRIBUTION: Japan, E. China (Chekiang, Anhwei, Fukien, Kiangsi, Kwangtung).

CHEKIANG: 12, Tien-mu Shan, Reitter (FREY). ANHWEI: 1, Kin-hua Shan, IX. 1932, G. Liu; 1, Tai-ping-shien, X. 1932, G. Liu (MCZ). FUKIEN: several, Ta-chu-lan, 1000 m, and Sui-pei-kai, Shaowu, IV–V. 1943, Maa (BISHOP, CAS); 1, Wan-hang, Kien-yang, IV. 1943, Maa (BISHOP). KIANGSI: Wong-sa-shue, 300 m, S of Sungwu, 8–11. VII. 1936, Gressitt (CAS). KWANGTUNG: 2, Canton, Mell (ZMB). ?KWEICHOW: Kiautschau (FREY).

184. Paridea (Paridea) sinensis Laboissière Fig. 134, b.

Paridea sinensis Lab., 1930, Soc. Ent. France, Ann. 99: 342 (Yunnan, Kweichow, Szechuan; ? BRUXELLES).

DISTRIBUTION: S. China (Yunnan, Kweichow, Fukien, Kiangsi, Hupeh).

FUKIEN: Several, Ta-chu-lan, 1000 m, Shaowu, V. 1945; Sien-feng-ling, Chungan, IV. 1942; Kuatun, Chungan, IV. 1942; Upper Kuatun, 1400 m, VIII. 1945, all Maa (BISHOP, CAS); 2, Yun-ling Shan (ZMB). KIANGSI: 1 (FREY). HUPEH: several, Sui-sa-pa, 1000 m, Lichuan Distr., 23. VII-30. VIII. 1948, Gressitt & Djou; Liang-ho-keu, Lichuan, 7. IX. 1938, Djou. YUNNAN: 1, Tali (FREY).

1B

#### 185. Paridea (Paridea) testacea Gressitt and Kimoto, n. sp. Fig. 135, b.

*Male*: Pale testaceous, slightly less pale on head, pronotum and scutellum; antenna dull brown beyond segment 2; mesepisternum and metathorax pitchy black; tibiae and tarsi pitchy reddish-brown. Body nearly glabrous above; antenna clothed with fine short pale hairs; ventral surfaces rather thinly clothed with silvery buff hairs; legs clothed with rather short silvery buff hairs.

Head distinctly narrower than prothorax, about as broad as long, tapered and rounded anteriorly; occiput smooth and shiny, apparently impunctate, finely grooved on middle of anterior portion; a transverse groove between postmedian portions of eye; interocular area moderately swollen and medially grooved; frontoclypeus strongly raised on median line above to a point of nearly reaching posterior margins of antennal insertions; labrum smooth and shiny with only a few punctures. Antenna slender, not quite 3/4 as long as body; scape shiny, gradually thickened to apex; segment 2 more than 1/2 as long as 1;3 is  $5 \times$  as long as 2 and subequal to next 4; 7-10 decreasing very slightly in length; 11 barely longer than 4, subacute apically. Prothorax nearly 3/4 as long as broad, much wider anteriorly than posteriorly; side slightly sinuate, impressed near middle; basal margin slightly convex; anterior margin nearly straight in dorsal view; anterior angle projecting very slightly; disc smooth and shiny with very few distinct punctures, anterior 3/5 considerably raised and convex and followed by subregular transverse groove which is almost interrupted at medial line. Scutellum slightly longer than broad, shiny, rounded apically. Elytron not quite  $3 \times$  as long as broad, gradually widened beginning at last 1/4, evenly rounded apically; surface with fairly distinct rows of moderately deep punctures on central portion of disc, particularly on outer 1/2 of anterior portion of disc, the rows becoming less distinct basally and apically and near suture as well as being somewhat confused on lateral



Fig. 135. a, Paridea (Paridea) tuberculata n. sp.; b, P. (P.) testacea n. sp.

declivity; upper edge of lateral declivity forming a fine ridge. Ventral surfaces in large part sparsely punctured, more weakly so on metasternum. Legs fairly slender and straight; hind tarsal segment 1, fully as long as 2+3 and slightly longer than 5. Length 4.5 mm; breadth 2.4.

Female: Length 4.6 mm; breadth 2.5.

Paratypes: Length 4.4–6.0 mm; breadth 2.4–2.8.

DISTRIBUTION: SE China (Fukien).

Holotype & (BISHOP 3278), Ta-chu-lan, 1000 m, Shaowu, Fukien, 29. IV. 1942, T. C. Maa; allotopotype ♀ (BISHOP), 11. IV. 1943, Maa; 15 paratopotypes (BISHOP, CAS, USNM, BMNH), 17–24. IV. 1942, 17. V–2. VI. 1943, Maa (one by K. S. Lin).

Differs from other Chinese species in being entirely testaceous above and in lacking specialized structures on elytron except for a fine posthumeral ridge.

# 186. Paridea (Paridea) tetraspilota (Hope)

Galleruca tetraspilota Hope, 1831, IN Gray, Zool. Miscell., 29 (Nepal; ?OxFord).

Paridea thoracica Baly, 1886, Linn. Soc. Lond., Jour. 20: 27 (India; BM).—Duvivier, 1891,
Soc. Ent. Belg., C. R. 35: xlv (Konbir); 1892, Soc. Ent. Belg., Ann. 36: 432 (Kurseong, Konbir).

Paridea tetraspilota, Maulik, 1936, Fauna India, Galeruc., 50 (India, Burma, Yunnan, Siam, Formosa).

We have only examined material in the British Museum, including the type of *thoracica*.

DISTRIBUTION: India, Nepal, Burma, Thailand, SW China, Taiwan.

# 187. Paridea (Paridea) tuberculata Gressitt and Kimoto, n. sp. Fig. 135, a.

*Male*: Yellowish testaceous with a slightly ochraceous tinge particularly on upper portions of head and prothorax; elytron with 2 large bands not quite reaching external margin or suture: 1st covering humeral area and most of basal 1/4, 2nd in 3rd 1/4 and not quite so black or regularly defined as 1st and slightly constricted in middle. Body more or less glabrous above with a few hairs on anterior portion of head and side of prothorax; antenna with very short oblique pale hairs and a few longer ones on apices of segments; ventral surfaces and legs sparingly clothed with subrecumbent golden hairs.

Head distinctly narrower than prothorax, about as broad as long, broadly rounded anteriorly; occiput evenly convex and smooth; subtransverse depression between posterior portions of eyes; interocular area slightly raised behind antennal insertions and obliquely grooved at middle; frontoclypeus triangular with median ridge projecting backward to slightly behind posterior borders of antennal insertions; labrum rather large, with a few scattered punctures. Antenna 2/3 as long as body, fairly slender; scape more or less gradually thickened to apex, slightly arched; segment 2 shiny like 1 and nearly glabrous, not quite 1/2 as long as 1; 3 slightly shorter than 1, subequal to 4; 5 slightly shorter, subequal to remaining segments in length. Prothorax nearly 2/3 as long as broad, side strongly sinuate, considerably widened anterior to middle; basal margin strongly and subevenly convex; anterior margin nearly straight in dorsal view; posterior and anterior lateral angles somewhat rounded and not projecting; disc rather smooth and sparsely and minutely punc-
tured, a rather shallow transverse depression just behind middle and distinctly weaker on central portion and barely evident on median line. Scutellum subequilaterally triangular, rounded apically, smooth. Elytron about  $2.5 \times$  as long as broad, strongly widened to end of 2nd 1/3, evenly rounded posteriorly; disc strongly convex, finely and irregularly punctured, with punctures mostly about 1/3 as wide as interspaces, but slightly larger on central portion, a carina arising well behind humerus and very strong tubercle at top of apical declivity; tubercle projecting posteriorly at apex and subacute with a cavity below it adjacent to suture. Ventral surfaces finely and sparsely punctured, rather shiny on metasternum; apical margin of large pygidium evenly rounded; central portion of last sternite deeply incised some distance on each side of middle and forming an apical lobe which is twice as broad as long and shallowly emarginate apically. Legs not very stout; hind tarsus with segment 1 distinctly longer than 2+3 and slightly longer than 5. Length 6.2 mm; breadth 3.8.

#### DISTRIBUTION: SE China (Fukien)

Holotype & (Zool. Mus. BERLIN), Yun-ling Shan, Fukien Prov., SE China.

Differs from *sinensis* in being slightly larger, broader posteriorly, with prothorax broader and elytron more finely and irregularly punctured in large part, and bearing a very strong tubercle posteriorly.

#### Genus Haplosomoides Duvivier

Haplosomoides Duv., 1890, Soc. Ent. Belg., C. R. 34: XXXV (type: Rhaphidopalpa serena Boheman; E. Indies).—Laboissière, 1930, Soc. Ent. France, Ann. 99: 325.—Maulik, 1936, Fauna India, Galeruc., 162.

Weise (1924, Coleopt. Cat. 78: 126) indicated the type, serena Boh., as a synonym of unicolor Illiger. However, remarks by Baly (1889, Ent. Soc. Lond., Trans. 1889: 305) and by Weise (1922, Tijdschr. Ent. 65: 74) indicate that serena has appendiculate tarsal claws, whereas unicolor has bifid claws, as pointed out by Maulik (1936, Fauna India, 162). Thus the 2 cannot be synonyms, and serena can remain the type of Haplosomoides, while unicolor belongs properly in Hoplasoma, if the attributed comments do actually apply to the type specimens.

#### KEY TO CHINESE SPECIES OF HAPLOSOMOIDES

1.	Elytral carinae quite sharp, or at least always fairly distinct; body partly dark
	above, or length over 7 mm
	Elytral carinae not very sharp, often quite weak; dorsum entirely pale; length
	less than 6.5 mm
2(1).	Elytron partly or entirely dark; elytral carinae quite sharp; hind corner of pro-
	thorax feebly incised behind angle 3
	Elytron entirely pale; elytral carinae not always very sharp; hind corner of
	prothorax distinctly incised behind angle 4
3 (2).	Elytron entirely dark; length 5.8-6.6 mm 189. costata
	Elytron dark only on apical 1/3; length 5.2-5.8 mm 194. ustulata
4 (2).	Dorsum entirely pale; head distinctly narrower than prothorax in $9$ ; length 7
	mm

1B

Head and pronotum pitchy or partly pitchy; head as wide as prothorax in  $\varphi$ ; length 5.5–6.0 mm; antenna broad in 3<sup>4</sup> ..... 193. laticornis 5(1). Prothorax slightly emarginate (obtusely) at middle of anterior margin; incision Prothorax with anterior margin straight; incision behind basal corners of prothorax quite weak; body entirely pale.....7 6 (5). Prothorax weakly trapeziform; length generally more than 5.5 mm; venter generally pitchy; dorsum often dull testaceous ...... 190. egena egena Prothorax more distinctly trapeziform; length generally less than 5.5 mm; venter generally pale; dorsum quite pale...... 191. e. occidentalis 7 (5). Body less than 2/5 as broad as long; prothorax distinctly trapeziform; antennal Body more than 2/5 as broad as long; prothorax not distinctly trapeziform, suboblong and slightly sinuate at side; antennal segment 3 barely or slightly 

## 188. Haplosomoides appendiculata Laboissière

Haplosomoides appendiculata Lab., 1930, Ent. Soc. France, Ann. 99: 328, fig. 16 (Tonkin; ? BRUXELLES).

DISTRIBUTION: N. Vietnam, Hainan I.

HAINAN: 1, Dwa-bi (Tai-pin-tsuen), 22. VII. 1935, Gressitt (CAS).

#### 189. Haplosomoides costata (Baly) Fig. 136, a.

Mimastra costata Baly, 1878, Ann. Mag. Nat. Hist. ser. 5, 2: 415 (China; BM).-Weise, 1922, Tijdschr. Ent. 65: 75 (Fokien, W. Formosa).

Haplosomoides costata, Laboissière, 1930, Soc. Ent. France, Ann. 99: 325 (Tonkin, Kweichow).--Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 164.

DISTRIBUTION: S. China (Chekiang, Fukien, Kiangsi, Kwangtung, Kweichow, Szechuan, Sikang), Hainan I., Ryukyu, Taiwan.

CHEKIANG : Tien-mu Shan, Reitter (FREY). FUKIEN : Ta-chu-lan, 1000 m, VI. 1943, Maa; Ban-ling, Chang-ting, VI. 1940, Maa (BISHOP, CAS). KIANGSI: Tai-au-hong, S of Sungwu, VII. 1936, Gressitt. KWEICHOW: Meitan, 900 m, E of Tseng-yi, VII. 1940. Gressitt (LINGNAN). SZECHUAN: nr. Sui-fu, VI. 1929, Graham (US). SIKANG: 3, betw. Ya-chow & Ta-tsien-lu, 2000 m, VII. 1930, Graham (US). KWANGTUNG: many, Yim-na Shan and Tsing-leong Shan, VI. 1936, Gressitt (CAS); Taam-yuen-tung, VI. and Fong-tong-Ping, VII. Lin Distr. 1934, To (LINGNAN); 5, Tscha-jiu San, V-VI. 1912, Mell (ZMB). HAINAN: Ling-men, IV. 1932, Hoffmann (LINGNAN).

HOST: Clerodendron trichotomum Thunb. (in Okinawa).

## 190. Haplosomoides egena egena Weise

Haplosomoides egena Ws., 1922, Tijdschr. Ent. 65: 74 (Fukien; STOCKHOLM),-Laboissière, 1930, Soc. Ent. France, Ann. 99: 326 (Tonkin).

DISTRIBUTION: SE China (Chekiang, Fukien, Kwangtung), N. Vietnam.

CHEKIANG: 2, Tien-mu Shan, Reitter (FREY); 1, Hangchow, V. 1923, Van Dyke;



Fig. 136. a, Haplosomoides costata (Baly); b, H. egena occidentalis n. subsp.

1, Nantung Joe, V. 1923, Van Dyke. FUKIEN: 1, Ta-chu-lan, Shaowu, V. 1942, Maa; 2, Shuipei-kai, Shaowu, V. 1943, Maa; 1, Tsin-ga-han-pu, Changting, VI. 1940, Maa; 1, Bohea Hills, 30. IV. 1940, Maa (CAS, BISHOP). KWANGTUNG: 2, Yim-na Shan, VI. 1936, Gressitt (CAS); 2, Waichow, and 1, Ying-to, Hwei-yang Distr., IV. 1940, Gressitt & To (LINGNAN). N. VIETNAM: 3, Hoa-binh, Tonkin, Cooman (FREY).

## 191. Haplosomoides egena occidentalis Gressitt and Kimoto, n. subsp. Fig. 136, b.

*Male*: Body slender, subparallel-sided; pale yellowish testaceous, slightly ochraceous on head and slightly duller ochraceous on ventral surfaces. Dorsum with a very few fine scattered erect hairs, mostly near apex and external margin of elytron and some around eyes and anterior portion of head; antenna rather finely clothed with oblique pale hairs; ventral surfaces moderately clothed with suberect pale hairs, slightly longer on abdomen; legs rather sparingly clothed on femora and moderately clothed on tibiae and upper portions of tarsi.

Head distinctly broader than prothorax, strongly abbreviated anteriorly; occiput evenly convex, smooth and shiny with a shallow depression in middle of anterior portion; interocular area transversely raised with a median groove; frontoclypeus short, with a very short median raised line and strongly oblique lateral raised lines; labrum convex and shiny. *Antenna* nearly 4/5 as long as body, moderately slender; segment 1 shiny, deeply arched; 2nd 1/3 as long as 1; 3 nearly as long as 1; 4th 1/4 longer than 3, barely longer than 5; 5–7 gradually shorter; 8 barely shorter than 7 and distinctly longer than 9; 9–11 subequal. *Prothorax* not quite 3/4 as long as broad, suboblong, moderately and evenly broad-

ened from base to end of apical 1/3 and then slightly narrowed; basal margin nearly straight, but sinuate at side; anterior margin slightly concave at middle; disc smooth and shiny, broadly depressed transversely just behind center, not obviously punctured. *Scutellum* triangular, rounded behind. *Elytron* nearly  $5 \times$  as long as broad, subparallel-sided, rounded apically; disc fairly smooth and shiny, slightly irregular, finely and irregularly punctured. *Ventral surfaces* with scattered fine punctures; abdominal appendage extremely slender, about 1/2 as long as abdomen and moderately expanded at apex. Length 5 mm; breadth 1.5.

*Female*: Metathorax and abdomen pitchy, latter brownish at apex. Length 5.2 mm; breadth 2.2.

Paratypes: Length 4.8-5.8 mm; breadth 1.5-2.2.

DISTRIBUTION: W. China (Sikang, Szechuan).

Holotype & (U. S. NAT. MUS.), betw. Ya-chow and Ta-tsien-lu, 2000 m, E. Sikang Prov., 14. VII. 1930, D. C. Graham; allotype ♀ (US), Sui-fu, 5–12. VI. 1930, Graham; 1 paratopotype &, same data as type; 8 paratypes (US, BISHOP), Sui-fu, or nr. Sui-fu, IV-V. 1928, V. 1924, VI. 1929, Graham; 1 paratype ♀, betw. Kia-ting and Sui-fu, 26. VI-3. VII. 1930, Graham.

Differs from *egena* in being slightly smaller, more pale above, and in having the ventral surfaces generally pale.

#### 192. Haplosomoides flava Laboissière

Haplosomoides flava Lab., 1930, Soc. Ent. France, Ann. 99: 326 (Tonkin; ?BRUXELLES).

DISTRIBUTION: N. Vietnam.

N. VIETNAM: 4, Hoa-binh, Tonkin, Cooman (FREY).

## 193. Haplosomoides laticornis Laboissière

Haplosomoides laticornis Lab., 1930, Soc. Ent. France, Ann. 99: 329, fig. 17 (Yunnanfu; ?BRUXELLES).

DISTRIBUTION: SW China (Yunnan).

YUNNAN: 5, Yunnan-sen, Hauser coll. (ZMB).

## 194. Haplosomoides ustulata Laboissière

Haplosomoides ustulata Lab., 1938, Arkiv Zool. 30 A (11): 2 (Kiangsu; STOCKHOLM).

DISTRIBUTION: E. China (Chekiang).

CHEKIANG: 1, Tien-mu Shan, Reitter (FREY); 1, Mo-kan Shan, 20. VIII. 1927, Wright (CAS).

## Genus Taumacera Thunberg

Taumacera Th., 1814, Vet. Acad. Handl. 48 (type: T. deusta Th.; India).—Maulik, 1936, Fauna India, Galeruc., 479.

Cerophysa Chevr., 1837, IN Dejean, Cat. Col. ed. 2, p. 379; ed. 3, p. 403 (type: Galleruca nodicornis Wiedemann, monobasic; Java); 1843, IN d'Orbigny, Dict. Univ. Hist. Nat. 3: 339.—Maulik, 1936, Fauna India, Galeruc., 470.—Ogloblin, 1936, Fauna USSR 26, 1: 171, 372.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 611. Subgenus.

- Ozomena Chevrolat, 1837, IN Dejean, Cat. Col. ed. 2, p. 379; ed. 3, p. 403 (nom. nudum).
   —Chevrolat, 1845, IN d'Orbingny, Dict. Univ. Hist. Nat. 6: 5 (type: Galleruca nodicornis Wiedemann).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 611.
- Cerophyta Blanchard, 1845, Hist. Insect. 2: 190.—Strand, 1935, Folia Zool. Hydrobiol. 7: 285 (n. name for Cerophysa Chevr. 1843, nec 1837).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 611.
- Neocharis Jacoby, 1881, Zool. Soc. Lond., Proc. 1881: 448 (type: N. fulvicollis Jac.; monobasic; Java).
- Metallus Jacoby, 1886, Mus. Civ. Genova, Ann. 24: 63 (new name for Neocharis Jacoby, nec Neocharis Sharp, 1877, Eucnemidae); 1896, op. cit. 36: 499; 1891, Entomologist 25 Suppl.: 65; 1899, Stett. Ent. Ztg. 60: 298.
- Nacrea Baly, 1886, Ent. Soc. Lond., Trans. 1886: 29 (type: N. maculata Baly=Neocharis fulvicollis Jacoby; Java).—Weise, 1913, Philipp. Jour. Sci. 3D, 8: 231.

Thaumacera Weise, 1922, Tijdschr. Ent. 65: 84.

We are reducing *Cerophysa* to subgeneric rank under *Taumacera*, as the differences are only in secondary sexual characters.

## KEY TO CHINESE SPECIES OF TAUMACERA

1. Antennal segments $3-7$ of $3^{\circ}$ not swollen and partly almost round ( <i>Cerophysa</i> ) 2
Antennal segments 3–7 of 3 swollen, 3 nearly round, 7 nearly normal; 8 normal
(Taumacera s. str.) 195. zhenzhuristi
2 (1). Antennal segment 8 of $\vec{\sigma}$ greatly enlarged
Antennal segment 8 of $\mathcal{J}^1$ not greatly enlarged
3 (2). Elytron dark at base and apex, pale in middle, rarely almost entirely dark; pro-
notum dark; antennal segment 8 of $\mathcal{J}$ fusiform-cylindrical, with a short pre-
apical ridge above; length 5.0-5.6 mm 197. biplagiata
Elytron largely pale, dark apically; pronotum pale; antennal segment 8 of $\mathcal{J}$
uneven, with an oblique depression behind as well as a preapical ridge above;
length 7.0 mm
4 (2). Prothorax strongly sinuate at side, widened anteriorly and narrowed and emar-
ginate posteriorly; pronotum orange; elytron shiny black
Prothorax nearly straight, or rounded-obtuse at side; pronotum pale to pitchy;
elytron pale testaceous with a brown stripe, or pale to dull brown
5 (4). Prothorax quite oblique at side, hardly narrowed at anterior end, and depressed
transversely behind center of disc; scutellum, venter and legs pale; elytron
not distinctly punctate (Jacoby, 1885; Japan, Taiwan) tibialis*
Prothorax more sinuate, narrowed at anterior end, and hardly depressed on
median line behind center of disc; scutellum, venter and much of legs black
or pitchy; elytron finely punctured 196. bicolor
6 (4). Prothorax obtusely rounded at side, widest slightly anterior to middle; elytral
punctures partly nearly as large as interspaces; head nearly black above; pro-
notum pitchy brown
Prothorax nearly straight at side, subevenly widened anteriorly; elytral punctures
about $1/3$ as large as interspaces; head and pronotum pale 199. parasuturalis

#### Pac. Ins. Mon.

## Subgenus Taumacera s. str.

## 195. Taumacera (Taumacera) zhenzhuristi (Ogloblin)

Cerophysa zhenzhuristi Ogl., 1936, Fauna USSR 26, 1; 172, 399, fig. 72. (Nanking; ?Moscow).

*Thaumacera zhenzhuristi*, Laboissière, 1938, Arkiv Zool. **30** A (11) : 5 (Kiangsu : Shanghai). DISTRIBUTION : E. China (Kiangsu, Chekiang, Kwangtung).

CHEKIANG: 5, Hangchow, VI. 1924, Illingworth (BISHOP); 4, Hangchow, 19. V. 1923, Van Dyke (CAS). KWANGTUNG: 2, Lung-ping-hui, Lin Distr., 16. V. 1934, To (LINGNAN).

#### Subgenus Cerophysa Chevrolat

196. Taumacera (Cerophysa) bicolor Gressitt and Kimoto, n. sp.

*Male*: Pale yellowish and orange to dark pitchy reddish brown: Head orange, paler anteriorly; antenna reddish brown, testaceous basally and apically; prothorax pale yellow; scutellum and elytron dark pitchy reddish brown; ventral surfaces of hind thorax and abdomen dark reddish brown to pitchy; fore leg largely pale, reddish basally; mid and hind legs reddish brown, darker on femora and paler on tarsi. Dorsum with a few short erect pale hairs; ventral surfaces and legs sparsely clothed with oblique pale hairs; antenna rather sparsely pubescent but with some erect hairs beneath.

Head slightly narrower than prothorax; occiput smooth and evenly convex, depressed anteriorly at center; postantennal swellings broad, weakly convex but distinctly bounded behind by subtransverse depression; interantennal space about  $2 \times as$  wide as an antennal insertion, rather strongly raised medially and continuous with transversely obtuse raised area of frons; labrum slightly emarginate at middle of apex, quite broad; gena about 1/10as deep as eye; eye broadly oval. Antenna nearly 3/4 as long as body, slightly thickened in central portion; segment 1 strongly arched and strongly thickened and oblique apically; 2 about as long as broad; 3 about  $3 \times$  as long as broad, slightly oblique apically; 4 slightly longer than 3, weakly broadened apically but ridged anteriorly; 4-8 similiar, all ridged anteriorly; 9 slightly shorter than 8, equal to 10, weakly ridged anteriorly; 10 not distinctly ridged; 11 longest. Prothorax just over 3/5 as long as broad; anterior margin weakly concave in middle; basal margin sinuate, in general convex but slightly concave at center; lateral margin sinuate, distinctly broadened anterior to middle and sligtly concave on basal 1/2; anterior angle rounded and projecting slightly forward; basal angle roundedobtuse; disc unevenly convex, more strongly raised anteriorly and slightly depressed subtransversely behind middle; surface smooth and shiny, not distinctly punctured. Scutellum slightly longer than broad and narrowed and broadly rounded apically, feebly punctured. *Elytron*  $3.4 \times$  as long as broad, subparallel, very weakly convex at side, narrowed and obliquely rounded apically and somewhat rounded at sutural angle; external margin very narrowly expanded; epipleuron moderately broad basally, gradually narrowing in basal 1/4 and then a little more strongly narrowing and gradually tapering but continuing to about middle of apex; disc fairly smooth and shiny, slightly uneven, weakly raised near scutellum; surface with very fine sparse punctures, about 22 in an approximate row across middle. Ventral surfaces smooth and shiny, nearly impunctate on thorax and weakly punctured on sides of abdominal segments; last abdominal sternite with a broad apical lobe which is oblique at side, rounded apically and about  $3 \times$  as broad as long. Legs fairly slender; hind tibia nearly straight; hind tarsal segment 1 slightly longer than 2+3 and distinctly longer than last. Length 4.7 mm; breadth 1.55.

*Female*: Antenna more slender and simple, without ridges on middle segments; elytron slightly more broadened postmedially; last abdominal sternite rounded apically with a narrow emargination at middle. Length 4.6 mm; breadth 1.7.

Paratypes: Length 3.8–5.2 mm; breadth 1.5–2.4.

DISTRIBUTION: NW China (Shensi).

Holotype  $\mathcal{J}$  (U. S. NAT. MUS.), S. Shensi, V. 1904, Eliot Blackwelder, 6475; allotype  $\mathcal{Q}$  (MUS. G. FREY), S. Shensi (no other data); paratype (BISHOP), Chin-ling Mts., Shensi, IV-V, 1904, Blackwelder; 14 paratypes (FREY, BISHOP), same data as allotype.

Differs from *tibialis* (Jac.) in having antenna darker in middle, legs darker, prothorax less sinuate at side and less depressed on median line of disc, and elytron longer, vertical at side, less widened posteriorly and more distinctly punctured.

## 197. Taumacera (Cerophysa) biplagiata (Duvivier), NEW COMBINATION

Cerophysa biplagiata Duv., 1885, Stett. Ent. Ztg. 26: 393 (Hong Kong; type location unknown).—Weise, 1922, Tijdschr. Ent. 65: 69 (Fukien, Tonkin).

Cerophysa biplagiata ab. ruficollis Weise, 1922, l. c. (Fukien).

Cerophysa biplagiata subsp. collaris Chen, 1942, Notes d'Ent. Chinoise 9(3): 32 (Pehpei, Szechuan; Ac. SIN.).

There is considerable color variation in this species. The thorax may be black or reddish brown, and the elytron may have, or may lack, a reddish brown spot. Thus Weise's and Chen's divisions probably cannot be maintained.

DISTRIBUTION: S. China (Kwangtung, Fukien, Szechuan), Hainan I.

SZECHUAN: 1, Sui-fu, 1932, Graham (US); 3, Pe-pei (Pei-bay), June 1932, G. Liu (MCZ). FUKIEN: 6, Yen-ping, 11. VI. 1917 (Ac. 5148; AMNH); 2, Foochow, Kellogg (CAS); 1, Wingan, Sungan, 19. V. 1940, Maa (BISHOP). KWANGTUNG: Canton, 17. IV. 1936, To; 3, Yao Shan, 9. V. 1934, To (LINGNAN); 6, Yim-na Shan, 10. VI. 1936, Gressitt (CAS); Kau-lin San, 800 m, Lin-ping Distr., 20. IV. 1940, Gressitt & To (LINGNAN). HAI-NAN: 1, Tai-pin-tsuen, Kiung-shan Distr., 25. IV. 1935, To; 1, Taitsing-lam-tsuen, Ting-an Distr., 11. VI. 1932, To (LINGNAN): Ta-hian, 600 m, Five Finger Mts., 16. VI. 1935, Gressitt (CAS).

#### 198. Taumacera (Cerophysa) gracilicornis Gressitt and Kimoto, n. sp.

*Male*: Pale to dark reddish brown; head pale reddish anteriorly, pitchy reddish posteriorly; antenna nearly uniformly reddish brown; pronotum reddish brown, darker anteriorly and at sides; scutellum dark reddish brown; elytron slightly mottled reddish and testaceous brown, darker basally and apically; ventral surfaces dull reddish brown; legs reddish brown, darker to pitchy on tibiae and tarsi. Body sparsely clothed above with erect pale hairs; ventral surfaces sparsely to moderately clothed with oblique pale hairs; legs and antenna rather sparsely clothed, latter with only a few suberect or oblique hairs.

Head nearly as broad as prothorax; occiput weakly convex, minutely rugose, depressed anteriorly at center; postantennal swellings large and strongly raised, divided by median groove; interantennal area slightly wider than an antennal insertion, finely ridged at each side and moderately raised medially, continuous with oblique transverse raised area on frons; gena 1/5 as deep as eye; eye rounded-oval, more convex anteriorly. *Antenna* slightly longer than body, fairly slender with segments mostly thickened at apices; segment 1 long, moderately arched, distinctly thickened apically; 2 about  $4 \times$  as long as broad; 3 about 1/4 longer than 2, strongly widened and oblique apically; 4 nearly as long as 1, oblique apically; 4-10 decreasing slightly in length; 11 slightly longer than 10. *Prothorax* slightly more than 2/3 as long as broad; anterior margin nearly straight; basal margin straight in middle and curving obliquely forward at sides; lateral margin strongly sinuate, broadest somewhat anterior to middle and slightly concave in basal 1/2; anterior angle narrowed and then slightly protruding; basal angle obtuse and slightly protruding; disc unevenly convex, fairly



Fig. 137. Taumacera (Cerophysa) parasuturalis n. sp

flat in central portion and barely depressed on each side of median line behind center; surface minutely and in large part sparsely punctured. Scutellum slightly longer than broad, gradually narrowed and rounded apically, slightly convex and somewhat frosted. *Elytron* just over  $3 \times as$  long as broad, subparallel but slightly widened in central portion, broadly rounded apically with sutural angle slightly rounded; lateral margin very narrowly expanded; epipleuron very broad in basal 1/4, somewhat gradually narrowed to middle and disappearing on apex; surface subevenly convex, with numerous irregular small punctures which are mostly a little smaller than interspaces and numbering more than 25 across mid-*Ventral surfaces* nearly impunctate on thorax dle. and rather finely punctured on abdomen; last abdominal sternite with broad apical lobe which is deeply incised at each side, weakly concave apically, depressed preapically and about  $4 \times$  as broad as long; aedeagus slender, gradually widening to beginning of apical portion and then evenly narrowed and acute. Legs moderately long and slender; hind tarsal segment 1 slightly longer than 2+3 and much longer than last. Length 4.5 mm; breadth 2.2.

*Female*: Antenna not quite as long as body, quite slender; last abdominal sternite broadly rounded apically, slightly depressed before apex. Length 4.5 mm; breadth 2.2.

Paratype: Length 4.4 mm; breadth 1.9.

DISTRIBUTION: SW China (Yunnan).

Holotype  $\mathcal{J}$  (Mus. G. FREY), So-ling-ho River Valley, Yunnan; allotopotype  $\mathcal{Q}$  (FREY), same data; paratype  $\mathcal{Q}$  (BISHOP), Yunnan (no other data), ex Mus. Frey. Fig. 137.

Differs from *biplagiata* Duv. in not being distinctly banded with pale and in having antenna almost undifferentiated.

## 199. Taumacera (Cerophysa) parasuturalis Gressitt and Kimoto, n. sp. Fig. 137.

Male: Moderately elongate and subparallel-sided; body rather pale, in part marked

with pale brown: a narrow discal stripe on elytron starting slightly behind base and ending just before top of apical declivity, parallel to suture and somewhat closer to suture than to external margin in dorsal view; head and prothorax slightly darker than remainder of elytral disc; antenna yellowish basally becoming pale brown apically; thoracic sterna dull testaceous; abdomen paler; legs testaceous brown, slightly duller at apices of tibiae. Dorsum with a very few short scattered suberect pale hairs, mostly on posterior portion of elytron; head with some moderately long pale hairs anteriorly; ventral surfaces moderately clothed with fairly long silvery hairs; legs moderately clothed with more recumbent hairs.

Head barely as broad as prothorax; occiput feebly convex, smooth and more or less impunctate; an incomplete depressed line between posterior portions of eyes; interocular area moderately raised, smooth, with a fine median groove; frontoclypeus rather small, arcuate and emarginate on sides and strongly raised and moderately punctured; labrum small, sparsely punctured. Antenna fully 3/4 as long as body, moderately slender; scape shiny, fairly stout and somewhat hairy; segment 2 conico-cylindrical, 1/2 as long as 1; 3rd  $3 \times$  as long as 2, slightly shorter than 4; 5 barely longer than 3 and slightly longer than 6; 6-10 decreasing very slightly in length; 11 subequal to 1. Prothorax nearly 2/3 as long as broad, moderately broader anteriorly than posteriorly; side very slightly constricted near middle, feebly sinuate; anterior corner slightly thickened, barely projecting; disc feebly convex in longitudinal sense, rather even and smooth, with almost no distinct punctures. Scutellum longer than broad, suboblong, narrowed and rounded apically; anterior margin straight; anterior corner projecting slightly forward; disc somewhat evenly convex. Elytron fully  $4 \times$  as long as broad, almost parallel-sided, subevenly rounded apically; disc finely and irregularly punctured almost throughout, the punctures becoming weak on apical declivity. Ventral surfaces moderately punctured; abdomen with a swelling in middle of segment 1 and a very large paired swollen lobe on central portion of 2 with inner surfaces of lobes rather flat and bearing numerous short hairs, 3 and 4 hardly modified, 5 quite large with a very shallow shiny subterminal depression deeply incised on each side; pygidium produced with thick apical margin and sides articulating within incisions on each side of sternite. Legs moderately long and stout; hind tibia very slightly arched and rather strongly flattened; hind tarsal segment 1 as long as 2+3 and considerably longer than 5. Length 5.6 mm ; breadth 2.2.

*Female*: Coloration slightly darker: largely ochraceous brown with dull brown occiput and discal stripe on elytron. Elytron slightly widened behind middle. Length 6.5 mm; breadth 2.5.

Paratypes: Length 5.5-7.5 mm; breadth 1.8-2.4.

DISTRIBUTION: E. Siberia, NE China (Kirin).

Holotype  $\mathcal{J}$  (U. S. NAT. MUS.), Kudia River, Amagu, E. Siberia, VII. 1923, T. D. A. Cockerell; allotype  $\mathcal{P}$  (US), Kongaus, E. Siberia, VIII. 1923, Cockerell; paratype  $\mathcal{P}$  (Bishop), Amagu Village, E. Siberia, VII. 1923, Cockerell; 4 paratypes  $\mathcal{J} \mathcal{P} \mathcal{P} \mathcal{P}$  (FREY, Bishop), Charbin (Harbin), Kirin, 28. VI. 1950.

Differs from *biplagiata* Duv. in not having antennal segment 8 enlarged, in being longer and more slender, in having prothorax more trapeziform, and in being pale with a narrow brown stripe instead of dark with a broad pale band on elytron.

200. Taumacera (Cerophysa) pulchella (Laboissière), NEW COMBINATION

Cerophysa pulchella Lab., 1930, Soc. Ent. France, Ann. 99: 348 (Tonkin; ?BRUXELLES).

DISTRIBUTION: N. Vietnam, Kwangtung. KWANGTUNG: Wang lung-kum, nr. Lo-fau Shan, IV–V. 1912, Mell (ZMB).

## Genus Fleutiauxia Laboissière

Fleutiauxia Lab., 1933, Soc. Ent. France, Ann. 102:53 (type: F. cyanipennis Lab.; Tonkin).
 —Ogloblin, 1936, Fauna USSR 26, 1: 183 (type: "Aenidia armata Baly"; Japan).

## Key to Chinese species of Fleutiauxia

1.	Frons of $\mathcal{J}$ with a transverse open cavity across middle; elytron bluish to purplish lavendar
	Frons of $\mathcal{J}$ without an open cavity across middle, raised both basally and apically
	on median line, with a partial ridge or hairs between; elytron green 3
2.	Frons of $\mathcal{J}$ with posterior ridge bearing a prominent process which is enlarged and
	disc-like at end, without a process anteriorly; elytron blue; occiput and pronotum
	pitchy black 201. armata
	Frons of $\mathcal{J}$ with posterior ridge bearing a short pubescent process, and with a
	backward projecting process on anterior portion; elytron blackish blue; head
	and pronotum reddish 204. septentrionalis
3.	Clypeal area of $\mathcal{F}$ with a tall erect process, separated from anteriorly projecting
	lobe from posterior part of frons by another lower, hairy lobe; occiput pitchy;
	antenna pale; elytron dark green 203. mutifrons
	Clypeal area of $\mathcal{F}$ low, with a posteriorly projecting ridge (partly hairy) nearly
	meeting anteriorly projecting process of posterior part of frons; occiput orange;

#### 201. Fleutiauxia armata (Baly)

Aenidia armata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 179 (Nagasaki, Hiogo, TsuSima, Manchuria; BM).—Harold, 1877, Deutsche Ent. Zeitschr. 1877: 366 (Hagi, Japan).
—Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 749 (Japan).—Haku, 1936, Chosen Nat. Hist. Soc., Jour. 21: 122 (Korea: Taikyu).

antenna dark; elytron golden green ...... 202. bicavifrons

Aenidia armata var. koltzei Heyden, 1893, Cat. Col. Siber., Nachtr. 1: 204 (Amur).

Aenidia armata var. Heyden, 1884, Deutsche Ent. Zeitschr. 1884: 300 (Askold, Chabarofka). Phyllobrotica armata, Weise, 1924, Coleopt. Cat. 78: 98.

Fleutiauxia armata, Lab., 1933, Soc. Ent. France, Ann. 102: 55 (Japan).—Ogloblin, 1936, Fauna USSR 26, 1: 184, fig. 76 (Ussuri, Korea).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 158 (Japan proper, Tsusima, Korea, Manchuria, E. Siberia).
—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 161 (Japan, Korea, Manchuria, E. Siberia).

DISTRIBUTION: Japan, E. Siberia, Korea, NE China (Kirin, Chekiang).

KIRIN: 1, Er-sen-djan-szy, VI. 1948; 4, Gao-lin-szy, VII. 1948 (FREY). 2, "China" (ZMB). CHEKIANG: 1, Chiang Shan, VI. 1926, Wright; 1, Tung-lu, IV. 1926, Wright (CAS). KOREA: 1, 40km N of Fune, V. 1931, Thompson (CAS); 1, Chemulpo (ZMB).

HOSTS: Juglans mandzurica Maxim. (after Ogloblin); Broussonetia Kazinoki Sieb., B.

papyrifera (1.) Vent., Morus spp., Populus Sieboldii Miq. (after Chûjô & Kimoto).

#### 202. Fleutiauxia bicavifrons Gressitt and Kimoto, n. sp.

*Male*: Testaceous to bright golden metallic green and pitchy: Head and pronotum pale orange ochraceous; antenna dark pitchy brown, paler reddish on segment 1; eye blackish; scutellum pitchy black; elytron bright metallic golden green; ventral surfaces of hind thorax and abdomen pitchy black; legs testaceous, in part somewhat reddish. Dorsum nearly glabrous, a few short pale hairs on head; antenna moderately clothed with subad-pressed auburn hairs; ventral surfaces and legs sparsely clothed with suberect pale golden hairs.

*Head* nearly as broad as prothorax; occiput weakly convex, slightly frosted, concave at middle of anterior border; postantennal swellings short and broad, distinctly raised; interantennal area at least  $3 \times$  as broad as an antennal insertion, emarginate at each side of median portion which is flat above but somewhat raised and projecting upward apically; frons with a large deep cavity on each side of middle, an erect process at anterior end of interantennal process as well as a posteriorly projecting irregular lobe on posterior portion of clypeal area, most of which are connected by a narrow ridge, sides of median lobes partly pubescent; large, distinctly concave apically; gena large, about 1/2 as deep as eye; eye ovate-oblong. Antenna nearly as long as body, fairly slender; segment 1 somewhat flattened beneath, distinctly arched and thickened apically; 2 slightly longer than broad; 3 as long as 1, straight and slightly oblique apically; 4 slightly shorter than 3, slightly thickened in middle and suboblique apically; 5 similar to 4; 5-10 decreasing somewhat in length and diameter; 11 a little longer than 10. *Prothorax* nearly 2/3 as long as broad; anterior margin nearly straight; basal margin weakly convex, slightly oblique near side; lateral margin somewhat sinuate, widest anterior to middle, weakly narrowed towards apex, oblique and slightly concave towards base; anterior angle rounded and weakly projecting; basal angle obtuse and somewhat projecting; disc unevenly convex, with a large shallow depression on each side of median line just behind center and with median line very slightly depressed near center; surface minutely punctured throughout. Scutellum large, subequilaterally triangular but rounded apically, slightly convex and feebly punctured. Elytron about  $3.6 \times$  as long as broad, subparallel-sided, very slightly concave at side at end of basal 1/5, broadly rounded apically with sutural angle rounded; lateral margin weakly expanded; epipleuron fairly broad in basal 1/4, and somewhat gradually narrowed and disappearing near extreme apex, not 1/2 as broad just before apex as at middle; disc subevenly convex, slightly raised on basal 1/4 and slightly depressed near middle of side; surface with deep punctures partly arranged in subregular longitudinal rows, about 16 across middle of disc, most of punctures a little larger than interspaces. Ventral surfaces feebly punctured; pygidium rounded apically; last abdominal sternite with apical lobe about  $2 \times$ as broad as long and about 2/5 as long as sternite and truncate apically with rounded corners. Legs fairly long and stout; hind tibia weakly sinuate; hind tarsal segment 1 nearly as long as remaining segments combined, 2 slightly longer than 3 and shorter than last. Length 4.8 mm; breadth 2.0.

*Female*: Frontal area subtriangular, moderately smooth on swollen portion; last abdominal sternite rounded apically. Length 5.3 mm; width 2.0

Paratypes: Length 4.8-5.1 mm; breadth 1.9-2.1.

DISTRIBUTION: W. China (W. Hupeh).

Holotype  $\mathcal{J}$  (CAS), Hsiao-ho (Shao-ho), 900 m, Lichuan Distr., W. Hupeh Prov., 8. VIII. 1948, Gressitt & Djou; allotopotype  $\mathcal{P}$  (CAS), same data; 4  $\mathcal{J}$  paratopotypes (CAS, BISHOP, AC. SIN.), 8, 13. VIII.

Differs from *septentrionalis* (Ws.) in being smaller, with green elytron, frons divided medially by tubercles, and antenna darker.

## 203. Fleutiauxia mutifrons Gressitt and Kimoto, n. sp.

*Male*: Yellowish testaceous to dark submetallic green: Head orange testaceous, pitchy greenish black on occiput and on part of base of anterior cephalic tubercle; antenna ochraceous, slightly darker along upper edges of basal segments; pronotum testaceous, in part reddish in central portion; scutellum pitchy black; elytron dark metallic green; prosternum partly pitchy; hind thorax and abdomen pitchy black with a slightly metallic greenish tinge, somewhat reddish on posterior margins of abdominal segments; legs orange testaceous. Body nearly glabrous above; antenna with adpressed golden pubescence; ventral surfaces and legs sparsely clothed with fairly long suberect golden buff hairs.

Head slightly narrower than prothorax; occiput moderately convex, slightly frosted; postantennal swellings rather broad and strongly raised; interantennal area about  $2 \times as$ long as an antennal insertion, moderately raised medially with median portion continuing forward as a small tubercle just about center of frons; a much higher tubercle from anterior portion of frontoclypeal area nearly vertical anteriorly and slightly overhanging behind with a smaller pubescent tubercle between anterior and posterior tubercles, each side of frons moderately depressed but nearly flat; labrum large, slightly emarginate apically; gena slightly more than 1/2 as deep as eye; eye very broadly ovate, nearly round. Antenna 4/5 as long as body, slightly stout; segment 1 fairly thick, arched; segment 2 slightly broadened and long; 3 slightly longer than 1, fairly straight and gradually thickened to apex; 4 about as long as 3; 5 as long as 4; 5-10 decreasing slightly in length; 11 a little longer than 10, acuminate. Prothorax nearly 2/3 as long as broad; anterior margin weakly convex; basal margin slightly convex; lateral margin moderately rounded anteriorly, widest a short distance from anterior end and fairly straight and oblique posteriorly; anterior angle swollen and slightly protruding forward; basal angle obtuse; surface slightly uneven, a distinct shallow depression on each side of median line and median line slightly depressed just behind center, extremely minute punctures over most of surface. Scutellum slightly longer than broad, strongly narrowed and rounded apically, slightly convex and feebly punctured. *Elytron*  $3.25 \times$  as long as broad, subparallel, slightly sinuate behind humerus, broadly rounded apically with sutural angle obtusely rounded; lateral margin narrow; epipleuron moderately broad in basal 1/4, somewhat strongly narrowed to middle and gradually narrowed and disappearing near extreme apex; disc slightly uneven, moderately swollen in basal 1/4; surface with fine deep punctures which are largely irregular, about 20 across middle and mostly a little smaller than interspaces. Ventral surfaces somewhat shiny, feebly punctured; pygidium rounded apically; last abdominal sternite with median apical lobe nearly  $2 \times$  as broad as long, subtruncate apically and rounded at side. Legs moderately stout; hind tibia straight; hind tarsal segment 1 as long as 2+3, 2 slightly longer than 3 and shorter than last. Length 4.6 mm; breadth 1.9.

*Female*: Frons moderately raised on subtriangular central area, subcarinate medially; last abdominal sternite rounded apically, slightly emarginate at middle. Length 6.0 mm;

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breadth 2.4.

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Paratype: Length 5.6 mm; breadth 2.3.

DISTRIBUTION: E. China (Chekiang).

Holotype  $\mathcal{J}$  (CAS), Hangchow, Chekiang Prov., 19. V. 1923, E. C. Van Dyke; allotype  $\mathcal{Q}$  (U. S. NAT. MUS.), Chekiang, 4, 22. IV. 1931, Chen; paratype  $\mathcal{J}$  (BISHOP), same data as allotype.

Differs from *septentrionalis* (Ws.) in being smaller, with elytron green, antenna paler, prothorax paler and frons divided medially. Differs from *bicavifrons* n. sp. in having elytron darker green, occiput pitchy and clypeus with a tall erect tubercle.

204. Fleutiauxia septentrionalis (Weise), NEW COMBINATION Fig. 138, a.

Prasyptera septentrionalis Ws., 1922, Tijdschr. Ent. 65: 82 (Fukien; STOCKHOLM).

Fleutiauxia nigricornis Laboissière, 1933, Soc. Ent. France, Ann. 102: 54 (Fukien; PARIS). New Synonymy.

DISTRIBUTION: SE China (Fukien, Kwangtung), Hainan I.

FUKIEN: 1, Bang-lo, Kien-au, V. 1941, Maa; 1, Shui-pei-kai, Shaowu, V. 1943, Maa (CAS, BISHOP). KWANGTUNG: 7, Tsha-jiu San, V. 1911, Mell (ZMB). HAINAN: 1, No-doa (Na-da), Tan Distr., 27. IV. 1932, To (LINGNAN).



Fig. 138. a, Fleutiauxia sepentrionalis (Weise); b, Pseudoliroetis fulvipennis (Jacoby).

## Genus Pseudoliroetis Laboissière

Pseudoliroetis Lab., 1929, Soc. Ent. France, Ann. 98: 280 (type: Liroetis fulvipennis Jacoby;

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## Pac. Ins. Mon.

# China).- Ogloblin, 1936, Fauna USSR 26, 1: 204.

## KEY TO CHINESE SPECIES OF PSEUDOLIROETIS

1. Pronotum pale	2
<ol> <li>Ventral surfaces testaceous; prothorax suboblong, or feebly narrowed anteriorly Ventral surfaces black, except for sides of prosternum; prothorax strongly narrowed anteriorly; length 5.0-5.5 mm</li></ol>	3 ps
<ol> <li>Prothorax convex at side and slightly narrowed anteriorly</li> <li>Prothorax suboblong, not evenly rounded at side and not narrower anteriorly than basally; antenna and legs black; length 8–12 mm</li></ol>	4 is
4. Antenna, palps and legs black; length 11-14 mm (Laboissière, 1929; Tonkin) ieanvoine	i*
Upper borders of tibiae and tarsi black; antenna with segments 1-3, 9-11 red, 4-8 black; length 14 mm (Laboissière, 1929; Tonkin) clermont	i*
205. Pseudoliroetis fulvipennis (Jacoby) Fig. 138, b.	
Liroetis fulvipennis Jac., 1890, Entomologist 23: 215, pl. 2, fig. 2 (Chang-yang; BM). Pseudoliroetis fulvipennis, Lab., 1929, Soc. Ent. France, Ann. 98: 281 (Chang Hai; ?PARIS —Ogloblin, 1936, Fauna USSR 26, 1: 206, 405 (San-kiang, Fukien).	).
DISTRIBUTION: S. China (Hupeh, Szechuan, Fukien, Kiangsu).	
FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, V-VI. 1943, Maa. HUPEH: many, Sui- sa-pa, 1000 m, Lichuan, 23. VII-20. VIII. 1948, Gressitt & Djou (CAS, BISHOP). SZECHUAN: 2, Shin-kai-si, Mt. Omei, 1300 m, VII. 1924, Graham (US).	
HOSTS: Liquidambar formosana, Lonicera (Hupeh).	
206. Pseudoliroetis nigriceps Laboissière	
Pseudoliroetis nigriceps Lab., 1929, Soc. Ent. France, Ann. 98: 282 (Moupin; PARIS) Ogloblin, 1936, Fauna USSR 26, 1: 206, 405.	-
DISTRIBUTION: W. China (Sikang).	
Genus Arthrotidea Chen	
Arthrotidea Chen, 1942, Notes d'Ent. Chinoise 9: 45 (type: A. ruficollis Chen; China).	
This genus was described as closely related to <i>Taphinella</i> , <i>Taphinellina</i> , <i>Proegmena</i> , an <i>Arthrotus</i> , but also as characterized by tibia <i>mutique</i> (not <i>mucrones</i> ), anterior coxal cavitie open behind, and elytral epipleuron wide basally.	ıd es
207. Arthrotidea ruficollis Chen Fig. 139, a.	
Arthrotidea ruficollis Chen, 1942, Notes d'Ent. Chinoise 9: 44 (Sikang: Chow-kon shar Ac. SIN.).	1;
DISTRIBUTION: S. China (Sikang, Szechuan, Hupeh, ? Chekiang).	
HUPEH: 6, Sui-sa-pa, 1000 m, Lichuan, 22. VII–19. VIII., Gressitt & Djou (CAS BISHOP). SZECHUAN: 15, Beh-lu-din, 1800 m, N of Chengtu, Szechuan, VII–VIII. 193	S, 3,

Graham (USNM); 11, Mt. Omei, 3000–3300 m, VII. 1936, Graham; 1, Kuanshien, 19. VII. 1933, Graham; 1, Wen-chuan-shien, 1200 m, NNW of Kuanshien, 19. VII. 1933, Graham; 1, Wa Shan, 20. VII. 1925, Graham. SIKANG: 5, Yao-gi, nr. Mu-pin, 2200 m, 15. VII. 1929, Graham; 2, nr. Mu-pin, VII. 1929, Graham (USNM). One, Tien-mu Shan, Chekiang, Reitter (FREY). Perhaps the label on the latter specimen should be questioned.



Fig. 139. a, Arthrotidea ruficollis Chen; b, Cneoranidea signatipes Chen.

## Genus Cneoranidea Chen

Cneoranidea Chen, 1942, Notes d'Ent. Chinoise 9: 31 (type: C. signatipes Chen; China). This genus has only the following single known species,

208. Cneoranidea signatipes Chen Fig. 139, b.

Cneoranidea signatipes Chen, 1942, Notes d'Ent. Chinoise 9:31 (Szechuan: Chengtu, Kuanhsien; U. NANKING).

DISTRIBUTION: China (Szechuan, Hupeh, Anhwei, Chekiang, Kiangsi, Kwangtung).

CHEKIANG: 1, Tien-mu Shan, Reitter (FREY). ANHWEI: 1, Tai-ping-shien, X. 1932, G. Liu (MCZ). KIANGSI: 5, Tai-au-hong, 4. VII; 7, Wong-sa-shue, 8. VII, S of Sung-wu, 1936, Hong Shan, 16. VII. 1936, Gressitt (CAS). HUPEH: 4, Sui-sa-pa, 1000 m, Lichuan, 29. VII. 1948, Gressitt & Djou; 1, Hsiao-ho, Lichuan, 15. VIII. 1948, Gressitt (CAS, BISHOP). KWANGTUNG: 2, Tin-tong, 18. VIII., 1, Sui-kwan San, Tin-tong, Lochang, 17. VIII. 1947, Tsang; 2, Cheung-nga San, Tin-tong, Lochang, 16. VIII. 1947, Tsang (CAS).

#### Genus Liroetis Weise

- Liroetis Ws., 1889, Soc. Ent. Ross., Horae 23: 607 (type: L. aeneipennis Ws.; NW China). —Maulik, 1936, Fauna India, Galerue., 311.—Ogloblin, 1936, Fauna USSR 26, 1: 207, 372.
- Liroetes, Jacoby, 1890, Entomologist 20: 215.

#### KEY TO CHINESE SPECIES OF LIROETIS

- 1. Elytron about  $6 \times$  as long as prothorax, or at least body length more than  $8 \text{ mm} \dots 2$ Elytron  $4-5 \times as$  long as prothorax; body length rarely over 8 mm ...... 4 Elytron black with yellowish outer margin and 3 yellow bands; length 12-14 3 (2). Body entirely pale; elytron very finely punctured; prothorax less than  $2 \times as$ Elytron metallic green; elytral punctures not extremely fine; prothorax more 4 (1). Elytron 1/4 again as wide postmedially as basally, distinctly narrowed apically; Elytron less than 1/4 again as wide postmedially as basally, broadly rounded 5 (4). Pronotum and elytron rather strongly punctured, the punctures mostly larger than interspaces; pronotum with some depressions; dorsum largely pale with small Pronotum and elytron finely punctured, the punctures mostly smaller than interspaces; pronotum without depressions; dorsum pitchy black with limited pale marks on anterior corner of pronotum, and on base (stripe near humerus),

## 209. Liroetis aeneipennis Weise

- Liroetis aeneipennis Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 608 (Kansu; ZMB).-Ogloblin, 1936, Fauna USSR 26, 1: 210, 405 (Chine).
- Liroetes aeneipennis, Jacoby, 1890, Entomologist 23: 216, pl. 2, fig. 3 (Changyang; Hupeh).

DISTRIBUTION: W. China (Kansu, Szechuan, Hupeh).

SZECHUAN: 1, Tsu-dien, 1800 m, Mt. Omei, Aug. 1925, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, Lichuan, 27. VII-31. VIII. 1948, Gressitt & Djou, on Salix (CAS, BISHOP); 1, Liang-ho-keu, Lichuan, 1. IX, Djou (CAS).

HOST: Salix sp.

1B

## 210. Liroetis apicalis Gressitt and Kimoto, n. sp. Fig. 140.

*Female*: Body shiny black to testaceous: head black with a few small pale black spots at sides and apex of mandible pale; antenna shiny black basally and dull black apically; pronotum black with corners testaceous and anterior portion slightly pitchy red; elytron shiny black with much of lateral margin and a large preapical spot and a narrow submedian basal stripe testaceous; ventral surfaces black; legs black, slightly pitchy reddish on femora; dorsum glabrous; venter with short sparse pale hairs; legs moderately clothed with short pale hairs, much more sparsely so on femora.

*Head* much narrower than prothorax, fairly short, abbreviated anteriorly; occiput moderately convex, shiny, with a few punctures on sides; interocular area with a transverse de-

pression which is deepest near middle and raised behind antennal insertions with a strong median groove; frontoclypeus much broader than long, raised medially to between antennal insertions and subtransversely raised anteriorly. Antenna 3/5 as long as body, moderately stout; segment 1 strongly arched, fairly stout; 2 is 1/3 as long as 1; 3 is 2  $\times$ as long as 2; 3 and 4 subequal; 5 slightly shorter, 5-10 decreasing slightly in length; 11 slightly longer than 10. Prothorax about  $2 \times$  as broad as long, transversely subrectangular; side somewhat convex, widest anterior to middle; basal margin feebly convex; anterior margin feebly concave; anterior corner projecting somewhat forward, disc slightly convex, somewhat shiny, finely and distinctly punctured on most of surface with a few areas anterior to center and near side closely punctured. Scutellum subequilaterally triangular, slightly rounded posteriorly. *Elytron*  $3.5 \times$  as long as broad, strongly widened posteriorly and widest somewhat behind middle, narrowed and rounded apically; disc with numerous fine irregular punctures becoming still finer posteriorly. Ventral surfaces slightly shiny, rather finely punctured and sparsely so along median portions of sternites. Legs fairly slender; fe-





mora rather flat; hind tibia nearly straight; hind tarsal segment 1 nearly as long as remainder combined. Length 7.0 mm; breadth 4.1.

DISTRIBUTION: W. China (Sikang).

Holotype  $\mathcal{P}$  (Mus. G. FREY), Se-long, 4000 m, San-kiang-kou, Wassuland, E. Sikang Prov., 7. VIII. 1934, Friedrich.

Differs from *octopunctata* in having pronotum and elytron much more finely punctured with punctures mostly smaller than interspaces, pronotum without depressions and coloration largely black instead of largely pale.

211. Liroetis flavipennis Bryant Fig. 141, a.

Liroetis flavipennis Bry., 1954, Arkiv Zool. ser. 2, 6 (6): 547, fig. 7 (NE Burma; STOCKHOLM).

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Fig. 141. a, Liroetis flavipennis Bryant; b, L. spinipes Ogloblin.

DISTRIBUTION: Burma, W. China (Sikang, Szechuan).

SIKANG: 3, nr. Mu-ping, VII. 1929, Graham (US); 4, Yao-gi, nr. Mu-ping, VII. 1929, Graham; 1, Yachow, VIII. 1930, Graham (US). SZECHUAN: 3, 0-er, 2200 m, nr. Weichow, VIII. 1933, Graham; 2, Den-shing-yuet, nr. Ning-yuen-fu, VIII. 1928, Graham; 3, Weichow, 1500 m, VIII. 1933, Graham; 1, nr. Li-to, 1600 m, VIII. 1930, Graham (US).

## 212. Liroetis leechi Jacoby

Liroetis leechi Jac., 1890, Entomologist 23: 215 (Chang-yang, Hupeh; BM).

DISTRIBUTION: S. China (Hupeh, Chekiang).

CHEKIANG: 1, Tien-mu Shan, Reitter (FREY).

## 213. Liroetis octopunctata (Weise)

Mimastra octopunctata Ws., 1889, Soc. Ent. Ross., Horae 23: 508, 619 (Szechuan;? LENIN-GRAD).

Liroetis octopunctata, Ogloblin, 1936, Fauna USSR 26, 1: 208, 405, fig. 93 (Kukunor). DISTRIBUTION: W. China (Szechuan, Sikang, Tsinghai).

SIKANG: 1, Ngan-yang-ba, nr. Ta-tsien-lu, 4000 m, 4. VII. 1923, Graham (US).

214. Liroetis reitteri (Pic), NEW COMBINATION

Merista Reitteri Pic, 1934, Ent. Nachrbl. 8: 87 (Ta-tsien-lu to Kiu-lung; ?PARIS). Meristoides touzalini, Ogloblin, 1936, Fauna USSR 26, 1: 336 (part). Meristoides Reitteri, Laboissière, 1940, Mus. R. Hist. Nat. Belg., Bull. 16(3): 23, note 16.

Ogloblin synonymized this species with *touzalini*, but Laboissière pointed out that this was incorrect.

DISTRIBUTION: W. China (Sikang).

215. Liroetis spinipes Ogloblin Flg. 141, b.

Liroetis spinipes Ogl., 1936, Fauna USSR 26, 1: 212, 406 (Ta-tsien-lu; ? Moscow). DISTRIBUTION: W. China (Sikang).

SIKANG: 1, Se-long, 4000 m, Wassuland, San-kiang-keu, 7. VIII. 1934, Friedrich (FREY); 1, Yao-gi, nr. Mu-ping, 2200 m, VIII. 1929, Graham (US).

## Genus Mimastra Baly

- Mimastra Baly, 1865, Ann. Mag. Nat. Hist., ser. 3, 16: 253 (type: *M. arcuata* Baly; Andaman Is.).—Chapuis, 1875, Gen. Col. 11: 178, 179.—Maulik, 1936, Fauna India, Galeruc., 524.—Ogloblin, 1936, Fauna USSR 26, 1: 176.
- Anthraxantha Fairmaire, 1878, Soc. Ent. France, Ann. ser. 5, 8:137 (type: A. davidis Fairm.; China).—Jacoby, 1888, Zool. Soc. Lond., Proc. 1888: 351.
- Brachita Allard, 1889, Soc. Ent. Belg., C. R. 33: CIII (type: B. terminata All.); 1890, op. cit. 34: LXXX.

#### KEY TO CHINESE SPECIES OF MIMASTRA

1.	Elytral disc pale on basal 1/2, or entirely pale
	Elytral disc with some dark pigmentation on basal 1/2 4
2(1).	Elytron with some metallic or pitchy pigmentation on apical portion
	Elytron entirely pale; postocciput and venter largely black or pitchy; pronotum sometimes with some slender oblique marks; length 8-9 mm 224 soreli
3(2).	Prothorax with corners somewhat rounded; elytron with apical 1/3 greenish or
	bluish, and sometimes a fine line extending forward; length 7.5-9.0 mm
	Prothorax with corners fairly angular; elytron with apical $2/5$ , or more, steel
	blue to purplish; length 9-10 mm
4(1).	Elytron with a large anterior and a large posterior spot
	Elytron with disc largely or entirely pigmented, or apical pigmented area ex-
	tending forward and narrowing6
5(4).	Prothorax $2 \times$ as broad as long; elytron heavily punctured and with faint raised
	lines, the subbasal spot nearly touching basal margin; length 6.5 mm. 222. pygidialis
	Prothorax $1.5 \times$ as broad as long; elytron finely punctured, without raised lines,
	the subbasal spot not nearly touching base; length 7.5-8.0 mm 223. quadrinotata
6(4).	Elytron finely punctured, with sutural pale stripe narrow or lacking; length 5-7
	mm
	Elytron heavily punctured or rugulose, with sutural stripe generally broad; length
	7.5–10.5 mm
7(6).	Elytron with sutural and external stripes moderately narrow and with punctura-

tion very weak; length 6 mm 221. modesta
Elytron with sutural stripes lacking and external stripe quite narrow and punc-
turation fine but close; length 6.5-7.0 mm 220. maai
8(6). Elytron not completely glabrous and with punctures not tending to form rows;
length generally 9.0–10.5 mm
Elytron glabrous, considerably widened posteriorly, and with heavy punctures
tending to form rows; length 7.5-8.5 mm malvi
9(8). Elytron with disc not almost entirely metallic, generally with 2 longitudinal stripes
which may merge at or behind middle 10
Elytron with disc almost entirely metallic (sutural stripe sometimes fairly wide
anteriorly) 11
10(9). Elytral disc with 2 distinct bronzy brown stripes; pronotum with a fairly large
pitchy spot on each side 218. guerryi
Elytral disc with 2 bluish stripes, somewhat variable, but always merging pos-
teriorly; pronotum pale 216. cyanura
11(9). Prothorax not quite $2 \times$ as broad as long, with an irregular spot at each side;
elytral disc dark blue 219. limbata
Prothorax more than $2 \times$ as broad as long, unspotted; elytral disc generally
black

## 216. Mimastra cyanura (Hope) Fig. 143, a.

Auchenia cyanura Hope, 1831, IN Gray, Zool. Miscell., 29 (Nepal; BM).

Phyllobrotica lunata Kollar & Redtenbacher, 1848, IN Hügel, Kaschmir 4: 556, pl. 27, fig. 3 (?Kashmir).—Fairmaire, 1888, Soc. Ent. Belg., Ann. 32: 43 (Kiangsi, K. Tcheou).
Auchenia cyanura, Harold, 1875, Col. Hefte 13: 106.

Anthraxantha davidis Fairmaire, 1878, Soc. Ent. France, Ann. ser. 5, 8: 137 (C. China; ?PARIS).—Jacoby, 1888, Zool. Soc. Lond., Proc. 1888: 351 (syn. of cyanura).

Mimastra apicalis Baly, 1886, Ent. Soc. Lond., Trans. 1886: 28 (India; BM).

Haplosoma lunata, Allard, 1888, Soc. Ent. France, Ann. ser. 6, 8: 327 (key).

Mimastra cyanura, Duvivier, 1891, Soc. Ent. Belg., C. R. 35: xlvi (Tetara).—Maulik, 1936,
 Fauna India, Galeruc., 529 (Kashmir, Nepal, Punjab, United Provinces, Manipur,
 Burma).—Ogloblin, 1936, Fauna USSR 26, 1: 179, figs. 74, 75.

Mimastra lunata, Jacoby, 1894, Soc. Ent. Belg., Ann. 38: 198; 1896, op. cit. 40: 271.

Mimastra cyanura ab. davidis, Weise, 1924, Coleopt. Cat. 78: 124.

The coloration of this species is quite variable. The elytron may be blue only on apical 1/3, or the disc may be largely blue, although rarely so on basal portion of disc.

DISTRIBUTION: Kashmir, Nepal, N. India, S. China (Fukien, Kiangsi, Kwangtung, Hupeh, Szechuan, Sikang).

FUKIEN: 8, Ta-chu-lan, 1000 m, Shaowu, V. 1942, 1943, Maa, V. 1945, Lin (CAS, BISHOP). KIANGSI: Kiu-kiang (ZSBS). KWANGTUNG: 12, Lo-fau San, IV-V. 1912, Mell (ZMB). HUPEH: Hsiao-ho, Lichuan, VIII. 1948, Gressitt & Djou. SZECHUAN: many, Wen-chuan, VI. 1933, Graham (US); 3, Kin-tun, Chau-chia-tu, 24. IV. 1949, Djou (CAS); 6, Pe-pei (Pei Bay), VI. 1932, G. Liu (MCZ); 1, Chengtu, V. 1938, Sage (AMNH);

Wen-chuan-shien, 1933, Graham; Chengtu, IV. 1930, Graham; 1, Ta-ning-ho, V-VI. 1904, Blackwelder; many, Sui-fu, 1930, Graham; Kuan-hsien, 1930, Graham (US), Stötzner (ZSBS). SIKANG: many, betw. Ya-chow & Ta-tsien-lu, 2200 m, VII. 1930, Graham.

## 217. Mimastra grahami Gressitt and Kimoto, n. sp. Fig. 142, a.

*Male*: Testaceous to black: head pale testaceous, pitchy on posterior portion of occiput; antenna pitchy brown, pale on basal 3.5 segments; prothorax and scutellum testaceous; elytron testaceous with disc largely pitchy black, leaving a moderately wide margin of pale around entire circumference except for extreme apex near suture which is slightly reddish brown; prosternum, metathorax and abdomen pitchy black; remainder of ventral surfaces and legs testaceous, with a narrow pitchy stripe on outer edges of femora and tibiae, and tarsi somewhat pitchy beyond middle. Body largely glabrous, a few pale hairs on head and sides of thorax; ventral surfaces meagrely clothed with rather short pale hairs; legs moderately clothed with fine suberect pale hairs.

*Head* nearly as broad as prothorax, fairly short anteriorly and narrowed behind eyes; occiput fairly smooth and evenly convex except for a cavity in center; interocular area raised behind antennal insertions, with a fine median groove, and rounded posteriorly by slightly arcuate depression; frontoclypeus broadly triangular, raised medially near posterior corner just before antennal insertions. *Antenna* not quite as long as body, fairly slender; scape smooth and shiny, slightly arcuate; segment 2 is 1/2 as long as 1; 3 is  $1.5 \times$  as long as 2; 4 longer than 2+3; 4-10 decreasing very slightly and gradually in length; 11 slightly longer than 10. *Prothorax* more than  $2 \times$  as broad as long, suboblong; side feebly convex, widest slightly anterior to middle; basal margin moderately convex, slightly sinuate, moderately incised behind posterior angles; anterior margin slightly concave in dorsal view;



Fig. 142. a, Mimastra grahami n. sp.; b, M. limbata Baly.

anterior corners rounded and slightly projecting forward; disc smooth and shiny, shallowly depressed across central portion, not distinctly punctured. *Scutellum* fairly large, triangular, slightly rounded at apex. *Elytron* about  $3 \times as$  long as broad, moderately expanded laterally and widest behind middle, evenly rounded apically; disc rather heavily and closely punctured; interspaces somewhat rugulose. *Ventral surfaces* shiny, finely and sparsely punctured; last abdominal sternite broadly rounded apically; pygidium obtusely rounded apically. *Legs* moderately slender; hind tibia nearly straight; hind tarsal segment 1 slightly longer than 2+3 and distinctly longer than 5. Length 8.2 mm; breadth 3.4.

Female: Length 7.4 mm; breadth 3.4.

Paratypes: Length 7.0-8.0 mm; breadth 3.3-3.9.

DISTRIBUTION: W. China (S. Shensi, Szechuan).

Holotype  $\eth$  (U. S. NAT. MUS.), S. Shensi, V. 1904, Eliot Blackwelder (6363); allotype  $\wp$  (US), Sui-fu, Szechuan, V. 1923, D. C. Graham; paratypes  $\wp \wp \wp$  (US, BISHOP), Sui-fu, V. 1923, Graham; 1 paratype  $\wp$ , Chungking, 600 m, 6–27. V. 1930, Graham. Named for the collector, Rev. D. C. Graham. The Chungking specimen has the elytral disc more extensively dark, leaving only a very narrow sutural stripe.

Differs from *limbata* in being much shorter and broader, and in having elytral disc black instead of blue. Differs from *maai* in being larger, broader and much more heavily punctured on elytron.

## 218. Mimastra guerryi Laboissière

Mimastra guerryi Lab., 1929, Soc. Ent. France, Ann. 98: 283 (Yunnan; PARIS).

Mimastra quadrivittata Mader, 1938, Ent. Nachrbl. 12: 59 (Soling-ho R. Vall., Yunnan; HAUSER).—Laboissière, 1940, Mus. R. Hist. Nat. Belg., Bull. 16: 23 (syn. of guerryi).

DISTRIBUTION: SW China (Yunnan).

YUNNAN: 8, Yunnan-sen (ZMB); 2, Kunming, 1900 m, 4. VII. 1940, Gressitt; 4, Kunming, 1. VIII. 1944, C. L. Liu, no. 203B (US). One questionable specimen, Chao chowfu, W. Yunnan, 2300 m, 23. VIII-21. IX. 1914, Mell (ZMB).

219. Mimastra limbata Baly Fig. 142, b.

Mimastra limbata Baly, 1879, Cist. Ent. 2: 449 (Assam; BM).—Maulik, 1936, Fauna India, Galeruc., 531 (Khasi Hills, Assam).—Ogloblin, 1936, Fauna USSR 26, 1: 180, 400 (Szechuan).

DISTRIBUTION: Assam, W. China (S. Shensi, Sikang, Szechuan, W. Hupeh, Kweichow, Yunnan).

SHENSI: 1, S. Shensi, V. 1904, Blackwelder (US). SIKANG: 1, betw. Ya-chow & Ta-tsien-lu, 2300 m, VII. 1929, Graham; 2, Mu-ping, VII. 1929, Graham (US). SZECHUAN: 10, Sui-fu, VIII. 1930, Graham; 1, Fu-lin, 2200 m, VII. 1928, Graham; 3 betw. Kiating & Sui-fu, VI-VII. 1930, Graham; 5, Chungking, V. 1930, Graham; 1, Ta-ning-ho, V-VI. 1904, Blackwelder; 2, Hua-yin Shan, VII. 1933, Graham; 1, Shin-kai-si, 1300 m, Mt. Omei, Graham (US); 1, nr. Yueh-shi, 1500 m, VII. 1928, Graham (US); 10, Kin-tung, Chau-chia-tu, 24. IV. 1949, Djou (CAS, BISHOP); 4, Chungking, VI. 1932, G. Liu; 1, Ching-cheng Shan, VII. 1932, G. Liu (MCZ). HUPEH: 20, Sui-sa-pa, 1000 m, Lichuan Distr., 27. VII-19. VIII. 1948, Gressitt & Djou (CAS); 2, Hsiao-ho, 4, Liangho-keu, Lichuan, VIII-IX. 1948, Gressitt



Fig. 143. d' genitalia. a, Mimastra cyanura (Hope); b, M. unicitarsis Laboissière.

& Djou. KWEICHOW: 3, Meitan, 900 m, 19. VII. 1940, Gressitt (LINGNAN). YUNNAN: 2, Kunming, 1. VIII. 1944, C. L. Liu, 2001: 122 (US).

220. Mimastra maai Gressitt and Kimoto, n. sp. Fig. 144.

*Male*: Body fairly short, slightly broadened posteriorly; pale testaceous with elytral disc pitchy brown, slightly more reddish posteriorly with suture very narrowly reddish brown and external margin narrowly testaceous; antenna



Fig. 144. Mimastra maai n. sp.

reddish brown; legs ochraceous, slightly reddish brown on tarsi. Body nearly glabrous above, a few pale hairs on anterior portions of head, and scattered fine hairs on ventral surfaces and legs; antenna moderately clothed with pale golden hairs, only a few on segment 1.

Head nearly as broad as prothorax, rounded anteriorly and narrowed behind eyes; occiput moderately convex, fairly smooth; interocular area with a biarcuate transverse groove in center, behind 2 swollen areas behind antennal insertions and divided posteriorly by a fine median groove; frontoclypeus moderately large, raised and flat on large triangular central portion; labrum fairly smooth and convex. Antenna 1/5 longer than body, moderately slender; scape shiny, slightly arched; segment 2 is 2/5 as long as 1; 3 is  $2 \times$  as long as 2; 4 as long as 2+3; 4–10 gradually decreasing in length; 11 barely as long as 10. Prothorax less than  $2 \times$  as broad as long, transversely suboblong; side fairly straight from base to 1/3 length from apex and then slightly narrowed; basal margin feebly convex and slightly sinuate; anterior margin nearly straight; disc rather strongly swollen on

anterior 1/2, transversely depressed just behind middle but depression nearly obsolete on median line, and posterior portion moderately convex but slightly depressed in center; surface microrugulose but not distinctly punctured. *Scutellum* subtriangular, rounded apically. *Elytron* slightly more than  $4 \times as$  long as broad, slightly widened to behind middle and broadly rounded apically; external margin very slightly expanded; disc with numerous close punctures which are rather shallow and vague and confused by a general slight rugosity, also some interspaces form slightly raised longitudinal lines. *Ventral surfaces* shiny, finely and sparsely punctured. *Legs* moderately stout; hind tibia nearly straight; hind tarsal segment 1 as long as remainder combined. Length 6.3 mm; breadth 2.65.

Female: Length 7.0 mm; breadth 3.2.

Paratypes: One with suture entirely brown. Length 7.0-7.4 mm; breadth 3.0-3.4.

DISTRIBUTION: SE China (Fukien).

Holotype & (BISHOP 3279), Ta-chu-lan, 1000 m, Shaowu Distr., Fukien Prov., 10. VI. 1942, T. C. Maa; allotopotype & (BISHOP), 13. VI. 1942, Maa; paratopotype & (CAS), 27– 29. V. 1943, Maa. Named after the collector, Prof. T. C. Maa, now of Bishop Museum.

Differs from *cyanura* in being shorter, with elytral disc entirely pitchy brown instead of metallic blue posteriorly. The body is relatively shorter and broader than in all known Chinese species except *grahami*.

## 221. Mimastra modesta Fairmaire

Mimastra modesta Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 82 (Moupin; PARIS).— Ogloblin, 1936, Fauna USSR 26, 1: 181, 400 (Szechuan).

DISTRIBUTION: W. China (Sikang, Szechuan).

SIKANG: 1, Wo-lung, 2000 m, San-kiang-kou, Wassuland, 7. X. 1934, Friedrich (FREY). SZECHUAN: 1, Kuan-hsien, 17. VIII. 1924, Graham (US); 3, Shin-kai-sze, 1500 m, Omei Shan, 8. VIII. 1940, Gressitt (BISHOP, LINGNAN, CAS).

## 222. Mimastra pygidialis Laboissière

Mimastra pygidialis Lab., 1929, Soc. Ent. France, Ann. 98: 285, fig. 14 (Hoa-binh & Chapa, Tonkin; BRUXELLES).

DISTRIBUTION: N. Vietnam (mountains of N. Tonkin).

N. VIETNAM: 4, Hoa-binh, Tonkin, Cooman (FREY).

## 223. Mimastra quadrinotata Gressitt and Kimoto, n. sp. Fig. 145, a.

Male: Testaceous, in part marked with dark brown or pitchy black; head and prothorax pale, antenna largely dull reddish-brown, scutellum dull brown, elytron orange testaceous with a fairly large oval spot on disc in basal 1/3, centered obliquely behind humerus, as well as a large preapical blackish spot which does not quite reach suture or margin and is slightly more distant from apex; metathorax brownish black; abdomen reddish brown, darker at apex; legs reddish-brown, darker on much of hind femur and on tarsi.

*Head* not quite as broad as prothorax, with eyes rather small and not prominent; occiput rather smooth and nearly impunctate with a transverse groove in middle behind postantennal swellings; vertex with a parallel-sided raised area between antennal insertions; frontoclypeus short, transverse and somewhat raised; labrum rounded-oblong and fairly smooth. Antenna barely longer than body; segment 1 slender, gradually thickened apically; 2 just over 1/3 as long as 1; 3 slightly shorter than 1; 4 longer than 1; 4-7 decreasing slightly in length; 8 as long as 7, slightly longer than 9; 9-11 subequal in length. Prothorax about  $1.5 \times$  as broad as long, subrectangular, slightly widened from base to apex with basal angle somewhat rounded; disc slightly uneven but largely smooth and shiny and without very distinct punctures on central portion and with minute punctures towards side, surface slightly depressed in central portion and more strongly depressed toward middle of side. Scutellum triangular, slightly convex and feebly punctured. Elytron about  $4 \times as$ long as broad, subparallel-sided, very slightly broadened before apex and broad and rounded apically; disc rather smooth and even, quite finely and rather irregularly punctured throughout. Ventral surfaces quite finely punctured, rather vaguely so in part; last abdominal tergite very large, convex and largely impunctate, and last sternite fairly level in central portion but raised and slightly indented along posterior margin. Legs long and slender; hind tarsal segment 1 as long as remainder combined and 2 distinctly longer than 3. Length 8 mm; breadth 3.

*Female*: Elytral spots more rounded and more blackish; abdomen dark reddish brown, extending somewhat beyond elytral apices; antenna about as long as body. Length 8.0 mm; breadth 3.2.

*Paratypes*: Anterior elytral spot sometimes fairly large and nearly forming a transverse band. Length 6.5–9.0 mm; breadth 2.6–3.4.

DISTRIBUTION: SW China (Yunnan).

Holotype & (BISHOP 3280), Kunming, 1900 m, Yunnan Prov., 28. IV. 1940, T. C. Maa; allotopotype & (BISHOP), 2. VII. 1940, Gressitt; 2 paratopotypes (LINGNAN, CAS), 1–5. VII. 1940, Gressitt; 3 paratopotypes (USNM), VIII. 1944, C. L. Liu (2001: 117); 14 paratypes (ZMB, BISHOP), Yunnan-sen.

Differs from *guerryi* Lab. in having 4 large black spots instead of 4 stripes. Differs from *cyanura* (Hope) in being more parallel-sided, much more finely punctured, with elytral epipleura less conspicuous from above, and with quite different coloration.

#### 224. Mimastra soreli Baly

Mismastra Soreli Baly, 1878, Ann. Mag. Nat. Hist. ser. 5, 2: 415 (Upper Yangtze Kiang; BM).—Weise, 1922, Tijdschr. Ent 65: 78 (Fukien).—Ogloblin, 1936, Fauna USSR 26, 1: 178, 400.

DISTRIBUTION: S. China (Kiangsu, Chekiang, Fukien, Kwangtung, Kwangsi, Szechuan, Yunnan), Hainan I.

KIANGSU: 1, Soochow, 20. V. 1909, Thompson (CAS); 3, Chin-kiang, VII. 1924, and 1, Nanking, VI. 1924, Illingworth (BISHOP). CHEKIANG: many, Tung-lu, 23–27. IV. 1926, Wright; 2, Hangchow, 18. V. 1923, Van Dyke (CAS); 4, Hangchow, VII. 1924, Illingworth (BISHOP). FUKIEN: many, Shui-pei-kai, III–IV. 1943, Maa (CAS); 1, Ku-yuen-chie, Shao-wu, III. 1945, Maa; 1, Chi-shih, Chungan, V. 1940, Maa; 1, Bohea Hills, VI. 1939, Maa; 2, Cha-shan, Kien-ning Distr., VI. 1933, Ngu (LINGNAN); 1, Ho-tien, Changting, IV. 1941, Maa; 1, Yungan City, V. 1941, Maa; 1, Hing-hwa, Cole (US); 2, Yen-ping, VI. 1917 (AMNH 5148); 6, Foochow, VII. 1926, Kellogg (CAS). KWANGTUNG: 3, Yim-na Shan, 10. VI. 1936, Gressitt; 2, Mei-hsien, 31. V. 1936, Gressitt (CAS); 1, Wui-tung, Chung-shan

Distr., 9. III. 1935, Fung; 1, Sin-fung-Lung-kai, 12. IV.; Koon-yam-kok, Waichow, 6. IV.; and Tai-kang – Mui-hang, Lung-men, 9. IV., E. River, 1940, Gressitt & To (LINGNAN). KWANGSI: 4, Pei-liu, V. 1933, G. Liu; 2, Kwei-lin, IV. 1933, Liu; 2, Ping-loo, 1933, Liu; 2, Kwei-ping, IV. 1933, Liu (MCZ). SZECHUAN: 2, Kuanhsien, 900 m, 1930, Graham (US). YUNNAN: 2, Kunming, 1. VIII. 1944, C. L. Liu 2001: 122 (US); 2, Yun Hsien, IV. 1942, Jellison (US). N. VIETNAM: 2, Hoa-binh, Tonkin, Cooman (FREY).

225. Mimastra unicitarsis Laboissière Fig. 143, b & 145, b.

Mimastra unicitarsis Lab., 1940, Mus. R. Hist. Nat. Belg., Bull. 16 (37): 4, figs. (Burma; ? STOCKHOLM).

DISTRIBUTION: Burma, S. China.

CHEKIANG: 2, Hangchow, VI. 1927, Wong (US); 1, Hangchow, V. 1923, Van Dyke (CAS); 1, Hangchow, VI. 1924, Illingworth (BISHOP). FUKIEN: many, Ku-hsien-kai, Shaowu, 1. V. 1944, Maa (CAS, BISHOP). KIANGSI: 1, Hong Shan (Kwangtung border), 900 m, 30. VI. 1936, Gressitt (CAS); 2, An-yuen, 23. V. 1948, Gressitt & Djou. KWANG-TUNG: 2, Yim-na Shan, 10. VI. 1936, Gressitt; 1, Lin-ping to Noi-koon, Linping Distr., 14. IV. 1940, Gressitt & To; 2, Lung-tau Shan, 400 m, 11. VI. 1947, Gressitt (CAS, LINGNAN). YUNNAN: 2, Western Hills, 2100 m, nr. Kunming, 7. VII. 1940, Gressitt.



Fig. 145. a, Mimastra quadrinotata n. sp.; b, M. unicitarsis Laboissière.

Trichomimastra Weise, 1922, Tijdschr. Ent. 65: 75 (type: Mimastra seminigra Ws.).—Ogloblin, 1936, Fauna USSR 26, 1: 181.

This was described as a subgenus of *Mimastra* and was so treated by Ogloblin but we are raising it to generic rank.

#### KEY TO CHINESE SPECIES OF TRICHOMIMASTRA

1.	Body pale testaceous or brown
	Body black except for antenna and legs testaceous; elytra twice as broad as
	prothorax at base; length 3.0-4.3 mm 229. jejuna
2(1).	Prothorax more or less trapeziform, widest anteriorly; color brownish; length
• •	less than 3.7 mm
	Prothorax transversely oblong but widest near middle; color pale; length more
	than 5 mm
3 (2).	Prothorax weakly trapeziform, somewhat convex at side, fully $2 \times as$ broad as
	long: elvtron rather closely punctured and finely rugulose
	Prothoray distinctly transgiform straight at side much wider anteriorly than
	Fromotax distinctly trapezitorin, straight at suc, much when another than
	basally, less than $2 \times as$ broad as long; elytron minutely punctured, fairly
	smooth
4 (2).	Elytron with numerous long pale hairs 5
	Elytron with rather few hairs; antennal segment 2 about 3/5 as long as 3;
	pronotum not depressed transversely
5(4).	Antennal segment 2 about $2/3$ as long as 3; pronotum not emarginate basally;
	length 7.2–9.0 mm
	Antennal segment 2 nearly as long as 3; pronotum slightly emarginate at middle
	of base; length $4.5-5.0 \text{ mm}$ 228 ? gracilipes $\varphi$
6 (5).	Abdomen dark brown or pitchy: legs slightly brownish: length 6.5-7.8 mm
	226 a attenuata
	Abdomen very nale: lease very nale: length 70-95 mm 227 attenuate albida
	Automien very pare, legs very pare, length 7.0 9.5 minter. 227. attenuata annua

226. Trichomimastra attenuata attenuata Gressitt and Kimoto, n. sp. Fig. 146, a.

*Male*: Elongate, subparallel-sided; body testaceous in part tinged with reddish on head and borders of pronotum; antenna dull brown beyond middle of scape, pitchy on segments 8–9; ventral surfaces testaceous brown; legs slightly paler, but duller on outer edges of tibiae and on tarsi. Body clothed with quite long suberect hairs, mostly arranged in subregular rows on elytron; pronotum largely glabrous; ventral surfaces moderately clothed with less erect hairs and legs moderately clothed; antenna somewhat densely clothed with oblique silvery buff hairs, sparser on scape.

Head broader than prothorax, greatly abbreviated anteriorly, narrowed behind eyes; occiput evenly convex, finely shagreened; interocular area moderately raised in middle, forming more or less of a raised triangle extending forward between antennal insertions and very shallowly grooved medially; frontoclypeus with short median raised line and longer oblique anterior ridges. Antenna 4/5 as long as body, fairly slender; segment 1 slender, gradually thickened; 2 is 2/5 as long as 1; 3 is  $1.4 \times$  as long as 2; 4 nearly as long as

2+3; 4-10 gradually decreasing slightly in length; 11 barely longer than 10. *Prothorax* more than  $2 \times$  as broad as long, nearly straight at side, barely narrower anteriorly than posteriorly; basal margin evenly convex; anterior margin slightly sinuate, concave at middle; disc shiny, slightly uneven, not distinctly punctured. *Scutellum* subequilaterally triangular, micropunctulate. *Elytron* more than  $5 \times$  as long as broad, nearly parallel-sided, hardly widened posteriorly, obtusely rounded apically; disc with numerous irregular shallow punctures and slightly rugulose, as well as having several vague feebly longitudinal lines. *Ventral surfaces* shiny, with scattered fine punctures; last abdominal sternite slightly emarginate apically and obliquely raised on each side of middle; pygidium narrowed and rounded apically. *Legs* long and slender; hind tarsal segment 1 slightly longer than remaining segments combined. Length 10.1 mm; breadth 2.85.

*Female*: Last abdominal sternite broad, evenly rounded behind; pygidium rounded obtuse. Length 8.0 mm; breadth 2.6.

*Paratypes*: Mostly paler than type and allotype. Length 6.5–7.8 mm; breadth 2.4–2.7. DISTRIBUTION: W. China (Szechuan).

Holotype & (BISHOP 3281), below Shin-kai-sze, 1300 m, Omei Shan, 17. VIII. 1940, Gressitt; allotopotype & (BISHOP), same data; numerous paratypes (US, BISHOP, LINGNAN, CAS, BMNH), Mt. Omei, 3300 m, 19. VIII. 1934, Graham.

Differs from *pellucida* Ogl. in being very much larger, in having prothorax transversely oblong instead of trapeziform, and in being paler. Differs from *membranacea* Ws. in being much larger, in having some slightly raised lines on elytron, and in having antenna slightly darkened from distal portion of scape.



Fig. 146. a, Trichomimastra attenuata attenuata n. sp.: b, T. gracilipes n. sp.

#### 227. Trichomimastra attenuata albida Gressitt and Kimoto, n. subsp. Fig. 147, a.

*Female*: Pale yellowish testaceous, slightly duller on tarsi; head smooth and shiny behind; pronotum shiny, transversely depressed on disc; scutellum somewhat convex; elytron finely punctured and wrinkled, with some very feeble raised lines. Length 8.7 mm; breadth 2.85.

Paratypes: Length 7.0–9.5 mm; breadth 2.7–3.0.

DISTRIBUTION: W. China (Szechuan, Sikang).

Holotype  $\mathcal{Q}$  (U. S. NAT. MUS.), Beh-luh-din, 1800 m, 50 km N of Chengtu, Szechuan Prov., VII–VIII. 1933, D. C. Graham; numerous paratopotypes (US, BISHOP), same data; 1, Kuan-hsien, VIII. 1933, Graham. Four from Yao-gi, 2300 m, nr. Mu-pin, Sikang, 15. VII. 1929, Graham (USNM), and 1 from Ta-tsien-lu to Kiu-lung, Reitter (FREY), not designated paratypes, are slightly smaller in size.

Differs from *attenuata* in being still paler, with venter and legs quite pale, and in averaging larger in size.



Fig. 147. 3 genitalia. a, Trichomimastra attenuata albida n. subsp.; b, T. gracilipes n. sp.; c, T. violaceipennis Allard; d, T. fokiensis Weise.

228. Trichomimastra gracilipes Gressitt and Kimoto, n. sp. Figs. 146, b & 147, b.

*Male*: Very pale testaceous, slightly ochraceus on head and metasternum; eye brown; apex of mandible reddish; antenna slightly dull testaceous beyond segment 2. Dorsum with rather few scattered suberect pale hairs; antenna moderately clothed with oblique goldep hairs; ventral surfaces moderately clothed with pale silvery buff hairs.

*Head* broader than prothorax, narrowed from behind eyes to neck, much abbreviated anterior to eyes; occiput evenly convex and smooth, depressed anteriorly; interocular area transversely depressed behind antennal insertions between which are moderately raised and medially grooved, frontoclypeus quite short, barely ridged medially and arcuately ridged anteriorly. *Antenna* 4/5 as long as body, fairly slender; segment 1 barely arched, distinctly punctured, 2 fully 1/2 as long as 1; 3 is  $1.5 \times$  as long as 2; 4 slightly longer than 3; 4-10 decreasing very slightly in length; 11 slightly longer than 10. *Prothorax* 2 × as broad as long, somewhat obtuse slightly anterior to middle of side; basal margin deeply convex,

slightly indented at middle of base; anterior margin nearly straight at dorsal view; disc smooth and shiny, not distinctly punctured, slightly uneven but hardly depressed across center. Scutellum slightly longer than broad, subtriangular and rounded behind. Elytron nearly  $5 \times$  as long as broad, subparallel-sided and rounded apically; disc finely and irregularly punctured, in part minutely rugulose. Ventral surfaces finely and partially punctured. Legs slender. Length 5.0 mm; breadth 1.45.

**Paratype:** Metasternum, abdomen and tarsi slightly dull testaceous. Antennal segment 1 considerably longer than 2+3 which together are about as long as 5. Aedeagus long and slender, somewhat flattened, slightly broadened just before apex which is strongly narrowed and very briefly dentate at extreme apex. Length 5.6 mm; breadth 1.8.

DISTRIBUTION: W. China (Sikang).

Holotype  $\Diamond$  (U. S. NAT. MUS.), Yao-gi, 2500 m, nr. Mu-pin, 14–18. VII. 1929, D. C. Graham; paratopotype  $\eth$  (BISHOP), same data. Three  $\Diamond \Diamond$  from Mu-pin have the elytron much more hairy, the pronotum depressed transversely and antennal segments 2–3 subequal in length. They might represent another species.

Differs from *pellucida* Ogl. in being longer, more slender and paler, and in having the prothorax transversely oblong and obtuse at side, instead of trapeziform.

## 229. Trichomimastra jejuna (Weise), NEW COMBINATION

Luperus jejunus Ws., 1889, Soc. Ent. Ross., Horae 23: 568, 616 (Kansu; ?LENINGRAD). Mimastra (Trichomimastra) jejuna, Ogloblin, 1936, Fauna USSR 26, 1: 182, 400 (Ta-tsien-lu).

DISTRIBUTION: W. China (Kwansu, Sikang).

## 230. Trichomimastra pectoralis Laboissière Fig. 148, a.

Mimastra (Trichomimastra) pectoralis Lab., 1929, Soc. Ent. France, Ann. 98: 286, fig. 15 (Hoa-binh, Tonkin; ? BRUXELLES).

DISTRIBUTION: N. Vietnam (Tonkin), Hainan I.

HAINAN: 1, 10. III. 1909, Schoede (ZMB); 2, Ta-han, 800 m, nr. Red Mist. Mt., 21 -23. VI. 1935, Gressitt; 1, Ta-hau, 3. VII. 1935, Gressitt (CAS, BISHOP).

231. Trichomimastra pellucida (Ogloblin)

Mimastra (Trichomimastra) pellucida Ogl., 1936, Fauna USSR 26, 1: 182, 400 (Ta-tsien-lu; ? Moscow).

DISTRIBUTION: W. China (Sikang, Szechuan).

SIKANG: 1, Ta-tsien-lu to Kiu-lung, Reitter (FREY); 1, betw. Ya-chow & Ta-tsien-lu, 2000 m, VII. 1930, Graham (US). SZECHUAN: 2, Omei Shan, below Shin-kai-sze, 1300 m, 17. VIII. 1940, Gressitt (BISHOP, LINGNAN).

## Genus Cneorane Baly

Cneorane Baly, 1865, Ent. Monthly Mag. 2: 97 (type: Cneorane fulvicollis Baly=Galleruca rubricollis Hope); 1874, Ent. Soc. Lond., Trans. 1874: 182.—Chapuis, 1875, Gen. Col. 11: 178, 179.—Jacoby, 1888, Biol. Centr. Amer., Col. 6 (1): 604.—Allard, 1889, Soc.



Fig. 148. a, Trichomimastra pectoralis Laboissière; b, Cneorane intermedia Fairmaire.

Ent. Belg., C. R. 33: LXIX.—Maulik, 1936, Fauna India, Galeruc., 335.—Ogloblin, 1936, Fauna USSR 26, 1: 212, 406.

There is considerable color variation in some species of this genus. We were not able to identify some of the named species, and some of those omitted from the following key will probably prove to be synonyms of some of the keyed species.

## Key to Chinese species of Cneorane

1.	Elytron unicolorous, generally metallic	2
	Elytron yellowish brown with basal, lateral, apical and sutural margins, and a	
	transverse band behind middle, blackish; head, pronotum and ventral sur-	
	faces reddish brown; length 6.5-8.5 mm 237. ephippiat	a
2(1).	Dorsum, including pronotum, blue or dark violaceous blue; abdomen partly or	
	largely yellow	3
	Pronotum reddish or yellowish brown	4
3 (2).	Elytron subparallel-sided; antennal segment 3 is $1/2$ longer than 2; pronotal	
	punctures almost invisible; length 4-5 mm 232. abdominali	s
	Elytron distinctly broadened posteriorly; antennal segment 3 is 2/3 longer than	
	2; pronotal punctures quite easily visible; length 8.0 mm 244. sikang	a
4(2).	Abdomen entirely reddish or yellowish brown	5
	Abdomen bluish or blackish	5
5(4).	Antenna robust, distinctly serrated in $3$ ; length 6-8 mm 245, subcoerulescen	s

6 (4).	Antenna rather slender; body elongate; length 8.0 mm
	Interstices of elytral punctures convex and irregularly rugose; head, prothorax and mesothorax reddish brown; elytron blackish or bluish; mesothorax and abdomen bluish or blackish blue, except fore and mid femora reddish; length 8.5-9.0 mm
7 (6).	Without combination of tibiae, tarsi and apices of femora blackish; femora largely reddish
	In all legs tibiae, tarsi and apices of femora blackish, femora largely reddish brown; head, prothorax and mesothorax yellowish brown; elytron violaceous or blue; puncturation of elytron large and strong, and their interstices nar- rower than their diameters, and sometimes interstices minutely shagreened; length 9.0-9.5 mm
8 (7).	Interstices of elytral punctures narrower than diameter of each puncture9
	Interstices of elytral punctures wider than diameter of each puncture 10
9 (8).	Pronotum 1.2 $\times$ as wide as long; elytron dark greenish or bluish; head, pro- thorax and mesothorax yellowish brown; metathorax, abdomen and legs bluish or blackish, except for fore and mid femora reddish; in $9$ $9$ interstices of elytral punctures shagreened; length 8-9 mm
	Pronotum $1.3-1.5 \times$ as wide as long; elytron violaceous blue, in some cases more bronzy; color of other parts of body as in <i>femoralis</i> ; body more robust than in preceding species and shorter in body length; in most $9$ $9$ interstices of elytral punctures not shagreened; length 8.5 mm
10 (8).	Rather larger size; larger than 5.5 mm 11
	Rather smaller size, length 4.5-5.0 mm; head and thorax reddish brown; ely-
	tron blackish blue; abdomen and legs infuscated, except femora of fore and
	mid legs reddish; length 4.5–5.0 mm 243. rufocaerulea
11 (10).	Subapical antennal segments gradually widened in $3^\circ$ elytron blue or gradually
	blue: head and thorax dark brown: legs blackish with femora brownish:
	in some specimens apical antennal segment 11 reddish (this may suggest the
	identity of this species with apicicornis Jacoby); length 6.8-8.0 mm235. crassicornis
12 (11).	Male genitalia rather slender in lateral view; legs generally blackish except
	fore and mid femora reddish or yellowish but in many cases legs almost entirely reddish; elytron in most cases violaceous blue but in many cases
	more greenish than blue; length 6.5-8.0 mm 240. fokiensis
	Male genitalia more robust in lateral view; legs entirely yellowish or reddish brown; elytron green or blue; length 7-8 mm 246. violaceipennis
232. Ci	neorane abdominalis Jacoby
Cneoran	e abdominalis Jac., 1890, Entomologist 23: 167 (Chang-yang; BM).
DIS	STRIBUTION: C. China (Hupeh).

## 233. Cneorane apicicornis Jacoby

Cneorane apicicornis Jac., 1890, Entomologist 23: 166 (Chang-yang; BM).

This may be a color variation of the  $\mathcal{P}$  of *crassicornis*.

DISTRIBUTION: C. China (Hupeh).

#### 234. Cneorane cariosipennis Fairmaire

Cneorane cariosipennis Fairm., 1888, Soc. Ent. Belg., Ann. 82: 45 (Yunnan; PARIS).—Ogloblin, 1936, Fauna USSR 26, 1: 217 (Chin-chan-pu, Ta-chui-pan, Szechuan).

DISTRIBUTION: W. China (Sikang, Szechuan).

SIKANG: 1, nr. Mu-pin, VII. 1929, Graham; 1, W of Ya-chow, 1800 m, VIII. 1923, Graham; 1, 50 km W of Ta-tsien-lu, 1500 m, 20. VI. 1928, Graham (US); Wo-lung, Sankiang-kou, Wassuland, 7. X. 1934, Friedrich (FREY). SZECHUAN: 1, 70 km S of Songpan, 2100 m, 1. VIII. 1924, Graham; 2, Mow-chow, 1300 m, VIII. 1924, Graham (US).

#### 235. Cneorane crassicornis Fairmaire

Cneorane crassicornis Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 81 ♂ (Koui-Tcheou; PARIS).—Baly, 1890, Ent. Monthly Mag. ser 2, 1: 14 (=fulvicollis Baly ♂).

Cneorane rubricollis, Ogloblin, 1936 (nec Hope, 1831), Fauna USSR 26, 1: 216 (Ta-tsien-lu, O-lun-tze, La-ma-ya, Pa-si-koi).

Baly (1890) and Weise (1924, Coleopt. Cat. 78: 127) synonymized this species with *fulvicollis* Baly, and Maulik and Ogloblin put both under *rubricollis* Hope, but this species does not have the close elytral puncturation, and must be separated from the Indian species.

DISTRIBUTION: SW China (Yunnan, Sikang).

YUNNAN: 3, Kunming, 1. VIII. 1944, C. L. Liu, 2001: 72 (US); 2, Yun Hsien, IV. 1942, Jellison (US); 1, Yunnan (FREY); 4, Yunnan-sen (ZMB).

## 236. Cneorane cribratissima Fairmaire

Cneorane cribratissima Fairm., 1888, Soc. Ent. Belg., Ann. 32: 44 (Kweichow; PARIS). DISTRIBUTION: SW China (Kweichow).

## 237. Cneorane ephippiata Laboissière

Cneorane ephippiata Lab., 1930, Soc. Ent. France, Ann. 99: 346, fig. (Yunnan; ? BRUXELLES). DISTRIBUTION: SW China (Yunnan).

YUNNAN: 9, So-ling-ho River Valley (FREY); 8, Yunnan (FREY); 2, Mt. nr. Mengtze (FREY).

## 238. Cneorane episcopalis Fairmaire

Cneorane episcopalis Fairm., 1889, Soc. Ent. France, Ann. 58: 81 (Koui-Tcheou; PARIS).

This may be a synonym of *fokiensis* Weise. DISTRIBUTION: SW China (Kweichow).

#### 239. Cneorane femoralis Jacoby

Cneorane femoralis Jac., 1888, Zool. Soc. Lond., Proc. 1888: 350 (Foochan; BM). Cneorane De la Touchei Fairmaire, 1888, Soc. Ent. Belg., Ann. 32: 45 (Fokien; PARIS).— Jacoby, 1890, Entomologist 23: 193 (syn. of femoralis). Fairmaire's synonym is apparently based upon the  $\partial$ .

DISTRIBUTION: SE China (Fukien, Kwangtung, ? Kweichow, Szechuan, Tibet), Hainan I.

FUKIEN: Foochow, 1886, Leech (BM), 1921–24, Kellogg (US). KWANGTUNG: 2, Yam-na Shan, nr. Mei-hsien, 29. VIII. 1933, To; 6, Tin-tong, Lochang Distr., 13. VIII. 1947, Tsang & Lam, for Gressitt (CAS, BISHOP); 1, Cheung-nga San, Tin-tong, Lochang, VIII. 1947, Tsang; 1, Yao Shan, Lin Distr., 3. V. 1934, To (LINGNAN); 27, Tscha-jiu San, V-VI. 1912, Mell (ZMB); Shiu-chow-fu (ZMB). HAINAN: 1, Loh-fung-tung, Yai Distr., 27. II. 1935, To; 1, Nai-suen, SE of Naam-fung, Linkao Distr., 10. IX. 1932, To; 1, Taai-po, nr. Naam-fung, 25. IX. 1932, To (LINGNAN); 4, "Kiautschau" (FREY). SZECHUAN: 1, Shiao-shing lin Pass, VII. 1928, Graham (US). TIBET: 1 (AMNH F. 4728).

### 240. Cneorane fokiensis Weise

Cneorane fokiensis Ws., 1922, Ent. Tijdschr. 65: 71 (Fukien; STOCKHOLM).

DISTRIBUTION: S. China (Fukien, Chekiang, Kiangsu, Hupeh, Szechuan, Sikang, Kweichow, Shansi).

KIANGSU: 1, Shanghai, 15. V. 1923, Van Dyke. CHEKIANG: 1, Tung-lu, V. 1926. Wright (CAS); Hangchow, 19. V. 1923, Van Dyke (CAS). FUKIEN: 3, Yun-ling Shan, Loa-leng (ZMB); 3, Yen-ping, VIII. 1917 (AMNH 5148); many, Ta-chu-lan, 1000 m, Shaowu, V. 1943, VI. 1942, VIII. 1945, and Tsi-li-chiao, Chungan, 1000 m, VI. 1942, Maa; Kuatun, Chungan, VI. 1942, Maa (CAS, BISHOP). HUPEH: 1, Tshia-yuen-kow, Lao-ho-Kow (ZMB); many, Sui-sa-pa, 1000 m, Lichuan, VII-VIII. 1948, Gressitt & Djou; Liang-ho-keu, 4. IX, 1948, Djou; Hsiao-ho, VIII. 1948, Gressitt; Sang-hou keu, Hupeh-Szechuan border, 19. VII. 1948. Gressitt & Djou (CAS, BISHOP); Chiao yu-tai to Wang chia-ying, 1100 m, 20, IX, 1948, Djou. SHANSI: 4, Ho-tsin (ZMB). KWEICHOW: 1, Kweiyang, 1000 m, 12. VII, 2, Tseng-vih, 850 m, 14. VII, and 1, Meitan, 900 m, 17. VII. 1940, Gressitt (LINGNAN, CAS). SZECHUAN: 1, Mt. Omei, VII. 1932, Franck; 2, Omei Shan, VII. 1932, G. Liu; 1, Ching-cheng Shan, VII. 1932, Liu; 1, King-foo Shan, VIII. 1932, Liu (MCZ); Uen-chan, VIII. 1924, Graham; Kuanhsien, VIII. 1930, Graham; S of Song-pan, 2200 m, VIII. 1924, Graham; Sui-fu, Graham; Yuen-shi, VII. 1928, Graham; Chung-king, V. 1930, Graham; Wei-chow, VII. 1933, Graham (US). SIKANG: Mu-ping, VIII. 1929, Graham; Ya-chow, VI. 1929, Graham (US); 1, Tatsien-lu to Kiu-lung, Reitter (FREY).

HOSTS: ? Cunninghamia.

### 241. Cneorane intermedia Fairmaire Fig. 148, b.

Cneorane intermedia Fairm., 1889, Soc. Ent. France, Ann. 58: 81 (Koui-Tcheou; PARIS).— Jacoby, 1890, Entomologist 23: 66.

The specimens cited below from Kwangtung, Hupeh, Szechuan, and Tibet are included with some question. They have entirely bluish or blackish posterior femora.

DISTRIBUTION: SW China (Yunnan, Szechuan, Tibet, Hupeh, Kweichow, Kwangtung).

YUNNAN: 11, Yunnan-sen (ZMB); Kunming, VIII. 1944, C. L. Liu 2001: 72 (US).

The following are questionably this species. YUNNAN: 1, Hauser (ZMB); 1, Yun Hsien, II. 1942, Jellison. TIBET: 5, (AMNH 4722). SZECHUAN: 1, Mt. Omei, VIII.

1938, Sage (AMNH); 2, Mt. Omei, VII. 1932, Franck; 1, Mt. Omei, VII. 1923, Graham; 1, betw. Tsang-ling-shien & Tso-jin-geo, 800 m, nr. Sui-fu, IX. 1939, Graham; 2, Hua-yin Shan, N of Chungking, VII. 1933, Graham; 1, nr. Fu-lin, 1400 m, VII. 1928, Graham (US); 1, Sui-fu, X. 1924, Graham. HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan, 30. VII. 1948, Gressitt & Djou (CAS). KWANGTUNG: 1, Tin-tong, Lochang Distr., VIII. 1947, Tsang (CAS).

## 242. Cneorane nigripennis Laboissière

Cneorane nigripennis Lab., 1922, Soc. Ent. France, Bull. 1922: 102 (Yunnan; ? BRUXELLES).

There is the possibility that this may be a synonym of *cariosipennis* Fairmaire. DISTRIBUTION: SW China (Yunnan).

## 243. Cneorane rufocaerulea Fairmaire

Cneorane rufo-caerulea Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 8: 374 (Lienson, Tonkin; PARIS).—Jacoby, 1890, Entomologists 23: 167.

DISTRIBUTION: N. Vietnam (Tonkin).

#### 244. Cneorane sikanga Gressitt and Kimoto, n. sp. Fig. 149, a.

*Male*: Largely black, tinged in part with purplish or bluish; head and pronotum black with a slightly metallic tinge, slightly shagreened: elytron black with a greenish blue shagreened tinge; thoracic sternites purplish black; abdomen pitchy brown basally and testaceous on last 2 segments and apical margins of basal segments; legs violet-blue to purplish, more purplish and reddish on tarsi. Body largely glabrous above but with a few scattered pale hairs on head and sides of prothorax and a few very short hairs on apical portion of elytron; ventral surfaces moderately clothed with suberect pale hairs; femora rather thinly clothed at sides and tibiae and tarsi more densely clothed.

Head much narrower than prothorax, moderately narrowed and rounded anteriorly; occiput evenly convex and not very distinctly punctured; interocular area transversely and subarcuately grooved behind with a depression at center, raised behind antennal insertions and briefly grooved between; frontoclypeus strongly transverse, and convex, with a raised narrow ridge extending posteriorly to posterior borders of antennal insertions. Antenna nearly 3/4 as long as body, moderately stout; segment 1 stout, slightly arched; 2 is 3/5as long as 1; 3 as long as 1; 4 is 1/4 longer than 3, 4-9 subequal (last 2 missing). Prothorax about 2/3 as long as broad, about as wide anteriorly as basally; side evenly rounded; base bisinuate, being concave opposite scutellum; anterior margin somewhat strongly and evenly concave with anterior corner rounded and projecting slightly forward; disc subevenly convex, minutely and in large part rather closely punctured with a less closely punctured area on central portion. Scutellum fairly large subtriangular but broadly rounded apically and finely shagreened. Elytron  $2.6 \times$  as long as broad, moderately convex at side and broadest somewhat behind middle, broadly rounded apically; disc rather finely and closely punctured throughout, the punctures irregular and variable in size but mostly about 1/2 to 1/3 as wide as spaces between them, and largest on central portion and finer at base and apex. Ventral surfaces rather finely and sparsely punctured on thorax and a little more heavily punctured on parts of abdomen; last abdominal sternite with a large trapeziform median lobe, truncate apically and about 1/3 wider than long; pygidium evenly rounded apically. Legs fairly stout; hind tarsal segment 1 slightly shorter than remaining segments

combined. Length 6.5 mm; breadth 3.6.

*Female*: Abdomen entirely testaceous on last 4 segments and also on apex of basal segment which is pitchy brown with a purplish tinge on basal portion. Length 8.1 mm; breadth 4.6.

*Paratypes*: Coloration of abdomen somewhat intermediate between those of holotype and allotype. Length 7.1-7.9 mm; breadth 3.8-4.5.



Fig. 149. a, Cneorane sikanga n. sp.; b, Cneorane violaceipennis Allard.

## DISTRIBUTION: W. China (Sikang).

Holotype  $\mathcal{F}$  (U. S. NAT. MUS.), SW of Tatsien-lu, Sikang Prov., 3000 m, 28. VI-2. VII. 1923, D. C. Graham; allotype  $\mathcal{P}$  (USNM), Mu-pin, Sikang, VII. 1929, Graham; paratype  $\mathcal{F}$  (US), U-long-kong, 3000 + m, nr. Tatsien-lu, 20. VI. 1927, Graham; paratopotype  $\mathcal{P}$  (BISHOP), same data as holotype; 1 paratype (FREY), Tatsien-lu to Kiu-lung, Reitter; 1 (FREY), Chuntung (?), Wassuland, Reitter; 1 (FREY), Lungai, 2000 m, San-kiang-kou, Wassuland, Friedrich, 1934.

Differs from *abdominalis* Jacoby in being distinctly broadened posteriorly, in having antennal segment 3 relatively longer, about 2/3 longer than segment 2, in having the pronotal punctures quite easily visible, elytron finely shagreened, and in being much larger.

## 245. Cneorane subcoerulescens Fairmaire

Cneorane subcoerulescens Fairm., 1888, Soc. Ent. Belg., Ann. 32: 44 (Yunnan; PARIS).

DISTRIBUTION: S. China. (Fukien, Kiangsi, Kwangtung, Yunnan).

FUKIEN: 5, Shui-pei-kai, 21. IV. 1943, Maa (CAS, BISHOP). KIANGSI: 2, Hong Shan, 1000 m, Kwangtung border, 25. VI. 1936, Gressitt (CAS). KWANGTUNG: 2, Fong-
tong-ping, Lin Distr., 30. VI, and 1, Sing-tze-chan, Lin Distr., 27. VI. 1934, To (LINGNAN). YUNNAN: 3, Kunming, 1. VIII. 1944, C. L. Liu 2001: 74 (US); 1, Chao-tung, VII-VIII. 1934, Graham (US); 4, Yunnan (FREY).

# 246. Cneorane violaceipennis Allard Fig. 149, b.

Cneorane elegans, Fairmaire, 1887 (nec Baly, 1874), Revue d'Ent. 6: 332 (Peking).—Heyden, 1887, Soc. Ent. Ross., Horae 21: 263 (Korea).—Doi, 1927, Dobutsugaku Zasshi 39 (466): 333, 337 (Korea: Suigen, Zinsen & Kanko).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 11 (Korea: Mt. Kin'u-Zan).

Cneorane violaceipennis All., 1889, Soc. Ent. Belg., C. R. 33: VXIX, VXX (N. China; ?BRUXELLES).—Laboissière, 1935, Arkiv Zool. 27A (6): 6 (NE Szechuan).—Ogloblin, 1936, Fauna USSR 26, 1: 214, 406 (Kiangsu, Chekiang, Szechuan).

Cneorane rufipes Weise, 1889, Soc. Ent. Ross., Horae, 23: 620 (Kansu; ?Moscow).—Jacoby, 1890, Entomologist 23: 193, pl. 2, fig. 11 (Chang-yang).—Jacobson, 1904, Mus. Petersb., Ann. 8: 16; 1911, Käfer Russl. 9: pl. 59, fig. 9.

Cneorane elegans var. violaceipennis, Baly, 1890, Ent. Monthly Mag. ser. 2, 1: 14.

Cneorane violaceipennis subsp. rufipes, Ogloblin, 1936, Fauna USSR 26, 1: 215, 406, fig. 96 (Amur, Ussuri, Korea, Hopei, Kiangsu, Szechuan).—Chûjô, 1938, Mushi 11: 164 (Laoshan, nr. Tsingtau); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 158 (E. Siberia, N. China, Manchuria, Korea); 1941, op. cit. 31 (219): 461.

Cneorane elegans ab. violaceipennis, Weise, 1924, Coleopt. Cat. 78: 126. Apophylia violaceipennis, Weise, 1924, Coleopt. Cat. 78: 184 (error).

This species is variable both in color and in size. Though there might later prove to be geographical races, this is not evident from the material at hand. No genitalic differences can be found in specimens from different parts of China.

DISTRIBUTION: E. Siberia, China (Kirin, Hopei, Shensi, Kansu, Kiangsu, Anhwei, Chekiang, Fukien, Kiangsi, Kwangtung, Hupeh, Szechuan), Korea.

E. SIBERIA: Vladivostok, V. 1939, Frieb (FREY); Nikolsk Ussurijsk, Mandl (FREY). KIRIN: Djalantun, VII. 1938, Weymarn (CAS); Hsing-king (Shinkyo), VII. 1939, Tagawa(KI-MOTO); Er-sen-tien-tze, VI. 1940, Weymarn (CAS); Kung-chu-ling, VII. 1939, Ito; VII. 1948. Ezzendjanzsy (FREY); Charbin, VI. 1950 (FREY). HOPEI: Tsin lung Shan, Sowerby (US); Peking (FREY), KANSU: Kwei-sin (FREY); Tu-kiang (ZMB); Hoei-sien, S. Kansu (FREY). SHENSI: Chin-ling Mts., S. Shensi, IV-V. 1904, Blackwelder (US). KIANGSU: Nanking, VI. 1923, Van Dyke (CAS). ANHWEI: Kiu-hua Shan, IX. 1932, G. Liu (MCZ). CHEKIANG: Hangchow, V. 1923, Van Dyke (CAS); Hangchow, VI. 1927, Wong (US); Tung-lu, VIII.1926. Wright (CAS); Ningpo (FREY); Ting-hai, Chusan, VII. 1934, (FREY). FUKIEN: Yen-ping. V. 1917 (AMNH 5148): Shui-pei-kai, Shaowu, IV. 1943, Maa; Ku-hsien-kai, Shaowu, V. 1944, Maa. KIANGSI: Chang-sing-cheng (ZMB); Hong Shan, VII. 1936, Gressitt; Tai-au-hong & Wong-sa-shue, VII. 1936, Gressitt (CAS); Kuling, VII. 1933, Djou (LINGNAN); Kiu-kiang (FREY). HUPEH: Ichang (ZMB); Hsiaoho, Lichuan, VIII. 1940, Gressitt; Mo-tai-chi to Chiau Shan, VII. 1948, Gressitt & Djou. KWANGTUNG: Kau-lin San, 800 m, Lienping Distr., IV. 1940, Gressitt & To; Lung-tau Shan, 1200 m, VI. 1947, Gressitt & Lam; Tsing-leung Shan, VI. 1936, Gressitt (CAS); Lo-fau San, IV. 1911, Mell (ZMB). SZECHUAN: Kuanhsien & Sun-pan-ting, Stötzner (FREY). KOREA: Quelpart I. (FREY); Chemulpo, Gensan (ZMB); Sekinisen, Keikido, 25. VII. 1937, Yamada (TARI); Konju, Thompson (CAS).

## Luperini, Group 3

### Genus Meristoides Laboissière

Meristoides Lab., 1929, Rev. Chilen. Hist. Nat. 33: 289 (type: Merista touzalini Lab.; Yunnan).—Ogloblin, 1936, Fauna USSR 26, 1: 334, 375.

#### KEY TO CHINESE SPECIES OF MERISTOIDES

## 247. Meristoides grandipennis (Fairmaire)

Leptarthra grandipennis Fairm., 1889, Soc. Ent. France, Ann. 58: 77 (Moupin; PARIS).— Jacoby, 1890, Entomologist 23: 194 (Chang-yang); 1892, Mus. Civ. Genova, Ann. 32: 962.

Leptarthra intermedia Jacoby, 1890, Entomologist 23: 194, pl. 1, fig. 12 (Changyang; cotype MCZ, also BM).—Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 441.

Meristoides grandipennis, Ogloblin, 1936, Fauna USSR 26, 1: 335, 439.

DISTRIBUTION: W. China (Sikang, Hupeh), Taiwan.

SIKANG: 1, nr. Ning-yuen-fu, 2200 m, 23. VII. 1928, Graham (USNM).

248. Meristoides oberthuri (Jacoby) Fig. 150, a.

- Merista oberthüri Jac., 1883, Zool. Soc. Lond., Proc. 1883: 404, pl. 45, fig. 10 (Thibet; cotype MCZ, paratype BM).
- Merista Touzalini Laboissière, 1922, Soc. Ent. France, Bull. 1922: 101 (Yunnan: Pe-yentsin; ?PARIS). New Synonymy.
- Meristoides touzalini, Ogloblin, 1936, Fauna USSR 26, 1: 336, 439, fig. 138.

Meristoides oberthuri, Lab., 1940, Mus. R. Hist. Nat. Belg., Bull. 16 (3): 23.

DISTRIBUTION: W. China (Tibet, Sikang, Yunnan).

SIKANG: 1, Ning-yuen-fu to Den-shiang-uin, 2000 m, 3–8. VIII. 1928, Graham (USNM); 1, Ta-tsien-lu, 1–8. VII. 1928, Graham; 2, Ta-tsien-lu, 3000 m, 25. VI. 1923, Graham; 1, Tatsien-lu, Biet (LEIDEN). YUNNAN: 3, Djo-kou-la, 1200 m, NW Yunnan (US); 1, Machang, 1000 m, W. Yunnan (US); 3, Li-kiang, N. Yunnan, 27. V. 1935, Höne (ZMB). Eight, labelled Canton?, Schneider (ZMB).

## 249. Meristoides vigintiguttata Ogloblin

Meristoides vigintiguttata Ogl., 1936, Fauna USSR 26, 1: 335, 337, 439 (China: Se-Tchouen; ?Moscow).



Fig. 150. a, Meristoides oberthuri (Jacoby); b, Luperus semiflavus Ogloblin.

DISTRIBUTION: W. China (Szechuan).

### Genus Siemssenius Weise

Siemssenius Ws., 1922, Tijdschr. Ent. 65: 73 (type: S. modestus Ws., monobasic; China). Weise indicated this genus as most closely related to Ornithognathus Thomson.

## 250. Siemssenius modestus Weise

Siemssenius modestus Ws., 1922, Tijdschr. Ent. 65: 73 (Fokien; STOCKHOLM).

We have seen only the type material.

DISTRIBUTION: SE China (Fukien).

# Genus Morphosphaera Baly

Morphosphaera B., 1861, Jour. Ent. 1 (4): 298 (type: Chrysomela japonica Hornst; Japan).
 —Chapuis, 1875, Gen. Col. 11: 161, 170.—Allard, 1889, Soc. Ent. Belg., C. R. 33: LXVII.—Laboissière, 1930, Soc. Ent. France, Ann. 99: 357.—Maulik, 1936, Fauna India, Galeruc., 316.—Ogloblin, 1936, Fauna USSR 26, 1: 230, 370, 408.

We have not seen all the Chinese species, and the following key is patterned largely after that of Laboissière.

KEY TO CHINESE SPECIES OF MORPHOSPHAERA

rac.	1115.	wion.	

556

1B

,

	Elytron paler, variously colored
2(1).	Venter largely, and legs, black
	Venter yellowish testaceous; femora brown with black apices; tibiae and tarsi
	black; head and antenna black, with scape brown below and at base;
	pronotum pale vellow with 5 black spots: elytron blue (Schönfeldt, 1890;
	Rvukvu)
3(2)	$\Delta$ black line on base of proportium or middle of disc entirely black : abdomen
5 (2).	vellow with or without lateral black mote
	No black line on base of proportim: black with labrum sides of abdomen
	and proportium brown: proportium with 4 transverse enets; shutron dull blue;
	leasth 11 mm (Doly, 1961, D. Judice)
4 (2)	Dealer proportion note wellow with 5 block create (4, 1), and with a block
4 (3).	black, pronotum pale yellow with 5 black spots (4:1), and with a black
	band on arched portion of base; elytron blue, bluish violet or purplish black;
	abdomen brown, with a small oval black spot on side of each segment;
	length 8–9 mm 255. japonica
	Brilliant black, slightly bluish on chest; pronotum pale yellow, the disc with
	a large black spot occupying $1/3$ of area, and a small one at side; elytron
	purplish violet, brilliant; abdomen brown; length 8-9 mm 253. collaris
5(1).	Pronotum not bordered with black
	Pronotum pale yellow, bordered with black except at middle of base, and
	broadly bordered anteriorly; disc with 7 black spots, 6 of them in a row;
	head, antenna (except segments 1-2 below brown) and legs black; scutellum
	and elytron brilliant brown; venter brown; each abdominal segment with
	an oval black spot at side; length 11 mm 252. cincticollis
6(5).	Pronotum with 7 spots on disc
	Pronotum with 5 spots on disc
7(6).	Elytron brown with slight metallic tinge to reddish brown strongly tinged with
	blue
	Elytron pale yellowish testaceous without metallic tinge; venter, antenna (ex-
	cept scape brownish) and legs black; head brown; pronotum yellowish
	testaceous, with 2 spots adjacent at center. 1 near and just behind each of
	these. 1 near side at level of first, and 1 small one near middle of base;
	length 6.5 mm (Allard, 1889: Cambodia)albipennis*
8(7).	Elvtron reddish brown with blue reflections giving a nurplish appearance:
• (.).	venter reddish brown: head antenna (except reddish base) and legs black:
	pronotum and abdomen testaceous: pronotum with spots 4:3 and a basal
	hand each abdominal segment with a black hand at side length 7–9 mm
	257 nurnurea
	Elytron brown with very slight currecus sheen: pronotum with spots 4:3 but
	without basal hand and almost impunctate: margins and apey of abdomen
	vellowish : length 8 mm 258 sodalis
9(6)	Elytron uniformly testaceous or brown without metallic or pacreous tinge 10
J (U).	Elytron reddish testaceous or brown with purplish blue metallic or pagracus
	tinge
10(0)	Ungo, antanno soutallym alytran about and loss raddish brown , tibias darker ,
10 (9).	neau, antenna, soutenum, erytron, chest and legs reddish brown; tiblae darker;
	oasai amennai segmenis paier; pronoium yellowish brown with 5 spots (4:

#### Gressitt & Kimoto: Chrysomelidae of China

1) and a basal line of reddish; elytral puncturation very fine; length 7.5-
8.0 mm 251. cavaleriei
Pale brownish yellow; antenna (except scape), tibiae, tarsi and apices of
femora black; pronotum pale, with spots 4:1, but outer spot behind inner
one on each side, and 5th minute; elytron densely punctured; length 7.5 mm
(Laboissière, 1930; Tonkin) coomani*
11 (9). Elytron dark brown largely hidden by metallic greenish reflections 12
Elytron dull reddish or testaceous with blue, purplish or nacreous reflections 13
12 (11). Head with a metallic black spot on occiput; pronotum with 4 spots in an
arc; elytron with a pale greenish, somewhat nacreous, tinge; length 6.5 mm

- 1930; Taiwan)......formosa\*

## 251. Morphosphaera cavaleriei Laboissière

Morphosphaera Cavaleriei Lab., 1930, Soc. Ent. France, Ann. 99: 363 (Yunnan Fou; Pin-fa, Kouy-Tcheou; ?PARIS).

DISTRIBUTION: SW China (Yunnan).

## 252. Morphosphaera cincticollis Laboissière

Morphosphaera cincticollis Lab., 1930, Soc. Ent. France, Ann. 99: 364 (Kouy-Tcheou; Kouy-Yang; ?PARIS).

DISTRIBUTION: SW China (Kweichow).

### 253. Morphosphaera collaris Laboissière

Morphosphaera collaris Lab., 1930, Soc. Ent. France, Ann. 99: 362 (Tonkin: Tuyen-Quan; China: Sze-Tchouan; PARIS).

DISTRIBUTION: N. Vietnam (Tonkin), W. China (Szechuan).

## 254. Morphosphaera gingkoae Gressitt and Kimoto, n. sp.

*Male*: Pale testaceous to bronzy brown and pitchy black: head pitchy black, more reddish anteriorly; antenna pitchy black, somewhat reddish on segments 1-2; prothorax pale testaceous with 4 rounded pitchy black spots across central portion and a 5th spot on median line between middle and base; scutellum pale reddish brown; elytron pale reddish brown with a greenish bronzy tinge; ventral surfaces ochraceous with a pitchy spot at middle of side of each abdominal sternite; legs reddish basally, becoming dark

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pitchy brown at apices of femora, pitchy to blackish on tibiae and reddish brown to pitchy on tarsi. Body glabrous above; antenna moderately clothed with short reddish hairs and a few longer pale oblique ones; ventral surfaces and legs thinly clothed with suberect golden buff hairs.

Head nearly 3/4 as wide as prothorax; occiput fairly flat, sparsely and weakly punctured; postantennal swellings oblique and subtriangular, fairly distinct and not quite touching; interantennal area about  $2 \times$  as wide as an antennal insertion; from smoderately raised, subtriangular, weakly punctured; gena about 1/4 as deep as eye; eye ovate, moderately convex. Antenna 3/5 as long as body; segment 1 arched and thickened apically; 2 about  $2 \times$  as long as broad; 3 slightly longer than 2; 4 nearly as long as 2+3 and nearly as long as 1; 4–10 decreasing slightly in length; 11 distinctly longer than 10. Prothorax  $2.4 \times$ as broad as long; anterior margin concave but nearly straight in central portion; basal margin obtuse but rounded-truncate in middle; lateral margin subevenly convex, widest anterior to middle; anterior angle broadly rounded; basal angle rounded-obtuse; disc subevenly convex, irregularly punctured, with most of punctures about 1/2 to 1/4 as large as interspaces but sparser on parts on central portion. Scutellum subequilaterally triangular, weakly convex and impunctate. Elytron  $2.7 \times$  as long as broad, subevenly rounded externally and widest near middle, rounded apically; lateral margin narrowly expanded; epipleuron broad in basal 1/4, then somewhat suddenly narrowed and quite narrow from middle to apex; disc subevenly convex with irregular punctures mostly about 1/3 to 1/4 as wide as interspaces and about 25 in an approximate row across middle. Ventral surfaces smooth and weakly punctured on thorax, slightly irregular and somewhat punctured on sides of abdominal sternites; last abdominal sternite rounded apically. Legs moderately stout; hind tibia slightly arched; hind tarsal segment 1 slightly longer than 2+3, 2 longer than 3 and last nearly as long as 1. Length 5.4 mm; breadth 3.9.

Female: Last abdominal sternite rounded apically. Length 6.8 mm; breadth 4.5.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♂ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., on Gingko biloba, 28. VII. 1948, Gressitt; allotopotype ♀ (BISHOP 3282), 25. VII. 1948, Gressitt & Djou.

Differs from *margaritacea* Lab. in being smaller, in having antenna nearly black, tibiae entirely dark and elytron greenish instead of bluish.

### 255. Morphosphaera japonica (Hornstedt)

Chrysomela japonica Hornst., 1788, Ges. Naturf. Freunde Berlin, Schrift. 2: 1, pl. 1, fig. 1 (Japan).

Adorium Japonicum Baly, 1874, Ent. Soc. Lond., Trans. 1874: 176 (Nagasaki; China; ?BM). —Harold, 1875, Col. Hefte 14: 211.

Morphorsphaera japonica, Weise, 1924, Coleopt. Cat. 78: 129.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 167 (hosts).

DISTRIBUTION: Japan, Amur, S. China (Fukien, Szechuan).

FUKIEN: 2, Shui-pei-kai, Shaowu, 1. V. 1944, Maa; 1, Kao-yang, 12. VII. 1942, Maa (CAS, BISHOP). SZECHUAN: 1, Chengtu, 400 m, 1. IV. 1930, Graham (USNM).

HOSTS: Ficus erecta Thunb., F. nipponica Franch. & Savat., F. pumila L., F. stipulata Thunb.

## 256. Morphosphaera metallescens Gressitt and Kimoto, n. sp.

*Male*: Whitish testaceous to purplish brown and black; head shiny black, somewhat reddish on labrum and palpi; antenna black, slightly reddish near base; pronotum whitish testaceous with 4 rounded to squarish blackish spots in a transverse row across central portion, as well as a small pitchy spot on median line slightly anterior to posterior margin; scutellum pitchy black with a purplish tinge; elytron reddish brown with purplish reflections and pitchy on extreme margin; ventral surfaces pale on prosternum, reddish brown on hind thorax, reddish on abdomen, but testaceous around borders and pitchy at middle of each side of sternites. Body glabrous above; antenna clothed with short reddish brown pubescence; ventral surfaces and legs thinly clothed with oblique pale brownish hairs.

Head nearly 3/4 as wide as prothorax; occiput evenly convex, finely and sparsely punctured; postantennal swellings distinctly raised, more or less oblique and merging in interantennal area which is about  $2 \times$  as wide as antennal insertion; from distinctly swollen, finely punctured; gena about 1/3 as deep as eye; eye somewhat narrowly ovate, weakly convex. Antenna 2/3 as long as body; segment 1 arched and gradually swollen; 2 slightly longer than broad; 3 about  $2 \times$  as long as 2; 4 slightly longer than 3; 4–10 decreasing very slightly in length; 11 slightly longer than 10. Prothorax  $2.7 \times$  as broad as long; anterior margin strongly and subevenly concave; basal margin rounded-obtuse; lateral margin subevenly rounded; anterior angle swollen and rounded; basal angle roundedobtuse; disc subevenly convex, fairly smooth with fine scattered punctures of irregular density, ranging from 1/4 as large to nearly as large as interspaces. Scutellum weakly convex and impunctate. Elytron  $3.3 \times$  as long as broad, evenly rounded at side and widest just behind middle, subobtusely rounded apically with sutural angle slightly rounded; lateral margin distinctly expanded; epipleuron broad in basal 1/4, suddenly narrowed to somewhat anterior to middle and quite narrow on remainder and continuing to apex; disc evenly convex, closely punctured throughout, more than 35 punctures across center. Ventral surfaces slightly shiny, moderately punctured and somewhat uneven at sides of sternites: last abdominal sternite fairly long, smooth and finely punctured with obtusely rounded apical margin. Legs moderately stout; hind tibia slightly arched; hind tarsal segment 1 as long as 2+3 combined and slightly longer than last. Length 9.3 mm; breadth 5.8.

*Female*: Antenna 3/5 as long as body; last abdominal sternite rounded-truncate apically. Length 9.0 mm; breadth 5.8.

*Paratypes*: Elytron varying from purplish brown to bluish purple. Length 8.5–10.0 mm; breadth 5.5–6.2.

## DISTRIBUTION: W. China (Szechuan, Sikang).

Holotype ♂ (U. S. NAT. MUS), S of Sui-fu, 400 m, Szechuan Prov., 1. IV. 1930, D. C. Graham; allotype ♀ (US), Szechuan, 1923, Graham; 17 paratypes (US, BISHOP, BMNH, CAS, KIMOTO): 16 from Szechuan: from near Sui-fu, 17. III. 1919, V-VI. 1924, 15. IV. 1925, 15–25. V. 1928, Graham; 1, betw. Ya-chow & Kia-ting, 450 m, 19–22. VI. 1929; 1, Mt. Omei, 16. VIII. 1932, H. Franck. SIKANG: 1, Ta-tsien-lu, 2400 m, 1–14. VIII. 1930, Graham.

Differs from *purpurea* Lab. in being somewhat larger, in having 5 instead of 7 spots on pronotum, and in lacking a basal band on pronotum.

#### 257. Morphosphaera purpurea Laboissière

Morphosphaera purpurea Lab., 1930, Soc. Ent. France, Ann. 99: 362 (Yunnan: Pe-yen

Tsin; ?PARIS). DISTRIBUTION: SW China (Yunnan).

#### 258. Morphosphaera sodalis Chen

Morphosphaera sodalis Chen, 1935, Sinensia 6: 778, fig. 5 (Pin-tan, Kweichow; Ac. SIN.). DISTRIBUTION: SW China (Kweichow).

## 259. Morphosphaera viridipennis Laboissière

Morphosphaera viridipennis Lab., 1930, Soc. Ent. France, Ann. 99: 366 (Tonkin: Chapa; Cho-Ganh; Sze-Tchouan; Tchoung-king; Thibet: Moupin; ?PARIS).

DISTRIBUTION: SW China (Yunnan, Szechuan).

SZECHUAN: 5, Sui-fu, 800 m, 1. X. 1924, Graham (USNM).

## Genus Parexosoma Laboissière

- Parexosoma Lab., 1933, Mus. Natl. Hist. Nat. Paris, Bull. ser. 2, 4 (8): 967 (type: Malacosoma flaviventre Baly, monobasic; N. India).—Ogloblin, 1936, Fauna USSR 26, 1: 224, 373.—Laboissière, 1940, Mus. Hist. Nat. Belg., Bull. 16 (37): 4.
- *Bijukta* Maulik, 1936, Fauna India, Galeruc., 321 (type: *Malacosoma flaviventre* Baly). This genus contains only the following species.

#### 260. Parexosoma flaviventre (Baly)

- Malacosoma flaviventre B., 1878, Cist. Ent. 2: 379 (Murree; BM); 1858, Second Yarkand Mission, 33.—Duvivier, 1884, Soc. Ent. Belg., C. R. 28: CCCXIV.
- Parexosoma flaviventre, Laboissière, 1923, Mus. Natl. Hist. Nat. Paris, Bull. ser. 2, 4(8): 967.—Ogloblin, 1936, Fauna USSR 26, 1: 225, fig. 98 (Ta-tsien-lu).—Lab., 1940, Mus. Hist. Nat. Belg., Bull. 16 (37): 4 (Burma).

Bijukta flaviventre, Maulik, 1936, Fauna India, Galeruc., 323, fig. 96.

Dorsum metallic green, blue or purple. The material below is blue and purple.

DISTRIBUTION: N. India (Murree, Sikkim), Burma, W. China (Sikang).

SIKANG: 1, Kiu-lung, R. Hr.; 1, Ta-tsien-lu, Reitter (FREY).

# Genus Miltina Chapuis

Miltina Ch., 1875, Gen. Col. 11: 172 (type: *M. dilatata* Ch., monobasic; SE Asia.)—Jacoby, 1905, Mus. Civ. Genova, Ann. 41: 513.—Weise, 1922, Tijdschr. Ent. 65: 99.—Maulik, 1936, Fauna India, Galeruc., 313.

## Key to Chinese species of Miltina

Body barely over 1/2 as broad as long; antenna with lobe of segment 5 about 3/5 as long as segment proper; hind angle of prothorax angulate (Fukien; ZMB) ......sp.

#### 261. Miltina dilatata Chapuis

Miltina dilatata Ch., 1875, Gen. Col. 11: 173, pl. 125, fig. 2 (no loc.; ?BRUXELLES).-Jacoby,

1884, Notes Leyden Mus. 6: 42.—Weise, 1922, Tijdschr. Ent. 65: 99.—Maulik, 1936, Fauna India, Galeruc., 316, figs. 92–94.

Bonesia balyi Jacoby, 1889, Mus. Civ. Genova, Ann. 27: 206 (Burma; ?GENOVA).

DISTRIBUTION: N. India (Sikkim, Assam), Burma, Malaya, Sumatra, N. Vietnam, S. Kiangsi, Hainan I.

KIANGSI: 1, Hong Shan, 1000 m, SE Kiangsi, 15. VII. 1936, Gressitt (CAS). HAI-NAN: 1, Ta-hian, 600 m, 14. VI. 1935, Gressitt; 1, Ta-hau, 25 m, W of No-doa, 4. VII. 1935, Gressitt (CAS); 1, Tai-ping-tsuen (Dwa-bi), 300 m, 25–26. IV. 1935, To (LINGNAN). N. VIETNAM: 10, Hoa-binh, Tonkin, de Cooman (FREY).

## Genus Luperus Geoffroy

Luperus Geoff., 1762, Hist. Ins. 1: 230.—Joannis, 1866, Abeille 3: 8, 115.—Chapuis, 1875, Gen. Col. 9: 186.—Weise, 1886, Ins. Deutschl. 6(4): 575, 589.—Laboissière, 1912, Ass. Nat. Levallois-Perret, Ann. 1912: 25; 1935, Arkiv Zool. 27 A(6): 3. Type: Chrysomela flavipes L.

Adoxia Broun, 1880, Man. N. Zeal. Col., 631.

Lyperus Bedel, 1892, Col. Bassin Seine 5: 158, 160.

### KEY TO CHINESE SPECIES OF LUPERUS

1.	Prothorax 2× as broad as long
	Prothorax about 1.3 or 1.4× as broad as long
2.	Pronotum smooth, without fovea; body yellowish with a large ovate pitchy spot
	near apex of elytron; length 2 mm 263. biplagiatus
	Pronotum with a deep small foveum on each side just behind middle; yellow-brown
	with elytron brownish black and antenna black beyond segment 3; length 4.2 mm
3.	Pronotum pale orange or yellow 4
	Dorsum entirely black with a greenish tinge; antenna and legs black; prothorax
	$1.3 \times$ as broad as long; disc with a fine impression on median line opposite
	scutellum, finely and densely punctured; length 3.5-4.6 mm
4.	Antennal segment 5–10 each about $6 \times$ as long as broad; elytron with weak parallel
	ridges 5
	Antennal segments 5-10 each about $4 \times$ as long as broad; elytral disc quite smooth
	and even; length 4 mm (Omei Shan, Szechuan) sp.
5.	Head distinctly narrower than prothorax; antennal segment 3 longer than 1; pro-
	notum with a fovea on median line anterior to base; length 4.5 mm 266. semiflavus

Head about as broad as prothorax; antennal segment 3 about as long as 1; pronotum with a distinct foveum on median line; length 4 mm......265. flavimanus

## 262. Luperus anthracinus Ogloblin

Luperus (Luperus) anthracinus Ogl., 1936, Fauna USSR 26, 1: 289, 426 (Altai: Aigoulak, Denkagan, lac. Dshuilu kul, lac. Toodagn-kul, Mongolie: Tchagin-Bourgoza, Korodyr; ?Moscow).

We have specimens from Sikang, Szechuan, Chekiang and Kwangtung which are very close to this species, but are more bluish and probably different.

# DISTRIBUTION: S. Siberia, Mongolia.

#### 263. Luperus biplagiatus Jacoby

Luperus biplagiatus Jac., 1890, Entomologist 23: 165, pl. 2, fig. 10 (Chang-yang; BM).

We saw the type specimen before completing our study. Verification of generic placement is desirable.

DISTRIBUTION: C. China (Hupeh).

## 264. Luperus cavicollis Chen

Luperus cavicollis Chen, 1942, Notes d'Ent. Chinoise 9: 62 (Kwangsi: Yaosan; Ac. SIN.). DISTRIBUTION: SW China (Kwangsi).

# 265. Luperus flavimanus Weise Fig. 151, a.

Luperus flavimanus Ws., 1889, Soc. Ent. Ross., Horae 23: 568, 618 (Sze-tschuan; ?Moscow). Abdomen entirely blackish in ♂, entirely yellowish in ♀; original description was of ♂. DISTRIBUTION: W. & E. China (Szechuan, Kiangsu).

KIANGSU: 8, Nanking, 25. IV-4. V. 1923, Van Dyke (CAS).



Fig. 151. & genitalia. a, Luperus flavimanus Weise; b, L. semiflavus Ogloblin.

## 265a. Luperus kusanagii Chûjô

Luperus (s. str.) kusanagii Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 165, fig. 9 (Kogen-Do, Korea; TARI).

This species is not included in the key. It would be necessary to compare the male organ of the type with those of the other species.

DISTRIBUTION: Korea.

# 266. Luperus semiflavus Ogloblin Figs. 150, b & 151, b.

- Luperus (Luperus) semiflavus Ogl., 1936, Fauna USSR 26, 1: 294, 427 (Mandchourie: Imanpo; Formose; ?Moscow).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 166.
- Luperus (Luperus) mandzhuricus Ogl., 1936, Fauna USSR 26, 1: 295, 428 (Mandchourie: Moukden, Tschendiatun; ?Moscow).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 166 (Korea). New Synonymy.

Apparently *semiflavus* represents the female and *mandzhuricus* the male (abdomen almost entirely blackish) of the same species.

DISTRIBUTION: NE China (Manchuria), Taiwan.

KIRIN: 5, Hsinking, 11. VI. 1939, Tagawa (Кімото).

### Genus Agelastica Chevrolat

Agelastica Chev., 1837, IN Dejean Cat. Col. ed. 2, 381; ed. 3, 405 (type: Chrysomela alni L., 1758; Europe).—Duponchel & Chev., 1841, Dict. Univ. Hist. Nat. 1: 193.— Chev., 1845, IN d'Orbigny, op. cit. 6: 85.—Maulik, 1936, Fauna India, Galeruc., 326.—Ogloblin, 1936, Fauna USSR 26, 1: 226, 374.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 608.

### 267. Agelastica coerulea Baly

Agelastica alni var. coerulea Motschulsky, 1860, Etud. Ent. 9: 26 (Japan; nom. nud.).

Agelastica coerulea B., 1874, Ent. Soc. Lond., Trans. 1874: 188 (Yokohama; BM).—Heyden, 1887, Soc. Ent. Ross., Horae 21: 263 (Korea).—Okamoto, 1924, Agr. Exp. Sta. Chosen, Bull. 1 (2): 195, 228 (Quelpart).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 155.—Ogloblin, 1936, Fauna USSR 26, 1: 230, 408.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 156.—Doi, 1927, Dobutsugaku Zasshi 39 (466): 332, 337.

DISTRIBUTION: Japan, Ryukyu (Okinawa), Korea, NE China, E. Siberia, N. America.

KIRIN: 3, Yablonya, 16. VI. 1940, Weymarn (CAS); Phaltoku (ZSBS). KOREA: 10, Seoul, 18. VII. 1961, H. K. Kim (BISHOP); 6, Chemulpo (ZMB). SIBERIA: Vladivostok, 1928, Prinada (USNM).

HOSTS: Alnus spp., Betula spp., Carpinus spp., Castanea crenata, Corylus spp., Lespedeza cyrtobotrya Miq., Populus Maximowiczii Henry, Prunus spp., Malus pumila Mill., Pyrus communis L., Salix spp. (After Chûjô & Kimoto).

### Genus Exosoma Jacoby

- Malacosoma Chevrolat, 1845 (nec Hübner 1816), Dict. Univ. 6: 5 (type: Chrysomela lusitanica L.; Europe).—Joannis, 1866, Abeille 3: 8, 101.—Weise, 1886, Ins. Deutschl. 6 (4): 576, 581.
- Exosoma Jac., 1903, Ent. Soc. Lond., Trans. 1903: 25 (new name for Malacosoma Chev.).
  —Reitter, 1912, Fauna Germ. 4: 135, 141.—Laboissière, 1934, Soc. Ent. France, Ann. 103: 77; 1935, Arkiv f. Zool. 27 A (6): 3.—Ogloblin, 1936, Fauna USSR 26, 1: 220, 407.

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Malacodora Bedel, 1905, Abeille 30: 236 (new name for Malacosoma Chev.).

Exora subg. Exosoma Weise, 1924, Coleopt. Cat. 78: 98.

This genus has been variously defined, but according to Laboissière it is separable from *Calomicrus* in having coxal cavities separated by prosternal process.

## KEY TO CHINESE SPECIES OF EXOSOMA

1.	Elytron distinctly punctured; legs dark
	Elytron nearly impunctate; legs pale; base of antenna pale; dorsum black; pronotum
	impunctate; length 3 mm 273. pratti
2.	Prothorax at least 3/4 as long as broad; body length more than 4 mm
	Prothorax less than $2/3$ as long as broad; body length less than $3.5 \text{ mm} \dots 4$
3.	Antennal segment 4 distinctly longer than 1; aedeagus acutely tapering apically in
	dorsal view, obtuse above in lateral view 269. flaviventris
	Antennal segment 4 not distinctly longer than 1; aedeagus rounded-truncate apically
	with a very brief tooth at middle in dorsal view, rounded above in lateral view
4.	Abdomen pale 5
	Abdomen black; antennal segment 3 slender, barely longer than 2; aedeagus broad
	and rounded-obtuse apically in dorsal view, strongly sinuate in lateral view
5.	Dorsum bluish to purplish brown; antennal segment 2 nearly as broad as long;
	aedeagus stout and thickened beyond middle, narrowed and blunt apically in dor-
	sal view, obtuse above and subacute and bent slightly downward at tip in lateral
	view
	Dorsum bronzy greenish; antennal segment 2 nearly $2 \times$ as long as broad; aedeagus
	parallel-sided and subacuminate apically in dorsal view, gradually tapering in
	distal 1/2 and slightly enlarged at tip in lateral view



Fig. 152. a, Exosoma chujoi (Nakane); b, Calomicrus kelloggi n. sp.; c, C. maatsingi n. sp.

268. Exosoma chujoi (Nakane), NEW COMBINATION Figs. 152, a & 153, a.

Calomicrus chujoi Nakane, 1958, Saikyo Univ., Sci. Rep. 2 (5): A309, fig. 20 (Yakushima, Kyushu, Honshu; SAIKYO U.).—Chujo & Kimoto, 1961, Pacific Ins. 3 (1): 159.

DISTRIBUTION: Japan (Yakushima, Kyushu, Honshu), E. & C. China (Chekiang, Fukien, Hupeh).

CHEKIANG: 5, Tien-mu Shan (FREY). FUKIEN: hundreds, Ta-chu-lan, Shaowu Distr., IV-V. 1942-43, Maa (CAS, BISHOP); Sui-pei-kai, Shaowu, IV. 1942, Maa. HUPEH: many, Sui-sa-pa, Lichuan, VII-VIII, Liang-hou-keu, IX, Hsiao-ho, VIII, Wang-chia-ying, VII, all Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP).

## 269. Exosoma flaviventris (Motschulsky) Fig. 153, b.

Calomicrus? flaviventris Motsch., 1860, Etudes Ent. 9: 26 (Khokodody, Japan; type lost?). —Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 159.

Monolepta flaviventris, Baly, 1874, Ent. Soc. Lond., Trans. 1874: 189 (Japan; N. China).

Exosoma flaviventris, Laboissière, 1935, Ark. Zool. 27 A (6): 3.

Luperus (Calomicrus) flaviventris, Ogloblin, 1936, Fauna USSR 26, 1: 262, 412, fig. 110F (Amur, Ussuri, Korea, Manchuria).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 164 (Korea).

DISTRIBUTION: Japan, N. China (Kirin, Kansu, Shensi, Hupeh, Anhwei, Chekiang, Kiangsi, Hunan, Kwangtung), Korea.

KIRIN: 6, Charbin (Harbin), 2–6. VII. 1948, VII. 1950; 1, Mao-er-schan, 25. VIII. 1950; 1, Tschen, 3. VIII. 1946 (FREY). HUPEH: 1, Hsiao-ho, Lichuan, 10. VIII. 1948, Gressitt (CAS). KANSU: 1, Hoei-sinn, S. Kansu (ZMB). SHENSI: 1, S. Shensi, V. 1904, Black-welder (USNM). ANHWEI: 3, Kiu-hua Shan, IX. 1932, G. Liu (MCZ). CHEKIANG: 1, Tung-lu, 22. V. 1926, Wright (CAS). KIANGSI: 6, Hong Shan, 1000 m, 15–29. VI. 1936,



Fig. 153. 3 genitalia. a, Exosoma chujoi (Nakane); b, E. flaviventris (Motschulsky); c, E. minuta (Joannis).

Gressitt; 1, Ta-au-hong, 540 m, 5. VII. 1936, Gressitt (CAS). HUNAN: 1, Tai-kwong, Linmao, 21–22. VII. 1934, To (LINGNAN). KWANGTUNG: 1, Yao Shan, 29. IV. 1934, To; 1, Tin-tong, Lochang, 18. VIII. 1947, for Gressitt; 1, Kaulin San, 700–900 m, Lienping, 22. IV. 1940, Gressitt & To (BISHOP).

### 270. Exosoma hummeli Laboissière

Exosoma hummeli Lab., 1935, Ark. Zool. 27 A (6): 2 (S. Kansu; ?STOCKHOLM).

As the article concerned NW China, "S. Kiansu" is probably an error for S. Kansu rather than Kiangsu.

DISTRIBUTION: NW China (S. Kansu).

271. Exosoma minuta (Joannis), NEW COMBINATION Fig. 153, c.

Luperus minutus Joan., 1866, Abeille 3: 117, 136 (Dauria).

Luperus (Calomicrus) minutus, Ogloblin, 1936, Fauna USSR 26, 1: 271, 413.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 164 (Kogen-Do, Korea).

DISTRIBUTION: SE Siberia, N. Manchuria (Heilungkiang, Kirin), Korea.

HEILUNGKIANG: 2, Wu-ta-lien-chieh, Chi-fen-chan, 6. VII. 1937, Loukashkin (CAS). KIRIN: 1, Cheng-hou-tze station nr. Harbin, 18. VI. 1939, Loukashkin (CAS). SIBERIA: 1, Preobragenia Bay, VII. 1923, Cockerell; 6, Kudia River, Amagu, VII. 1923; 1, Amagu Village, VII. 1923, Cockerell (USNM).

272. Exosoma nigriventris (Ogloblin), NEW COMBINATION Fig. 154, a.

Luperus nigriventris Ogl., 1936, Fauna USSR 26, 1: 268, 424, fig. 110N (Ganssu: Hoisian; Se-Tchouen nord: Sun-pan-tin, ?Moscow).—Chûjô, 1938, Mushi 11 (2): 165 (Tsingtau; Kansu).

There is a possibility that this might be a color form of *hummeli* Lab., although the size indicated is larger.



Fig. 154.  $\Im$  genitalia. a, *Exosoma nigriventris* (Ogloblin); b, *E. sikanga* n. sp.

DISTRIBUTION: N. China (Kirin, Shantung, Shansi, Shensi, Kansu, Szechuan).

KIRIN: 20, Charbin (Harbin), VII. 1937; 3, Tschen, 13. VIII. 1946; 12, Station Barin Rajon, VII. 1938 (FREY). SHANSI: 18, Shoh-chow (FREY). SHENSI: 1, Chinling Mts., IV-V. 1904, Blackwelder. SZECHU-AN: 1, Ta-ning-ho, V-VI. 1904, Blackwelder (USNM).

# 273. Exosoma pratti (Jacoby)

Luperus pratti Jac., 1890, Entomologist 23: 164 (Chang-yang; BM). Exosoma Pratti, Laboissière, 1940, Mus. R. Hist. Nat. Belg., Bull. 16(37): 2. Verification of the generic placement of this species is desirable. DISTRIBUTION: C. China (Hupeh).

### 274. Exosoma sikanga Gressitt and Kimoto, n. sp. Fig. 154, b.

*Male*: Pitchy brown to bronzy black and testaceous: bronzy black posteriorly, pitchy reddish anteriorly; antenna blackish brown, somewhat metallic pitchy basally; pronotum reddish pitchy to bronzy black, more reddish on basal portion of disc; scutellum reddish pitchy; elytron reddish pitchy to bronzy black; ventral surfaces reddish anteriorly, pitchy on metasternum and testaceous on abdomen; legs pitchy brown, more reddish basally and on last tarsal segment. Body nearly glabrous above with a few erect hairs on posterior portion of elytron; antenna moderately clothed with short oblique auburn hairs; ventral surfaces and legs sparsely clothed with suberect goldish hairs.

Head about 5/6 as broad as prothorax; occiput moderately convex, smooth and nearly impunctate; postantennal swellings transverse, distinctly swollen and separated; interocular area about  $2 \times$  as wide as an antennal insertion, distinctly raised medially almost to upper borders of antennal insertions and continuous with transverse raised area of frons; gena about 1/5 as deep as eye; eye broadly ovate, rather coarsely facetted. Antenna 3/4 as long as body, fairly slender; segment 1 weakly arched, somewhat broadened and thickened preapically; 2 not quite  $2 \times$  as long as broad and nearly as stout as 1; 3 slender basally, about  $1.3 \times$  as long as 2; 4 more cylindrical, about as long as 1; 4-10 subequal in length; 11 somewhat longer than 10. Prothorax 3/4 as long as broad; anterior margin weakly convex : basal margin distinctly convex, more oblique at side ; lateral margin moderately convex. widest somewhat anterior to middle; anterior angle swollen and produced somewhat forward and outward; basal angle obtuse; disc somewhat evenly convex, with a few scattered punctures at side, somewhat uneven in size with one or two large ones and some small ones, but no very distinct punctures on median portion. Scutellum small, broad, rounded apically. Elytron  $3.4 \times$  as long as broad, weakly convex at side and slightly broadened to behind middle, rounded apically with sutural angle rounded; lateral margin narrowly expanded; epipleuron not very broad, subparallel in basal 1/3 then narrowed to middle and gradually narrowed from middle to apex; disc subevenly convex, without a postbasal depression; surface with rather small irregular punctures, about 20 in a row across middle and mostly about as large as interspaces and slightly smaller posteriorly. Ventral surfaces shiny, with only a few feeble punctures at side; pygidium rounded apically; last abdominal sternite slightly sinuate, weakly obtuse at middle and with surface slightly raised and irregular preapically. Aedeagus as in figure. Legs fairly slender; hind tibia nearly straight; hind tarsal segment 1 fairly slender, barely longer than 2+3 and somewhat longer than last. Length 3.0 mm; breadth 1.45.

*Female*: Dorsum tinged with bluish green and purplish brown; last abdominal sternite rounded-obtuse apically. Length 3.55 mm; breadth 1.6.

*Paratypes*: Mostly purplish brown tinged with bluish green. Length 2.8-4.2 mm; breadth 1.3-1.6.

DISTRIBUTION: W. China (Sikang).

Holotype 3' (Mus. G. FREY), Se-long, 4000 m, San-kiang-keo, Wassuland, Sikang Prov.,

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VII-VIII. 1934, Friedrich; allotopotype Q (FREY), same data; 58 paratopotypes (FREY, BISHOP, CAS, USNM, BMNH), same data.

Differs from nigriventris Ogl. in having abdomen pale yellowish testaceous, in being more greenish and less bluish and in having aedeagus parallel-sided, subacuminate apically in dorsal view and straight beneath in lateral view.

## Genus Calomicrus Stephens

Calomicrus St., 1834, Brit. Ent. Mandb. 4: 293 (type: Crioceris circumfusus Marsh; monobasic; Europe).

Luperus subg. Calomicrus, Weise, 1886, Ins. Deutschl. 6 (4): 591, 600.-Laboissière, 1934, Soc. Ent. France, Ann. 103: 31, 86.—Ogloblin, 1936, Fauna USSR 26, 1: 251.

Trichelytron Apfelbeck, 1912, Glasn. Mus. Sarajevo 25: 259 (part).

## KEY TO CHINESE SPECIES OF CALOMICRUS

<ul> <li>Prothorax generally at least 2/3 as long as broad; elytron not very broad 3</li> <li>2 (1). Spaces between elytral punctures about as large as punctures; occiput, pronotum and elytron generally purplish blue; basal antennal segments somewhat reddish</li></ul>
<ul> <li>2 (1). Spaces between elytral punctures about as large as punctures; occiput, pronotum and elytron generally purplish blue; basal antennal segments somewhat reddish</li></ul>
<ul> <li>Spaces between elytral punctures much smaller than punctures; occiput, pronotum and elytron generally greenish, or brown tinged with green286. suisapanus</li> <li>3 (1). Elytron with several feebly raised longitudinal costae</li></ul>
<ul> <li>a sphere of the hybrid particular binner many particulars, or brown tinged with green286. suisapanus</li> <li>3 (1). Elytron with several feebly raised longitudinal costae</li></ul>
<ul> <li>3 (1). Elytron with several feebly raised longitudinal costae</li></ul>
<ul> <li>Elytron without any longitudinal costae</li></ul>
<ul> <li>4 (3). Abdomen yellowish brown; antenna of ♂ slightly more than 1/2 as long as body, slender, segments 6-8 are 4.0-4.5× as long as broad; segment 1 of fore an mid tarsi lyre-shaped; hind tibia with a toothed external process; length 4.0-5.3 mm</li></ul>
<ul> <li>body, slender, segments 6-8 are 4.0-4.5× as long as broad; segment 1 of fore an mid tarsi lyre-shaped; hind tibia with a toothed external process; length 4.0-5.3 mm</li></ul>
<ul> <li>fore an mid tarsi lyre-shaped; hind tibia with a toothed external process; length 4.0-5.3 mm</li></ul>
<ul> <li>length 4.0-5.3 mm</li></ul>
<ul> <li>Abdomen blackish; elytron longitudinally punctured, greenish blue; antenna and apices of femora testaceous; coxae black; mid and hind tibiae brown, paler basally; length 3.2 mm</li></ul>
<ul> <li>and apices of femora testaceous; coxae black; mid and hind tibiae brown, paler basally; length 3.2 mm</li></ul>
<ul> <li>paler basally; length 3.2 mm</li></ul>
<ul> <li>5 (3). Pronotum rather flat, transverse, usually 1.7× as wide as long</li></ul>
<ul> <li>Pronotum strongly convex, not so wide, usually 1.3× as wide as long</li></ul>
<ul> <li>6 (5). Pronotum and elytron blue; pronotum with 2 adjacent transverse depressions near side</li></ul>
near side
Pronotum reddish brown, elytron blue; pronotum without distinct depression; underside entirely yellowish brown; length 4.0-4.6 mm
underside entirely yellowish brown; length 4.0-4.6 mm 282. maatsingi
7 (6). Antenna fairly robust; segment 4 about $3 \times$ as long as broad; length 4.1 mm
(E. Sikalig) sp.
on hasal margin: length 4 4-65 mm
8(5) Length 30-38 mm; dorsum often hright greenish
Length 40-57 mm; dorsum generally bluich
0 (2) Abdomen entirely nale: elytron moderately nunctured about 30 across middle:
aedeagus subtruncate anically in dorsal view and oblique and tanering to a
slightly blunt anex in lateral view.

1B

Abdomen largely pitchy; elytron grossly and very densely punctured, about 20 across middle; aedeagus acuminate in dorsal view, sinuate and acute in 10(8). Abdomen black, or at least largely pitchy brown; dorsum purplish to greenish 11 (10). Elytral punctures mostly smaller than interspaces; aedeagus rounded-obtuse apically in dorsal view and briefly curved upward and acute in lateral Elytral punctures mostly larger than interspaces; aedeagus narrowed with concave borders and with tip emarginate in dorsal view, arched upward 12 (10). Dorsum blackish to greenish blue; anterior tarsal segment 1 dilated; aedeagus slightly concave at sides, suddenly narrowed apically and terminating in a 

# 275. Calomicrus sp. Fig. 155.

We are not sure of the identity of the material listed here. According to our study of the type of the species described by Weise as *Luperus* (*Calomicrus*) *aenescens*, there is a slight possibility that it may be referred to this species, although we have used that name for species no. 321 in the genus *Euluperus*. It will be necessary to study the  $\Im$  genitalia of the type series to decide the matter.

DISTRIBUTION: W. China (Sikang).

SIKANG: 1, Ta-tsien-lu to Kiu-lung (FREY); 1, betw. Ning-yuen-fu & Den-shiang-uin, 2000 m, 6-8. VIII. 1928, Graham (USNM). YUNNAN: 4, Yunnan-sen (ZMB).

276. Calomicrus concolor (Ogloblin), NEW COMBINA-TION

Luperus (Calomicrus) concolor Ogl., 1936, Fauna USSR 26, 1: 269, 424, fig. 111 (Se-tchouen: Da-tsian-lou; ?Moscow).

We are not positive of the placement of this species. DISTRIBUTION: W. China (Sikang).

277. Calomicrus coomani Gressitt and Kimoto, n. sp. Fig. 156, a.

*Male*: Pitchy reddish brown to purplish or testaceous: Head greenish black posteriorly and reddish brown with a bronzy tinge anteriorly; antenna dark reddish brown, some-



Fig. 155. ♂ genitalia. Calomicrus sp. (sp. no. 275).

what reddish bronzy basally; pronotum reddish brown with a purplish tinge; scutellum dark reddish brown; elytron reddish brown with blue to bronzy reflections; ventral surfaces of thorax reddish brown with a slight bluish tinge; abdomen pale ochraceous; legs reddish brown with bluish and bronzy tinges. Dorsum nearly glabrous; antenna moderately clothed with suberect pale buff hairs; ventral surfaces and leg quite sparsely clothed with suberect golden buff hairs.

Head 4/5 as broad as prothorax; occiput moderately convex, smooth and weakly punctured, bounded anteriorly with a weakly obtuse groove; postantennal swellings quite distinct, separated and obliquely transverse; interantennal area about  $2\times$  as wide as an antennal insertion, moderately convex and continuous with raised area of froms; gena about 1/7as deep as eye; eye rounded-ovate. Antenna 2/3 as long as body, not very stout; segment 1 fairly short, arched and thickened apically; 2 nearly  $2 \times as$  long as broad and about 1/2 as long as 1; 3 not quite  $2 \times$  as long as 2, slightly shorter than 1; 4 as long as 1, fairly thick; 4-10 increasing slightly in length and decreasing slightly in thickness; 11 distinctly longer than 10. Prothorax fully 4/5 as long as broad; sinuate anteriorly, slightly concave at middle; evenly convex basally; moderately convex at side with widest portion anterior to middle and basal portion narrowed and slightly oblique; anterior angle swollen and rounded; basal angle slightly protruding; disc subevenly convex, fairly steep at side; surface weakly punctured on central portions with scattered fine to medium-size punctures at side and finer punctures toward lateral margin. Scutellum subtriangular, slightly convex and nearly impunctate. Elytron not quite  $3 \times$  as long as broad, moderately and evenly convex at side, broadly rounded apically; lateral margin distinctly expanded; epipleuron fairly broad in basal 1/3 then suddenly narrowed to middle and gradually narrowed and disappearing at beginning of apex; disc strongly convex, slightly swollen in middle of basal 1/4 and slightly depressed behind humerus and subbasal swelling; surface impressed with fairly deep punctures, mostly about as large as interspaces on basal 2/3and finer and sparser posteriorly. *Ventral surfaces* smooth and impunctate on thorax, slightly rougher but feebly punctured on abdomen; pygidium rounded-truncate; last abdominal sternite with apical lobe short, about  $5 \times$  as broad as long, rounded apically and concave



Fig. 156. 3 genitalia. a, Calomicrus coomani n. sp.; b, C. hainanicus n. sp.; c, Calomicrus iniquus (Weise).

just before apex. Aedeagus as in figure. Legs moderately stout; hind tibia nearly straight; hind tarsal segment 1 nearly as long as 2+3 and slightly longer than last. Length 4.0 mm; breadth 2.25.

*Female*: Dorsum greenish blue with purplish reflections; last abdominal sternite broadly rounded apically and with a few distinct punctures. Length 4.5 mm; breadth 2.5.

Paratypes: Length 4.0-4.3 mm; breadth 2.2-2.3.

DISTRIBUTION: N. Vietnam.

Holotype  $\mathcal{F}$  (Mus. G. FREY), Hoa-binh, Tonkin, N. Vietnam, R. P. A. de Cooman; allotopotype  $\mathcal{P}$  (FREY), same data; 4 paratopotypes (FREY, BISHOP), same data. Named for the collector, the late R. Père Auguste de Cooman.

Differs from *iniquus* (Ws.) in having shorter antenna, longer and more rounded prothorax, more heavily punctured elytron and more bluish dorsum.

## 278. Calomicrus hainanicus Gressitt and Kimoto, n. sp. Fig. 156, a.

*Male*: Metallic green to pitchy reddish or ochraceous: Head dark metallic green, more reddish anteriorly; antenna dark pitchy brown, paler reddish basally and apically; pronotum dark metallic green with a slightly bluish tinge; scutellum purplish black; elytron bright metallic green, slightly bluish posteriorly; ventral surfaces of thorax pitchy black to greenish; abdomen reddish ochraceous; coxae dark reddish brown; legs largely reddish pitchy with a bronzy to greenish tinge, more reddish at bases of femora and on tarsi. Body nearly glabrous above, with some fairly long hairs on anterior portion of head; antenna moderately clothed with fairly short pale buff hairs; ventral surfaces thinly clothed with suberect golden buff hairs.

Head 3/4 as broad as prothorax; occiput moderately convex, smooth and nearly impuncate, bounded anteriorly by a slightly arcuate depression; postantennal swellings transversely oblique, moderately raised and distinctly separated; interantennal area more than  $2 \times$  as wide as an antennal insertion, rather strongly raised medially, raised area continuous with transverse raised portion of frons and continuing posteriorly to just behind posterior borders of antennal insertions; gena about 1/8 as deep as eye; eye broadly ovate. Antenna 3/5 as long as body, slightly thickened; segment 1 moderately stout, slightly arched; 2 fully 1/2 as long as 1; 3 slightly longer than 2; 4 as long as 1; 4-10 subequal in length, 4-8 stouter; 11 distinctly longer than 10. Prothorax nearly 3/4 as long as broad; anterior margin slightly convex; basal margin more strongly convex; lateral margin subevenly convex, widest just anterior to middle; anterior angle swollen and projecting forward; basal angle weakly obtuse; disc subevenly convex, unevenly punctured, weakly punctured along median portion and with a few strong punctures at side of middle surrounded by an area of minute punctures. Scutellum as long as broad, broadly rounded apically, flat and impuncate. Elytron  $3 \times$  as long as broad, evenly convex at side and widest at middle, broadly rounded apically with sutural angle distinctly rounded; lateral margin narrowly expanded throughout; epipleuron moderately broad basally, sinuate on inner margin in basal 1/3, slightly widened at end of basal 1/4 then strongly narrowed to middle and more gradually narrowed to apex; disc strongly convex, slightly depressed behind basal 1/4 and covered with irregular small punctures which are mostly about 1/2 as large as interspaces on basal 2/3 and finer and sparser posteriorly. Ventral surfaces shiny, largely impunctate

on thorax and moderately punctured on abdomen; pygidium rounded-truncate apically; last abdominal sternite with apical lobe fairly small, about  $4 \times$  as broad as long and weak-ly rounded apically and slightly concave in middle. *Aedeagus* as in figure. *Legs* moderate-ly short and stout; hind tibia weakly arched; hind tarsal segment 1 as long as 2+3 and barely longer than last. Length 4.4 mm; breadth 2.4.

*Female*: Antenna slightly less stout; last abdominal sternite rounded-truncate apically. Length 4.6 mm; breadth 2.5.

Paratypes: Length 4.4-4.8 mm; breadth 2.3-2.6.

DISTRIBUTION: Hainan I.

Holotype & (CAS), Kiungchow, near sea level, N. Hainan I., 27. V. 1935, Gressitt; allotopotype ♀ (CAS), same date; 4 paratypes (CAS, BISHOP), Ta-hian, 600 m, foot of Five Finger Mts., Hainan, 15–16. VI. 1935, Gressitt.

Differs from *flaviventris* (Mots.) in being shorter, more bluish, with antenna shorter and stouter, with prothorax more weakly punctured and elytron more sparsely punctured.

279. Calomicrus ictericus (Weise), NEW COMBINATION

Luperus (Calomicrus) ictericus Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 609 (Kan-ssu; ?ZMB).

Luperus (Calomicrus) icterious ab. unicolor Ogloblin, 1936, Fauna USSR 26, 1: 255, 423 (no locality specified; ?Moscow).

We are not positive about the generic placement of this species.

DISTRIBUTION: NW China (Kansu, Szechuan).

279a. Calomicrus iniquus (Weise), NEW COMBINATION Fig. 156, c.

Luperus iniquus Ws., 1889, Soc. Ent. Ross., Horae 23: 568, 617 (Kan-ssu; ?ZMB).

Luperus (Calomicrus) iniquus, Ogloblin, 1936, Fauna USSR 26, 1: 277 (Kansu, Szechuan).

DISTRIBUTION: NW China (Kansu, Szechuan, Sikang).

SZECHUAN: 1, Mt. Omei, 3300 m, 20. VIII. 1921, Graham (USNM). SIKANG: 1, Ta-tsien-lu; 1, Wo-lung, Wassuland, San-kiang-kou, VII-X. 1934, Friedrich (FREY).

280. Calomicrus kelloggi Gressitt and Kimoto, n. sp. Figs. 152, b & 157, a.

*Male*: Dark steely blue to purplish with iridescent tinges: Head blackish green with a bluish to purplish tinge, somewhat bronzy reddish on labrum and reddish brown on mandible; antenna pitchy brown, somewhat bronzy reddish on basal segments; pronotum steely blue with a slight purplish tinge; scutellum and elytron metallic purplish slightly tinged with steely blue to greenish or bronzy; ventral surfaces reddish brown with metallic reflections, paler on abdomen; legs purplish brown with slightly bronzy or bluish tinges. Body nearly glabrous above, antenna somewhat densely clothed beyond segment 3 with short oblique golden brown hairs; ventral surfaces and legs rather thinly clothed with suberect golden buff hairs.

*Head* barely 3/4 as broad as prothorax; occiput moderately convex, smooth and very weakly punctured, bounded anteriorly by subtransverse groove; postantennal swellings quite distinct, broad, short and somewhat oblique; interantennal area slightly wider than an antennal insertion, strongly raised medially with ridge continuous with transverse ridge of

frons; gena extremely short, border very close to middle of bottom of eye; eye broadly ovate and strongly swollen. Antenna 3/5 as long as body, slightly stout; segment 1 arched and gradually swollen to near apex; segment 2 about  $1.5 \times$  as long as broad, nearly 1/2 as long as 1; 3 slightly longer than 2 and more slender; 4 slightly longer than 3, nearly as long as 1; 5 slightly longer than 4; 5-10 decreasing very slightly in length and diameter; 11 distinctly longer than 10. Prothorax 8/11 as long as broad; anterior margin slightly convex; basal margin strongly and evenly convex; lateral margin slightly sinuate, strongly widened and rounded well anterior to middle, narrowed anteriorly and narrowed and weakly oblique posteriorly; anterior angle slightly swollen, subrounded; basal angle obtuse and slightly projecting; disc moderately convex, somewhat raised along median line and somewhat flattened on each side of middle and slightly steep near lateral border; surface unevenly punctured, with central portion very weakly and sparsely punctured but with finer and closer punctures on parts of side. Scutellum slightly broader than long, broadly rounded apically and finely punctured.  $E/ytron 3.3 \times$  as long as broad, strongly convex at side and widest just behind middle, broadly rounded apically with sutural angle slightly rounded; lateral margin narrowly expanded; epipleuron fairly broad in basal 1/3 and slightly sinuate on inner margin, more strongly narrowed just anterior to middle and then gradually narrowed and disappearing on apex; disc subevenly convex, slightly raised near, middle of basal 1/4; surface finely and irregularly punctured, most of punctures 1/2 to 1/3 as wide as interspaces, in part larger at end of basal 1/4 and much sparser apically. Ventral surfaces shiny, largely impunctate on thorax and weakly punctured on sides of abdominal segments; pygidium rounded apically; last abdominal sternite with apical lobe much broader than long and sinuate-truncate apically and concave just before apex, subclosely punctured near middle. Aedeagus as in figure. Legs moderately stout; hind tibia nearly straight; hind tarsal segment 1 nearly as long as 2+3 and barely longer than last. Length 5.0 mm; breadth; 2.6.

*Female*: Pronotum blackish green; elytron steely blue with slight purplish tinge; metasternum greenish black; abdomen pitchy reddish to pale reddish brown apically; last ab-



Fig. 157. & genitalia. a, Calomicrus kelloggi n. sp.; b, C. maatsingi n. sp.; c, C. parvicollis (Weise).

dominal sternite broadly rounded and somewhat heavily and sparsely punctured. Length 5.8 mm; breadth 3.2.

*Paratype*: Dorsum purplish brown to bluish green. Length 4.5–5.2 mm; breadth 2.5–2.8.

DISTRIBUTION: SE China (Fukien, N. Kwangtung, Kweichow).

Holotype & (BISHOP 3283), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 1. VI. 1943, T. C. Maa; allotype ♀ (BISHOP), Chin-shan-pu, Changting, Fukien, 15. VI. 1940, Maa; 9 paratypes (CAS, BISHOP, USNM, LINGNAN): 6, Foochow, C. R. Kellogg, 1921–1924; 1, Kau-lin San, 700–900 m, Lienping Distr., N. Kwangtung, 18. IV. 1940, Gressitt & To; 1, Lung-ping-hui, Lin Distr., N. Kwangtung, 16–17. V. 1934, F. K. To; 1, Kweiyang, 1000 m, 11. VII. 1940, Gressitt.

Differs from *iniquus* Ws. in being broader, more metallic beneath, with abdomen paler basally and duller apically, and with prothorax less oblong and elytron more heavily punctured.

#### 281. Calomicrus lineatus (Weise), NEW COMBINATION

Luperus (Calomicrus) lineatus Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 612 (Sze-tschuan; ZMB).

There is a possibility that this may not be a true *Calomicrus*. DISTRIBUTION: W. China (Szechuan).

## 282. Calomicrus maatsingi Gressitt and Kimoto, n. sp. Figs. 152, c & 157, b.

Ma/e: Pale testaceous to purplish brown: Head bluish black above, pitchy brown to reddish anteriorly; antenna pale brown, largely testaceous on segments 1-4; pronotum yellowish testaceous; scutellum ochraceous; elytron reddish brown with a purplish to slightly bluish tinge; ventral surfaces yellowish testaceous, basal portions of sides of abdominal segments slightly pitchy. Dorsum nearly glabrous; antenna moderately clothed with short oblique pale hairs; ventral surfaces and legs quite sparsely clothed with suberect golden hairs.

Head 4/5 as broad as prothorax; occiput weakly convex, smooth and nearly impunctate; postantennal swellings quite strongly raised, obliquely transverse and divided by groove; interantennal area slightly wider than an antennal insertion, moderately convex, with ridge continuous with raised portion of frons; gena about 1/4 as deep as eye; eye rounded-oval. Antenna nearly 3/4 as long as body, fairly slender; segment 1 arched and gradually thickened to slightly before apex; 2 nearly  $2 \times$  as long as broad and nearly 1/2 as long as 1; 3 is  $1.6 \times$  as long as 2; 4 nearly as long as 1; 4-10 subequal in length; 11 is  $1.3 \times$  as long as 10. Prothorax 3/5 as long as broad; subtransverse anteriorly but slightly concave at middle of margin; weakly convex basally; moderately convex laterally; anterior angle swollen and projecting forward and outward; basal angle moderately projecting; disc weakly and evenly convex, nearly impunctate. Scutellum subtriangular, rounded apically, smooth and nearly impunctate. Elytron  $3.5 \times$  as long as broad, moderately broadened to widest point behind middle, broadly rounded apically and rounded at sutural angle; epipleuron moderately broadened and subparallel in basal 1/4 and strongly narrowed to middle and gradually narrowed and terminating on apex; disc rather strongly convex, slightly raised on basal 1/4 and slightly depressed behind disc; surface depressed with irregular small

punctures, mostly 1/2 as wide as interspaces and becoming smaller posteriorly. Ventral surfaces shiny, with only a few punctures at sides of abdominal segments; pygidium rounded apically; last abdominal sternite with median lobe about  $3 \times$  as broad as long, rounded-truncate apically and strongly concave from near middle of base to near end of apical lobe; lateral lobe rounded apically. Aedeagus as in figure. Legs slightly stout; hind tibia nearly straight; hind tarsal segment 1 barely longer than 2+3 and 2 slightly shorter than 3 and last shorter than 1. Length 4.4 mm; breadth 2.5.

*Female*: Antenna 2/3 as long as body; elytron purplish blue; last abdominal sternite rounded-truncate apically. Length 4.5 mm; breadth 2.6.

*Paratype*: Elytron purplish brown to blackish blue. Length 4.0-4.6 mm; breadth 2.1-2.5.

DISTRIBUTION: SE China (Fukien).

Holotype & (BISHOP 3284), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien, 30. IV. 1942, T. C. Maa; allotopotype & (BISHOP), 26. V. 1943, Maa; 13 paratopotypes (BISHOP, CAS, USNM, BMNH, Ac. SIN., TARI), 24. IV. 1942, 21–31. V. 1942, 3–26. V. 1943, 7. VI. 1943, Maa. Named for the collector, Tsing-chao Maa, now of Bishop Museum.

Differs from *flaviventris* (Mots.) in having pronotum orange and much shorter, antenna partly pale, elytron more depressed postbasally and thoracic sternites pale.

283. Calomicrus parvicollis (Weise), NEW COMBINATION Fig. 157, c.

Luperus punctulatus ab. parvicollis Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 614 (Szetschuan, Kansu; ZMB).

Luperus (Calomicrus) parvicollis, Ogloblin, 1936, Fauna USSR 26, 1: 270, 412 (Tatsienlu). DISTRIBUTION: W. China (Szechuan, Kansu, Sikang).

SIKANG: 6, Se-long, 4000 m, San-kiang-kou, Wassuland, VII-VIII. 1934, Friedrich (FREY).

284. Calomicrus punctatolineatus (Laboissière), NEW COMBINATION

Luperus (Calomicrus) punctatolineatus Lab., 1935, Ark. Zool. 27A (6): 4 (S. Kansu, NE Szechuan; STOCKHOLM).

We are not certain that this belongs to Calomicrus.

DISTRIBUTION: W. China (S. Kansu; NE Szechuan).

285. Calomicrus spurius Gressitt and Kimoto, n. sp. Fig. 158, a.

*Male*: Blue to purplish above, in part testaceous beneath: head purplish black, pitchy reddish on mouth parts; antenna dark reddish brown tinged with pitchy and slightly bluish on scape; pronotum dark purplish blue; scutellum blackish blue; elytron dark purplish; ventral surfaces pitchy to reddish on thorax and pale yellowish testaceous on abdomen; legs reddish to pitchy. Dorsum with a few erect hairs mostly on head and external margin of elytron; antenna moderately clothed with oblique pale pubescence beyond segment 3; ventral surfaces and legs quite sparsely clothed with oblique pale hairs.

*Head* much narrower than prothorax; occiput smooth, feebly convex; postantennal swellings distinctly raised, moderately raised and transverse, separated by a median groove;

interantennal space nearly  $2 \times$  as wide as antennal insertion, moderately convex and continuous with subarcuate raised area of frons; gena about 1/4 as deep as eye; eye broadly oval. Antenna just over 2/3 as long as body; segment 1 arched and distinctly thickened apically; 2 about 1/3 as long as 1; 3 about  $1.5 \times$  as long as 2; 4 nearly as long as 2+3; 4-10 decreasing slightly in length; 11 about as long as 4, acute apically. Prothorax  $2.23 \times$ as broad as long; anterior margin weakly concave; basal margin somewhat convex but nearly straight in middle; lateral margin strongly and evenly convex; anterior angle projecting forward; basal angle rounded-obtuse; disc smooth and weakly convex, very finely and irregularly punctured with a few somewhat larger punctures. Scutellum large, narrowed and rounded apically, somewhat convex. Elytron  $2.5 \times$  as long as broad, strongly rounded externally and rounded-truncate apically; epipleuron widened in basal 1/4, then strongly narrowed in middle and gradually narrowed to apex; disc strongly convex, somewhat swollen in basal 1/4 followed by a transverse depression; surface with irregular punctures mostly about as large as interspaces or slightly larger or slightly smaller. Ventral surfaces deeply punctured; last abdominal sternite with apical lobe about  $2 \times$  as broad as long, truncate apically and slightly widened from apex to base and sternite concave in area of base of lobe; lateral lobe broadly rounded apically. Legs moderately slender; hind tarsal segment 1 slightly longer than 2+3, last as long as 1. Length 4.4 mm; breadth 3.05.

*Female*: Elytra reddish brown with a strong purplish tinge; last abdominal sternite deeply convex apically, moderately punctured and slightly depressed along median line. Length 5.4 mm; breadth 3.5.

*Paratypes*: Dorsum from purplish brown to metallic purplish or steely blue. Length 4.3-5.5 mm; breadth 2.8-3.8.

DISTRIBUTION: Hainan I., S. China (Kwangtung, Fukien, Kiangsi).

Holotype 3' (CAS), Ta-hian, 600 m, foot of Five Finger Mts., Hainan I., 13. VI. 1935,



Fig. 158. a, Calomicrus spurius n. sp.; b, C. suisapanus n. sp.

Gressitt; allotopotype  $\mathcal{P}$  (CAS), 15. VI; 1 paratopotype, 15. VI; 5 paratypes (CAS, BISHOP, LINGNAN), Hainan: 2, No-doa (Na-ta), 10. VII. 1935, Gressitt; 2, Dwa-bi (Tai-pin), 20. VII. 1935, Gressitt; 1, Naam-fung, 16 km SSW of No-doa, 3–4. VII. 1932, Lau & To. Six specimens from mainland S. China are not designated paratypes, though they differ rather slightly from the Hainan material: 1, Yim-na San, NE Kwangtung, 10–15. VI. 1936, Gressitt; 1, Tsi-li-chiao, 1000 m, Chungan Distr., NW Fukien, 24. X. 1942, Maa; 1, Gang-keu, S of Shang-hang, SW Fukien, 24. VII. 1936, Gressitt; 3, Hong Shan, 1000 m, SE Kiangsi, 24–26. VI, 15. VII. 1936, Gressitt.

Differs from most species of *Calomicrus* in having prothorax more than  $2 \times$  as broad as long. Differs from *iniquus* (Ws.) in having antenna more slender, prothorax shorter and more rounded at side and elytron broader and more heavily and more closely punctured. This species and the following one may possibly represent a new genus.

## 286. Calomicrus suisapanus Gressitt and Kimoto, n. sp. Fig. 158, b.

*Male*: Greenish blue above and pitchy to reddish and testaceous beneath; head greenish blue, pitchy reddish to bronzy on mouth parts. Antenna reddish brown with a greenish to bluish tinge, darker on basal segments; pronotum bluish green; scutellum greenish pitchy; elytron bluish green, becoming somewhat pitchy reddish posteriorly; ventral surfaces reddish on thorax, becoming pitchy greenish towards side and testaceous on abdomen; legs pitchy brown to greenish on femora and largely bluish green on tibiae and tarsi. Dorsum with a few pale hairs on head and outer margin of elytron; antenna moderately clothed with oblique pale hairs beyond segment 2 but fewer hairs on segment 3; ventral surfaces quite sparsely clothed and legs moderately clothed.

*Head* somewhat narrower than prothorax; occiput deeply convex and finely shagreened; postantennal swellings strongly raised, transverse and separated by a groove; interantennal space about  $1.5 \times$  as wide as an antennal insertion, moderately raised and continuous with somewhat triangularly raised froms; gena about 1/3 as deep as eye; eye very broadly oval. Antenna nearly 3/4 as long as body; segment 1 arched and thickened apically; 2 slightly more than 1/3 as long as 1; 2 about  $1.3 \times$  as long as 2; 4 not quite as long as 2+3; 4–8 hardly decreasing in length; 9–10 progressively shorter; 11 about as long as 4. Prothorax  $2.25 \times$  as broad as long; anterior margin evenly concave; basal margin subevenly convex; lateral margin obtusely rounded, widest slightly anterior to middle; anterior angle rounded and produced somewhat forward; basal angle rounded-obtuse; disc subevenly convex; very finely and sparsely punctured and micropunctulate; with a weak depression, with a few larger punctures just behind middle of each side. Scutellum larger, triangular, rounded behind, slightly convex and finely punctured. Elytron 2.7× as long as broad, broadly rounded externally and widest somewhat behind middle, broadly roundedtruncate apically; epipleuron broadened, subparallel in basal 1/3, more strongly narrowed to middle then gradually narrowed to apex; disc subevenly convex, weakly depressed behind basal 1/4; surface with close irregular punctures, mostly distinctly larger than interspaces but about as large as interspaces near apex. Ventral surfaces very weakly punctured; last abdominal sternite with apical lobe not quite  $2 \times$  as broad as long, narrowed from base to apex and weakly convex at apex. Legs not very stout; hind tibia straight; hind tarsal segment 1 shorter than 2+3, last slightly longer than 1. Length 4.8 mm; breadth 2.75.

Female: Last abdominal sternite smooth and nearly flat, weakly sinuate apically.

# Length 5.1 mm; breadth 3.15.

*Paratypes*: Elytron dark bluish green to reddish brown with greenish tinge. Length 4.4-5.2 mm; breadth 2.4-3.2.

DISTRIBUTION: W. China (W. Hupeh).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 30. VII. 1948, Gressitt & Djou; allotype ♀ (CAS), 12. IX. 1948; 5 paratopotypes (CAS, BISHOP, LING-NAN), 25 30. VII. 1948; 1 paratype, Leung-ho-keu, Lichuan, 9. IX. 1948.

Differs from *iniquus* (Ws.) in having more slender antenna, much shorter and more rounded prothorax, and broader and much more heavily and more closely punctured ely-tron. (See note under preceding species.)

### Genus Hesperomorpha Ogloblin

Hesperomorpha Ogl., 1936, Fauna USSR 26, 1: 298, 375, 429 (type: Luperus hirsutus Jacoby; Japan).

#### KEY TO CHINESE SPECIES OF HESPEROMORPHA

### 287. Hesperomorpha atra (Chen), NEW COMBINATION

Luperus ater Chen, 1942, Notes d'Ent. Chinoise 9: 63 (Hopeh: Nankeou; HOANGHO-PAI-HO, TIENTSIN).

DISTRIBUTION: NE China (Hopei).

## 288. Hesperomorpha hirsuta (Jacoby)

- Luperus hirsutus Jac., 1885, Zool. Soc. Lond., Proc. 742, pl. 46, fig. 4 (Nikko, Yuyama, Kiga, Hitoyoshi; ?BM); 1890, Entomologist 23: 164, pl. 2, fig. 9 (Chang-yang).
- Hesperomorpha hirsuta, Ogloblin, 1936, Fauna USSR 26, 1: 299.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 164 (Shikoku, Kyushu).

DISTRIBUTION: Japan, C. China (Hupeh).

## 289. Hesperomorpha potanini Ogloblin

Hesperomorpha potanini Ogloblin, 1936, Fauna USSR 26, 1: 300, 429 (China: Se-Tchouen, Fej-lin; ?Moscow).

DISTRIBUTION: W. China (Szechuan, Sikang).

SIKANG: 9, Wo-lung, 2000 m, San-kiang-kou, Wassuland, VII-X. 1934, Friedrich (FREY).

# Genus Stenoluperus Ogloblin

# KEY TO CHINESE SPECIES OF STENOLUPERUS

1.	Abdomen largely yellowish brown
2(1).	Legs entirely blackish, bluish or purplish brown
	Legs entirely pale ochraceous; antenna of $\mathcal{J}$ with 2nd segment $1/2$ as long as
	1, 3rd 1.6 $\times$ as long as 2, and 4th 1.3 $\times$ as long as 3; elytron purplish blue
	with subregular rows of punctures
3 (2).	Antenna of $\eth$ more robust than in $\wp$ , segments 2 and 3 short, 4 long and more
	than 2× as long as $2+3$ ; antenna of $\varphi$ slender, segment 3 distinctly shorter
	than 1/2 length of 4; elytron very feebly depressed behind subbasal area;
	length 3.3–4.3 mm
	Antenna of $\partial'$ not much more robust than in $\Upsilon$ , segments 2 and 5 short, 4
	subsqual to or shorter than $1/2$ length of 4: elytron distinctly depressed be-
	hind subbasal area: length 2.8-33 mm
4(1)	Legs largely black bluish or purplish brown.
• (•)•	Legs largely or entirely reddish brown
5 (4).	Antennal segment 3 is $1.5 \times$ as long as, or subequal to 2; 4 slightly longer than
, í	2+3
	Antennal segment 3 is $2-3\times$ as long as 2; 4 slightly longer than 3, length 3.2-
	4.5 mm
6 (5).	Antennal segment 3 distinctly longer than 2, usually $1.5 \times$ as long as 2; de-
	pression on each side of pronotum moderately large; length 3.0-3.8 mm
	298. potanini
	Antennal segment 3 subequal to 2 in length; depression on each side of prono-
7 (1)	Tum more distinct than in preceding species; length 3.8 mm 294. nigrimemoris
7 (4).	Punctures of elytron arranged in semi-regular rows and their interstices more or
	less strongly elevated: antenna and less entirely brown: length 30-36 mm
	290 flavimentris
8 (7).	Larger than 3.0 mm; dorsal surface metallic greenish blue or bronze;
• (.).	
	Smaller than 3.0 mm; black, legs entirely yellowish brown and antenna brownish
	with apical segments darker; length 2.8 mm 293. lemoides
9 (8).	Depression of pronotum small and not distinct; legs brownish with femora (ex-
	cept apex brownish), and bases of tibiae much darker; length 3.0-4.5 mm
	Depression of pronotum much stronger than in preceding species; legs brown
	with some parts of tibiae darker; length 3.8 mm

<sup>Stenoluperus Ogl., 1936, Fauna USSR 26, 1: 247, 408, 419 (type: Luperus potanini Ws.; W. China; as subgenus of Luperus).—Chen, 1942, Notes d'Ent. Chinoise 9 (3): 64 (full genus).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 169.</sup> 

### 290. Stenoluperus flavimembris Chen

Stenoluperus flavimembris Chen, 1942, Notes d'Ent. Chinoise 9 (3): 66 (Kansu: Ka-jang; Kang-Yang; HOANGHO-PAIHO).

This species differs from the others in having costate elytron.

DISTRIBUTION: NW China (Kansu).

## 291. Stenoluperus flavipes Chen

Stenoluperus flavipes Chen, 1942, Notes d'Ent. Chinoise 9: 65 (Sikang: Kanting; Ac. SIN.). DISTRIBUTION: W. China (Sikang).

# 292. Stenoluperus flaviventris Chen Fig. 159, a.

Stenoluperus flaviventris Chen, 1942, Notes d'Ent. Chinoise 9: 67 (Kiangsu; Ac. SIN.).

DISTRIBUTION: E. China (Kiangsu, Fukien).

FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, IV-V, 1942-43, Maa (CAS, BISHOP); Sien-feng-ling, Chungan, 27. IV. 1942, Maa.

## 293. Stenoluperus lemoides (Weise), NEW COMBINATION

Luperus lemoides Ws., 1889, Soc. Ent. Ross., Horae 23: 568, 616 (Sze-tschuan; ?Moscow). Luperus (Stenoluperus) lemoides, Ogloblin, 1936, Fauna USSR 26, 1: 250, 409.

DISTRIBUTION: W. China (Szechuan, Sikang).

SIKANG: 1, Ni-tou to Ta-tsien-lu, Reitter; 1, Chung-hwa, Wassuland, Reitter (FREY).

# 294. Stenoluperus nigrimembris Chen

Stenoluperus nigrimembris Chen, 1942, Notes d'Ent. Chinoise 9: 66 (Sikang: Kanting; Ac.



Fig. 159. a, Stenoluperus flaviventris Chen; b, S. parvus n. sp.; c, S. nipponensis (Laboissière).

1963

Sin.).

This species appears to be close to *potanini*. DISTRIBUTION: W. China (Sikang).

#### 295. Stenoluperus nipponensis (Laboissière) Fig. 159, c.

Luperus longicornis Jacoby, 1885 (nec Fabricius 1781), Zool. Soc. Lond., Proc. 1885: 742, pl. 46, fig. 5 (Honshu).

Luperus nipponensis Lab., 1913, Ass. Nat. Levallois-Perret, Ann. 1913: 67, nota (Japan; ?BRUXELLES).

Luperus jacobyi Weise, 1924, Coleopt. Cat. 78: 119 (new name for L. longicornis Jac. 1885). Luperus (Stenoluperus) nipponensis, Ogloblin, 1936, Fauna USSR 26, 1: 248, 409, fig. 105

(Amur, Manchuria, Szechuan, Japan).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 164 (Kankyo-Nando, Korea).

Stenoluperus nipponensis, Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 169 (Korea).

DISTRIBUTION: Japan, Korea, N. and W. China (Manchuria, Szechuan, Sikang, Yunnan), E. Siberia.

SIKANG: 3, Ta-tsien-lu; 2, Ni-tou to Ta-tsien-lu, Reitter (FREY); 1, Se-long, 4000 m, Wassuland, VII–VIII. 1934, Friedrich (FREY); 2, nr. Mu-ping, 2300 m, 2, Yao gi, nr. Mu-ping, 2400 m, VII. 1929, Graham (US). YUNNAN: 1, Chao-chow-fu, 2300 m, 23. VIII–21. IX. 1914, Mell (ZMB).

### 296. Stenoluperus pallipes Gressitt and Kimoto, n. sp.

*Male*: Dorsum largely purplish brown with a strong bluish tinge: head pitchy with a bluish tinge, paler reddish anteriorly; antenna pale reddish brown, slightly duller on segments 4-9; pronotum pitchy black with bronzy bluish tinge; scutellum bronzy pitchy; elytron purplish brown with strong bluish tinge; pro- and mesosternum reddish; metasternum blackish; abdomen testaceous with basal portions of segments slightly ochraceous; legs orange testaceous. Dorsum nearly glabrous; antenna with oblique goldish hairs, thoracic sterna with very few hairs; abdomen and legs oblique goldish hairs, longer on abdomen.

Head abbreviated anteriorly; occiput evenly convex and weakly punctured; postantennal swellings transversely oblong, moderately raised and separated medially; interantennal space narrower than an antennal insertion, raised medially; fronto-clypeus short, with raised area forming an obtuse angle; labrum weakly concave at middle; gena 1/5 as deep as eye; eye broadly oval. Antenna nearly as long as body, fairly slender; segment 1 arched, gradually thickened; 2 oval, 1/2 as long as 1; 3 nearly as long as 1; 4 longer than 1; 4–10 decreasing slightly in length; 11 slightly longer than 4. Prothorax 3/4 as long as broad; anterior margin weakly concave; basal margin convex on each side but slightly concave at middle; lateral margin slightly convex; anterior angle swollen and prominent; basal angle moderately prominent; disc subevenly convex, but slightly depressed just behind middle of each side; surface with scattered large punctures, particularly near side and along median line, with an impunctate area on each side of median line centered anterior to middle. Scutellum narrowed posteriorly, subtruncate apically, flat and feebly punctured. Elytron 2/7 as broad as long, weakly convex at side and broadest well behind middle with margin hidden from above, except on rounded apex; epipleuron rather narPac. Ins. Mon.

row, but continuing almost to apex, gradually becoming narrower; disc with about 18 rows of partly regular punctures, mostly larger than interspaces, except posteriorly. Ventral surfaces weakly punctured on thorax and somewhat densely punctured on abdomen; last abdominal sternite with terminal lobe sinuate apically, concave at middle, rounded at side and about  $3 \times$  as broad as long and somewhat concave. Legs with tibiae slender and straight, hind femur swollen and hind tarsal segment 1 nearly as long as remainder combined, 2 barely longer than 3, and last only slightly longer than 2. Length 4 mm; breadth 1.6.

DISTRIBUTION: W. China (W. Hupeh).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 26. VII. 1948, Gressitt & Djou.

Differs from other species in having both legs and abdomen yellowish testaceous.

## 297. Stenoluperus parvus Gressitt and Kimoto, n. sp. Fig. 159, b.

Male: Purplish pitchy with a bluish green metallic tinge; more metallic on occiput and pronotum and more brownish on elytron and anterior portion of head; antenna submetallic on segments 1–2 and reddish brown on remainder; abdomen reddish brown with a bronzy tinge; legs reddish pitchy with bluish tinge. Body with just a few suberect hairs on anterior portion of head and posterior portion of elytron; antenna with short oblique golden brown hairs; ventral surfaces and legs thinly clothed with suberect golden hairs.

*Head* somewhat produced anteriorly; occiput slightly convex and sparsely punctured; postantennal swellings transverse, slightly swollen and distinctly separated; interantennal space barely as wide as an antennal insertion, weakly convex medially; frontoclypeus weakly convex; labrum slightly emarginate apically; gena about 1/9 as deep as eye; eye broadly oval. Antenna 1/6 longer than body, slender; segment 1 nearly glabrous, subfusiform and weakly arched; 2nd 1/3 as long as 1; 3 nearly  $2 \times$  as long as 2; 4 nearly as long as 1-3 combined; 4-10 decreasing slightly in length; 11 as long as 10. Prothorax just over 3/5 as long as broad, subtrapeziform, nearly straight anteriorly, moderately convex basally but slightly concave at middle, nearly straight at side and slightly broadening anteriorly, with anterior angle swollen and somewhat projecting and basal angle weakly projecting and nearly a right angle; disc weakly convex, slightly irregular, with fairly large punctures mostly about 1/2 as wide as interspaces, or more widely spaced. Scutellum subequilaterally triangular, smooth. Elytron just over  $3 \times$  as long as broad, distinctly widened to well behind middle, rounded apically and nearly square at sutural angle; epipleuron fairly narrow and somewhat evenly narrowed; disc with a distinct depression behind postbasal swelling; surface heavily punctured with punctures mostly irregular and in part larger than interspaces, but becoming smaller and sparser posteriorly. Ventral surfaces rather sparsely and weakly punctured; last abdominal sternite subtransverse and slightly depressed at middle of apex, with a slight notch on each side of middle. Aedeagus long and slender, subacute apically. Legs with tibiae slender and hind femur stout; hind tarsal segment 1 nearly as long as remainder combined, 2 slightly longer than 3 and last 2/3 as long as 1. Length 2.75 mm; breadth 1.1.

*Female*: Elytra quite bluish; abdomen yellowish testaceous; last abdominal sternite evenly rounded apically. Length 3.3 mm; breadth 1.5.

Paratypes: Length 2.6–3.3 mm; breadth 1.1–1.5.

## DISTRIBUTION: W. China (W. Hupeh).

Holotype ♂ (CAS), Liang-hou-keu, 750 m, Lichuan Distr., W. Hupeh Prov., 1. IX. 1948, Djou; allotopotype ♀ (CAS), 4. IX.; 15 paratopotypes (CAS, BISHOP, LINGNAN, USNM, BMNH, KIMOTO), 1–9. IX. 1948, Djou; 4 paratypes, Sui-sa-pa, 1000 m, Lichuan, 2. VIII–12. IX. 1948, Gressitt & Djou; 4, Hsiao-ho (Shaoho), 900 m, 10. VIII–14. IX. 1948, Gressitt & Djou.

Differs from *flaviventris* Chen in having antennal segments 2 and 3 of  $3^{\circ}$  together more than 1/2 as long as 4, and segment 3 of  $2^{\circ}$  subequal to, or shorter than, 1/2 length of 4, as well as elytron distinctly depressed postbasally.

### 298. Stenoluperus potanini (Weise), NEW COMBINATION

Luperus Potanini Ws., 1889, Soc. Ent. Ross., Horae 23: 568, 615 (Kan-ssu, Szetschuan; ? ZMB).

Luperus (Stenoluperus) potanini, Ogloblin, 1936, Fauna USSR 26, 1: 248, 409 (Szechuan). DISTRIBUTION: W. China (Kansu, Szechuan, Sikang).

SZECHUAN: O-er, nr. Wei-chow, 6-16. VIII. 1933, Graham; Wa-shan, VII. 1925, Graham (US); Shin-kai-sze, S. side and Nien-hwo-shih to summit, Omei Shan, 1000-3000 m, 9-12. VIII. 1940, Gressitt (BISHOP, CAS). SIKANG: 6, nr. Mu-ping, 2200-3600 m, VII. 1929, Graham (US).

### 299. Stenoluperus tibialis Chen

Stenoluperus tibialis Chen, 1942, Notes d'Ent. Chinoise 9: 63 (Sikang: Kanting; Ac. SIN.).

We are not quite certain that the specimens listed here belong to this species. We also have two specimens of an apparently related species.

DISTRIBUTION: W. China (Sikang, Szechuan).

SIKANG: 1, nr. Mu-ping, 2300 m, 18. VII. 1929, Graham (US). SZECHUAN: Shinkai-sze, 1000–1400 m, and Nien-hwo-shih to summit, 2000–3000 m, Omei Shan, 10–17. VIII. 1940, Gressitt (CAS, BISHOP).

#### Genus Sinoluperus new genus

Antennal insertion separated by more than  $2\times$  width of an insertion; labrum emarginate apically, with only 1 distinct setigerous pore on each side; gena 1/8 as deep as eye; maxillary palp with penultimate segment short and stout, and last conical; antennal segment 3 more than  $2\times$  as long as 2; prothorax margined on all borders, subevenly convex; elytron irregularly punctured, with epipleuron moderately wide basally and gradually narrowed; fore coxal cavities adjacent (touching); intercoxal process extremely narrow, barely widened at apex; anterior coxal cavity open behind; mesosternum free, flat, acute behind; mid coxae not quite touching: elytral disc with 4–5 sublongitudinal raised strips, with closer punctures between them; epipleuron moderately broad in basal 1/3, subparallelsided, then gradually narrowed; metasternum longer than mid coxa; median lobe of last abdominal sternite less than  $2\times$  as broad as long, concave; mid and hind tibiae each with a moderate spine apically; hind coxa large, somewhat raised above abdominal segment 1; tarsal claws appendiculate.

Type species: Sinoluperus subcostatus n. sp.

### Pac. Ins. Mon.

Differs from *Luperus* Geoff. in having frons much broader and concave medially instead of carinate between antennal insertions, and antennal segments 1 and 3 relatively much longer. Differs from *Atrachya* (*Luperodes*) Motsch. in having frons much broader and antennal segment 3 relatively much longer. Differs from *Calomicrus* Steph. in having body narrower, frons much wider, and antenna longer and more slender. Differs from *Stenoluperus* Ogl. in having shorter body, wider frons, and more rounded prothorax.

## 300. Sinoluperus subcostatus Gressitt and Kimoto, n. sp. Fig. 160.

*Male*: Pale ochraceous, slightly paler on ventral surfaces and slightly reddish on parts of elytron; mandible pitchy black apically and reddish at middle; tarsal claws slightly reddish brown. Dorsum with just a few suberect hairs on posterior portion of elytron and on head; antenna thinly clothed with fairly short oblique pale hairs; ventral surfaces and legs quite thinly clothed with oblique or subrecumbent pale golden hairs.



Fig. 160. Sinoluperus subcostatus n. sp.

*Head* nearly as broad as prothorax; occiput weakly convex, depressed anteriorly on median line, rather distinctly punctured; interantennal space nearly  $4 \times$  as wide as an antennal insertion, moderately raised transversely but depressed medially; postantennal swellings subtriangular, weakly swollen, finely punctured and distinctly separated; frons subtrapizeform, nearly as broad at middle as total length, obtuse posteriorly and terminating slightly behind upper levels of antennal insertions, central portion concave and minutely punctured; gena extremely short, part of border touching anterior margin of eye; eye only slightly deeper than wide, strongly swollen. Antenna slender, slightly longer than body; segment 1 long, slender basally, arched and thickened apically: 2 slightly longer than broad; 3 about  $3 \times$  as long as 2, nearly as long as 1; 4 slightly longer than 3; 4-10 similiar, decreasing slightly in length; 11 barely longer than 10. Prothorax not quite 2/3 as long as broad; anterior margin straight; basal margin subevenly convex, slightly concave at middle; lateral margin sinuate, widest just anterior to middle, narrowed anteriorly and

slightly narrowed and then straight posteriorly; anterior angle strongly swollen and slightly projecting laterally; basal angle moderately swollen and obtuse; disc subevenly convex, hardly depressed on each side of middle, with numerous fine punctures varying in size and density, in part extremely fine and dense and in part much more widely separated in diameters. *Scutellum* subtriangular, subrounded apically, moderately convex and weakly punctured. *Elytron*  $3.4 \times$  as long as broad, subparallel-sided but slightly wider just behind humerus and then slightly narrowed just anterior to middle, broadly rounded apically with sutural angle slightly rounded; lateral margin very narrowly expanded; epipleuron quite

broad basally, gradually narrowed for a short distance and then more strongly narrowed to just anterior to middle, then somewhat gradually narrowed and disappearing on apex; disc rather strongly convex, raised postmedially, with 4 or 5 slightly oblique longitudinal raised strips which are sparsely punctured and with depressions between quite heavily punctured, these punctures larger than interspaces; remainder of surface much more sparsely punctured and quite finely so posteriorly, the ridges becoming indistinct postmedially and disappearing well before apex and not approaching very close to base or to suture. *Ventral surfaces* quite shiny and smooth, indistinctly punctured; pygidium broadly rounded apically; last abdominal sternite with apical lobe very much broader than long, rounded apically and depressed in central portion just before apex. *Legs* with femora fairly stout; hind tibia straight, spined apically; hind tarsal segment 1 nearly as long as remaining segments combined, 2 slightly longer than 3 and last much shorter than 1; tarsal claws broadly appendiculate. Length 5.2 mm; breadth 2.4.

*Female*: Antenna slightly shorter than body; last abdominal sternite long, broadly rounded apically. Length 5.5 mm; breadth 2.7.

*Paratypes*: Some of  $\mathcal{F}$  specimens with elytron partly or almost entirely pitchy black and dark reddish brown. Length 4.0-5.2 mm; breadth 1.7-2.5.

DISTRIBUTION: S. China (Kiangsi, Kwangtung, Szechuan, Chekiang), Hainan I.

Holotype & (CAS), Hong Shan, 1000 m, SE Kiangsi Prov. (at corners of Fukien and Kwangtung), 16. VIII. 1936, Gressitt; allotopotype ♀ (CAS), 15. VII.; 15 paratypes (CAS, BISHOP, USNM, BMNH, AC. SIN.); 2 paratopotypes, 25. VI, 15. VIII, Gressitt; 1, An-yuen, Kiangsi, 23. V. 1948, Gressitt & Djou; 1, Pe-pei, Szechuan, 28. VII. 1940, Gressitt; 1, Yimna Shan, 600 m, nr. Meihsien, NE Kwangtung, 10–15. VI. 1936, Gressitt; 1, Tsek-chü, Hong Kong, 6. V. 1940, F. K. To; 1, Tien-mu Shan, Chekiang (FREY); 8 from Hainan I.: Hainan, 1932, Hoffmann; Fan-heang, 7. VI, Ta-hian, 600 m, 14. VI, Ta-han, 750 m, 24. VI, Dome Mt., nr. No-doa, 13. VII, Cheung-kon, nr. Loi Mother Mt., 18. VII, Tai-pin (Dwa-bi), 325 m, 22. VII, all 1935, Gressitt.

Differs from species of related genera in the very broad, concave frons.

#### Genus Paraluperodes Ogloblin

Paraluperodes Ogl., 1936, Fauna USSR 26, 1: 310, 375, 431 (type: Cnecodes suturalis Motschulsky, monobasic; E. Asia).

### KEY TO CHINESE SUBSPECIES OF LUPERODES

Elytral stripe narrow and not reaching base, often quite pale...302. suturalis nigrobilineatus

301. Paraluperodes suturalis suturalis (Motschulsky) Fig. 161.

Cnecodes suturalis Mots., 1858, Etudes Ent. 7: 100 (Burma; type lost?).

Luperodes suturalis, Allard, 1889, Soc. Ent. France, Ann. 58: 310 (Pnomh-Penh).—Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 444.—Weise, 1910, Philip. Jour. Sci. 5 (2, D): 141; 1922, Tijdschr. Ent. 65: 80 (Canton).

Paraluperodes suturalis, Ogloblin, 1936, Fauna USSR 26, 1: 312.

Paraluperodes suturalis suturalis, Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 167 (Ryukyu). This form is more tropical and the other subspecies is more northern.

Fig. 161. *Paraluperodes suturalis* (Motschulsky).

DISTRIBUTION: E. Indies, Sunda Is., Vietnam, Philippines, Hainan I., S. China (Kwangtung, Fukien, Szechuan), Taiwan, Ryukyu Is.

FUKIEN: 4, Tsao-yang, Kutien, 1. VIII. 1940, Maa; 1, Ta-chu-lan, Shaowu, 20. V. 1944, Maa; 1, Wingan, 17. V. 1940, Maa (CAS). SZECHU-AN: 1, Sui-fu, 1929, Graham (USNM). KWANG-TUNG: Ho-nam I., Canton, 23. VIII-X. 1939, Gressitt. HAINAN: 1, Ka-chek, Kiungtung Distr., 3-6. V. 1932, Hoffmann (LINGNAN). VIETNAM: 11, Hoa-binh, Tonkin, de Cooman (FREY).

# 302. Paraluperodes suturalis nigrobilineatus (Motschulsky)

Cnecodes nigro-bilineatus Mots., 1860, Etudes Ent. 9: 26 (Japan; ?type lost).

Luperodes nigrobilineatus, Jacobson, 1931, Одрел. Жуков: 318.

Luperodes suturalis ab. nigrobilineata, Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 11 (Korea).

Paraluperodes suturalis subsp. nigrobilineatus Ogloblin, 1936, Fauna USSR 26, 1: 312, fig. 130.—Chûjô, 1938, Mushi 11 (2): 165 (Laoshan); 1941, Nat. Hist. Soc. Formosa, Trans. 31(211): 168 (Korea).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 168.

DISTRIBUTION: SE Siberia, N.&C. China (Hopei, Shantung, Kiangsu, Anhwei, Fukien, Hupeh, Szechuan, Sikang, Yunnan, Shensi), Korea, Tsushima, Japan.

HOPEI: many, Peking, VII. 1913, Schoede & Müller (ZMB); 1, Peiping, VII. 1932, G. Liu (MCZ). KIANGSU: Ching-kiang, 1893, Kreyenberg (ZMB); Nanking, 14. IV. 1923, Van Dyke (CAS); 13. VIII. 1919, Loomis (US). ANHWEI: 3, Kiu-hwa Shan, IX. 1932, G. Liu (MCZ). FUKIEN: 4, Tsao-yang, Kutien, 1. VIII. 1940, Maa; 1, Ku-hsien-kai, 17. VI. 1944, Maa; 1, Bohea Hills, Chungan, 17. IX. 1939, Maa (CAS, BISHOP). HUPEH: 14, Sui-sa-pa, Lichuan, 23. VII-25. VIII. 1948, Gressitt & Djou (CAS); Leang-hou-keu, Lichuan, 9. IX. 1948, Djou. SZECHUAN: 1, nr. Chang-lin-kang, S of Wanhsien, 17. VII. 1948, Gressitt & Djou (CAS); 1, Pe-pei, 300 m, N of Chungking, 7. VII. 1940, Gressitt. YUNNAN: 1, Kunming, 16. VI. 1940, Maa. SIKANG: 1, Mu-ping, 2000 m, 22. VII. 1929, Graham (US). SHENSI: 1, Chin-ling Mts., IV-V. 1904, Blackwelder.

HOST: Glycine Max (L.) Merr.

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- Atrachya Dejean, 1837, Cat. Col. ed. 2, p. 377; ed. 3, p. 401 (type: Galleruca menetriesii Faldermann, 1835, monobasic; E. Asia).—Duponchel & Chevrolat, 1842, IN D'Orbigny, Dict. Univ. Hist. Nat. 2: 310 (type cited as G. menetriesii (sic.)).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 608; 1950, op. cit. 3: 86.
- Phyllobrotica Chevrolat, 1837, IN Dejean, Cat. Col. ed. 2, p. 381; ed. 3, p. 405 (type: Chrysomela quadrimaculata L., 1758).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 609.
- Luperodes Motschulsky, 1858, Etudes Ent. 7: 102 (type: L. alboplagiatus Mots.; Ceylon).-Ogloblin, 1936, Fauna USSR 26, 1: 306, 374.

Iphidea Baly, 1865, Ent. Monthly Mag. 2: 127 (type: I. discrepans Baly; Japan).

## Key to Chinese species of Atrachya

1. Pronotum largely black, always with a pair of deep depressions at sides
2(1) Smaller insects less than 60 mm in length electron unicolor or bicolorous 2
2 (1). Similar insects, less that do him in regardless black here $1/2$ for broken and
Larger insects, 7.3–8.0 mm in length; pronotum black; basal 1/2 of elytron red-
dish brown and apical 1/2 blackish with a large rounded yellowish marking
3 (2). Elytron without any different color of markings at apex
Elytron yellowish brown with apical 1/4 stained with black; head, pronotum
and apical 2-3 segments of abdomen blackish; legs reddish brown with tibiae
and tarsi blackish; length 4.5-5.5 mm
4 (3). Elytron unicolorous or bicolorous, vellowish or reddish brown
Dorsal surface entirely blackish with bluish lustre (under strong light, appears
dark reddish): pronotum closely and strongly nunctured: length 35-40 mm
aux realism), pronotani crosofy and strongty punctured, rongin
5 (4) Length 50 mm , analy of multility of 1 sharp and projecting behind, altren
5 (4). Length 5.0 min, apex of pyginnin of 6 sharp and projecting bennin, crytron.
entirely readish brown
Smaller than 4.5 mm; apex of pygidium of o slightly emarginated and not
produced behind; elytron reddish basally and more yellowish apically, but
these borders ill-defined
6 (1). Ventral surface yellowish or reddish brown, except apex of abdomen 7
Ventral surface entirely black or at least meso- and metathorax black
7 (6). Larger, 5.0 mm in length; red; elytron yellowish brown except humerus, basal
and lateral margin stained with red; anterior part of head, including post-
antennal tubercles, basal parts of interior margin of elytral epipleurae, apex
of pygidium and apical 2/3 of last abdominal segment, black; antenna, except
2-3 basal segments and tibiae and tarsi blackish brown
Smaller $A \cap A$ 5 mm in length · vellowish brown with elytron more or less darker ·
band proportion except base based parts of last abdominal segment reddish:
include in balance of the loss of a subspiced assessments of antenna influence.
posterior naives of tible, tars at subapical segments of antenna infuscate,
apex of abdomen and base of the hind tarsal segment 1 black 304. caudata
8 (6). Abdomen entirely black; pronotum and elytron always yellowish brown; elytron
without remarkable secondary sexual characters; length ca 5.0 mm 309. pedestris

without remarkable secondary sexual characters; length ca 5.0 mm... 309. pedestri Abdomen largely yellowish brown with lateral area partly blackish; pronotum 

### 303. Atrachya bipartita (Jacoby), NEW COMBINATION

Luperodes bipartitus Jac., 1890, Entomologist 23: 163, pl. 2, fig. 8 (Chang-yang, Hupeh; ?BM).

DISTRIBUTION: S. China (Hupeh, Fukien, Chekiang).

HUPEH: 2, Sui-sa-pa, 1000 m, Lichuan Distr., 31. VII, 13. IX. 1948, Gressitt & Djou; 1, Hsiao-ho (Suiho), Lichuan, 14. IX. 1948, Djou (CAS, BISHOP). FUKIEN: 2, Ta-chu-lan, Shaowu, 10. IV. 1943, Maa (CAS). CHEKIANG: 2, Mo-kan Shan, 24. IX. 1927, Wright (CAS).

### 304. Atrachya caudata (Chen), NEW COMBINATION

Luperodes caudatus Chen, 1942, Notes d'Ent. Chinoise 9:47 (Szechwan: Omeishan; U. NANKING).

Chen indicated that this species had affinity with haemodera.

DISTRIBUTION: W. China (Szechuan).

# 305. Atrachya haemodera (Chen), NEW COMBINATION

Luperodes haemodera Chen, 1942, Notes d'Ent. Chinoise 9:48 (Kwangsi: Yangso; Ac. SIN.).

DISTRIBUTION: S. China (Kwangsi, Kwangtung).

KWANGTUNG: 1, Yim-na Shan, Mei Distr., 600 m, 10–15. VI. 1936, Gressitt (CAS); 1, Naam-kong-paai, Yao Shan, Yangshan Distr., 18–20. X. 1934, To (LINGNAN).

## 306. Atrachya haemoptera (Chen), NEW COMBINATION

Luperodes haemoptera Chen, 1942, Notes d'Ent. Chinoise 9: 49 (Szechuan: Omeishan, Sikang: Yachow; Ac. SIN.).

DISTRIBUTION: W. China (Szechuan, Sikang).

SZECHUAN: 2, Hua-ying Shan, 800 m, Chungking, 5. VII. 1933, Graham (USNM); Kin-fu Shan, 2000 m (Frey). SIKANG: 1, Wo-lung, 2000 m, Wassuland, VII-X. 1934, Friedrich; 1, Ta-tsien-lu, Yü-ling (Frey).

## 307. Atrachya fokiensis (Weise), NEW COMBINATION

Monolepta fokiensis Ws., 1922, Tijdschr. Ent. 65: 104 (Fokien; STOCKHOLM).

DISTRIBUTION: SE China (Fukien).

## 308. Atrachya menetriesi (Faldermann)

Galeruca menetriesi Fald., 1835, Acad. Petersb., Mem. 2: 439, pl. 5, fig. 7 (N. China; ?LE-NINGRAD).

Luperodes praeustus Motsch., 1860, Schrenck's Reisen Amurl. 2: 232, pl. 11, fig. 19 J (Daourie, Amour).—Weise, 1889, Soc. Ent. Ross., Horae 23: 568 (Szetschuan).—
Fairmaire, 1887, Revue d'Ent. 6: 333 (Pekin).

Luperodes nigripennis Motsch., 1860, Schrenck's Reisen Amurl. 2: 232 (Daourie, Amour).—
Baly, 1877, Linn. Soc. Jour. 20: 163.—Fairmaire, 1888, Revue d'Ent. 7: 154 (Pekin).
—Jacoby, 1888, Zool. Soc. Lond., Proc. 1888: 350 (Gensan; Korea).—Jacoby, 1890, Entomologist 23: 163 (Chang-yang).

Iphidea discrepans Baly, 1865, Ent. Monthly Mag. 2: 127 (Japan).

Phyllobrotica menetriesi, Weise, 1924, Coleopt. Cat. 78: 97.

Luperodes mentriesi, Ogloblin, 1936, Fauna USSR 26, 1: 307, 431, fig. 127.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 162 (Corea).

Atrachya menetriesi, Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 157.

DISTRIBUTION: Amur; Korea; China (Kirin, Hopei, Kansu, Sikang, Szechuan, Yunnan, Kweichow, Hupeh, Kwangtung, Kiangsi, Fukien, Chekiang, Kiangsu).

KIRIN: 6, Mao-er-schan, 25. VIII. 1950 (FREY). HOPEI: Peking, Westberg, Stötzner (FREY). KANSU: Lanchow (Lantschou; ZMB). SIKANG: 4, Se-long, 4000 m, Wassuland, VII-VIII. 1934, Friedrich (FREY); W of Ta-tsien-lu, 1-15. VIII. 1930, Graham (USNM); Ya-chow, Graham; Den-shiang-lin, VIII. 1928, Graham; Wa-hu Pass, VIII. 1930, Graham; Ning-yuen-fu, VIII. 1928, Graham; Li-to, VIII. 1930, Graham. SZECHUAN: Wei-chow, 1800 m, VIII. 1933, Graham; Sui-fu, 1920, Graham; King-foo Shan, VIII. 1932, G. Liu (MCZ); Mt. Omei, Graham; Sui-fu, V. 1924, Graham; O-er, nr. Li-fan, VIII. 1933, Graham; Pe-pei, VII. 1940, Gressitt; Chengtu, 1933, Graham. YUNNAN: Yunnan-sen (ZMB); Soling-ho R. Vall. (FREY). KWEICHOW: 1 (FREY). HUPEH: Sui-sa-pa, Lichuan, VII-IX. 1948, Gressitt & Djou, mostly on Salix; Liang-ho-keu, IX. 1948, Djou; Hsiao-ho, VIII. 1948, Gressitt; Mo-tau-chi to Chi-au Shan, VII. 1948, Gressitt & Djou. KWANGTUNG: Lung-tau Shan, 450 m, VI. 1947, Gressitt & Lam. KIANGSI: Hong Shan, VI. 1936, Gressitt (CAS). FUKIEN: Yen-pin, IX. 1917 (AMNH 5148); Shao-hu to Ta-chu-lan, VI. 1943, Maa. CHEKIANG: Ning-po (ZMB); Hangchow, V. 1923, Van Dyke (CAS). KIANGSU: Shanghai, VIII. 1919, Loomis (USNM); Nanking, VI. 1923, Van Dyke. KOREA: Mt. Chii San, S. Korea, VII-VIII. 1935, Suk (USNM). SIBERIA: Okeanskaya, VIII. 1923, Cockerell (USNM).

HOSTS: Many kinds of cultivated and wild plants, Salix, Metasequoia (Hupeh).

# 309. Atrachya pedestris Gressitt and Kimoto, n. sp.

Male: Yellowish testaceous to reddish and pitchy black: head yellowish, slightly reddish on mandible and palpi; eye pitchy; antenna testaceous on segments 1–2, reddish on 3 and dull brown on remainder; dorsum entirely yellowish testaceous; venter pitchy brown, becoming ochraceous on last abdominal segment and apical borders of preceding segments; legs dark reddish brown, in part pitchy. Dorsum largely glabrous; antenna thinly clothed with oblique pale hairs; ventral surfaces and legs moderately clothed with oblique and suberect golden buff hairs.

Head distinctly narrower than anterior end of prothorax; occiput evenly swollen and nearly impunctate, very weakly grooved medially near anterior border; postantennal swellings slightly raised, convex on posterior margin; interantennal area somewhat wider than an antennal insertion, distinctly convex and continuous with transverse raised area of frons; labrum barely emarginate apically; gena 1/5 as deep as eye; eye narrowly ovate. Antenna 3/4 as long as body; segment 1 weakly arched and strongly thickened apically; 2 just over

1/3 as long as 1; 3 about 1/3 longer than 2; 4 nearly as long as 2+3; 4-10 decreasing slightly in length. Prothorax 4/7 as long as broad; anterior margin weakly concave; basal margin convex, but weakly concave at center; lateral margin distinctly convex, narrowed anteriorly; anterior angle thickened and rounded; basal angle moderately swollen and slightly projecting; disc subevenly convex, with a small weak depression on each side somewhat near base; surface with numerous minute punctures, somewhat denser towards side and sparser near base. Scutellum triangular, smooth and weakly convex. Elvtron  $2.6 \times$ as long as broad, weakly convex at side and broadly rounded apically; epipleuron broad basally, and slightly widened at basal 1/4, strongly narrowed in middle and disappearing at beginning of apex; disc subevenly convex with a somewhat raised and transparent area on sutural 1/2 just behind basal 1/6; surface with numerous irregular minute punctures. about 50 in an approximate row across middle. Ventral surfaces rather finely and closely punctured. Pygidium obtuse apically; last abdominal sternite with median lobe broader than long, subrectangular, emarginate-truncate apically and moderately concave. Legs fairly long and slender; hind tibia slightly arched; hind tarsal segment 1 as long as remainder combined, 2 distinctly longer than 3 and last just over 1/2 as long as 1. Length 5.6 mm; breadth 2.55.

*Female*: Antenna 2/3 as long as body; segments 10 and 11 somewhat thickened, 11 barely longer than 10; scutellum somewhat pitchy; ventral surfaces and legs almost entirely dark pitchy brown to blackish except for last abdominal segment which is ochraceous and paler at apex; last sternite rounded apically and somewhat flattened along median portion. Length 4.6 mm; breadth 2.3

DISTRIBUTION: SW China (Yunnan).

Holotype ♂ (U. S. NAT. MUS.), Yun-hsien, Yunnan Prov., III. 1942, W. L. Jellison; allotopotype ♀ (BISHOP 3285), same data.

Differs from *bipartita* (Jac.) in being entirely pale above, in having pronotum more rounded at side, much less depressed on each side of center of disc and much more finely and more uniformly punctured, and with elytra much more finely and closely punctured.

#### 310. Atrachya rubripennis Gressitt and Kimoto, n. sp.

*Male*: Bright orange ochraceous to pitchy black: head largely pitchy black, more reddish on clypeus, labrum and palpi; antenna reddish brown, slightly pitchy on segment 1; pronotum reddish brown, or pitchy to almost blackish anteriorly and at side, but reddish along anterior margin; scutellum and elytron orange ochraceous; ventral surfaces ochraceous; legs pitchy brown with femora and apical portions of tarsi reddish brown. Dorsum with just a few scattered hairs on posterior portion of elytron and on head; antenna moderately clothed with oblique goldish buff hairs; ventral surfaces and legs sparsely clothed with suberect golden buff hairs.

Head slightly narrower than prothorax; occiput smooth and evenly convex; postantennal swellings moderately raised, not quite touching posteriorly and with straight posterior margins; interantennal area wider than an antennal insertion, moderately convex; frons with a slender obtuse (chevron shaped) raised area; gena extremely short; eye broadly oval. Antenna 3/4 as long as body; segment 1 slender and arched, thickened apically; 2 not quite 1/2 as long as 1; 3 barely longer than 2; 4 nearly as long as 1; 4–10 decreasing gradually in length; 11 about as long as 8. Prothorax not quite  $2 \times$  as broad as long;

anterior margin weakly emarginate; basal margin moderately and subevenly convex; lateral margin weakly convex, somewhat oblique, broadening anteriorly; anterior angle rounded and fairly prominent; basal angle obtuse and weakly projecting; disc with a distinct transverse depression across central portion to middle of side; surface with fairly distinct scattered small punctures, denser towards side and anterior border and much weaker and sparser in depressed area and near base. Scutellum triangular, somewhat angulate behind. *Elytron* slightly more than  $3 \times$  as long as broad, weakly convex at side and broadest just behind middle, broadly rounded-truncate apically; epipleuron round in basal 1/4 and then more strongly narrowed to about middle and gradually narrowed to extreme apex and disappearing on truncate portion; disc subevenly convex, with numerous distinct irregular punctures, with approximately 28 in row across middle. Ventral surfaces shiny, almost impunctate on thorax, very weakly punctured on abdomen; pygidium subacute apically; last abdominal sternite very long, with median lobe longer than broad, slightly narrowed apically and truncate at apex with rounded corners and median portion concave to base of segment. Legs slender; hind tibia very weakly arched; hind tarsal segment 1 distinctly longer than remainder combined, 2 barely longer than 3 and last about 1/2 as long as 1. Length 5.2 mm; breadth 2.6.

DISTRIBUTION: W. China (Szechuan).

Holotype 3 (BISHOP 3286), Shin-kai-sze, 1500 m, Omei Shan, Szechuan Prov., 9. VIII. 1940, Gressitt.

Differs from *haemoptera* Chen in having pronotum less black, elytron entirely red, both pronotum and elytron more heavily punctured, and prothorax a bit shorter.

#### 311. Atrachya tricolor Gressitt and Kimoto, n. sp.

Male: Reddish brown, testaceous or pitchy black: head nearly black but paler on anterior portion; antenna pitchy black, somewhat more brownish beyond segment 3; pronotum pitchy black with a slight reddish tinge; scutellum pitchy black; elytron reddish brown on basal 1/2, pitchy black on posterior 1/2 but with a large subrounded testaceous spot in middle of blackish portion; ventral surfaces pitchy on prothorax and part of mesothorax, testaceous to reddish on remainder; legs pitchy black. Body nearly glabrous above; antenna moderately clothed with short oblique goldish hairs; ventral surfaces and legs sparsely clothed with oblique pale hairs.

Head much narrower than prothorax; occiput weakly swollen, slightly depressed anteriorly at middle; postantennal swellings weakly raised, separated by a shallow groove; interantennal area slightly wider than an antennal insertion, raised anteriorly and continuous with transverse raised area of frons; labrum barely emarginate apically; gena extremely short; eye large and broadly oval. Antenna 4/5 as long as body; segment 1 fairly slender and arched; 2 not quite 1/2 as long as 1; 3rd 2/3 as long as 1; 4 nearly as long as 1; 4–10 decreasing very slightly in length; 11 barely longer than 4. Prothorax slightly more than  $2\times$  as broad as long; anterior margin slightly concave; basal margin distinctly convex but weakly concave at center; lateral margin weakly convex, slightly narrowed anteriorly; anterior angle swollen and rounded; basal angle obtusely rounded; disc slightly raised in central portion of anterior 1/2 and slightly depressed over a broader area of posterior 1/2; surface with fine punctures at side and with sparser punctures on central portion, denser on anterior 1/2 and much weaker and sparser on posterior 1/2. Scutellum subequilaterally triangular, flat and smooth. *Elytron* not quite  $3 \times as$  long as broad, subparallel-sided, broadly rounded apically; epipleuron broadened in basal 1/4 then strongly narrowed to middle where it is nearly as wide as at extreme base, then narrowed to beginning of apex and very narrow on extreme apex; disc with numerous minute punctures, mostly about 1/2 as large as interspaces. *Ventral surfaces* shiny, weakly punctured on thorax and more strongly and closely punctured on abdomen; pygidium somewhat obtuse apically; last abdominal sternite very large with rectangular median lobe which is slightly longer than broad and truncate apically, entire sternite concave medially to base. *Legs* fairly slender; hind tibia somewhat arched; hind tarsal segment 1 distinctly longer than remainder combined, 2 somewhat longer than 3 and last just over 1/2 as long as 1. Length 7.5 mm; breadth 3.8.

*Female*: Antenna 2/3 as long as body; last abdominal sternite not very long, emarginate-truncate apically and slightly raised along apical margin. Length 7.4 mm; breadth 4.0.

Paratype: Length 8 mm; breadth 4.

DISTRIBUTION: SE China (Fukien).

Holotype 3' (BISHOP 3287), Kuatun, Chungan Distr., NW Fukien Prov., 1. VIII. 1945, T. C. Maa; allotype  $\mathcal{P}$  (BISHOP), Sui-ying-pan, Wingan Distr., VIII. 1945, Maa; paratopotype 3' (CAS), same data as holotype.

Differs from *haemoptera* Chen in being larger, in having 4 apparent bands of 3 colors on elytron instead of merely an apical black area, and in having prothorax shorter and less oblong.

# Luperini, Group 4

#### Genus Erganoides Jacoby

Erganoides Jac., Soc. Ent. Belg., Ann. 47: 125 (type: *E. flavicollis* Jac.; S. India).—Ogloblin, 1936, Fauna USSR 26, 1: 300, 431.

## KEY TO CHINESE SPECIES OF ERGANOIDES

1.	Elytral punctures minute, often indistinct
	Elytral punctures distinct, often quite deep and dense 3
2(1).	Dorsum almost entirely pale; pronotum flat above, with anterior margin sinuate; elytron nearly as broad as prothorax
	Dorsum partly pitchy, particularly along elytral border; pronotum somewhat convex, with anterior margin straight; elytron much narrower than prothorax
3 (1).	Prothorax about 2/3 as long as broad; dorsum entirely dark, metallic or sub- metallic
	Prothorax about 3/5 as long as broad; pronotum pale; elytron partly or entire- ly pale
4(3).	Abdomen pale; elytral punctures fairly dense; antennal segments 4–10 each about $4 \times$ as long as broad
	Abdomen largely blue with apical borders of segments reddish brown; elytral punctures sparse; antennal segments 4–10 each slightly more than 2× as long as broad
5(4).	Dorsum steely blue to purplish red: elytron with punctures about as large as

# 

Prothorax about 1/4 as long as elytron; middle antennal segments about  $2.5 \times$  as long as broad; elytral punctures about 1/3 as wide as interspaces...314. occipitalis

#### 312. Erganoides capito (Weise)

Luperus (Calomicrus) capito Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 610 (Sze-tschuan, Kan-ssu; ZMB).—Jacoby, 1890, Entomologist 23: 165 (Chang-yang).

Luperus capito ab. mundulus Weise, 1889, Soc. Ent. Ross., Horae 23: 610 (Sze-tschuan; ZMB).

*Erganoides capito*, Laboissière, 1940, Mus. R. Hist. Nat. Belg., Bull. **16** (37) : 3.—Ogloblin, 1936, Fauna USSR **26**, 1 : 301, 302, 431 (Szechuan).

DISTRIBUTION: NW China (Szechuan, Kansu, Hupeh, Shensi).

SHENSI: 1, somewhat doubtfully this species, Chin-ling Mts., IV-V. 1904, Blackwelder (USNM).

313. Erganoides discalis Gressitt and Kimoto, n. sp. Fig. 162, a.

*Male*: Pale yellowish testaceous to pitchy brown; head pale anteriorly as far as postantennal swellings and dark pitchy brown posteriorly; antenna testaceous, slightly duller on median segments; pronotum yellowish testaceous; scutellum pitchy brown; elytron pale testaceous with borders broadly pitchy reddish brown; ventral surfaces pale pitchy brown on metathorax and abdomen; legs pale testaceous with terminal segments of tarsi slightly reddish brown. Body largely glabrous above with a few short erect hairs on posterior portion of elytron and on head; antenna moderately clothed with short adpressed pale hairs and a few oblique hairs; ventral surfaces and legs moderately clothed with oblique pale hairs.

Head distinctly narrower than prothorax; occiput evenly convex and smooth, nearly impunctate; postantennal swellings distinct, fairly broad and slightly sinuate behind; interantennal area about  $3 \times$  as wide as antennal insertion, rather strongly and evenly raised and continuous with transversely obtuse swelling of frontal area; gena about 1/6 as deep as eye; eye subevenly oval. Antenna not quite 2/3 as long as body, somewhat thickened distally; segment 1 short, moderately thickened apically; 2 nearly  $2 \times$  as long as broad; 3 slightly longer, nearly as long as 1 but slightly oblique apically; 4 about as long as 3; 5 slightly longer than 4 and slightly stouter; 6-10 subequal in length and slightly stouter than 5; 11 longest. Prothorax 5/8 as long as broad; weakly concave anteriorly; convex on posterior margin but nearly straight in central portion; subevenly convex laterally and widest just anterior to middle; anterior angle swollen and rounded; basal angle obtuse; disc subevenly convex, finely and indistinctly punctured. Scutellum slightly broader than long, rounded apically and smooth. Elytron slightly more than  $3 \times$  as long as broad, subparallel in basal 1/2 and gradually narrowed and obliquely rounded apically, with sutural angle slightly rounded; lateral margin narrowly expanded and bearing erect hairs; epipleuron sinuate in basal 1/4, rather suddenly narrowed to about middle and then gradually narrowed and disappearing on apex; disc rather evenly convex, smooth and shiny with punctures minute and indistinct. Ventral surfaces moderately shiny, finely punctured on side of metathorax and more distinctly punctured on side of abdomen; pygidium rounded apically; last abdominal sternite with terminal lobe much broader than long, oblique laterally and bilobed apically. Legs fairly short and stout; hind tibia nearly straight; hind tarsal segment 1 barely as long as 2+3 and about as long as last; aedeagus strongly and evenly tapering and acute at apex. Length 3.2 mm; breadth 1.6.

*Paratypes*: Elytron with margins paler brown. Length 3.0–3.2 mm; breadth 1.3–1.5. DISTRIBUTION: W. China (Sikang).

Holotype & (U. S. NAT. MUS.), nr. Mu-ping, 2000 m, Sikang Prov., 22–24. VII. 1929, D. C. Graham; 3 paratopotypes (US, BISHOP), 1–22. VII. 1929, Graham; 1 paratype (US), betw. Ning-yuen-fu & Den-shiang-uin, 2000–2500 m, 6–8. VIII. 1929, Graham.

Differs from *flavicollis* Jac. in having pronotum smoother and elytron nearly impunctate instead of subclosely and distinctly punctured. Differs from *capito* (Ws.) in having pro-thorax convex and straight on anterior border, and elytron narrower.

## 314. Erganoides occipitalis Laboissière

Erganoides occipitalis Lab., 1940, Mus. R. Hist. Nat. Belg., Bull. 16 (37): 2 (Hupeh: Chang-



Fig. 162.  $\Im$  genitalia. a, Erganoides discalis n. sp.; b, E. punctulatus (Weise); c, E. suturalis n. sp.

yang; ?BRUXELLES). DISTRIBUTION: C. China (Hupeh, Chekiang). CHEKIANG: 2, Tung-lu, 23. IV. 1926, Wright (CAS).

315. Erganoides punctulatus (Weise), NEW COMBINATION Figs. 162, b & 164, c.

- Luperus (Calomicrus) punctulatus Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 614 (Szetschuan; ZMB).
- *Erganoides Hedini* Laboissière, 1935, Ark. Zool. 27 A (6): 5 (S. Kansu; ?Stockholm).— Ogloblin, 1936, Fauna USSR 26, 1: 301, 431. New Synonymy.

DISTRIBUTION: W. China (Szechwan, Kansu, Sikang, Hupeh).

SZECHUAN: Several, Sui-fu, X. 1924; Tseo-jia-gee, S of Sui-fu, VII. 1929, Graham; Wa Shan, VII. 1925; S of Song-pan, VIII. 1924; O-er, nr. Wei-chow, VIII. 1933; Be-luhdin, VIII. 1933; Mt. Omei, VIII. 1921, Graham (USNM); Mo-tau-chi, 26. IX. 1948, Djou (CAS). SIKANG: Ya-chow, VI, Den-shiang-lin Pass to Ya-chow, VIII. 1928, Graham (USNM). HUPEH: Many, Sui-sa-pa, Lichuan, 25. VII-13. IX. 1948, Gressitt & Djou; Liang-ho-keu, Lichuan, IX. 1948, Djou; Hsiao-ho, VIII. 1948, Gressitt (CAS, BISHOP).

# 316. Erganoides similis Chen

*Erganoides similis* Chen, 1942, Notes d'Ent. Chinose **9**: 46 (Sikang: Kanting; Ac. SIN). DISTRIBUTION: W. China (Sikang).

#### 317. Erganoides suturalis Gressitt and Kimoto, n. sp. Figs. 162, c & 164, a.

Male: Yellowish testaceous to orange and dark pitchy brown: head and pronotum orange ochraceous, more reddish to slightly pitchy on mouthparts; antenna brown, slightly pitchy, pale ochraceous on segments 1–3; scutellum brown, slightly pitchy; elytron with disc pale yellowish testaceous, and all of margins pitchy brown, more broadly margined at apex and posterior portion of external margin; ventral surfaces pitchy brown on metasternum, metepisternum and abdomen, slightly paler at apex of latter; legs ochraceous, pitchy brown on swollen portions of mid and hind femora and moderately brownish on hind tibia and tarsus. Dorsum nearly glabrous, with sparse erect hairs on posterior portion of elytron and anterior portion of head; antenna with adpressed hairs and some oblique pale hairs; ventral surfaces and legs moderately clothed with oblique pale hairs.

Head distinctly narrower than prothorax; occiput evenly convex and minutely and sparsely punctured; postantennal swellings quite convex, distinctly bordered behind and separated by a median groove; interantennal area distinctly wider than an antennal insertion, moderately convex and continuous with subtransverse raised portion of frons; gena 1/3 as deep as eye; eye broadly oval, not very strongly swollen. Antenna 4/5 as long as body, moderately stout; segment 1 moderately arched and distinctly thickened distally; 2 about  $2 \times$  as long as broad; 3 barely longer than 2; 4 nearly as long as 1; 4–10 hardly decreasing in length but increasing in distal thickness; 11 distinctly longer than 10. Prothorax nearly 3/4 as long as broad; anterior margin straight; basal margin moderately convex, widest well anterior to middle and narrowed anteriorly, nearly straight and oblique in posterior portion; anterior angle slightly protruding; basal angle oblique and with a slight tubercle;

disc strongly convex, fairly smooth and very weakly punctured. Scutellum subequilaterally triangular, slightly convex and smooth. Elytron nearly  $3 \times$  as long as broad, subparallelsided in basal 2/3 and narrowed and obliquely rounded apically with sutural angle slightly rounded; lateral margin narrowly expanded; epipleuron broad in basal 1/3 then strongly narrowed, then more gradually narrowed and continuing to extreme apex; disc subevenly convex, with punctures partly smaller than interspaces, largely irregular but partly arranged in subregular rows on sutural 1/2 and approximately 20 across middle. Ventral surfaces rather finely punctured on thorax and more heavily punctured on side of abdomen; pygidium broadly rounded apically; last abdominal sternite slightly convex on middle of apical margin. Legs fairly short; hind tibia nearly straight; hind tarsal segment 1 slightly longer than 2+3 and slightly longer than last. Length 2.6 mm; breadth 1.3.

*Female*: Pronotum and antenna slightly more reddish. Length 3.2 mm; breadth 1.3. *Paratypes*: Length 2.6–2.8 mm; breadth 1.3–1.4.

DISTRIBUTION: SW China (Yunnan).

Holotype & (BISHOP 3288), Kunming (Yunnan-fu), 1900 m, Yunnan Prov., 4. VII. 1940, Gressitt; 2 paratypes (BISHOP, CAS), Western hills, 2100 m, nr. Kunming, Yunnan, 5–6. VII. 1940, Gressitt; 1 paratype (ZMB), Yunnan-sen.

Differs from *flavicollis* Jac. in having prothorax longer and more broadened anterior to middle, elytron largely pale and a little less closely and more seriately punctured, and antenna a little stouter and shorter. Differs from *occipitalis* Lab. in having elytron relatively shorter, middle antennal segments longer and elytral punctures closer.

318. Erganoides tibialis Chen Fig. 163, a.

*Erganoides tibialis* Chen, 1942, Notes d'Ent. Chinoise 9: 46 (Kwangsi: Yangso; Ac. SIN.). DISTRIBUTION: S. China (Kwangsi, Fukien).

FUKIEN: 1, Chi-shih, Chungan, 24. IV. 1940, Maa (BISHOP); 5, Ting-chow, Hoyer (FREY).

319. Erganoides variabilis Gressitt and Kimoto, n. sp. Fig. 163, b.

Male: Yellowish testaceous to pitchy black; head reddish anteriorly and pitchy black behind antennal insertions and below eyes; antenna ochraceous; pronotum yellowish testaceous; scutellum dark pitchy brown; elytron dark pitchy reddish brown with a large testaceous spot occupying a little more than middle 1/3 and centered slightly behind middle and barely reaching suture but not quite reaching external margin; ventral surfaces of hind thorax and abdomen reddish brown to pitchy brown; legs ochraceous, more reddish brown on hind femur and most of hind tibia and hind tarsus. Dorsum with sparse suberect hairs, but more on lateral margin of elytron; antenna with fine adpressed pale pubescence and a few oblique hairs; ventral surfaces and legs moderately clothed with oblique pale hairs.

*Head* distinctly narrower than prothorax; occiput moderately convex, smooth and shiny; postantennal swellings transverse, moderately raised and distinctly bounded behind by a groove; interantennal area more than  $2 \times$  as wide as an antennal insertion, rather strongly raised and continuous with transversely obtuse raised area of frons; gena about



Fig. 163. & genitalia. a, *Erganoides tibialis* Chen; b, *E. variabilis* n. sp.; c, *E. fulvi-collis* Jacoby (cotype!; Nilgiri Hills).

1/6 as deep as eye; eye strongly swollen, nearly round. Antenna 2/3 as long as body, fairly stout; segment 1 short, strongly thickened; 2 slightly longer than broad; 3 more than  $2 \times$  as long as broad, 1/2 again as long as 2; 4 barely longer than 3 but stouter; 4-10 increasing slightly in length and diameter; 11 slightly longer than 1. Prothorax nearly 2/3 as long as broad; anterior margin nearly straight; basal margin moderately and subevenly convex; lateral margin subevenly convex, widest slightly anterior to middle; anterior angle weakly swollen and rounded; basal angle obtuse and slightly projecting; disc moderately and evenly convex, with punctures which are mostly about 1/3 as wide Scutellem about as long as broad, slightly convex at side and rounded as interspaces. apically. Elytron slightly more than  $3 \times$  as long as broad, moderately convex at side and somewhat narrowed behind middle, broadly rounded apically with sutural angle slightly rounded; lateral margin narrowly expanded; epipleuron weakly sinuate in basal 1/4, then somewhat strongly narrowed to middle and gradually narrowed and disappearing at beginning of apex; disc subevenly convex, slightly swollen behind base near suture; surface with punctures mostly about as large as interspaces or slightly smaller and partly arranged in longitudinal rows on sutural 1/2 and more or less irregular on outer 1/2, about 20 punctures across center. Ventral surfaces moderately shiny, finely punctured on side of metasternum and abdomen; pygidium rounded apically; last abdominal sternite with terminal lobe rather small, rounded apically and curved at side with margin curved inward at base and lobe about  $2 \times$  as broad as long. Legs moderately short, stout; hind tibia straight; hind tarsal segment 1 as long as 2+3 and slightly longer than last. Length 2.8 mm; breadth 1.5.

*Female*: Elytral pale spot much larger, occupying more than central 2/3 of disc and reaching external margin and suture; pygidium subacutely produced apically; last abdominal sternite narrowly and briefly emarginate at apex. Length 3.4 mm; breadth 1.65.

*Paratypes*: Color varying from entirely pale testaceous above to markings as in holotype but with band somewhat constricted at suture. Length 2.5-3.5 mm; breadth 1.2-1.7.

DISTRIBUTION: S. China (Szechuan, Anhwei, Kwangtung, ?Kweichow), Hainan I.

Holotype ♂ (BISHOP 3289), summit 2060 m, Omei Shan, Szechuan Prov., 11. VIII. 1940, Gressitt; allotopotype ♀ (BISHOP), below Shin-kai-sze, 1000–1400 m, Omei Shan, 17. VIII.; 2 ♂ paratopotypes (BISHOP, CAS), same data as holotype and allotype, respectively; 1 (MCZ), Tai-ping-shien, Anhwei Prov., X. 1932, G. Liu; 8 (CAS, BISHOP, USNM, BMNH, Ac. SIN.), Tin-tong, Lochang Distr., N. Kwangtung, 2–25. VIII. 1947, Tsang & Lam (2 from Hau-leng, 1 from Sui-kwan San); 2 (CAS) from Hainan I.: Dwa-bi (Tai-pin), 24. VII. 1935, Gressitt, Lia-mui (Ling-men), 2. VIII. 1935, Gressitt; 6 paratypes, Kiau-tschau (FREY). The Kwangtung specimens are entirely pale, but the Hainan specimens are banded.

Differs from *flavicollis* Jac. in having prothorax a little longer, less convex at side and more convex in outline of basal margin, and elytron a little less closely and more regularly punctured. Differs from *occipitalis* Lab. in having prothorax widest near base instead of near middle.



Fig. 164. a, Erganoides suturalis n. sp.; b, Euluperus diadematus (Ogloblin); c, Erganoides punctulatus (Weise).

## Genus Euluperus Weise

Euluperus Ws., 1886, Ins. Deutschl. 6 (4): 662 (type: E. xanthopus Duft.; S. Europe).—
Seidlitz, 1891, Fauna Transsylv., 793.—Reitter, 1912, Fauna Germ. 4: 141.—Laboissière, 1912, Ass. Nat. Levallois-Perret, Ann. 1912: 21; 1934, Soc. Ent. France, Ann. 103: 104.—Ogloblin, 1936, Fauna USSR 26, 1: 303, 375.

#### KEY TO CHINESE SPECIES OF EULUPERUS

4. Only base of abdomen dark; end of aedeagus evenly tapering; prothorax obtuse at side, widest anterior to middle; elytron blue-green; length 4.0-4.5 mm...323. diadematus Entire abdomen dark; end of aedeagus with sides concave; prothorax evenly rounded at side, widest in middle; elytron blue; length 4 mm (S. Sikang)...... sp.

320. Euluperus aeneofuscus (Weise), NEW COMBINATION Fig. 166, a.

Luperus (Calomicrus) aeneofuscus Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 612 (Kanssu, Sze-tschuan; ZMB).

DISTRIBUTION: W. China (Kansu, Szechwan, Sikang, Yunnan).

SIKANG: 1, Ning-yuen-fu to Den-shiung-uin, 6. VIII. 1928, Graham (USNM). YUN-NAN: 16, ?Kunming, 1. VIII. 1944, C. L. Liu 2001: 82, 147, 2164; 2, Yunnan-sen (ZMB).



Fig. 165. & genitalia. a, Euluperus aenescens (Weise); b-d, E. chinensis n. sp.

# 321. Euluperus aenescens (Weise), NEW COMBINATION Fig. 165, a.

Luperus (Calomicrus) aenescens Ws., 1889, Soc. Ent. Ross., Horae 23: 567, 613 (Sze-tschuan; ZMB).—Jacoby, 1890, Entomologist 23: 164 (Chang-yang; Hupeh).

There is a slight question regarding the identity of this material. (See note under

Calomicrus sp. no. 275).

DISTRIBUTION: W. China (Szechuan, Sikang, Hupeh).

SZECHUAN: 1, Wa Shan, 23. VII. 1925, Graham (US). SIKANG: Mu-ping, 7–9. VII. 1929, Graham; Ning-yuen-fu to Den-shiang-uin, VIII. 1928, Graham; Yao-gi, nr. Muping, VII. 1929, Graham (US); Ta-tsien-lu to Kiu-lung, Ta-tsien-lu to Yu-ling, Reitter (FREY). HUPEH: Sui-sa-pa, Lichuan, 25. VII-6. VIII. 1948, Gressitt & Djou; Wang-chiaying to Sui-sa-pa, 21. VII, Mo-tai-chi to Chi-au Shan, 28. VII, Gressitt & Djou (CAS, BISHOP).

## 322. Euluperus chinensis Gressitt and Kimoto, n. sp. Fig. 165, b-d.

*Female*: Metallic bluish green to reddish purple and testaceous; head greenish black, partly pitchy reddish anteriorly; antenna reddish brown tinged with metallic greenish basally; pronotum bluish green; scutellum metallic pitchy; elytron reddish purple with metallic greenish tinge; ventral surfaces greenish pitchy to metallic on thorax and yellowish testaceous on abdomen; legs purplish to metallic green. Dorsum largely glabrous; antenna moderately clothed with pale buff hairs; ventral surfaces thinly clothed with oblique pale golden hairs.

*Head* somewhat narrower than prothorax; occiput evenly convex, smooth and nearly impunctate; postantennal swellings distinct, obliquely transverse and bounded behind by a groove; interantennal area nearly  $3 \times$  as wide as an antennal insertion, rather strongly convex and continuous with obtuse raised area on frons; gena about 1/5 as deep as eye; eye rounded-oval. Antenna 2/3 as long as body, moderately stout; segment 1 somewhat elliptical, slightly arched; 2 about  $2\times$  as long as broad; 3 barely longer than 2; 4 is  $1.5\times$ as long as 3, about as long as 1; 4-10 subequal in length; 11 longest. Prothorax not quite 2/3 as long as broad; anterior margin weakly convex; basal margin moderately convex, more oblique at side; lateral margin moderately and subevenly convex; anterior angle swollen and slightly projecting; basal angle weakly obtuse; disc subevenly convex, irregularly punctured, the punctures mostly fine and mostly about 1/3 to 1/4 as large as interspaces. Scutellum broader than long, triangular and fairly flat. Elytron nearly  $3.5 \times$ as long as broad, moderately convex at side, obliquely rounded apically with sutural angle moderately rounded; lateral margin very narrowly expanded; epipleuron slightly sinuate and moderately broad in basal 1/3, suddenly narrowed for a short distance and then gradually narrowed to apex and terminating at sutural angle; disc subevenly convex, slightly depressed at end of basal 1/4; surface rather deeply and closely impressed with punctures which are mostly about as large as interspaces or slightly larger anterior to middle and numbering more than 25 across middle. Ventral surfaces feebly punctured on thorax and not distinctly punctured on abdomen; pygidium rounded-obtuse apically; last abdominal sternite subtransverse apically. Legs not very stout; hind tibia straight; hind tarsal segment 1 fairly slender, as long as 2+3 and slightly longer than last. Length 3.6 mm; breadth 1.8.

*Male*: Pygidium rounded apically; last abdominal sternite sinuate apically, convex in middle. Length 3.3 mm; breadth 1.65.

Paratypes: Length 3.0-4.0 mm; breadth 1.45-1.95.

DISTRIBUTION: SW China (Yunnan).

Holotype Q (BISHOP 3290), Kunming (Yunnan-fu), 1900 m, Yunnan, VIII. 1932, K. P. Lau; allotype J (ZOOL. MUS. BERLIN), Chao-chow-fu, 2300 m, W. Yunnan, 23. VIII-21. IX. 1914, R. Mell; 1 paratopotype, same data as holotype; 20 paratypes (ZMB, BISHOP, Ac. SIN., BMNH, USNM), same data as allotype.

Differs from *aenescens* Ws. in being blue instead of greenish and in having elytron less closely punctured, with about 12 instead of about 16 punctures across sutural 1/2 of disc just anterior to middle.



Fig. 166. & genitalia. a, Euleuperus aeneofuscus (Weise); b-c, E. diadematus (Ogloblin).

323. Euluperus diadematus (Ogloblin), NEW COMBINATION Figs. 164, b-c & 166, b.
 Luperus diadematus Ogloblin, 1936, Fauna USSR 26, 1: 268, 423 (Se-Tchouen: Da-tzian-lou; ?Moscow).

DISTRIBUTION: W. China (Sikang).

SIKANG: 18, Ta-tsien-lu to Kiu-lung, Reitter (FREY).

#### Genus Brachyphora Jacoby

Brachyphora Jac., 1890, Entomologist 23: 195 (type: B. nigrovittata Jac.; Hupeh).—Ogloblin, 1936, Fauna USSR 26, 1: 304.

# 324. Brachyphora nigrovittata Jacoby

Brachyphora nigrovittata Jac., 1890, Entomologist 23: 195, pl. 2, fig. 12 (Chang-yang; BM). —Ogloblin, 1936, Fauna USSR 26, 1: 305 (Szechuan, Kiangsu).

DISTRIBUTION: S. China (Hupeh, Szechuan, Sikang, Shensi, Kiangsu, Chekiang, Fukien, Kiangsi, Kwangtung).

HUPEH: 1, Sui-sa-pa, 6. VIII.; 1, Chi-au Shan to Wang-chia-ying, 20. VII; 1, Hsiaoho, 15. VIII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). SZECHUAN: 1, Chingcheng Shan, VII. 1932, G. Liu (MCZ). SIKANG: 1, nr. Mu-ping, 1. VII. 1929, Graham (USNM). SHENSI: 1, S. Shensi, V. 1904, Blackwelder (USNM). CHEKIANG: 1, Mokan Shan, 28. VIII. 1927, Wright (CAS); 1, Tien-mu Shan (FREY). FUKIEN: Many, Tachu-lan, Shaowu, V–VI, 1942–43, Maa; Liung chon Shan, 21. VII. 1936, Gressitt (CAS). KIANGSI: An-yuen, 23. V. 1948, Gressitt & Djou; Hong Shan, 20. VI. 1936, Gressitt. KWANGTUNG: 6, Tsha-jiu Shan, VII–IX. 1910, Mell (ZMB); 1, Sui-kwan San, Tin-tong, Lohchang, 16. VIII. 1947, Tsang (CAS).

#### Genus Monolepta Erichson

- Monolepta Er., 1843, Archiv Naturgesch. 9(1): 265 [type: Galeruca (Monolepta) pauperata Er.; Africa].—Chevrolat, 1845, IN d'Orbigny, Dict. Univ. Hist. Nat. 6: 5; 1846, op. cit. 8: 326.—Reiche, 1847, Voy. Ferret et Galinier Abyss. 3: 402.—Joannis, 1866, Abeille 3: 8, 156.—Weise, 1886, Ins. Deutschl. 6(4): 576.—Baly, 1888, Linn. Soc. Lond., Jour. 20: 163.—Reitter, 1912, Fauna Germ. 4: 136.—Maulik, 1936, Fauna India, Galeruc., 373 (part).—Ogloblin, 1936, Fauna USSR 26, 1: 313.
- Ochralea Clark, 1865, Ann. Mag. Nat. Hist. ser. 3, 15: 144 (type: O. nigricornis Clk.).— Chapuis, 1875, Gen. Col. 11: 235, 236.—Harold, 1880, Stett. Ent. Ztg. 41: 148.— Baly, 1887, Ent. Monthly Mag. 23: 269.
- Candezea Chapuis, 1879, Mus. Civ. Genova, Ann. 15: 24.—Jacoby, 1886, Mus. Civ. Genova, Ann. 24: 116.—Weise, 1904, Archiv Naturgesch. 70: 50.

# Key to Chinese species of Monolepta

1.	Elytron with a cavity on basal portion at or near suture, or near middle of
	Elytron smooth, without a cavity at or near suture
2(1).	Elytron with a large or deep cavity near suture
	Elytron of $3^{\circ}$ with a longitudinal cavity on outer part of disc: in $9^{\circ}$ suture depressed behind scutellum, then slightly raised at end of basal 1/4 and behind this a small shallow depression on suture; elytron with 3 black bands
a ( <b>a</b> )	and 2 pale bands; length 4.5–5.0 mm
3 (2).	Elytron with a large depression along suture occupying more than second 1/4; elytron pale with black basal area; length 5 mm; ♀ unknown (Ogloblin, 1936; W. Asia) impressipennis* ♂
	Elytron with a fairly small but deep and complex depression by suture at end of basal 1/3, with anterior margin of depression raised and with portion of suture projecting into depression like a tubercle; pronotum black; elytron reddish; length 4.0-4.8 mm
4 (1).	Elytron black, without any yellowish or reddish marking 5
	Elytron not entirely black
5 (4).	Head partly or entirely black 6
	Head entirely yellowish 7
6 (5).	Black; head, except vertex, prothorax, mesosternum, abdomen, and legs red- dish; antenna black with segments 1-2 or 1-3 reddish; legs reddish brown, with tarsi and apex of hind tibia infuscate; length 3.0-3.7 mm 361. semenovi
	Black; anterior part of frons and prothorax, reddish brown; length 3.0 mm

7 (5).	Meso- and metathorax and abdomen blackish or pitchy
8 (7).	<ul> <li>Larger; length 3.0-3.5 mm; black; head and prothorax reddish; apices of tibiae and tarsi, or entire legs pitchy</li></ul>
9 (4).	Pronotum largely black
10 (9).	Antennal segment 3 subequal to 2 or slightly longer than 2; pronotum 1.5× as wide as long and depression at each side nearly obsolete; length 3.6– 5.5 mm
	Antennal segment 3 almost $2 \times$ as long as 2; pronotum almost $1.5 \times$ as wide as long and depression at each side rather strong ( $\mathcal{J}$ with a pair of de- pressions near suture behind scutellum) length $4.1-5.0 \text{ mm}$ 328. <b>bicavipennis</b> $\mathcal{P}$
11 (9).	Elytron yellowish and/or reddish to testaceous brown, generally entire dorsum pale or reddish
	Elytron in part black or pitchy
12 (11).	Abdomen usually entirely reddish or yellowish, but in some cases partly black- ich or darker tibica largely blackich
	Abdomen entirely black, rarely reddish; legs entirely pale, except hind tarsal segment 1 black basally; length 4.0-4.8 mm
13 (12).	Smaller than 4.5 mm; head entirely or largely black; dorsal surface red 14
	Not with above combination of characters
14 (13).	Antennal segment 3 distinctly longer than 2, and 1/2 length of 4; pronotum and alytron red, distinctly punctured; length 3.2, 4.5 mm (identification not
	and crytron red, distinctly punctured, length 5.2-4.5 min (identification not
	Antennal segment 3 subequal to 2 and almost 1/2 length of 4: nunctures of
	pronotum and elytron finer than in capitata; usually pronotum yellow and
15 (12)	Width between ever distinctly wider then 1/2 of transverse width of boad
15 (13).	Width between eyes distinctly wider than $1/3$ of transverse width of nead 16 Eyes very large, width between eyes not quite $1/3$ of transverse width of head 16
	pronotum red, elytron reddish brown; pronotum and elytron closely punctur- ed : length 5.5-5.6 mm
16 (15).	Less entirely vellowish or reddish, except blackish at base of hind tarsal seg-
10 (10).	ment 1
	Tibiae and tarsi entirely blackish: length 3.6–5.5 mm
17 (16).	Apex of elytron rounded, in most cases apical segments of antenna more or
	Apex of elytron subtruncate; antenna entirely testaceous; length 4.4 mm
18 (17).	Pronotum finely punctured; at most only in part closely punctured 19
	Pronotum distinctly and closely punctured
19 (18).	Length less than 3.2 mm; body oval; pale to dull testaceous; pronotum vari- ably punctured

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	Length 3.5–4.0 mm; body more parallel-sided; bright orange testaceous; prono-
20(10)	tum nearly impunctate
20 (19).	ly and posteriorly 21
	I stars margin of proportium straight and narrowed to apey: length 27-31 mm
	238 hunchensis
21 (20)	Elytron unicolorous lacking brown natterns
21 (20).	Elytron with base margins and postmedian band (brown) antennal segment 4
	is 1.5 x as long as 3: length 2.5-30 mm
22(21)	Apical $2/3$ of elytral epipleuron parrow, quite parrow at midpoint of epipleu-
().	ron: abdomen vellowish: meso- and metathorax darker than abdomen:
	length 2.2–2.8 mm
	Apical 2/3 of elvtral epipleuron wider than in preceding species, at midpoint
	of entire length subequal in width to, or slightly narrower than, $1/2$ width
	of base of epipleuron; ventral surface entirely yellowish brown; length 2.6-
	3.2 mm
23 (18).	Smaller than 2.5 mm
	Larger than 3.0 mm
24 (23).	Puncturation of elytron entirely confused; length 2.25 mm 329. brittoni
	Puncturation of elytron arranged in irregular longitudinal rows; length 1.5 mm
25 (23).	Pronotum $1.5 \times$ as wide as long; reddish brown, except antennal segments 1-
	2 or 1-3 blackish; length 3.1-3.8 mm 327. arundinariae
	Pronotum $1.66 \times$ as wide as long; color variable: head and prothorax red
	to yellow; elytron entirely yellowish or reddish, but in some cases ground
	color yellowish and basal area reddish; meso- and metathorax reddish or
	yellowish, but in some cases (Szechuan) meso- and metathorax blackish;
26 (11)	Elutron of 2 colors: ground color block with a single note marking or with
20 (11).	one hand or stripe of vellowish or reddish; pronotum always vellowish or
	reddish
	Elytron with ground color nale or largely nale with black markings or black
	with 2 or more pale marks, or pitchy and pale
27 (26).	Abdomen entirely black
. ,	Abdomen largely yellowish
28 (27).	Vertex unicolorously yellowish or reddish
	Vertex largely yellowish brown with postoccipital area blackish; legs entirely
	yellowish brown; elytral marking elongate and covering almost 3/4 of length
	and 4/5 of width of disc; length 3.0-3.8 mm 332. discalis
29 (28).	Elytral yellowish marking broader than long, and always reaches to lateral
	margin but sometimes free from sutural margin, fore femur entirely yellow-
	ish brown 30
	Elytral yellowish marking longer than broad and always free from lateral and
	sutural margins; legs pitchy reddish brown with apices of femora yellowish
	brown; length 3.2–4.0 mm 369. yunnanica
30 (29).	Aedeagus gradually narrowed anteriorly and without subparallel part at apex;

	length 3.0–4.3 mm
	Aedeagus subparallel sided in apical 1/5; length 3.0-3.5 mm
31 (27).	Elytron with a transverse band from lateral margin to sutural margin
	Elytron black with an elongate yellowish marking covering almost 3/4 of length
	and 4/5 of width of disc and free from lateral and sutural margins; head,
	prothorax and abdomen (except visible segment 5 blackish), yellowish brown;
	meso- and metathorax black; length 3.2-3.6 mm
32 (31).	Smaller; length 3.5 mm
	Larger; length 4.8-5.0 mm
33 (26).	Elytron pale except part of margins (over 5 mm long), or with both basal
	and apical bands, and sometimes also a median band, or pitchy and pale;
	never with discal spots, stripes or curved markings
	Elytron pale with margins largely blackish, with or without discal marks, or
	pale with curved black markings, or pale with apical portion dark or black
	with 2 large pale spots; length less than 5 mm
34 (33).	Elytron entirely pale except for part of suture or margins blackish35
	Elytron with bands, or largely pitchy reddish with a large pale spot
35 (34).	Elytron brown with entire basal and sutural margin, basal 2/3 of lateral mar-
	gin and interior margin of epipleuron, in some cases entire margins black-
	ish; head, thorax and abdomen brown; length 5-7 mm
	Basal portion of elytron reddish, basal $1/2$ of elytral suture blackish, ground
	color of elytron yellowish; head, thorax and abdomen yellow; length 5.2-
	· 6.4 mm
36 (34).	Elytron with basal and apical bands of black and sometimes a median band 37
	Elytron reddish brown, becoming darker to pitchy at apex, with a large yel-
27 (20)	lowish oval mark, largely behind middle; length 6.8-7.0 mm
37 (36).	Basal and apical portions of elytron narrowly blackish; d' without any de-
	pression in lateral area of elytron
	at middle; length 4.2.6.4 mm
28 (27)	Electron with 4 hands of block rad and vallow: hand 1 block rather parrow:
50 (57).	have 2 red occupying almost based 1/2: 3 vellowish: 4 black covering
	anex: head thorax and abdomen almost entirely reddish or brownish: length
	5 4_60 mm 371 zonglis
	Elytron brown with base basel part of eninleuron and apex black ; head tho-
	rax and abdomen brown : length 6 8–77 mm
39 (36).	Elytron with basal, lateral and apical margins entirely, together with part of
	or entire sutural margin, black; or black with 2 large pale spots
	Elytron pale with discal marks, or with posterior portion blackish
40 (39).	Antennal segment 4 barely longer than $2+3$ ; elytral disc with spots or stripe41
	Antennal segment 4 nearly $3 \times$ as long as $2+3$ ; elytron brown with basal,

lateral, apical and sutural margins blackish; head, prothorax and abdomen reddish; meso- and metathorax blackish; length 3.7-4.1 mm......326. antennalis

	2.6–2.8 mm
42 (41).	Ground color of elytron yellowish brown; basal, lateral, apical and sutural
	margins of elytron black, together with humeri, small spots at base and other
	larger spots behind middle; vertex and metathorax blackish; anterior part
	of head, meso- and metathorax and abdomen yellowish; length 3.0-3.6 mm
	Ground color of elytron black, with 2 yellowish markings (before and behind
	middle), in typical specimens 2 markings free from basal, lateral, apical and
	sutural margins but in some specimens posterior markings wide and cover
	parts of sutural margin; head, thorax and abdomen reddish brown; length
	3.0–3.8 mm
43 (39).	Elytron with basal margin and basal $1/2$ of lateral and sutural margins, rather
	broadly blackish, and another transverse or oblique black marking situated
	before middle, connected with sutural black margin but free from lateral
	margin, or connected with sutural and lateral margins; metathorax always
44 (42)	Elytron with dark spots or postmedian band, or apical 1/3 blackish 46
44 (43).	Abdomen yellowish brown
	Metathorax and abdomen entirely black; basal $2/3$ of elytron black including
45 (44)	large yellowish marking; length 5 mm
45 (44).	Smaller: 2.8–3.0 mm; basal margin and basal 1/2 of lateral and sutural mar-
	gins, numerus and a triangular marking benind middle (connected with su-
	Larger: 35.40 mm; basal margin and basal 1/2 of lateral and sutural mar
	ging humerus and a transverse hand which is joined with lateral and su-
	tural marging black but in some cases transverse band not reaching lateral
	margin 336 h hieroglyphica
46 (43).	Posterior 1/3 of elvtron almost entirely blue or black
	Posterior 1/3 of elvtron largely vellowish or reddish
47 (46).	Basal 2/3 or 3/5 of elytron pale
	Basal 2/3 of elytron largely black, with a longitudinal yellow stripe on basal
	1/3; a small pale spot before apex; length 3.8-4.0 mm
48 (47).	Antennal segment 4 subequal in length to $2+3$
	Antennal segment 4 nearly $2 \times$ as long as $2+3$ ; distance between eyes rather
	wide, nearly as wide as $1/2$ width of transverse diameter of head; head
	entirely blackish brown; length 3.5 mm 348. monticola
49 (48).	Distance between eyes nearly as great as $1/2$ width of head; anterior part of
	head yellowish brown; vertex not distinctly punctured; length 2.6-3.2 mm
	Distance between eyes distinctly narrower than $1/2$ width of head; occiput
	distinctly punctured; anterior part of, or entire head, pitchy; length 2.3-3.0
	mm
50 (46).	Elytron bicolorous : yellowish or reddish and blackish
	Elytron tricolorous: basal 2/3 reddish brown, a narrow transverse band situ-
	ated at beginning of apical $1/3$ and a narrow longitudinal stripe along su-

ture in apical 1/3 black, apical 1/3 largely yellowish; length 3.0-3.4 mm ...

## 325. Monolepta aglaonemae Gressitt and Kimoto, n. sp. Fig. 167, a.

*Male*: Yellowish testaceous, in part slightly orange, mandible reddish at apex, hind tarsal segment 1 blackish at extreme base. Dorsum nearly glabrous; ventral surfaces, legs and antenna sparsely clothed with pale suberect hairs.

Head nearly as broad as prothorax; occiput distinctly convex, shiny and nearly impunctate; postantennal swellings distinctly convex, separated by a short median groove; interantennal area barely wider than an antennal insertion, moderately raised and continuous with raised portion of frons; gena very short; eye large, broadly oval. Antenna 4/5 as long as body, fairly slender; segment 1 fairly broad in relation to length, slightly arched; 2 nearly  $2 \times$  as long as broad; 3 as long as 2, more slender basally; 4 barely longer than 2+3 and nearly as long as 1; 5 slightly longer than 4; 5–7 subequal; 8–10 slightly shorter and decreasing in length; 11 barely longer than 10. Prothorax 3/4 as long as broad; anterior margin transverse; basal margin distinctly and evenly convex; lateral margin weakly convex, slightly sinuate, broadest anterior to middle; anterior angle rounded and projecting slightly forward; basal angle obtuse and weakly projecting; disc moderately convex, shallowly and obliquely depressed on each side of center; surface very weakly punctured, with only a few distinct punctures near side. Scutellum triangular, smooth and impunctate. Elytron just over 1/3 as broad as long, moderately convex at side, widest well behind middle, rounded externally and slightly rounded at sutural corner; lateral margin weakly expanded; epipleuron slightly broadened in basal 1/4, suddenly narrowed and disappearing just before apex; disc subevenly convex, slightly depressed just interior to humerus; surface feebly punctured, with irregular punctures mostly about 1/3 as wide as interspaces and much weaker posteriorly. Ventral surfaces shiny, quite weakly and sparsely punctured; pygidium broadly rounded apically; last abdominal sternite with median lobe rounded-trapeziform, narrowed apically and distinctly broader than long. Legs slender; hind tibia straight; hind tarsal segment 1 about 1/4 longer than remainder combined, and 2/5 as long as tibia, 2 distinctly longer than 3, last 1/3 as long as 1. Length 3.2 mm; breadth 1.6.

*Female*: Antenna 2/3 as long as body, dull reddish beyond segment 2; last abdominal sternite broadly rounded and smooth. Length 2.7 mm; breadth 1.55.



Fig. 167.  $\Im$  genitalia. a, Monolepta aglaonemae n. sp.; b, M. arundinariae n. sp.; c, M. hieroglyphica hieroglyphica (Motschulsky); d, M. h. biarcuata Weise.

*Paratypes*: Very pale testaceous to pale reddish ochraceous. Length 2.6–2.8 mm; breadth 1.5–1.6.

DISTRIBUTION: Hainan I., Kwangtung.

Holotype  $\mathcal{F}$  (CAS), No-doa, 275 m, Hainan I., 28. VI. 1935, Gressitt; allotype  $\mathcal{F}$  (CAS), Ta-hau, 25 m, Hainan, 3. VII. 1935, Gressitt; 5 paratypes (CAS, BISHOP, USNM, BMNH), same data as allotype, but 3–6. VIII; 3 paratypes, Lia-mui (Ling-men), 350 m, Hainan, 2. VIII. 1935, Gressitt; 1 paratype (ZMB), Hainan, 10–25. III. 1909, Schoede; 1 specimen (USNM), on *Aglaonema* from China, 24. III. 1939, Scall. [?] no. 7807.

HOST: Aglaonema sp.

Differs from *longitarsoides* Chûjô in being smaller, more ovate, with pronotum more finely punctured and elytron unspotted.

# 326. Monolepta antennalis Gressitt and Kimoto, n. sp.

Male: Testaceous to reddish and pitchy black: head reddish ochraceous, paler anteriorly except for partly pitchy mandible and palpi; antenna pitchy black, largely reddish ochraceous on segments 1-3; pronotum reddish ochraceous; scutellum pitchy reddish; elytron pale to reddish ochraceous, with all of borders pitchy brown to pitchy black, slightly or broadly so on apex and most of external margin; ventral surfaces yellowish ochraceous on prosternum and abdomen, dark pitchy brown to nearly black on hind thorax; legs testaceous with femora and tibiae largely reddish brown to pitchy; dorsum largely glabrous with a few hairs on head and apex of elytron; antenna somewhat densely clothed with oblique goldish hairs beyond segment 3; ventral surfaces quite sparsely clothed with suberect pale hairs; legs rather thinly clothed.

*Head* somewhat narrower than apex of prothorax; occiput evenly convex, sparsely but distinctly punctured, depressed anteriorly at center; postantennal swellings fairly large, convex and smooth; interantennal area barely as broad as an antennal insertion, raised medi-

ally continuous with frontal area which is somewhat punctured; gena very short; eye broadly ovate. Antenna nearly as long as body, quite stout particularly in central portion; segment 1 not very long, arched and slightly punctured; 2 quite strongly swollen, nearly as broad as long; 3 shorter and oblique apically, broader than long; 4 longer than 1-3combined, quite stout, oblique apically; 5 nearly as long as 4; 5-10 decreasing somewhat in length and diameter; 11 slender, slightly longer than 10. Prothorax 7/10 as long as broad; anterior margin straight; basal margin strongly and evenly convex; lateral margin weakly and evenly convex; anterior angle swollen and projecting slightly forward; basal angle obtuse and slightly projecting; disc weakly depressed on each side of central portion, rather deeply and distinctly punctured, most of punctures about 1/3 as large as interspaces but somewhat smaller and denser anteriorly. Scutellum subtriangular, quite smooth. *Elytron* slightly more than  $3 \times$  as long as broad, weakly and evenly convex at side, somewhat obliquely rounded apically and obtusely rounded at sutural angle; lateral margin distinctly expanded; epipleuron fairly broad in basal 1/3, strongly narrowed just anterior to middle and then gradually narrowed and disappearing on apex; disc evenly convex, with fairly large deep punctures which are largely irregular and number approximately 19 in a row across middle, most of punctures slightly larger than interspaces basally and slightly smaller posteriorly. Ventral surfaces shiny and smooth, feebly punctured; last abdominal sternite with apical lobe suboblong, broader than long, weakly emarginate apically and slightly depressed on surface preapically and slightly swollen at base. Legs not very stout, hind tibia weakly arched; hind tarsal segment 1 slender, about  $1.5 \times$  as long as remaining segments combined, 2 about as long as 3, last nearly 1/2 as long as 1. Length 4.1 mm; breadth 2.0.

Paratype: Length 3.7 mm; breadth 1.8.

DISTRIBUTION: SW China (Szechuan, Kweichow).

Holotype & (BISHOP 3291), Shin-kai-sze, 1500 m, Omei Shan, Szechuan Prov., 15. VIII. 1940, Gressitt; paratype & (CAS), Meitan, 900–950 m, E of Tseng-yih, Kweichow Prov., 19. VII. 1940, Gressitt.

Differs from *sexlineata* Chûjô in being larger, without discal stripe on elytron, and with prothorax shorter, more rounded basally, and elytron more heavily but less closely punctured.

#### 327. Monolepta arundinariae Gressitt and Kimoto, n. sp. Fig. 167, b.

*Male*: Orange ochraceous, in part somewhat paler, slightly reddish on side of head and on mandible; antenna ochraceous brown, paler on segments 1-2. Dorsum nearly glabrous; ventral surfaces, legs and antenna rather sparsely clothed with pale golden hairs.

Head narrower than prothorax at widest part but wider than apex of prothorax; occiput weakly convex, smooth and feebly punctured; postantennal swellings slightly convex, nearly impunctate, separated by a median groove; interantennal area barely wider than an antennal insertion, distinctly raised medially and continuous with raised triangular portion of frons which is feebly punctured; gena very short; eye large, broadly oval. Antenna 4/5 as long as body; segment 1 long and slender, slightly arched; 2 fully  $2\times$  as long as broad, thickest near middle; 3 barely longer than 2, gradually thickened from base and oblique apically; 4 slightly shorter than 1; 4–10 decreasing slightly in length; 11 barely longer than

1B

10. Prothorax 3/4 as long as broad; anterior margin weakly convex; basal margin moderately convex; lateral margin subevenly convex, widest a little anterior to middle; anterior angle swollen and rounded: basal angle obtuse and slightly projecting: disc strongly convex, with a weak oblique depression on each side of middle; surface with fairly distinct punctures, finer anteriorly and mostly about 1/3 to 1/2 as large as interspaces. Scutellum triangular, weakly convex and nearly impunctate. *Elytron* 6/17 as broad as long, evenly convex at side and widest just behind middle, broadly rounded apically with sutural angle also rounded: lateral margin distinctly but slightly expanded: epipleuron slightly widened in basal 1/4, strongly narrowed in second 1/4 and terminating before apex; disc subevenly convex, slightly swollen in basal 1/4 near suture; surface with fairly deep distinct punctures arranged in about 18 irregular rows on basal 1/2, the rows partly irregular posteriorly, punctures mostly about as large as interspaces. Ventral surfaces shiny, weakly punctured on metathorax and sparsely punctured on abdomen; last abdominal sternite with median apical lobe transversely oblong, slightly narrowed apically and transversely truncate, with lateral lobe subacute. Legs with femora somewhat compressed; hind tibia nearly straight; segment 1 of hind tarsus  $2 \times$  as long as following segments combined and fully 1/2 as long as tibia, 2 slightly longer than 3, last about 1/3 as long as 1. Length 3.5 mm; breadth 1.9.

*Female*: Antenna slightly darker; last abdominal sternite rounded obtuse apically and fairly smooth. Length 3.5 mm; breadth 1.7.

Paratypes: Length 3.1-3.8 mm; breadth 1.6-1.7.

DISTRIBUTION: S. China (Kiangsi, Hupeh, Szechuan, Kiangsu).

Holotype ♂ (CAS), Hong Shan, 1000 m, SE Kiangsi Prov., 15-29. VI. 1936, Gressitt; allotopotype ♀ (CAS), same data; 2 paratypes ♀♀ (BISHOP, CAS), Sui-sa pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 23. VII, 21. VIII. 1948, Gressitt & Djou, 1 on *Arundinaria*; 1 paratype ♂ (USNM), Tseo-jia-geo, S of Sui-fu, Szechuan Prov., 2-3. IX. 1929, Graham; 1 (inc.) Tung-ko Forest Sta., Kiangsu Prov., 11. VI. 1923, Van Dyke (CAS).

HOST: Arundinaria sp.

Differs from *pallidula* (Baly) in being smaller, less shiny, and with prothorax longer, less oblong and in part more sparsely punctured, and elytron more heavily punctured.

# 328. Monolepta bicavipennis Chen

Monolepta bicavipennis Chen, 1942, Notes d'Ent. Chinoise 9: 55 (Shensi: Wei-tze-ping; Ho-ANGHO-PAIHO).

DISTRIBUTION: W. China (Shensi, Hupeh).

HUPEH: Many, Sui-sa-pa, 1000 m, Lichuan, partly on *Metasequoia*, *Gingko*, *Pyracantha*, *Pterocarya*, *Juglans*, *Castanea*, *Liquidambar* and *Salix*, 25. VII–26. VIII. 1948; Hsiao-ho, Lichuan, VIII. 1948; Leung-ho-keu, Lichuan, IX. 1948, Gressitt & Djou (CAS, BISHOP); Mo-tai-chi, near Szechuan border, 19. VII. 1948, Gressitt & Djou.

HOSTS: Metasequoia glyptostroboides Hu & Cheng, Gingko biloba L., Pyracantha crenulata M. Roem, Pterocarya stenoptera C.DC., Juglans sp., Castanea sp., Liquidambar formosana Hance, Salix sp. Castanea appears to be the preferred host.

#### 329. Monolepta brittoni Gressitt & Kimoto, n. sp.

*Male*: Reddish ochraceous, somewhat paler on fore leg, basal portion of antenna and frontal area of head, dark reddish on much of ventral surfaces and on mandible. Dorsum with a very few minute suberect pale pairs; ventral surfaces, legs and antenna quite sparsely clothed with short oblique goldish hairs.

*Head* slightly narrower than prothorax at apex; occiput evenly convex, sparsely punctured; postantennal swellings moderately raised, nearly impunctate, separated by a short median groove; interantennal area barely wider than an antennal insertion, moderately convex and continuous with raised central portion of frons; gena extremely short; eye broadly oval. Antenna 3/4 as long as body; segment 1 fairly slender, slightly arched; 2 not quite  $2 \times$  as long as broad, elliptical; 3 barely as long as 2, slender and thickened apically; 4 shorter than 1, subequal to 5; 5-10 hardly decreasing in length; 11 slightly longer than 10. Prothorax 3/5 as long as broad; anterior margin nearly straight; basal margin moderately and subevenly convex; lateral margin weakly and subevenly convex; anterior angle swollen and rounded; basal angle obtuse; disc subevenly convex, barely depressed on each side of center; surface with rather sparse weak punctures, a little denser towards side than at middle. Scutellum triangular, smooth and impunctate. Elytron 4/11as broad as long, weakly and subevenly convex at side and widest near middle, broadly rounded apically and rounded obtuse at sutural corner; lateral margin narrowly but distinctly expanded; epipleuron slightly broadened in basal 1/4 and then strongly narrowed. continuing narrowly along side and disappearing before apex; disc somewhat evenly convex but very slightly depressed behind postbasal weak swelling; surface with fairly deep distinct punctures in about 17 subregular rows on basal portion and becoming partly irregular posteriorly. Ventral surfaces shiny, nearly impunctate on metathorax and sparsely punctured on abdomen; pygidium broadly rounded; last abdominal sternite with median apical lobe subtrapeziform, slightly narrowed apically, somewhat broader than long and rounded-truncate apically, with lateral lobe subacute. Legs slender; hind tibia slightly arched; hind tarsal segment 1 fine, nearly  $2 \times$  as long as remainder combined, 2 about as long as 3 and last about 1/3 as long as 1. Length 2.25 mm; breadth 1.15.

Paratypes: Slightly duller reddish. Length 2.15-2.2 mm; breadth 1.15-1.2.

DISTRIBUTION: Hainan I.

Holotype & (CAS), Ta-han, 750 m, nr. Red Mist Mt., Hainan I., 21. VI. 1935, Gressitt; 2 paratypes (CAS, BISHOP): 1 topotype, 24. VI.; 1, Lia-mui (Leng-moon, Ling-men), 350 m, Hainan, 2. VIII. 1935, Gressitt. Named for E. B. Britton as a token of gratitude for extensive cooperation.

Differs from *minutissima* Chen in being larger, with elytral puncturation entirely confused, dorsum without bronzy tinge, and antenna paler.

#### 330. Monolepta capitata Chen

Monolepta capitata Chen, 1942, Notes d'Ent. Chinoise 9: 58 (Szechuan: Omeishan; U. NAN-KING).

We are not certain of the identification of the following material.

DISTRIBUTION: W. China (Szechuan, W. Hupeh).

HUPEH: 4, Sui-sa-pa, 1000–1250 m, Lichuan, partly from *Rubus*, 31. VII–24. VIII. 1948, Gressitt & Djou (CAS, BISHOP).

HOST: Rubus sp.

#### 331. Monolepta cavipennis Baly

Monolepta cavipennis Baly, 1878, Cist. Ent. 2: 459 (Assam; BM).—Maulik, 1936, Fauna India, Galeruc., 405 (Cochin-China, Hong Kong).

Candezea trifasciata Jacoby, 1900, Soc. Ent. Belg., Mem. 7: 139 (Siam; BM).

Monolepta siamensis Weise, 1915, Deutsche Zentr.-Afr. Exp., Ergebnis 2, Zool. 1: 177 (new name for trifasciata Jac.)

DISTRIBUTION: India, Thailand, S. China (Kwangtung), Hainan I., Vietnam.

KWANGTUNG: 2, Tung-chung, Lan-tau I., nr. Hong Kong, 18–19. VIII. 1934, Djou; 1, Lan-tau I., 7–9. VIII. 1934, Hoffmann (LINGNAN); 1, New Territories, Hong Kong, VII. 1962, on bamboo, Gressitt (BISHOP). HAINAN: 1, Faan-na, nr. No-doa, 14. VII. 1932, To; 1, No-doa, 4. VI. 1932, To; 1, Nam-liu-tin, 29. VII. 1932, To (LINGNAN); 2, Cheung-kon, 18. VII. 1935, Gressitt (CAS). VIETNAM: 6, Hoa-binh, Tonkin, de Cooman (FREY); 1, Hue, 16. III. 1927, Wright (CAS).

## 332. Monolepta discalis Gressitt and Kimoto, n. sp. Fig. 168, a.

Male: Largely ochraceous, partly paler and partly pitchy brown: head ochraceous, pitchy brown behind eyes and on most of labrum, clypeus and mandibles; antenna ochraceous brown; prothorax testaceous; scutellum pitchy brown; elytron testaceous with all borders pitchy brown, a little more broadly so on apical margin; ventral surfaces testaceous on prosternum and reddish brown to pitchy on hind thorax and abdomen; legs pale ochraceous, somewhat more reddish on tarsi. Body very sparsely clothed above with suberect pale hairs; ventral surfaces moderately clothed with suberect golden buff hairs, denser on abdomen than thorax; legs rather finely clothed with oblique golden buff hairs; antenna moderately clothed with subadpressed goldish hairs and a few longer ones, largely glabrous on segments 1–3.

Head slightly narrower than prothorax at apex; occiput smooth, very finely punctured; postantennal swellings moderately broad, fairly even and not distinctly punctured, separated by a median groove; interantennal space about as wide as an antennal insertion, moderately raised medially and raised strip continuous with subtriangular raised frontoclypeus; labrum subtruncate apically; gena hardly 1/10 as deep as eye; eye broadly oval. *Antenna* not quite as long as body, fairly slender; segment 1 moderately arched and fairly smooth and shiny; 2 about 1/2 again as long as broad; 3 a little longer than broad, oblique apically; 4 slightly longer than 1, slightly oblique apically; 5 slightly shorter than 4; 5-10 decreasing slightly in length and diameter; 11 about as long as 4. *Prothorax*  $1.6 \times$ as broad as long; anterior margin straight; basal margin convex, fairly straight on central portion and oblique at side; lateral margin feebly and subevenly convex; anterior angle rounded; basal angle obtuse and slightly protruding, disc evenly convex, smooth, with punctures quite fine and sparse. *Scutellum* triangular, smooth, flat, impunctate. *Elytron*  $3 \times$  as long as broad, subevenly convex at side, distinctly widened behind middle, broadly rounded apically, with sutural angle obtusely rounded; lateral margin very narrowly expanded; epipleuron wide basally, strongly narrowed anterior to middle, disappearing just before apex; disc evenly convex, smooth, with numerous fine irregular punctures mostly about 1/2 as large as interspaces, or smaller. *Ventral surfaces* distinctly, but somewhat finely and not very closely punctured; last abdominal sternite with a rounded-trapeziform median apical lobe which is slightly emarginate at middle of apex, and separated from subtriangular lateral lobes by deep narrow clefts. *Legs* fairly long, slender and straight; hind tarsus as long as tibia, segment 1 very slender, longer than remainder combined, 2 slightly longer than 3, last 1/2 as long as 1. Length 3.0 mm; breadth 1.5.



Fig. 168. a, Monolepta discalis n. sp.; b, M. leechi Jacoby; c, M. lunata n. sp.

*Female*: Pitchy borders of elytron broader, with lateral and sutural borders about 1/3 as wide as pale discal area, and basal and apical borders wider; antenna 3/4 as long as body. Length 3.7 mm; breadth 2.0.

Paratypes: Length 3.1–3.8 mm; breadth 1.7–2.0.

DISTRIBUTION: SW China (Yunnan, Kweichow).

Holotype & (BISHOP 3292), Kunming (Yunnan-fu), 1900 m, Yunnan Prov., 5. VII. 1940, Gressitt; allotype & (ZMB), Yunnan-sen; 6 paratypes (ZMB), Yunnan-sen; 1 paratype & (CAS), Kweiyang, 1000 m, Kweichow Prov., 11. VII. 1940, Gressitt.

Differs from *yaosanica* Chen in having pronotum and elytron more finely punctured and elytral disc largely pale instead of pitchy.

333. Monolepta eoa Ogloblin

Monolepta eoa Ogloblin, 1936, Fauna USSR 26, 1: 319, 435 (Ussuri; ?Moscow).

DISTRIBUTION: SE Siberia.

## 334. Monolepta epistomalis Laboissière

Monolepta epistomalis Lab., 1935, Ark. Zool. 27 A (6): 9 (S. Kansu; STOCKHOLM).—Ogloblin, 1936, Fauna USSR 26, 1: 318.

DISTRIBUTION: NW China (S. Kansu).

#### 335. Monolepta flavovittata Chen

Monolepta flavovittata Chen, 1942, Notes d'Ent. Chinoise 9: 61 (Hopeh: Yati; HOANGHO-PAIHO).

DISTRIBUTION: China (Hopei, Hupeh).

HUPEH: 6, Hsiao-ho, 900 m, Lichuan, 12. VIII. 1948, Gressitt, on a species of Sapindaceae (CAS, BISHOP).

336. Monolepta hieroglyphica hieroglyphica (Motschulsky) Fig. 167, c.

Luperodes hieroglyphica Mots., 1858, Etudes Ent. 7: 104 (E. Indies; ?type lost).

Monolepta elegantula Boheman, 1859, Eugenies Resa, 183 (Malacca).—Jacoby, 1889, Mus. Civ. Genova, Ann. 27: 226.

Luperodes quadriguttata, Fairmaire (nec Motschulsky), 1887, Revue d'Ent. 6: 333 (Pekin). Monolepta hieroglyphica ab. simplex Weise, 1913, Philipp. Jour. Sci. 8 D (3): 229 (Luzon; type probably destroyed).

Monolepta hieroglyphica, Weise, 1922, Tijdschr. Ent. 65: 104 (Sumatra: Deli).—Maulik, 1936, Fauna India, Galeruc., 412, fig. 110.—Ogloblin, 1936, Fauna USSR 26, 1: 318, 434.

Luperodes quadriguttatus, Yuasa, 1936 (nec Mots.), First Sci. Exp. Manchoukuo, Rep. 5, 1, 10 (51); 19, pl. 2, fig. 6 (Jehol).

DISTRIBUTION: SE Asia; China (Kirin, Liaoning, Suiyuan, Hopei, Shansi, Hupeh, Fukien, Chekiang).

KIRIN: 1, Charbin (Harbin), 2. VII. 1950 (FREY); 1, Wei-sohn, 30. VIII. 1923, Van Dyke (CAS). LIAONING: 2, Mukden, 19. VII. 1927, Loukashkin (CAS). SUIYUAN: 6, Ordos (FREY). SHANSI: 1, Shoh-chow (FREY). HUPEH: Many, Sui-sa-pa, 1000 m, Lichuan, 27. VII-26. VIII, Hsiao-ho, 15. VIII. 1948, Gressitt & Djou, partly from *Metasequoia & Hydrangea*; Liang-ho-keu, Lichuan, 5–10. IX. 1948, Djou (CAS, BISHOP); Mo-tai-chi, Szechuan-Hupeh border, 19. VII. 1948, Gressitt & Djou. SZECHUAN: 1, Uin-gin-shien, 2000 m, 14. VII. 1928, Graham (US); 1, betw. Ya-chow & Sui-fu, 800 m, 18. VI. 1929, Graham (US). KIANGSI: 2, Hong Shan, 1000 m, 23. VI. 1936, Gressitt; Shang-jao, IV. 1939, Maa. KWANGTUNG: 2, New Territories, Hong Kong, on *Alternathera*, VII. 1962, Gressitt. FU-KIEN: Many, Ta-chu-lan, 1000 m, Shaowu Distr., IV–V. 1942–43, Maa (CAS); Shui-pei-kai, Shaowu, VII; Shaowu City, X. 1941, Maa; Bohea Hills, Chungan, IV. 1940; Sien-feng-ling, Chungan, IV. 1941, Maa; Kwang-keng, Kienyang, Maa; Pu-cheng City, VIII. 1940, Maa; Kua-tun, Chungan, VI. 1943, Maa; Upper Kua-tun, 1400 m, IV, Maa; Fung-lo, Kienau, Chang-fu, V. 1941, Maa; Tsi-li-chiao, Chungan, X. 1941, Maa (CAS); 6, Ting-chow, Hoyer (FREY). CHEKIANG: 1, Lau-chi, 20. VI. 1926, Wright (CAS). One, Tso-yün, 30. VII. 1936 (FREY).

HOSTS: ?Metasequoia, ?Hydrangea, ?Alternanthera.

337. Monolepta hieroglyphica biarcuata Weise, NEW STATUS Fig. 167, d.

Monolepta biarcuata W., 1889, Soc. Ent. Ross., Horae 23: 569, 632 (C. Mongolia; ZMB). Monolepta hieroglyphica ab. biarcuata Ws., 1922, Tijdschr. Ent. 65: 104 (Sumatra: Deli). Monolepta hieroglyphica biarcuata, Ogloblin, 1936, Fauna USSR 26, 1: 315, 318, 434, fig.

131.—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. **31** (211): 167 (Korea); **31** (219):

462.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 166 (Kyushu).

Ogloblin (p. 318) referred to "quadripunctata Fairmaire" as a synonym of biarcuata.

This seems to be both a lapse in the use of *quadriguttata*, named by Motschulsky, and a misidentification, but possibly the two are the same. We are not sure that the Sumatra population is the same as that from China.

DISTRIBUTION: Mongolia, China (Hopei, Hupeh, Szechuan, Sikang), Sumatra.

HOPEI: 1, Tsili (FREY). HUPEH: Many, Sui-sa-pa, 1000 m, Lichuan, 24. VII–26. VIII. 1948, Gressitt & Djou, some on *Salix, Pyracantha, Viburnum* and *Rubus*; Liang-ho-keu, Lichuan, 7. IX. 1948; Hsiao-ho, Lichuan, 9–13. VIII. 1948, Gressitt & Djou (CAS, BISHOP). SZECHUAN: 1, Wa Shan, 20. VII. 1925, Graham (US); Shin-kai-sze, 1600 m, Omei Shan, 9. VIII. 1940, Gressitt; 3, Lung-chü-pa and Mo-tai-chi, Szechuan-Hupeh border, 19. VIII. 1948, Gressitt & Djou (CAS). SIKANG: 1, Ya-chow, 1200 m, IX. 1928, Graham (US).

HOSTS: Salix sp., Viburnum sp., Rubus sp., Pyracantha crenulata M. Roem.

## 338. Monolepta hupehensis Gressitt and Kimoto, n. sp. Fig. 169, a.

*Male*: Pale testaceous, somewhat duller on head and slightly brown on clypeus, labrum and mandible; slightly dark behind eye and at extreme base of hind tarsal segment 1. Body with a very few short suberect hairs above and somewhat sparsely clothed beneath, on legs and on antenna with sparse pale golden buff hairs.

Head nearly as broad as prothorax; occiput evenly convex, smooth and almost impunctate; postantennal swellings distinctly convex, shiny and separated by a short groove; interantennal area barely wider than an antennal insertion, distinctly raised medially and connected with triangular raised frontal area which is finely punctured; gena extremely short; eye fairly large, ovate and coarsely facetted. Antenna 2/3 as long as body, moderately slender; segment 1 slender but distinctly arched and moderately swollen apically; 2 nearly 2× as long as broad; 3 about 3× as long as broad; 4 not quite as long as 2+3; 5 barely longer than 4; 5-10 decreasing very slightly in length; 11 barely longer than 10. Prothorax 5/7 as long as broad; anterior margin nearly straight; basal margin weakly convex; lateral margin weakly convex and slightly widening anteriorly; anterior angle swollen and rounded; basal angle slightly projecting; disc moderately convex, with a shallow transverse depression just behind middle; surface weakly and irregularly punctured anteriorly and in part distinctly and in part feebly punctured on basal 1/2. Scutellum subtriangular, smooth and impunctate. Elytron 3/8 as broad as long, moderately convex at side and widest well behind middle, broadly rounded apically with sutural angle rounded: epipleuron broadened from base to end of basal 1/4 then suddenly narrowed and tapering and disappearing at beginning of apex; disc subevenly convex, with a slight depression at end of basal 1/4; surface with numerous fine punctures, partly arranged in subregular rows basally, nearly 20 in and approximate row just anterior to middle, and most of punctures nearly as large as interspaces, but slightly finer posteriorly. Ventral surfaces shiny, weakly punctured; pygidium rounded-truncate apically; last abdominal sternite with median lobe suboblong, distinctly wider and long and subtruncate apically, lateral lobe rounded-obtuse apically. Legs fairly slender; hind tarsal segment 1 about  $1.3 \times$  as long as remainder combined, 2 barely longer than 3 and last 2/5 as long as 1. Length 3.1 mm; breadth 1.5.

*Female*: Last abdominal sternite rounded-truncate apically. Length 2.7 mm; breadth 1.25.



Fig. 169. 3 genitalia. a, Monolepta hupehensis n. sp.; b, M. lauta n. sp.; c, M. leechi Jacoby; d, M. liui n. sp.

*Paratypes*: Color varying from pale testaceous to dull reddish testaceous. Length 2.7–3.1 mm; breadth 1.2–1.3.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♂ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 23. VIII. 1948, Gressitt & Y. W. Djou; allotopotype ♀ (CAS), 21. VIII; 1 paratopotype, 25. VII; 3 paratypes (BISHOP, CAS, LINGNAN), Liang-hou-keu, Lichuan Distr., Hupeh, 6–7. IX. 1948, Gressitt & Djou.

Differs from *minutissima* Chen in being smaller, in having pronotum finely and sparsely punctured, and in being paler in color.

# 339. Monolepta kwangtunga Gressitt and Kimoto, n. sp.

Male: Pale yellowish testaceous to slightly reddish ochraceous; antenna reddish brown but testaceous on segments 1-2; tibiae pitchy brown to nearly blackish; tarsi reddish brown basally; elytron with suture narrowly pitchy from slightly behind scutellum to just behind middle, basal margin, humerus, and basal portion of lateral margin pale reddish. Body nearly glabrous above, a few pale hairs on head; ventral surfaces rather thinly clothed with golden buff hairs; legs moderately clothed, more thinly on femora.

Head about as broad as prothorax at apex; occiput feebly convex, smooth and nearly impunctate; postantennal swellings subtriangular, smooth and separated by a groove posteriorly; interantennal area barely wider than an antennal insertion, moderately raised medially and continuous with triangular moderately raised frontal area; gena 1/10 as deep as eye; eye broadly ovate. Antenna slender, 4/5 as long as body; segment 1 slender; 2 nearly  $3 \times$  as long as broad; 3 nearly  $2 \times$  as long as 2; 4 nearly as long as 2+3; 4–11 subequal in length. Prothorax 3/5 as long as broad; anterior margin nearly straight; basal margin moderately and evenly convex; lateral margin very weakly convex and nearly straight posteriorly; anterior angle strongly swollen and projecting forward; basal angle obtuse and slightly projecting; disc convex, slightly uneven and with an oblique shallow groove on each side behind middle; surface with fairly close fine punctures on much of anterior 1/2 and with larger and sparser punctures on central and basal portions. Scutellum triangular, feebly convex, impunctate. Elytron not quite  $3 \times$  as long as broad, evenly rounded externally, rounded apically and also at sutural angle; lateral margin narrowly expanded; epipleuron broadened behind basal 1/6, narrowed just anterior to middle and more gradually narrowed and disappearing at apex; disc evenly convex, quite irregularly punctured, with punctures of different sizes but mostly quite small and from 1/2 to 1/4 as wide as interspaces. Ventral surfaces shiny and feebly punctured; pygidium broadly rounded apically; last abdominal sternite with a subtrapeziform lobe which extends for more than 1/2 length of sternum and is gradually narrowed to apex which is rounded-truncate, a fairly deep rounded depression centered between bases of lateral clefts. Legs fairly slender; hind tarsal segment 1 quite slender, nearly 1/2 again as long as remaining segments, 2 slightly longer than 3 and last 2/5 as long as 1. Length 5.2 mm; breadth 2.8.

*Female*: Antenna slightly paler and reddish brown; pygidium subtriangular, rounded-truncate apically and produced above apex; last abdominal sternite evenly rounded apically, distinctly punctured. Length 6.0 mm; breadth 2.7.

Paratypes: Length 5.3-6.4 mm; breadth 3.0-3.5.

DISTRIBUTION: SE China (NE Kwangtung).

Holotype ♂ (CAS), Tsin-leong Shan, 700 m, nr. Meihsien, Kwangtung Prov., 5. VI. 1936, Gressitt; allotopotype ♀ (CAS), same data; 25 paratopotypes (CAS, BISHOP, US, BM, Ac. SIN., KIMOTO), same data.

Differs from sauteri Chûjô in lacking completely black margins on elytron, in having pronotum less even and elytron more finely and less evenly punctured

## 340. Monolepta lauta Gressitt and Kimoto, n. sp. Fig. 169, b.

*Male*: Bright yellowish testaceous, paler on antenna and slightly reddish on mandible except for pitchy apex and very slightly orange on metasternum; base of hind tarsal segment 1 pitchy. Dorsum with a very few erect hairs posteriorly; ventral surfaces, legs and antenna thinly clothed with oblique pale hairs, longer and more erect on abdomen.

Head nearly as broad as prothorax; occiput distinctly convex, smooth and impunctate; postantennal swellings moderately convex, separated by a groove; interantennal area as wide as an antennal insertion, raised medially and continuous with raised triangular portion of frons; gena extremely short; eye large, broadly ovate. Antenna slightly longer than body, fairly slender; segment 1 fairly long, arched and gradually thickened to apex; 2 nearly  $2 \times$  as long as broad, thickest in middle; 3 more slender basally, less than  $2 \times$  as long as broad; 4 nearly as long as 1; 5 slightly longer; 5-10 decreasing very slightly in length; 11 slightly longer than 10. *Prothorax* 5/7 as long as broad; anterior margin weakly sinuate; basal margin strongly and subevenly convex; lateral margin weakly convex, wider anteriorly and widest somewhat anterior to middle; anterior angle rounded and projecting slightly forward; basal angle obtuse and slightly projecting; disc unevenly convex, and with an oblique depression on each side of middle and slightly raised near posterolateral angle; surface largely smooth and shiny, with minute sparse punctures, mostly much more widely separated than their diameters. Scutellum triangular, smooth and feebly convex. Elytron slightly more than  $3 \times$  as long as broad, somewhat gradually widened to beginning of apical 1/3 then narrowed and broadly rounded apically with sutural angle rounded; lateral margin distinctly but narrowly expanded; epipleuron slightly widened in basal 1/4, then strongly and then more gradually narrowed and disappearing before apex; disc rather strongly convex with a moderately distinct swelling between humerus and suture; surface with irregular quite fine punctures which are mostly about 1/3 as large as interspaces. *Ventral surfaces* shiny, feebly punctured on metasternum and quite distinctly punctured on sides of abdominal sternites; pygidium rounded and arched apically; last abdominal sternite with median apical lobe much broader than long, slightly narrowed and rounded-truncate apically, with lateral lobe rounded-acute. *Legs* fairly long and slender; hind tibia weakly sinuate; hind tarsal segment 1 slender, nearly 1/2 as long as tibia,  $1.3 \times$  as long as remaining segments combined, 2 slightly longer than 3, last 1/3 as long as 1. Length 3.6 mm; breadth 1.7.

*Female*: Last abdominal sternite rounded-truncate apically. Length 3.7 mm; breadth 1.8.

Paratypes: Length 3.3-3.9 mm; breadth 1.5-1.9.

DISTRIBUTION: Hainan I.

Holotype ♂ (CAS), Ta-hian, 600 m, nr. Five Finger Mts., Hainan, 15. VI. 1935, Gressitt; allotopotype ♀ (CAS), 13. VI; 4 paratopotypes (CAS, BISHOP), 2 ♂♂, 2 ♀♀, 13-19. VI.; 3 paratypes, Ta-hau, 30 m, Hainan, 6. VII. 1935, Gressitt; 1 paratype, No-doa, Hainan, 28. VI. 1935, Gressitt.

Differs from *schereri* n. sp. in being larger, more parallel-sided, with prothorax more shiny, much more sparsely punctured and more depressed on each side, and in being more brightly orange-yellow.

# 341. Monolepta leechi Jacoby Figs. 168, b & 169, c.

Monolepta leechi Jac., 1890, Entomologist 23: 216 (Chang-yang; MCZ).

DISTRIBUTION: S. China (Hupeh, Kweichow, Kwangtung).

HUPEH: 2, Sui-sa pa, 1250 m, Lichuan, 25. VII. 1948, Gressitt (CAS). KWEICHOW: 2 (FREY). KWANGTUNG: 2, Kau-lin San, 700–900 m, Lienping, 22. IV. 1940, Gressitt & To (LINGNAN, BISHOP).

342. Monolepta liui Gressitt and Kimoto, n. sp. Fig. 169, d.

*Male*: Pale testaceous to pitchy reddish brown: head and pronotum orange testaceous, pitchy brown on labrum, mandible and palpi; antenna dark brown, but ochraceous on segments 1-3; scutellum pitchy reddish brown; elytron pitchy reddish brown with a fairly broad complete transverse testaceous band at middle, the band broader on external margin and on suture and occupying slightly more than central 1/5; ventral surfaces testaceous on prosternum and reddish brown to pitchy on remainder; mid and hind coxae reddish; legs dark reddish brown, but ochraceous on fore femur and ochraceous brown on fore tibia. Dorsum nearly glabrous, a few pale hairs on anterior portion of head and a very few on posterior portion of elytron; ventral surfaces quite sparsely clothed with suberect golden hair; legs moderately clothed, quite thinly on femora.

*Head* barely as broad as prothorax at apex; occiput moderately convex, smooth and minutely punctured, weakly grooved medially; postantennal swellings small and weak, fairly smooth; interantennal area slightly wider than an antennal insertion, somewhat strongly

and evenly raised in middle and continuous with raised triangular frontoclypeal area; gena about 1/8 as deep as eye; eye broadly oval. Antenna 3/4 as long as body, not very slender; segment 1 moderately arched, weakly swollen and feebly punctured; 2 about  $1.5 \times$  as long as broad, moderately swollen; 3 not quite  $2 \times$  as long as broad; 4 as long as 1; 5 slightly longer than 4; 5-10 decreasing slightly in length; 11 hardly longer than 10, acute apically. *Prothorax*  $1.6 \times$  as broad as long; anterior margin nearly straight; basal margin distinctly and evenly convex; lateral margin moderately and evenly convex; anterior angle rounded and very slightly projecting; basal angle obtuse and slightly projecting; disc evenly convex. quite finely and rather sparsely punctured. Scutellum triangular, slightly convex and nearly impunctate. Elytron  $3.5 \times$  as long as broad, weakly convex at side and very slightly broader postmedially, broadly rounded apically with sutural angle rounded-obtuse; lateral margin very narrowly expanded; epipleuron fairly broad basally, somewhat suddenly narrowed after basal 1/3 and disappearing before apex; disc rather evenly convex, impressed with quite small irregular punctures which are mostly about 1/2 to 1/3 as wide as interspaces and becoming finer and sparser posteriorly. Ventral surfaces quite finely and sparsely punctured, with a few larger punctures at sides of abdominal sternites; pygidium rounded apically; last abdominal sternite with a large terminal median lobe which is roundedtrapeziform and separated from rounded-triangular lateral lobe by a deep oblique cleft. Legs fairly long and slender; hind tarsal segment 1 much longer than remainder combined, 2 slightly longer than 3, last nearly 1/2 as long as 1. Length 3.8 mm; breadth 2.1.

*Female*: Pale elytral band slightly narrower than in type and barely reaching suture but quite broad at external margin; pygidium and last abdominal sternite rather broadly rounded apically. Length 3.8 mm; breadth 1.7.

*Paratypes*: Pale median band on elytron varying from 1/5 to 1/3 of length of elytron. Length 3.0-4.3 mm; breadth 1.4-1.9.

DISTRIBUTION: SW China (Yunnan, Kweichow?).

Holotype & (U. S. NAT. MUS.), Kunming (?), 1900 m, Yunnan Prov., 1. VIII. 1944, Chung-lo Liu (2001: 129); allotopotype & (USNM), same data; paratopotype & (Ac. SIN.), same data; 8 paratypes (ZMB, BISHOP), Chao-chow-fu, 2300 m, W. Yunnan, 23. VIII-21. IX. 1914, R. Mell: 3 paratypes (ZMB), Yunnan-sen. One, slightly questionable specimen (FREY), "Kiautschau." Named for Dr. C. L. Liu.

Differs from *leechi* Jac. in having posthumeral punctures all much less than 1/2 as large as interspaces, and aedeagus more gradually tapered and bent upward instead of downward at apex. Differs from *yaosanica* Chen in being more slender, banded on elytron, with prothorax less rounded at side and more punctured on disc, and elytron less heavily punctured.

# 343. Monolepta longitarsoides Chûjô Fig. 170, a.

Monolepta longitarsoides Chûjô, 1938, Arb. Morph. Taxon. Ent. Berlin-Dahlem 5(2): 147, fig. 3 (Taiwan; DEI).

Prof. Chûjô's original description states that elytron is sometimes entirely reddish. However, we find that color variation is rather rare in this genus and we suspect that an additional species may be involved.

DISTRIBUTION: Taiwan, S. China (Kweichow, Hupeh, Kwangtung, Kiangsi, Fukien,



Fig. 170. ♂ genitalia. a, *Monolepta longitarsoides* Chûjô; b-d, *M. pallidula* (Baly) (b, Hupeh; c, Mt. Omei; d, Fukien); e, *M. palliparva* n. sp.

# Chekiang).

KWEICHOW: 7 (FREY). HUPEH: 16, Sui-sa-pa, 1000 m, Lichuan, 23. VII-13. IX. 1948, Gressitt & Djou; Liang-ho-keu, 1–7. IX. 1948; Hsiao-ho, 8. VIII. 1948; Wang-chiaying, 21. VII. 1948, Gressitt & Djou (CAS, BISHOP). KWANGTUNG: 1, Shiu-chow (Kuhkong), 15. VIII. 1932, Djou (LINGNAN). KIANGSI: 1, Tai-au-hong, 540 m, 5. VII. 1936, Gressitt. FUKIEN: 1, Liung-chon Shan, 22. VII. 1936, Gressitt (CAS). CHEKIANG: 1, Mo-kan Shan, 16. IX. 1927, Wright (CAS).

# 344. Monolepta lunata Gressitt and Kimoto, n. sp. Fig. 168, c.

*Female*: Pale testaceous to pitchy reddish brown: head reddish ochraceous, slightly paler on frontal area and pitchy on tips of mandible and palpi; antenna pitchy black, reddish on segment 1; pronotum reddish ochraceous: scutellum reddish ochraceous; elytron reddish basally and somewhat pitchy blackish apically and slightly pitchy on parts of external margin and humerus; disc with a large rounded oblong spot of pale testaceous centered slightly behind middle and not approaching very close to suture or external margin; ventral surfaces reddish ochraceous, slightly pitchy on metasternum because of transparent cuticle; legs largely reddish brown, slightly duller on tarsi and apical portions of tibiae. Body almost glabrous above with just a few pale hairs on anterior portion of head; ventral surfaces rather thinly clothed with oblique golden buff hairs: legs somewhat sparsely clothed particularly on femora.

Head slightly narrower than apex of prothorax, occiput evenly convex, feebly punctured; postantennal swellings feebly raised, nearly impunctate; interantennal space barely wider than an antennal insertion, subevenly raised and continuous with subtriangular raised frontal area; labrum subrounded apically; gena about 1/10 as deep as eye; eye ovate, fairly prominent. Antenna nearly as long as body, not very slender; segment 1 fairly long, arched, smooth and shiny; 2 about  $1.6 \times$  as long as broad, moderately thickened apically; 3 about

 $1.5 \times as$  long as broad, strongly oblique apically; 4 slightly longer than 1, suboblique apically; 5 about as long as 4; 5-10 decreasing gradually in length; 11 barely longer than 10. *Prothorax* 5/8 as long as broad; anterior margin straight; basal margin rather strongly and subevenly convex; lateral margin evenly convex; anterior angle swollen and projecting slightly forward; basal angle obtuse and barely projecting; disc evenly convex, smooth, with punctures of 2 different sizes, numerous fine punctures over much of anterior 1/2, these punctures mostly about 1/2 as large as interspaces, and posterior portion with much larger and much sparser punctures and fairly large impunctate spaces. Scutellum triangular, smooth and impunctate. *Elytron* not quite  $3 \times$  as long as broad, evenly convex at side and narrowed and rounded at apex with sutural angle obtusely rounded; lateral margin slightly expanded; epipleuron broad in basal 1/4 and strongly narrowed to just anterior to middle, then gradually narrowed and disappearing on apex; disc rather strongly and evenly convex with fairly fine largely irregular punctures in part arranged in about 25 irregular rows anterior to middle, punctures mostly about 1/3 as large as interspaces, and some minute punctures along lateral declivity. Ventral surfaces fairly smooth, with a few irregular punctures at sides of abdominal sternites and some fine punctures on metepisternum; pygidium obtusely rounded; last abdominal sternite subevenly rounded. Legs moderately stout; hind tarsal segment 1 slender, about 1/4 longer than remaining segments combined, 2 slightly longer than 3 and last about 2/5 as long as 1. Length 6.8 mm; breadth 3.8.

*Male*: Elytral spot somewhat more rounded and yellowish testaceous; pygidium broadly rounded apically; last abdominal sternite with subsquarish median lobe which is slightly broader and rounded-truncate apically. Length 6.2 mm; breadth 3.4.

Paratype: Length 6.6 mm; breadth 3.4.

## DISTRIBUTION: Hainan I.

Holotype ♀ (CAS), Ta-han, 750 m, nr. Red Mist Mt., C. Hainan, 23. VI. 1935, Gressitt; allotype ♂ (BISHOP 3293), Sam-ts'uen-kai-hui, SE of Loi Mother Mt., 4–6. VII. 1935, F. K. To; paratype ♀ (LINGNAN), Sam-kwong-ts'uen, Lam-wan-tung, Kiung Shan Distr., 7–9. VIII. 1935, To.

Differs from *sauteri* Chûjô in being darker, with a pale spot on elytron and without black borders, and with pronotum more convex and elytron more strongly and more regularly punctured.

#### 345. Monolepta maana Gressitt and Kimoto, n. sp.

*Female*: Pale yellowish testaceous to pitchy reddish brown: head and pronotum yellowish testaceous, slightly reddish brown on labrum, mandible and palpi; antenna dull reddish brown, pale ochraceous on segments 1-3; scutellum pitchy reddish brown; elytron reddish brown, somewhat tinged with pitchy with a broad pale testaceous band across middle occupying nearly central 1/3 being quite broad on suture and slightly narrowed at external margin; ventral surfaces with prosternum and abdomen pale yellowish testaceous and hind thorax reddish castaneous; legs reddish brown but fore leg almost entirely testaceous. Body nearly glabrous above with a few pale hairs on anterior portion of head and a very few small ones on posterior margin of elytron; antenna rather thinly clothed with subadpressed pale hairs and a few longer oblique ones, but very few on segments 1-3; ventral surfaces very sparsely clothed with fairly long suberect golden hairs; legs rather thinly clothed particularly on femora.

Head not quite as broad as prothorax at apex; occiput moderately convex, smooth and very feebly punctured; postantennal swellings fairly small and weakly raised but smooth; interantennal area slightly wider than an antennal insertion, moderately convex in middle and raised area continuous with raised triangular area of frontoclypeus which is very minutely and sparsely punctured; gena about 1/10 as deep as eye; eye broadly ovate. Antenna 3/5 as long as body, slightly stout beyond segment 4; segment 1 not very long, feebly arched and moderately thickened; 2 nearly  $2 \times$  as long as broad, weakly swollen; 3 slightly more than  $2 \times$  as long as broad, more cylindrical; 4 not quite as long as 1, gradually thickened apically; 5 about as long as 1; 5-8 similar in size and becoming slightly stouter; 9-10 each slightly shorter; 11 barely longer than 10, acute apically. Prothorax nearly  $1.5 \times$  as broad as long; anterior margin nearly straight; basal margin weakly and subevenly convex; lateral margin moderately evenly convex; anterior angle swollen and produced slightly forward; basal angle obtuse and barely protruding; disc rather smooth and evenly convex, with fine sparse punctures, mostly about 1/4 or 1/5 as wide as interspaces. Scutellum elongate-triangular, weakly convex and smooth. Elytron  $2.6 \times$  as long as broad, moderately and evenly rounded at side and widest just behind middle, broadly rounded apically and rounded obtuse at sutural angle; lateral margin narrowly expanded throughout; epipleuron broad basally and suddenly becoming very narrow just before middle and disappearing before apex; disc evenly convex, impressed with moderately strong deep punctures which are in part almost arranged in irregular longitudinal lines, punctures mostly about 1/2 as large as interspaces anteriorly and about 1/3 as large posteriorly. Ventral surfaces shiny, in large part very weakly punctured, with a few distinct punctures along side; pygidium somewhat narrowly rounded apically; last abdominal sternite a little more broadly rounded. Legs fairly slender; hind tarsal segment 1 about 1/3 longer than remainder combined, 2 slightly longer than 3, last 1/2 as long as 1. Length 3.2 mm; breadth 1.6.

*Paratype*: Pale elytral band broader, distinctly wider than black basal portion anterior to it. Length 3.3 mm; breadth 1.85.

DISTRIBUTION: SE China (Fukien).

Holotype  $\mathcal{P}$  (BISHOP 3294), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 1. X. 1942, T. C. Maa; paratype  $\mathcal{P}$  (CAS), same data but 23–28. XI. 1942.

Differs from *leechi* Jac. in being shorter with pronotum distinctly punctured and elytron more heavily punctured; and from *yaosanica* Chen in being stouter, broadly banded with pale on elytron, with pronotum and elytron a little more heavily and more sparsely punctured.

## 346. Monolepta meridionalis Gressitt and Kimoto, n. sp.

*Male*: Orange to reddish ochraceous, somewhat darker on head, with frons, interantennal area and postantennal swellings pitchy to blackish, and labrum, mandible and palpi reddish to slightly pitchy; extreme base of hind tarsal segment 1 blackish above. Body very sparsely clothed above with fine pale golden hairs; ventral surfaces and legs sparsely but distinctly clothed with suberect golden buff hairs.

*Head* slightly narrower than apex of prothorax; occiput evenly convex, fairly smooth but finely wrinkled or micropunctulate; postantennal swellings subtriangular, fairly convex and slightly wrinkled; interantennal area distinctly raised medially and continuous with

subtriangular raised area of frons which is minutely punctured; gena extremely short; eye large, ovate, coarsely facetted. Antenna fairly slender, 4/5 as long as body; segment 1 slender, slightly arched and gradually thickened; 2 more than  $2 \times$  as long as broad; 3 about  $1.5 \times$  as long as 2; 4 somewhat shorter than 1; 4–10 decreasing slightly in length; 11 about as long as 1. *Prothorax* 4/7 as long as broad; anterior margin nearly straight; basal margin strongly and evenly convex; lateral margin weakly and evenly convex; anterior angle strongly swollen and somewhat projecting; basal angle obtuse and slightly projecting; disc strongly but somewhat unevenly convex with an oblique depression on each side just behind center, a little deeper near lateral margin than center; surface unevenly punctured with fairly distinct punctures on anterior portion and in part weaker and in part stronger and closer punctures on basal portion. Scutellum subtriangular, smooth and impunctate. Elytron nearly  $3 \times$  as long as broad, moderately convex at side and widest somewhat behind middle, broadly rounded apically with sutural angle distinctly rounded; lateral margin narrowly expanded; epipleuron broad basally, slightly widened in basal 1/4 and slightly narrowed in second 1/4 and then gradually narrowed and disappearing just before apex; disc strongly and evenly convex, with moderately large close punctures, which are quite irregular and number over 20 across middle and mostly a little larger than Ventral surfaces shiny, rather finely punctured; pygidium broadly rounded interspaces. apically; last abdominal sternite with a large median lobe slightly broader than long, slightly rounded at side and feebly emarginate apically and lateral lobe subacute. Legs fairly slender; hind tibia weakly arched; hind tarsal segment 1 about  $1.4 \times$  as long as remainder, 2 not quite as long as 3 and last about 1/3 as long as 1. Length 5.5 mm; breadth 2.7.

*Female*: Head paler, almost entirely reddish; last abdominal sternite subevenly rounded, somewhat hairy at apex. Length 5.6 mm; breadth 2.9.

DISTRIBUTION: S. China (Kwangtung), Hainan I.

Holotype ♂ (CAS), Ting-wu Shan, West River, C. Kwangtung Prov., 23–26. VII. 1950, for Gressitt; allotopotype ♀ (BISHOP 3295), 7–12. VII. 1950, for Gressitt.

Differs from *sauteri* Chûjô in having legs and elytral margins pale, pronotum less evenly convex and elytron with closer but shallower punctures; and from *kwangtunga* n. sp. in having dorsum and antenna entirely pale, legs almost entirely pale, and with pronotum more even and more weakly punctured and elytron more closely punctured.

# 347. Monolepta minutissima Chen

Monolepta minutissima Chen, 1942, Notes d'Ent. Chinoise 9: 60 (Kwangsi: Yaosan; Ac. SIN.).

DISTRIBUTION: S. China (Kwangsi).

## 348. Monolepta monticola Gressitt and Kimoto, n. sp.

*Female*: Orange testaceous to pitchy brown: head pitchy reddish, nearly black on occiput; antenna dark reddish brown, pale reddish on segments 1-3; pronotum and scutellum orange testaceous; elytron ochraceous and slightly reddish on basal 2/3, pitchy on remainder; ventral surfaces and legs testaceous, pitchy at extreme base of hind tarsal segment 1. Dorsum with just a few pale hairs on head and posterior portion of elytron;

ventral surfaces and legs thinly clothed; antenna moderately clothed beyond segment 1.

*Head* slightly narrower than prothorax: occiput smooth, convex and weakly punctured: postantennal swellings fairly weak and not completely smooth; interantennal space as wide as an antennal insertion, moderately convex, continuous with raised subtriangular portion of frons; gena extremely short; eye broadly ovate. Antenna 4/5 as long as body; segment 1 fairly slender, arched, finely punctured; 2 moderately swollen,  $1.5 \times$  as long as broad; 3 a little more slender, nearly  $2\times$  as long as broad; 4 longer than 1, about  $1/5\times$  as long as 2+3; 4-8 subequal; 8-10 decreasing slightly in length; 11 barely longer than 10. Prothorax 7/12 as long as broad; anterior margin straight; basal margin moderately and subevenly convex; lateral margin moderately convex; anterior angle swollen and slightly raised; basal angle obtuse and slightly projecting; disc weakly depressed on each side just behind center; surface finely and in part closely punctured anteriorly and more strongly punctured posteriorly, with stronger punctures mostly smaller than interspaces. Scutellum narrowly rounded at apex, smooth. Elytron 38 % as broad as long, moderately rounded at side, subevenly rounded apically; lateral margin narrowly expanded; epipleuron parallelsided in basal 1/4, then somewhat suddenly narrowed and continuing to apex. Ventral surfaces smooth and shiny, moderately punctured at side of abdomen; last abdominal sternite smooth and obtusely rounded apically. Legs somewhat flattened; hind tarsal segment 1 about 1/2 as long as tibia, 1/3 longer than remaining segments combined, 2 about as long as 3, last 1/3 as long as 1. Length 3.4 mm; breadth 1.6.

Paratype: Length 3.5 mm; breadth 1.7.

DISTRIBUTION: SW China (Yunnan).

Holotype  $\mathcal{P}$  (BISHOP 3296), Western Hills, 2100 m, nr. Kunming, Yunnan Prov., 7. VII. 1940, Gressitt; paratopotype  $\mathcal{P}$  (LINGNAN), same data but 6. VII.

Differs from *signata* Olivier in being quite differently marked and much more strongly punctured, with longer prothorax and narrower epipleuron.

#### 349. Monolepta mordelloides Chen

Monolepta mordelloides Chen, 1942, Notes d'Ent. Chinoise 9:56 (Sikang: Sichang; Ac. SIN.).

DISTRIBUTION: W. China (Sikang, Kweichow, W. Hupeh).

KWEICHOW: Many (FREY). HUPEH: 2, Sui-sa-pa, 1000–1250 m, 25–26. VII. 1948, Gressitt & Djou, 1 ex Metasequoia (CAS).

HOST: Metasequoia glyptostroboides Hu & Cheng.

## 350. Monolepta nebulosa Ogloblin

Monolepta nebulosa Ogl., 1936, Fauna USSR 26, 1: 320, 435 (Ussuri; ?Moscow). DISTRIBUTION: SE Siberia.

#### 351. Monolepta occifluvis Gressitt and Kimoto, n. sp.

*Male*: Pale ochraceous to reddish ochraceous and black: head somewhat reddish ochraceous, slightly pitchy on labrum, mandible, and apex of palp; antenna dull reddish brown, reddish ochraceous on segments 1–2; pronotum ochraceous with partial reddish tinges; scutellum black; basal margin of elytron black as far as anterior portion of humerus
and black area continuing obliquely backward on external margin and epipleuron as far as greatest width of epipleuron, apical margin black on a slightly narrower strip than basal black area, remainder of elytron somewhat dirty ochraceous, in part tinged with reddish; ventral surfaces pale ochraceous with some apparent pitchy areas representing transparent portions of cuticle; legs reddish ochraceous with tibiae dull reddish brown to blackish and tarsi dull reddish brown, paler apically. Dorsum nearly glabrous, a few pale hairs on anterior portion of head and posterior portion of elytron; ventral surfaces sparsely clothed with fine suberect pale hairs; legs also sparsely clothed.

*Head* slightly narrower than apex of prothorax; occiput slightly depressed at middle and with some distinct punctures; interantennal area barely wider than an antennal insertion, evenly convex; frontal area triangular, moderately convex and fairly smooth; gena extremely short; eye broadly ovate. Antenna nearly as long as body, fairly slender; segment 1 slender, arched and fairly smooth; 2 not quite  $2 \times$  as long as broad; 3 nearly  $2 \times$ as long as broad and oblique apically; 4 longer than 1, subequal to 5; 6 nearly as long as 5; 6-10 decreasing slightly in length; 11 barely longer than 10. Prothorax 2/3 as long as broad; anterior margin straight; basal margin strongly and subevenly convex; lateral margin weakly and subevenly convex; anterior angle swollen and projecting forward and slightly outward; basal angle distinctly projecting; disc somewhat unevenly convex, with a sinuate depression on each side just behind center and extending obliquely forward at side; surface unevenly punctured, with fairly dense quite small punctures on anterior portion and much larger and sparser punctures on most of basal 1/2 and central area. Scutellum triangular, finely shagreened and slightly convex. Elytron nearly 2/5 as broad as long, very weakly convex at side, broadly rounded apically with sutural angles slightly rounded; lateral margin narrowly expanded; epipleuron considerably broadened from base to end of basal 1/3 then moderately narrowed in central portion and disappearing on apex; disc strongly convex, with dense close punctures which are subreticulate, being larger than interspaces, and numbering approximately 30 across middle of elytron. Ventral surfaces smooth, finely and sparsely punctured, more closely so on metepisternum; pygidium evenly rounded apically; last abdominal sternite with terminal lobes oblong, nearly  $2 \times$  as broad as long, weakly concave apically. Legs not very stout; hind tarsus 4/5 as long as tibia, with segment 1 fully 1/2 again as long as remainder, 2 about as long as 3, last about 2/5as long as 1. Length 7.7 mm; breadth 4.3.

Paratypes: Length 6.8 mm; breadth 4.2.

DISTRIBUTION: S. China (Kwangtung).

Holotype 3<sup>(CAS)</sup>, Ting-wu Shan, 400 m, West River, Kwangtung Prov., 7-12. VII. 1949, Gressitt; 2 3<sup>(A)</sup> paratopotypes (BISHOP, LINGNAN), same data.

Differs from *cavipennis* Baly in having prothorax less even and more punctured, and elytron less banded and much more heavily punctured.

#### 352. Monolepta ovatula Chen

Monolepta ovatula Chen, 1942, Notes d'Ent. Chinoise 9: 60 (Kwangsi: Yaosan; Ac. SIN.). DISTRIBUTION: S. China (Kwangsi, Hupeh, Kiangsi).

HUPEH: 2, Hsiao-ho, Lichuan, 14. IX. 1948, Djou (CAS). KIANGSI: 1, Tai-au-hong, 540 m, S of Sung-wu, 5. VII. 1936, Gressitt (BISHOP).

# 353. Monolepta pallidula (Baly) Fig. 170, b-d.

Luperodes pallidulus Baly, 1874, Ent. Soc. Lond., Trans. 1874: 187 (Nagasaki; BM).—Ogloblin, 1936, Fauna USSR 26, 1: 307, 310, 431 (Japan).

Monolepta pallidula, Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 167.

DISTRIBUTION: Japan, Ryukyu Is., Taiwan, S. China (Anhwei, Chekiang, Fukien, Kiangsi, Kwangtung, Hupeh, Szechuan, Sikang).

ANHWEI: 1, Kiu-hua Shan, IX. 1932, G. Liu; Tai-ping-shien, G. Liu (MCZ). CHE-KIANG: 1, Mo-kan Shan, 28. VIII. 1927, Wright; 5, Tien-mu Shan, Reitter (FREY). KI-ANGSI: 1, Ku-ling, 23. VII. 1933, Djou; 2, Hong Shan, 25. VI. 1936, Gressitt; 8, Tai-auhong, 6. VII. 1936, Gressitt. FUKIEN: Very many, Ta-chu-lan, Shaowu, III, V, VI, IX, 1942, Maa (CAS); Sui-pei-kai, Shaowu, V. 1943, Maa; Upper Kuatun, Chungan, VIII. 1945, Maa; Liu-tun, Kienyang, X. 1942, Maa. HUPEH: 10, Sui-sa-pa & Liang-hou-keu, Lichuan, VII-IX. 1948, Gressitt & Djou (CAS). SZECHUAN: 2, Mt. Omei, VIII. 1932, Graham (US); 1, Lung-chue-pa, Wan, 29. IX. 1948, Djou. SIKANG: 3, Mu-ping, Graham (US). KWANGTUNG: Many, Tsha-jiu San, V-VI. 1912, Mell; Pak-wan San, 24. II. 1912, Mell; Lo-fau San, 14–19. VI. 1912, Mell (ZMB); Ting-wu San, XI. 1948, Gressitt.

HOSTS: Styrax japonica Sieb. & Zucc. (Japan).

#### 354. Monolepta palliparva Gressitt and Kimoto, n. sp. Fig. 170, e.

*Male*: Pale reddish ochraceous, slightly more reddish on mandible and palpi and on sides of metathorax; antenna dull reddish brown beyond segment 3; hind tarsal segment 1 black at extreme base. Body very sparsely clothed above with short suberect pale hairs; ventral surfaces and legs quite sparsely clothed with pale golden buff hairs; antenna with rather thin adpressed pale hairs and a few longer oblique ones.

Head nearly as broad as prothorax at apex; occiput smooth and evenly convex, very weakly and sparsely punctured; postantennal swellings moderate, not very distinctly separated and more or less merging with swollen interantennal area which is slightly wider than an antennal insertion; frontal area moderately convex, nearly impunctate; gena extremely short; eye broadly ovate and rather coarsely facetted. Antenna moderately slender, 4/5 as long as body; segment 1 moderately arched and not very strongly swollen towards apex; 2 nearly  $2 \times$  as long as broad, elliptical; 3 about as long as 2, slender basally and thickened apically; 4 slightly shorter than 1, barely longer than 5; 5-10 hardly decreasing in length; 11 about as long as 1. Prothorax 3/5 as long as broad; anterior margin slightly concave; basal margin distinctly and evenly convex; lateral margin weakly but subevenly convex; anterior angle moderately swollen but not projecting; basal angle obtuse and weakly projecting; disc somewhat uneven, a subtransverse shallow depression on each side of center; surface irregularly punctured, with some fairly fine and close punctures on parts of anterior portion and mostly larger and sparser punctures on basal 3/5. Scutellum subtriangular, smooth and flat. Elytron nearly 3/8 as broad as long, moderately and subevenly convex at side and broadest somewhat behind middle, broadly rounded apically with sutural corner obtusely rounded; lateral margin narrowly expanded; epipleuron slightly broadened in basal corner and then suddenly narrowed and continuing only a short distance along middle portion of side; disc with fairly small distinct punctures which are quite irregular behind middle but are partly arranged in subregular rows on sutural 1/2 of basal

2/5, punctures mostly a little larger than interspaces. Ventral surfaces shiny, very sparsely punctured on hind thorax and distinctly but sparsely punctured on abdomen; pygidium rounded apically; last abdominal sternite with a subsquarish apical lobe which is truncate apically and slightly concave in center and separated from angulate lateral lobe by a straight narrow cleft. Legs fairly slender; hind tibia weakly arched; hind tarsal segment 1 about  $1.3 \times$  as long as remainder combined, 2 about as long as 3 and last barely 1/2 as long as 1. Length 2.2 mm; breadth 1.3.

*Female*: Somewhat paler testaceous than in  $\mathcal{J}$ ; last abdominal sternite fairly large, obtusely rounded apically. Length 2.6 mm; breadth 1.5.

Paratypes: Length 2.2-2.8 mm; breadth 1.3-1.5.

DISTRIBUTION: S. China (Kweichow, Yunnan, Kiangsi), Hainan I.

Holotype & (BISHOP 3297), Meitan, 900-950 m, E of Tseng-yih, Kweichow Prov., 17. VII. 1940, Gressitt; allotype ♀ (USNM), Kunming?, Yunnan Prov., 1. VIII. 1944, Chunglo Liu (2001: 133); 3 paratypes (CAS, BISHOP); 1, Tai-au-hong, 540 m, S of Sung-wu, SE Kiangsi Prov., 5. VII. 1936, Gressitt; 1, Lia-mui (Leng-moon), 350 m, Hainan I., 2. VIII. 1935, Gressitt; 1, same data as allotype; 24 paratypes (ZMB), Chao-chow-fu, 2300 m, W. Yunnan, 23. VIII-21. IX. 1914, R. Mell.

Differs from *minutissima* Chen in having pronotum finely and sparsely punctured, in being larger in size and paler in color and lacking a bronzy tinge.

# 355. Monolepta parenthetica Gressitt and Kimoto, n. sp. Fig. 172, a.

Male: Testaceous to reddish and pitchy: head and prothorax reddish ochraceous, slightly paler on frons and darker on mandible and palpi; antenna dull pitchy brown, ochraceous on segments 1–3 and reddish on 11; scutellum pitchy brown; elytron testaceous with several pitchy markings: a sutural stripe in central portion and a much narrower one near apex, an arcuate mark near middle of posterior 1/2 which with its mate forms a pair of parentheses, and a part of lateral margin and epipleuron pitchy anteriorly; ventral surfaces and legs ochraceous. Body nearly glabrous above; ventral surfaces and appendages rather thinly pubescent.

Head slightly narrower than prothorax; occiput convex, smooth, finely punctured; postantennal swellings transverse, convex and shiny; interantennal area slightly wider than an antennal insertion, evenly convex and continuous with raised triangle on frontal area, which is finely punctured; gena very short; eye ovate, rather weakly convex. Antenna 3/4as long as body; segment 1 slender, slightly arched; 2 swollen,  $2 \times$  as long as broad; 3 barely longer than 2, gradually thickened to apex; 4 shorter than 2+3 combined; 4-10subequal in length; 11 about as long as 1. Prothorax not quite 2/3 as long as broad; anterior margin straight; basal margin evenly convex; lateral margin convex but almost sinuate, widening anteriorly from near base to well anterior to middle, slightly narrowed apically; anterior angle swollen and broadly rounded; basal angle obtuse and slightly projecting; disc subevenly convex with a very weak oblique depression on each side; surface with fine punctures mostly 1/2 to 1/3 as large as interspaces. Scutellum small, subtriangular *Elytron* nearly  $3 \times$  as long as broad, moderately convex at side, broadly and smooth. rounded apically. Sutural angle rounded-obtuse; lateral margin narrow; epipleuron widened in basal 1/4, strongly narrowed just before middle and disappearing at apex; disc evenly convex with fine punctures in partly subregular rows, about 18 across middle and punctures mostly about 1/2 as large as interspaces. *Ventral surfaces* shiny, sparsely punctured; pygidium rounded apically; last abdominal sternite with median lobe much broader than long and rounded-truncate apically. *Legs* fairly slender; hind tibia weakly arched; hind tarsal segment 1 slightly longer than remainder combined, 2 slightly longer than 3, and last 1/2 as long as 1. Length 2.85 mm; breadth 1.5.

*Female*: Elytral markings more blackish and more extensive, with lateral stripe joining parenthesis-mark; last abdominal sternite rounded apically. Length 3.2 mm; breadth 1.55.

*Paratypes*: Lateral stripe of elytron generally not reaching parenthesis-mark. Length 2.7-3.3 mm; breadth 1.4-1.5.

DISTRIBUTION: C. & W. China (Hupeh, Szechuan).

Holotype & (BISHOP 3298), 10 km S of Hwang-mei, Hwangmei Distr., Hupeh Prov., 1-6. VIII. 1933, Y. W. Djou; allotopotype & (LINGNAN), same data; 3 paratopotypes (CAS, BISHOP, Ac. SIN.), same data; 1 paratype (MCZ), Ching-cheng-shan, Szechuan Prov., VII. 1932, G. Liu.

Differs from *longitarsoides* Chûjô in having prothorax less evenly convex at side and elytron more finely and less regularly punctured and with different markings.

# 356. Monolepta postfasciata Gressitt and Kimoto, n. sp. Fig. 171, a.

Male: Ochraceous and reddish testaceous, in part marked with pitchy reddish: head pitchy reddish, nearly black on postantennal swellings; antenna dark pitchy reddish, paler reddish on segments 1–2; pronotum and scutellum pale ochraceous; elytra ochraceous, paler posteriorly, with a common transverse-arcuate pitchy band (concave anteriorly) at beginning of apical 1/3 and reaching 2/3 distance from suture to external margin, with a common sutural stripe of similar width from band to apex; ventral surfaces ochraceous; legs ochraceous with much of tibiae and tarsi pitchy brown. Body nearly glabrous above, sparsely pubescent on venter and appendages.

*Head* slightly narrower than prothorax; occiput evenly convex, with sparse punctures; postantennal swellings distinct, but fairly short, smooth and convex; interantennal space barely wider than an antennal insertion, evenly convex and continuous with triangular raised frontal area; labrum rounded apically; gena extremely short; eye rounded oval. Antenna nearly 3/4 as long as body, not very slender; segment 1 fairly short and stout, with some punctures; 2 thickened preapically, about  $2 \times$  as long as broad; 3 a little longer, more gradually thickened to apex; 4 nearly as long as 1, subequal to 5; 5-10 decreasing very slightly in length; 11 slightly longer than 10, acute apically. Prothorax not quite 2/3 as long as broad; anterior margin straight; posterior margin convex, but straight in middle; lateral margin weakly convex, widened from base to well anterior to middle, then slightly narrowed apically; anterior angle moderately swollen, barely projecting; basal angle obtuse, hardly projecting; disc moderately convex with a small weak depression on each side of middle and surface with fine punctures mostly about 1/3 as wide as interspaces. Scutellum broad, triangular, impunctate. Elytron  $3.3 \times$  as long as broad, weakly convex laterally, broadly rounded apically, with sutural angle obtuse; lateral margin narrowly convex; epipleuron broad near base, strongly narrowed near middle and disappearing at apex; disc

subevenly convex with fine distinct punctures largely in irregular rows, about 20 across middle and mostly about 1/2 as large as interspaces. *Ventral surfaces* finely and sparsely punctured; pygidium broadly rounded apically; last abdominal sternite with median apical lobe subtrapeziform, slightly broader than long, slightly narrower and broadly rounded apically. *Legs* not quite stout; hind tibia nearly straight; hind tarsal segment 1 slightly longer than remainder combined, 2 slightly longer than 3 and last 1/2 as long as 1. Length 3.0 mm; breadth 1.4.

*Female*: Elytral markings somewhat blacker with postmedian band slightly wider and more transverse; last abdominal sternite obtusely rounded apically. Length 3.4 mm; breadth 1.5.

DISTRIBUTION: EC China (Anhwei, Hupeh).



Fig. 171. a, Monolepta postfasciata n. sp.; b, M. signata Olivier; c, M. yaosanica Chen.

Holotype & (Mus. COMP. ZOOL.), Tai-ping-shien, Anhwei Prov., E. China, X. 1932, Gaines (K. C.) Liu; allotype & (LINGNAN), Si-tau-tsz, Hwang-mei Distr., NE Hupeh Prov., 8–12. VIII. 1933, Y. W. Djou.

Differs from *longitarsoides* Chûjô in being slightly larger, in having pronotum and elytron more finely punctured, with prothorax more trapeziform, and elytra with postmedian transverse band and posterior sutural stripe.

## 357. Monolepta quadriguttata (Motschulsky)

Luperodes quadriguttatus Mots., 1860, Schrenck's Reisen u. Forsch. Amur-Lande 2 (2): 233, pl. 11, fig. 20 (E. Siberia: Dauria, Amur).—Baly, 1874, Ent. Soc. Lond., Trans. 1874: 187 (Nagasaki).—Weise, 1886, Ins. Deutschl. 6 (4): 575, note 1.—Yuasa, 1936, First Sci. Exped. Manchoukuo 5, 1, 10 (51): 19 (Jehol).

Monolepta quadriguttata, Ogloblin, 1936, Fauna USSR 26, 1: 315, 320, 434 (Manchuria, Korea, Japan).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 21 (211): 167 (Korea).
 —Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 167.

DISTRIBUTION: E. Siberia, NE China (Manchuria), Korea, Quelpart I., Japan (Honshu, Shikoku, Kyushu).

#### 358. Monolepta sauteri Chûjô

Monolepta sauteri Chûjô, 1935, Arb. Morph. Taxon. Ent. Berlin-Dahlem 2 (3): 173 (Taiwan; DEI).

DISTRIBUTION: Taiwan, Hainan I.

HAINAN: 1, 10–25. III. 1909, Schoede; 18, No-doa, 28. VI–10. VII. 1935, Gressitt; 2, Ta-hian, 10–13. VI. 1935, Gressitt; Ta-hau, 5. VII; Ta-han, 7. VI. 1935, Gressitt (CAS); No-doa, 27. IV. 1932, To; Naam-fung, 29. VI. 1932, Lau & To (LINGNAN).

# 359. Monolepta schereri Gressitt and Kimoto, n. sp.

Male: Testaceous to dark pitchy brown and nearly black: head, prothorax and scutellum pale testaceous, varying in intensity depending on transparency of cuticle; antenna dark reddish to pitchy brown, ochraceous on segments 1–3; elytron dark pitchy brown, slightly reddish on parts of borders particularly near scutellum, basal 1/4 of suture, and apical margin; ventral surfaces orange testaceous; legs slightly reddish on parts of tarsi and pitchy at extreme base of hind tarsal segment 1. Dorsum with only a very few short pale erect hairs on anterior portion of head and on posterior portion of elytron; ventral surfaces somewhat thinly clothed with suberect golden buff hairs; legs rather thinly clothed, particularly on femora.

Head slightly narrower than apex of prothorax; occiput smooth and shiny, impunctate; postantennal swellings fairly narrow behind, projecting forward and separated by a short median groove; interantennal area slightly wider than an antennal insertion, moderately raised medially and raised portion continuous with broadly triangular raised area of frontoclypeus; labrum barely emarginate apically; gena about 1/6 as deep as eye. Antenna 3/4 as long as body, moderately slender and slightly compressed; segment 1 slender, arched and feebly swollen apically, very smooth and shiny; 2 about  $2 \times$  as long as broad. moderately swollen; 3 slightly shorter than 2 and swollen only at apex; 4 somewhat shorter than 1, subcylindrical; 5 barely longer than 4; 5-10 descreasing gradually in length; 11 about as long as 1, acute apically. Prothorax 4/7 as long as broad; anterior margin nearly transverse; basal margin distinctly convex; lateral margin weakly and evenly convex, barely broader anteriorly than posteriorly; anterior angle broadly rounded and not produced laterally; basal angle obtusely rounded, hardly produced; surface subevenly convex, smooth and shiny and nearly impunctate, with a slight transverse depression on each side just behind center. Scutellum subequai laterally triangular, smooth and shiny. Elytron nearly  $3 \times$  as long as broad, moderately and evenly rounded at side and broadly rounded apically with sutural angle rounded; lateral margin slightly expanded; epipleuron somewhat broad basally and suddenly somewhat narrowed after basal 2/5, disappearing on apex; surface entirely covered with fine irregular punctures which are mostly about 1/2 or less as wide as interspaces. *Ventral surfaces* smooth and shiny, not very distinctly punctured; pygidium evenly rounded apically; last abdominal sternite long, with a quite large subsquarish median apical lobe which reaches basad of middle and is separated from subtriangular lateral lobe by a deep straight incision. Legs quite slender; hind tarsal segment 1 very slender, distinctly longer than remaining segments combined, 2 slightly longer than

3 and last barely 3/5 as long as 1. Length 3.7 mm; breadth 1.9.

*Female*: Antenna not very dark brown; pygidium rounded apically; last abdominal sternite fairly long, subrounded-truncate apically. Length 3.8 mm; breadth 1.8.

Paratypes: Length 3.4-4.0 mm; breadth 1.8-2.1.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♂ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., nr. Szechuan border, 30. VII. 1948, Gressitt & Djou; allotype ♀ (CAS), Liang-ho-keu, 600 m, Lichuan Distr., Hupeh, 7. IX. 1948, Djou; 6 paratopotypes (CAS, BISHOP, LINGNAN), 23. VII-6. VIII.; 1 paratype, same data as allotype; 2 paratypes, Hsiao-ho, nr. Sui-sa-pa, 11-16. VIII. 1948, Gressitt. Named for Dr. G. Scherer of Museum G. Frey as a token of gratitude for kind cooperation.

Differs from *yaosanica* Chen in having elytron darker, occiput and pronotum impunctate instead of distinctly punctured and elytron irregularly instead of subregularly punctured.

### 360. Monolepta selmani Gressitt and Kimoto, n. sp. Fig. 172, c.

*Male*: Pale orange testaceous, apical 1/3 of elytron pitchy brown; head pitchy on frontal area; antenna pale reddish brown in distal 2/3; apex of hind tibia pitchy. Dorsum with just a few hairs on head and posterior portion of elytron; antenna moderately and irregularly pubescent beyond base; ventral surface and legs very sparsely clothed.

*Head* slightly narrower than prothorax; occiput evenly convex and shiny, sparsely punctured; postantennal swellings subtriangular, moderately raised and smooth; interantennal space slightly wider than an antennal insertion, moderately raised and continuous with subtriangular raised portion of frontal area; gena extremely short; eye broad and coarsely facetted, nearly round. Antenna 3/4 as long as body, slender basally; segment 1 slender and moderately arched, shiny; 2 fully  $2 \times$  as long as broad, fairly stout; 3 slightly shorter and more slender than 2; 4 nearly as long as 2+3; 5 slightly longer than 4; 5–9 subequal; 10 shorter; 11 about as long as 1, acute apically. *Prothorax* nearly 3/5 as long as broad; anterior margin nearly straight; basal and lateral margins moderately and evenly convex; anterior angle slightly swollen; basal angle obtuse and slightly projecting; disc weakly depressed on each side on central portion, with irregular punctures, mostly rather fine and close on anterior portion and larger and sparser on central and basal portions, mostly about as large as interspaces. Scutellum triangular, impunctate. Elytron about  $3.3 \times$  as long as broad, weakly convex at side and subparallel in central portion, broadly rounded apically with sutural angle obtusely rounded; lateral margin narrowly expanded; epipleuron slightly broadened in basal 1/4 and strongly narrowed and disappearing just before apex; disc rather evenly convex with fairly deep and distinct punctures, about 18 across middle but quite irregular in arrangement and mostly about as large as interspaces. Ventral surfaces smooth and shiny, deeply punctured; last abdominal sternite with median lobe about as long as broad, rounded apically and subparallel-sided. Legs fairly slender; hind tarsal segment 1 slender, about  $1.4 \times$  as long as remaining segments combined, 2 subequal to 3, last less than 2/5 as long as 1. Length 2.3 mm; breadth 1.3.

*Female*: Last abdominal sternite subtriangular, subrounded apically and moderately punctured. Length 3.0 mm; breadth 1.35.

Paratypes: Length 2.7-3.0 mm; breadth 1.3-1.5.

# DISTRIBUTION: W. China (W. Hupeh, Yunnan).

Holotype  $\mathcal{F}$  (CAS), Hsiao-ho, 900 m, Lichuan Distr., Hupeh Prov., nr. Szechuan border, 8. VIII. 1948, Gressitt *et al.*; allotype  $\mathcal{P}$  (CAS), Sui-sa-pa, 1000 m, Lichuan, 25. VII.; 20 paratypes (CAS, BISHOP, LINGNAN, USNM, BMNH); 3 paratopotypes, 16. IX, 10 same data as allotype, but 25. VII-17. IX.; 1, betw. Mo-tai-chi & San-hou-keu, 19. VII; 1, Liang-hokeu, Lichuan, Hupeh, 6. IX. 1948, Gressitt & Djou; 2, Western Hills, 2100 m, nr. Kunming, Yunnan, 7. VII. 1940, Gressitt. Named for Dr. B. J. Selman as a token of gratitude for cooperation rendered to this study in London.

Differs from *subapicalis* n. sp. in having elytral spot situated farther posterior, prothorax more strongly punctured and not so short, and elytron more heavily punctured and more narrowed posteriorly. Differs from *longitarsoides* Chûjô in being differently marked and more heavily punctured.

# 361. Monolepta semenovi Ogloblin

Monolepta semenovi Ogl., 1936, Fauna USSR 26, 1: 318, 434 (China: Se-Tchouen; Ussuri: Lac Khanka; ?Moscow).

DISTRIBUTION: W. China (Szechuan), SE Siberia.

# 362. Monolepta sexlineata Chûjô

Monolepta sexlineata Chûjô, 1938, Arb. Morph. Taxon. Ent. Berlin-Dahlem 5 (2): 150, fig. 4 (Taiwan; DEI).

DISTRIBUTION: Taiwan, S. China (Kwangtung), Hainan I.

KWANGTUNG: 1, Honam I., Canton, 4. V. 1932, Djou (LINGNAN); 1, Ying-to, Hweiyang, 5. IV. 1940, Gressitt & To. HAINAN: 1, Hoi-how (Haikau), 1932, Hoffman.

# 363. Monolepta shaowuensis Gressitt and Kimoto, n. sp.

Female: Pale yellowish testaceous to pitchy and castaneous: head testaceous, pitchy on much of occiput and on clypeus, labrum, mandible and palpi; antenna reddish brown, testaceous on segments 1-2; pronotum pale testaceous; scutellum pitchy, reddish in center; elytron pale yellowish testaceous, though almost all of borders narrowly pitchy brown and with a small humeral spot, a small oval spot between humerus and suture, a median postcentral spot and a small area opposite on external margin pitchy brown; ventral surfaces testaceous on prosternum and abdomen, castaneous on metathorax, metepisternum and most of hind coxa; legs testaceous, slightly brownish on tarsi and tibiae, with apices of hind tarsal segment 1 and hind tibia slightly pitchy; dorsum nearly glabrous with just a few pale hairs on head and outer margin of elytron; ventral surfaces with sparse oblique pale hairs, quite short on hind thorax; legs rather thinly clothed with pale hairs.

Head not quite as broad as prothorax at apex; occiput weakly convex, finely punctured; postantennal swellings subtriangular, moderately raised and grooved between; interantennal area slightly narrower than an antennal insertion, fairly strongly raised and the ridge continuous with raised portion of frontal area which is finely punctured; gena extremely short; eye broadly oval. Antenna 4/5 as long as body, fairly slender; segment 1 slender, arched and very smooth; 2 as thick as 1 and about 1/2 as long; 3 more slender than 2 and nearly as long; 4 not quite as long as 2+3, subequal to 5; 5–10 decreasing slightly

in length; 11 about as long as 5. Prothorax not quite 2/3 as long as broad; anterior margin straight; basal margin strongly convex, slightly sinuate and feebly concave at center; lateral margin weakly convex; anterior angle swollen and projecting somewhat forward; basal angle obtuse and barely projecting; disc distinctly depressed transversely just behind center; surface unevenly punctured with fairly small close punctures on much of anterior portion and sparser punctures near center and base and not very densely punctured in depression. Scutellum triangular, feebly convex and smooth. Elytron not quite  $3 \times$  as long as broad, gradually narrowing slightly to behind middle and then broadly rounded apically with sutural angle obtusely rounded; epipleuron broad and parallel in basal 1/4, then subevenly narrowed; disc subevenly convex, impressed with moderately deep punctures and about 19 irregular rows anterior to middle and less regularly posteriorly, most of punctures about as large as interspaces on anterior 1/2 and a little smaller Ventral surfaces shiny, in large part sparsely punctured; pygidium rounded posteriorly. apically; last abdominal sternite fairly large, partly smooth and finely punctured, subrounded apically. Legs fairly slender; hind tibia weakly sinuate; hind tarsal segment 1 about 1/2 as long as tibia and about  $1.6 \times$  as long as remaining segments combined, 2 distinctly longer than 3 and last about 1/3 as long as 1. Length 3.1 mm; breadth 1.5.

Male: Cuticle less yellowish and in part subtransparent or somewhat whitish; elytral spots paler brown; last abdominal sternite with a subtrapeziform terminal lobe which is slightly broader apically than basally, slightly broader than long and weakly concave apically; epipleuron broad and parallel in basal 1/4, then subevenly narrowed. Length 3.0 mm; breadth 1.5.

Paratypes: Length 3.0-3.6 mm; breadth 1.5-1.7.

DISTRIBUTION: S. China (Fukien, Hupeh, Kwangtung, Kiangsi).

Holotype ♀ (BISHOP 3299), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 21– 27. IV. 1945, T. C. Maa; allotype ♂ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 22. VIII. 1948, Gressitt & Djou; 3 paratypes (BISHOP, CAS, US): 1 paratopotype, 9. XI. 1942, Maa, 1, Yim-na Shan, 600 m, nr. Meihsien, NE Kwangtung Prov., 10. VI. 1936, Gressitt; 1, Ku-ling, nr. Kiu-kiang, N. Kiangsi Prov., 18. X. 1919, Loomis.

Differs from *sexlineatus* Chûjô in being slightly larger, with pronotum more even and less depressed across middle, and elytron less heavily punctured and with a median dark stripe instead of with basal and postmedian spots.

# 364. Monolepta signata Olivier Fig. 171, b.

Monolepta signata Oliv., 1808, Entomologie 6: 665, pl. 5, fig. 89 (E. Indies).—Duvivier, 1891, Soc. Ent. Belg., C. R. 35: 153 (Bengale).—Maulik, 1936, Fauna India, Galeruc., 410, fig. 109 (Hong Kong, Siam).

Monolepta signata ab. lutea Piton, 1943, Soc. Linn. Lyon, Bull. 12: 138 (Yunnan).

Monolepta signata ab. coalita Piton, 1943, l. c. (Yunnan).

Monolepta signata ab. bipunctata Piton, 1943, l. c. (Yunnan).

Monolepta signata ab. pici Piton, 1943, l.c. (Yunnan).

Monolepta signata ab. yunnanensis Piton, 1943, l.c. (Yunnan).

Monolepta signata ab. sexmaculata Piton, 1943, l. c. (Yunnan).

Monolepta signata ab. belmonti Piton, 1943, l. c. (Yunnan).

**1B** 

DISTRIBUTION: India, Ceylon, Burma, Tibet, S. China (Yunnan, Szechuan, Kwangsi, Kwangtung, Fukien), Hainan I., Vietnam, Thailand.

TIBET: 3, LeMoult (FREY). YUNNAN: 9, Chao-chow-fu, 2300 m, W. Yunnan, 23. VIII-21. IX. 1914, Mell (ZMB); Chao-tung, Graham (US); 5, Yunnan-sen (ZMB); 3, Kunming (?), 1. VIII. 1944, C. L. Liu (2001: 149); Yunnan-fu, VIII. 1932, K. T. Lau. SZE-CHUAN: 1, Chang-tau-ching, 300 m, Wan, 18. VII. 1948, Gressitt & Djou (CAS); Sui-fu, X. 1924, Graham (US). KWANGSI: Chin-sing-chang, 28. VI. 1948, Djou (CAS); Lung-chow, IV. 1933, G. Liu (MCZ). KWANGTUNG: Honam I., Canton, VII. 1932, Djou; Tsin-pai, Sini, VII. 1932, Hoffmann; Mei-hsien, V–VI. 1936, Gressitt; Fong-tong-ping, Lin, VI. 1934, To; Waichow, Hweiyang, IV. 1940, Gressitt & To; Fei-ha to Fei-loi, VII. 1949, Gressitt. FUKIEN: 12, Yung-an City, II–VI. 1940, Maa (CAS, BISHOP); Fung-shih, Shang-hang, VII. 1940, Maa; Ten-hwa, X. 1940, Maa (CAS). HAINAN: 15, 10–25. III. 1909, Schoede; Hoi-how, 1932, Hoffmann; Loh-fung-tung, II. 1935, To; Cheung-kon, III. 1935, To; Fat-loh, III. 1935, To. VIETNAM: 20, Hoa binh, Tonkin, de Cooman (FREY).

# 365. Monolepta subapicalis Gressitt and Kimoto, n. sp. Fig. 172, b.

Male: Orange ochraceous, apical 2/5 of elytron dark pitchy brown except for apical margin and external margin; antenna slightly darkened in distal 1/2 and extreme apex of hind tibia slightly pitchy. Dorsum glabrous except for a few hairs on head and apical portion of elytron; ventral surfaces and legs quite sparsely pubescent; antenna moderately pubescent beyond segment 1.

Head slightly narrower than prothorax; occiput moderately convex, finely punctured; postantennal swellings rather weak and indistinct; interantennal area slightly wider than



Fig. 172.  $\bigcirc$  genitalia. a, Monolepta parenthetica n. sp.; b, M. subapicalis n. sp.; c, M. selmani n. sp.

an antennal insertion, moderately raised; frontal area subevenly convex, finely punctured; gena extremely short; eye partly ovate. Antenna 3/4 as long as body, fairly slender; segment 1 slender, arched and smooth; 2 about  $2 \times$  as long as broad, moderately swollen; 3 longer and more slender than 2; 4 stouter, not quite as long as 2+3; 5 about as long as 4; 5-10 decreasing slightly in length; 11 about as long as 5. Prothorax 5/9 as long as broad; anterior margin nearly straight; basal margin strongly convex; lateral margin moderately and evenly convex; anterior angle projecting slightly forward; basal angle obtuse and barely projecting; disc evenly convex, rather closely punctured, the punctures smaller anteriorly and somewhat larger posteriorly and mostly as large as interspaces. Scutellum triangular, smooth and shiny. Elytron 3/8 as broad as long, feebly convex at side but very slightly wider postmedially, broadly rounded apically with sutural angle obtusely rounded; lateral margin narrowly expanded; epipleuron subparallel in basal 1/4, then strongly narrowed and disappearing before apex; disc evenly convex, with fairly deep and distinct punctures which are almost entirely irregular and at least 20 across middle, mostly about as large as interspaces, but with some fine punctures in interspaces. Ventral surfaces slightly uneven but largely impunctate; last abdominal sternite with median lobe about as long as broad and somewhat tapering and rounded apically. Legs fairly slender; hind tibia slightly arched; hind tarsal segment 1 slender, 3/5 as long as tibia and  $1.5 \times$  as long as remaining segments combined, 2 about as long as 3 and last about 2/5 as long as 1. Length 3.1 mm; breadth 1.5.

*Female*: Preapical portion of elytron with dark area paler and more transparent; last abdominal sternite evenly rounded and weakly punctured. Length 3.0 mm; breadth 1.8.

Paratypes: Length 2.6-3.2 mm; breadth 1.4-1.8.

DISTRIBUTION: W. China (W. Hupeh).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., nr. Szechuan border, 25. VII. 1948, Gressitt & Djou; allotopotype ♀ (CAS), 30. VII; 11 paratopotypes (CAS, BISHOP, LINGNAN, USNM, BMNH), 25. VII-23. VIII; 1 paratype, Wang-chia-ying to Sui-sa-pa, 1200 m, 21. VII; 1, Hsiao-ho (Shaoho), Lichuan, 13. VIII, 1, Liang-ho-keu, Lichuan, 10. IX; 1, betw. Mo-tai-chi and San hou-keu, Hupeh-Szechuan border, 19. VII. 1948, Gressitt & Djou.

Differs from *longitarsoides* Chûjô in having prothorax shorter, less oblong, and convex, and elytron without an anterior spot and with posterior spot much larger.

# 366. Monolepta sublata Gressitt and Kimoto, n. sp.

*Female*: Pale testaceous to pitchy black: head and pronotum orange testaceous, more reddish on labrum, mandible and palpi; antenna dull reddish brown, ochraceous on segments 1-2; scutellum pitchy black; elytron pitchy brownish to blackish with a fairly broad straight transverse testaceous band at middle occupying slightly more than central 1/5; ventral surfaces testaceous on prosternum and abdominal sternites 1-4, pitchy black on remainder; legs pitchy brownish, more reddish on knees and tarsi, but fore leg largely testaceous on femur and ochraceous brown on tibia. Dorsum nearly glabrous above with just a few pale hairs on head; antenna moderately clothed with oblique reddish brown hairs and a few longer ones on distal segments; ventral surfaces quite sparsely clothed with suberect golden buff hairs; legs rather thinly clothed with pale hairs.

Head nearly as broad as prothorax at apex; occiput smooth and evenly convex; post-

antennal swellings rather weakly arranged but smooth, separated by a groove posteriorly; interantennal area barely broader than an antennal insertion, distinctly raised medially and continuous with raised triangular frontoclypeus which is finely punctured; gena extremely short; eye broadly ovate. Antenna 3/4 as long as body, moderately slender; segment 1 fairly long and moderately arched and swollen preapically; 2 about  $2\times$  as long as broad; 3 slightly longer, broadened and oblique apically; 4 fully as long as 1, suboblique apically; 4-7 equal in length; 8-10 slightly shorter; 11 barely longer than 4. Prothorax 2/3 as long as broad; anterior margin straight; posterior margin rather strongly and somewhat sinuately convex, being slightly concave at middle; lateral margin moderately and evenly convex; anterior corner swollen and projecting forward; posterior corner obtuse and slightly projecting: disc evenly convex, smooth, with fine scattered punctures mostly about 1/3or 1/4 as wide as interspaces. Scutellum triangular, feebly convex and smooth. Elytron  $2.6 \times$  as long as broad, moderately rounded at side but slightly constricted behind basal 1/3; apex broadly rounded with sutural angle rounded-obtuse; lateral margin distinctly expanded basally, becoming narrower posteriorly; epipleuron very broad in basal 1/3, suddenly greatly narrowing and becoming extremely narrow on apex; surface strongly and evenly convex, with numerous small distinct irregular punctures, mostly about 1/3-1/2 as large as interspaces. Ventral surfaces sparsely but quite distinctly punctured; pygidium rounded apically; last abdominal sternite rounded-truncate apically. Legs with femora fairly broad and flattened; hind tibia slightly arched; hind tarsus 4/5 as long as tibia, segment 1 nearly  $2 \times$  as long as remainder combined, 2 somewhat longer than 3, last barely longer than 2. Length 5.0 mm; breadth 2.75.

Paratypes: Length 4.4–5.2 mm; breadth 2.6–3.0.

DISTRIBUTION: S. China (Fukien, Szechuan, Yunnan).

Holotype  $\mathcal{Q}$  (BISHOP 3300), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 1– 9.X. 1934, T. C. Maa; 2  $\mathcal{Q}$  paratopotypes (BISHOP, CAS), 18–20. VIII. 1945, 18.X. 1942, Maa; paratype  $\mathcal{Q}$  (CAS), NE of Mo-tau-chi, Wan Distr., Szechuan Prov., nr. Hupeh border, 22. IX. 1948, Gressitt & Djou; paratype  $\mathcal{Q}$  (ZMB), Yunnan-sen, Yunnan Prov.

Differs from *leechi* Jac. in being larger and much broader, with elytral puncturation relatively finer, and abdominal sternites 1–4 yellow instead of pitchy.

## 367. Monolepta subrubra Chen

Monolepta subrubra Chen, 1942, Notes d'Ent. Chinoise 9: 57 (Shensi: Wei-Tze-ping; HOANG-HO-PAIHO).

DISTRIBUTION: NW China (Shensi).

# 368. Monolepta yaosanica Chen Fig. 171, c.

Monolepta yaosanica Chen, 1942, Notes d'Ent. Chinoise 9: 59 (Kwangsi: Yaosan; Ac. SIN.).

DISTRIBUTION: S. China (Kwangsi, Hupeh, Kiangsi, Fukien, Chekiang).

HUPEH: 1, Sui-sa-pa, 1200 m, Lichuan, 25. VII. 1948; 2, Chi-au Shan to Wang-chiaying, 1100 m, 20. VII. 1948, Gressitt & Djou. KIANGSI: 1, An-yuen, 400 m, 23. V. 1948, Gressitt & Djou; 1, Hong Shan, 1000 m, 26. VI. 1936, Gressitt (CAS). FUKIEN: 1, Tachu-lan, 1000 m, Shaowu, 31. VIII. 1942, Maa (BISHOP). CHEKIANG: 1, Hangchow, 19. V. 1923, Van Dyke (CAS).

#### 369. Monolepta yunnanica Gressitt and Kimoto, n. sp.

Male: Pale yellowish testaceous to pitchy black: head testaceous, brownish ochraceous, on occiput and postantennal swellings, reddish brown on labrum, mandible and palpi; antenna reddish brown, ochraceous on segments 1-3; pronotum pale testaceous; scutellum pitchy black; elytron pitchy black with a large testaceous spot on center of disc and occupying slightly more than 2nd 1/3 but not reaching suture on external margin; ventral surfaces behind prosternum pitchy black, in part tinged with reddish particularly at apex of abdomen; legs reddish pitchy, largely ochraceous on fore femur and reddish brown on fore tibia. Body very sparsely clothed above but with a few pale hairs on anterior portion of head and a very few on posterior portion of elytron; ventral surfaces quite thinly clothed with scattered suberect pale hairs; legs moderately clothed, thinly so on femora.

Head not quite as broad as apex of prothorax; occiput evenly convex, minutely and sparsely punctured; postantennal swellings fairly low and smooth, separated by a median groove; interantennal area about as large as an antennal insertion, raised medially and continuous with raised triangular frontoclypeal area; labrum subevenly rounded apically; gena about 1/7 as deep as eye; eye broadly oval. Antenna about 2/3 as long as body, fairly slender; segment 1 distinctly arched, not very strongly swollen and feebly punctured; 2 about  $1.5 \times$  as long as broad, moderately swollen; 3 fully  $2 \times$  as long as broad, more cylindrical; 4 slightly longer than 3; 5 slightly longer than 4; 5-10 decreasing gradually and slightly in length (last missing),  $1.8 \times$  as broad as long, anterior margin nearly straight; basal margin convex, very slightly concave at center; lateral margin somewhat evenly and weakly convex; anterior angle rounded and slightly swollen; basal angle obtuse and slightly projecting; disc rather evenly convex, quite finely and irregularly punctured, the punctures mostly much smaller than interspaces. Scutellum triangular, fairly flat and not distinctly punctured. *Elytron* not quite  $3 \times$  as long as broad, gradually and moderately widened to well behind middle and then broadly rounded apically and rounded at sutural corner; lateral margin narrowly expanded; epipleuron strongly narrowed after basal 2/5 and disappearing before apex; disc rather evenly convex, impressed with minute irregular punctures which are mostly about 1/3 as wide as interspaces and somewhat finer and sparser posteriorly. Ventral surfaces quite unevenly punctured with sparse fine punctures on metasternum and a few slightly larger punctures near base of middle of side of each abdominal sternite and larger punctures near lateral margin of abdomen; pygidium fairly broadly rounded apically; last abdominal sternite with a somewhat trapeziform central apical lobe which is separated from subtriangular lateral lobes by a fairly deep oblique incision. Legs moderately slender; hind tarsal segment 1 quite slender, distinctly longer than remainder combined, 2 slightly longer than 3, last barely 3/5 as long as 1. Length 3.2 mm; breadth 1.8.

*Female*: Elytral pale spot slightly larger, nearly 1/2 as long as elytron, pygidium rounded triangular; last abdominal sternite somewhat obtusely rounded apically. Length 4.0 mm; breadth 1.9.

Paratypes: Length 3.2-4.0 mm; breadth 1.85-2.0.

DISTRIBUTION: SW China (Yunnan).

Holotype Z<sup>A</sup> (Zool. Mus. Berlin), Chao-chow-fu, 2300 m, W. Yunnan, 23. VIII-21.

XI. I914, R. Mell; allotopotype  $\mathcal{P}$  (ZMB), same data; 8 paratopotypes (ZMB, BISHOP), same data.

Differs from *leechi* Jac. in having prothorax shorter and more punctured and elytron a little more finely and sparsely punctured and with a large spot instead of a band; and from *yaosanica* Chen in having a large pale spot on elytron, with prothorax less narrowed from middle to base and more punctured on disc, and elytron less heavily punctured.

# 370. Monolepta xanthodera Chen

Monolepta xanthodera Chen, 1942, Notes d'Ent. Chinoise 9: 58 (Shensi: Wei-tze-ping; Szechuan: Omeishan; HOANGHO-PAIHO).

DISTRIBUTION: W. China (Shensi, Szechuan, W. Hupeh, Yunnan).

SZECHUAN: Mt. Omei, 16. VII. 1932, Franck (CAS); Shin-kai-sze, 1500 m, S side, 2000 m, & summit, 3000 m, Omei Shan, 11–15. VIII. 1940, Gressitt (BISHOP); Beh-luh-din, 11. VIII. 1930, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, VII-VIII. 1948; Hsiao-ho, VIII; Liang-ho-keu, IX. 1948, Gressitt & Djou (CAS). YUNNAN: 1, Yunnan-sen; 3, Chao-chow-fu, 2300 m, W. Yunnan, VIII-IX. 1914, Mell (ZMB).

# 371. Monolepta zonalis Gressitt and Kimoto, n. sp.

*Female*: Pale yellowish testaceous to reddish and black: head and pronotum pale yellowish testaceous, but clypeus, labrum, mandible and palpi pitchy black; antenna dull reddish brown, ochraceous on segments 1-2; scutellum pitchy black; elytron pitchy black on basal 1/6 and apical 1/6, reddish from basal band to just behind middle and yellowish on remainder; ventral surfaces testaceous on prosternum, pale reddish brown on metasternum and partly pitchy and partly reddish or yellowish on thoracic pleura, reddish ochraceous on abdomen; legs pitchy, but fore coxa and fore femur testaceous and hind femur nearly black. Body glabrous above and very sparsely pubescent beneath and around femora.

*Head* slightly narrower than prothorax at apex; occiput feebly convex and almost impunctate; postantennal swellings fairly broad, moderately raised and feebly punctured; interantennal area barely as wide as an antennal insertion, moderately raised; frons subtriangular, moderately raised preapically but somewhat depressed towards antennal insertions; gena extremely short; eye broadly ovate. Antenna 3/4 as long as body, not very slender; segment 1 arched, smooth and shiny; 2 slightly longer than broad; 3 about  $2 \times$  as long as broad; 4 barely longer than 1; 5 equal to 4; 6 shorter, 6-10 decreasing very slightly in length; 11 barely longer than 10. Prothorax 5/8 as long as broad; anterior margin nearly straight; basal margin strongly and subevenly convex but barely concave at middle of base; lateral margin slightly and evenly convex; anterior angle swollen and projecting somewhat forward; basal angle obtuse and barely projecting; disc evenly convex, nearly impunctate. Scutellum triangular, smooth and impunctate. Elytron  $2.8 \times$  as long as broad, subevenly convex at side, rounded apically with sutural angle slightly rounded; lateral margin narrowly expanded; epipleuron broad basally and suddenly narrowed beyond basal 1/3, then gradually narrowed and disappearing before apex; disc subevenly convex, with numerous very fine irregular punctures mostly 1/2 to 1/3 as large as interspaces. Ventral surfaces shiny, with a few medium sized punctures scattered along sides of sternites; pygidium rounded apically and somewhat heavily punctured; last abdominal sternite broadly

rounded and moderately punctured. Legs fairly strongly flattened; mid-tarsal segment 1 not quite as long as remainder. Length 6.0 mm; breadth 3.5.

*Male*: Postmedian portion of elytron paler near suture; last abdominal sternite with median apical lobe broader than long, arcuately narrowed and rounded-truncate apically, with lateral lobe rounded-acute. Length 5.4 mm; breadth 2.9.

*Paratype*: Postmedian portion of elytron gradually paler posteriorly. Length 6.6 mm; breadth 3.4.

DISTRIBUTION: SW China (Yunnan), N. Vietnam.

Holotype  $\mathcal{Q}$  (Bishop 3301), on railway between Lao-Kay and Kai-yuen, Yunnan Prov., near Sino-Vietnam border, 29. VI. 1940, Gressitt; allotype  $\mathcal{J}$  (Mus. G. FREY), Hoa-binh, Tonkin, N. Vietnam, R. P. A. de Cooman; paratype  $\mathcal{Q}$  (Bishop), same data as allotype.

Differs from *cavipennis* Baly in lacking a black band at middle of elytron, with prothorax more evenly convex on disc and more evenly rounded at side, and with elytron more finely punctured.

# Genus Sermyloides Jacoby

Sermyloides Jac., 1884, Leyden Mus., Notes 6: 64 (type: S. basalis Jac.; Sumatra).—Baly, 1887, Ent. Monthly Mag. 23: 268.—Duvivier, 1891, Soc. Ent. Belg., C. R. 35: CLI.

Praeochralea Duvivier, 1885, Stett. Ent. Ztg. 46: 245 (type: P. antennalis Duv.).—Weise, 1913, Philipp. Jour. Sci. 8D (3): 232.

# KEY TO CHINESE SPECIES OF SERMYLOIDES

1. Elytron largely reddish with a preapical spot of black or whitish	2
Elytron unicolorous or apical portion entirely black	3
2(1). Elytron with a preapical spot of whitish testaceous, and apex black; pronotum	
distinctly punctured; length 4.8-5.0 mm 377. semiornat	a
Elytron with a large preapical black spot; pronotum not distinctly punctured;	
length 5.0–5.2 mm	a
3 (1). Frontal depression smooth in center, lacking a subcentral tubercle	4
Frontal depression with a central or subcentral tubercle, ridge or pair of erect	
lobes	5
4 (3). Frontal cavity even, with borders smooth and nearly hairless; dorsum entirely	
pale ochraceous; length 6 mm	a
Frontal cavity deep, with a hairy ridge on border near antennal insertions;	
brownish red with elytron black except basal 1/4 reddish yellow and a dis-	
cal spot of testaceous; length 5 mm 374. decorat	a
5(3). Frontal cavity with a raised central area and a deeper cavity on each side	
which is bordered with rows of fine hairs	6
Frontal cavity rather even, with 1 or 2 raised tubercles erect from smooth sur-	
face	7
6(5). Frontal cavity with a median narrow bridge between deeper lateral cavities, and	
erect lobes near antennal insertions; dorsum red with posterior $2/5$ of elytron	
black; length 4.9 mm (Yunnan)sp	),
Frontal cavity with a fairly broad flat area between deeper lateral cavities, and	

#### Pac. Ins. Mon.

#### 372. Sermyloides bimaculata Gressitt and Kimoto, n. sp.

*Female*: Body strongly convex and deep; pale orange testaceous with a large black spot on each elytron largely behind middle and somewhat closer to external margin than to suture and not quite reaching apex; antenna reddish brown, darker brown on segments 2-6, hind leg with tibia and apical 2/5 of femur black and tarsal segment 1 reddish brown. Body nearly glabrous above; antenna moderately clothed with oblique reddish buff hairs; ventral surfaces and legs sparsely clothed with suberect goldish hairs.

*Head* less than 4/5 as broad as prothorax; occiput moderately and evenly convex. with a shallow transverse groove behind postantennal swellings which are rather weak and indistinct at side; interantennal area slightly concave, narrower than an antennal insertion; frontal area depressed near antennal insertions, moderately convex across central portion, nearly impunctate; labrum strongly convex preapically, feebly emarginate at middle of apex; gena about 1/4 as deep as eye; eye subevenly ovate, a little more convex at middle of anterior margin. Antenna 3/4 as long as body, fairly slender; segment 1 subevenly arched and gradually thickened to apex; 2 barely as long as broad; 3 nearly as long as 1, slightly longer than 4; 4-10 gradually decreasing in length; 11 about as long as 4. *Prothorax* slightly more than  $2 \times$  as broad as long; anterior margin straight; basal margin distinctly and subevenly convex; lateral margin subevenly rounded, broadest just behind middle; anterior angle swollen and rounded; basal angle rounded-obtuse; disc subevenly convex, almost impunctate and slightly frosted. Scutellum subequilaterally triangular, weakly convex and feebly punctured. Elytron  $3.3 \times$  as long as broad, subparallel, weakly convex at side and widest near middle, narrowed and rounded apically with sutural angle obtusely rounded; lateral margin narrowly expanded; epipleuron slightly broadened from base to end of basal 1/4, then distinctly narrowed, then more gradually narrowed and continuing to extreme apex; disc strongly convex, lateral portion obscuring most of lateral margin in dorsal view; surface impressed with deep distinct punctures which are almost entirely irregular and mostly about as large as interspaces throughout, at least 25 in an approximate row across middle. Ventral surfaces shiny, nearly impunctate on metasternum and finely and not very closely punctured on abdomen; last abdominal sternite rounded-truncate. Legs with femora fairly stout and hind tibia slightly arched preapically; hind tarsal segment 1 slender, slightly longer than remainder combined, 2 slightly longer than 3, last 2/3 as long as 1. Length 5.0 mm; breadth 2.6.

*Paratypes*: Elytral spot not quite as large as in type, more oblique anteriorly. Length 4.9 mm; breadth 2.6.

DISTRIBUTION: S. China (Kwangtung).

Holotype ♀ (CAS), Lung-tau Shan, 300 m, Kuhkiang Distr., N. Kwangtung Prov., 7. VII. 1947, W. T. Tsang; paratopotype ♀ (BISHOP), above Tso-kok-wan, 600 m, Lung-tau Shan, 10. VI. 1947, Gressitt.

373. Sermyloides coomani Laboissière

Sermyloides coomani Lab., 1936, Soc. Ent. France, Ann. 105: 257 (Hoa-binh, Tonkin; PA-RIS).

DISTRIBUTION: N. Vietnam.

VIETNAM: 8, Hoa-binh, Tonkin, de Cooman (FREY).

374. Sermyloides decorata Chen

Sermyloides decorata Chen, 1942, Notes d'Ent. Chinoise 9: 55 (Kwangsi: Yaosan; Ac. SIN.). DISTRIBUTION: S. China (Kwangsi).

375. Sermyloides inornata Chen Fig. 173, a.

Sermyloides inornata Chen, 1942, l. c., 53 (Hainan; FAN. MEM. INST.).

DISTRIBUTION: Hainan I.

HAINAN: 1, Tai-tsing-lam-tsuen, nr. Lai-mo-ling, 3-4.VI. 1935, To; 1, Nam-liu-tin, Lam-wan-tung, 29-30. VII. 1935, To; 2, Ta-hau, W of No-doa, 3. VII. 1935, Gressitt; 1, Taipin-tsuen, 325 m, 22. VII. 1935, Gressitt (CAS, BISHOP, LINGNAN).



Fig. 173. a, Sermyloides inornata Chen; b, S. nigripennis n. sp.

# 376. Sermyloides nigripennis Gressitt and Kimoto, n. sp. Fig. 173, b.

*Male*: Pale orange testaceous and pitchy black to brown with a slightly metallic tinge: head, pronotum, scutellum and ventral surfaces pale orange testaceous; antenna brown, segment 1 largely ochraceous; legs testaceous with apex of hind femur pitchy brown; elytron pitchy reddish basally and apically and pitchy black on central portion with a slightly metallic tinge. Dorsum with very sparse erect hairs, mostly on head and posterior portion of elytron; antenna thinly clothed with subadpressed pale hairs beyond segment 3 and a few sparser hairs on basal segments; ventral surfaces and legs rather thinly clothed with suberect goldish hairs.

Head slightly broader than prothorax, quite short and depressed anteriorly; occiput moderately convex, depressed anteriorly at center; postantennal swellings broad and rather feebly raised; interantennal area depressed, barely wider than an antennal insertion; frontal area very broad and depressed with a transverse deeper depression on each side of center and one nearly as deep just above center with a pair of erect narrow lobed structures on center and a transverse ridge (divided in middle) on posterior portion of clypeal area and a ridge bearing some long hairs at side near middle of eye; labrum strongly raised preapically and slightly emarginate at apex; gena not quite 1/2 as deep as eye; eye irregularly ovate with a slight arcuate depression on anterior border just below transverse ridge. Antenna slightly longer than body; segment 1 strongly flattened and arched; 2 slightly broader than long; 3 about 1/3 longer than 1, moderately broadened and distinctly produced and toothed anteriorly at apex; 4 about 1/2 as long as 1, slightly oblique apically; 5 barely longer than 4; 5-7 subequal; 8 slightly longer than 7; 8-10 decreasing slightly in length; 11 about as long as 5. Prothorax not quite  $2 \times$  as broad as long; anterior margin nearly straight; basal margin moderately convex; lateral margin subevenly convex but widest somewhat anterior to middle; anterior angle swollen and rounded but not protruding; basal angle weakly obtuse; disc evenly convex, with very sparse and distinct punctures, Scutellum triangular, slightly longer than broad, slightly convex and feebly punctured. *Elytron* not quite  $4 \times$  as long as broad, subparallel-sided, very slightly broadened behind middle, broadly rounded apically with sutural angle obtusely rounded; lateral margin narrowly expanded; epipleuron moderately broadened in basal 1/4, then gradually narrowed and extending to extreme apex; disc evenly convex, with fairly deep irregular punctures which are mostly nearly as large as interspaces and somewhat weaker posteriorly. Ventral surfaces shiny, weakly and sparsely punctured, more punctured on abdomen then metasternum. Legs fairly long; femora fairly broad, compressed; hind tibia weakly arched preapically; hind tarsal segment 1 slender,  $1.2 \times$  as long as remaining segments combined, 2 slightly longer than 3, last 3/5 as long as 1. Length 4.6 mm; breadth 2.1.

*Female*: Head slightly narrower than prothorax; antenna 3/4 as long as body; antennal segment 1 pale brown, darker distally; elytron slightly darker than in type; front of head only slightly expanded and depressed with area surrounding antennal insertions moderately concave but central area of frons somewhat transversely raised. Length 4.8 mm; breadth 2.35.

Paratypes: Length 4.1-4.9 mm; breadth 1.8-2.3.

DISTRIBUTION: SE China (Kiangsi).

Holotype ♂ (CAS), Hong Shan, 1000 m, SE Kiangsi Prov., 30. VI. 1936, Gressitt; allotopotype ♀ (CAS), 26. VI; 3 paratopotypes 2 ♂♂, 1 ♀ (CAS, BISHOP), 15-20. VI. 1936, Gressitt.

Differs from *varicolor* Chen in being more slender, with elytron largely black and more heavily punctured and frons much less concave, with erect lobes at center.

### 377. Sermyloides semiornata Chen

Sermyloides semiornata Chen, 1942, Notes d'Ent. Chinoise 9: 54 (Shensi: Wei-tze-ping; HOANGHO-PAIHO).

The color of legs in our material does not agree, but it may be this species.

DISTRIBUTION: W. China (Shensi, W. Hupeh).

HUPEH: 1, Hsiao-ho, 900 m, Lichuan Distr., 13. VIII. 1948, Gressitt & Djou (CAS).

# 378. Sermyloides varicolor Chen Fig. 174, a.

Sermyloides varicolor Chen, 1942, l. c., 51 (Szechuan: Omei-shan; Sikang: Yachow; Ac. SIN.).

Three of the specimens below are red and 2 are black.

DISTRIBUTION: W. China (Szechuan, Sikang).

SZECHUAN: 5, Shin-kai-sze, 1500 m, Omei Shan, 8. VIII. 1940, Gressitt (BISHOP, CAS, LINGNAN).

# Genus Pseudosepharia Laboissière

Pseudosepharia Lab., 1936, Soc. Ent. France, Ann. 105: 253 (type: Sepharia dilatipennis



Fig. 174. a, Sermyloides varicolor Chen; b, Pseudosepharia dilatipennis (Fairmaire).

Fairm., monobasic; W. China).

379. Pseudosepharia dilatipennis (Fairmaire) Fig. 174, b.

Sepharia dilatipennis Fairm., 1889, Soc. Ent. France, Ann. 58: 78 (Moupin; PARIS). Pseudosepharia dilatipennis, Laboissière, 1936, Soc. Ent. France, Ann. 105: 253, fig. 52.

DISTRIBUTION: W. China (Sikang).

SIKANG: 3, San-kiang-kou, Wassuland, VIII. 1934, Friedrich (FREY); 1, Chung-hwa, Wassuland, Reitter (FREY); 3, Mu-ping, 2000 m, 3. VII. 1929, Graham; 1, nr. Wenchuan, V-VIII. 1933, Graham; 1, Ts'ao-p'o, nr. Wen-chuan, VIII. 1938, Graham (US); 2, "Szechuan", 2200 m, Graham.

# Genus Paleosepharia Laboissière

# Key to Chinese species of Paleosepharia

1.	Prothorax about 1/2 as long as broad; elytron broad, largely dark
2 (1).	Prothorax slightly trapeziform; fore-body pale, elytron dark with a pale band; median lobe of last abdominal sternite deeply concave, narrowed apically
	Prothorax rounded at side; dorsum entirely pitchy black; median lobe of last
	abdominal sternite shallowly concave, not flat in bottom, subparallel-sided and
	broadly truncate apically
3 (1).	Dorsum entirely pale, testaceous to pale red
	Dorsum with some pitchy or black markings5
4 (3).	Prothorax weakly sinuate at side, slightly convex at middle of side; elytron long
	and nearly parallel-sided
	prothorax strongly and evenly convex at side, elytron relatively short, widehed
5 (2)	just benind middle
5 (3).	Elytron with 2 dark bands; postbasal depression beside suture more conspicuous than raised portion of suture
	Elytron with a single discal dark band, or only apical portion dark; suture dis- tinctly raised behind scutellum 7
6 (5)	Prothoray strongly sinuate at side constricted nostmedially and disc distinctly
0(5).	nunctured elytron with postbasal sutural depression of $\mathcal{A}$ conspicuous slight-
	ly oblique: disc with narrow hands and nale areas testaceous 384 kolthoffi
	Prothoray weakly sinuate at side and disc feebly nunctured: elytron with nost-
	has a sutural depression of A parrow parallel to suture: disc with broader dark
	bands and with basel area cohreceous and rale hands 2 & 3 ivery colored
	Danus and with basar area ochraceous and pare bands 2 & 5 tvory colored
7 (5)	Fore body ophraceous: elutron with a single postmedian hand; elutral outware of
1(3).	The body beinaceous, civiton with a single postilicular band, civital sultire of
	0. Harrowly laised benind scutentili

Paleosepharia Lab., 1936, Soc. Ent. France, Ann. 105: 251 (type: P. truncata Lab., monobasic; Cochin-China).

#### 380. Paleosepharia basipennis Gressitt and Kimoto, n. sp.

*Female*: Pale yellowish testaceous to reddish: head and pronotum testaceous to slightly ochraceous, more reddish on mouthparts; antenna reddish brown, duller apically and testaceous basally; scutellum and basal 1/10 of elytron reddish along with basal 1/4 of epipleuron; remainder of elytron and abdomen pale yellowish testaceous; metasternum and metepisternum reddish; legs testaceous with tibiae darker and almost pitchy on outer border of hind tibia and reddish brown on tarsi. Body nearly glabrous above; antenna with oblique pale reddish yellow hairs; ventral surfaces and legs sparsely clothed with fine oblique or suberect hairs.

Head slightly narrower than prothorax; occiput fairly smooth and evenly convex, indistinctly punctured; postantennal swellings short and transverse behind; interantennal area subevenly convex, distinctly wider than an antennal insertion; frontal area with a moderately raised triangle extending to behind posterior margins of antennal insertions, raised area finely and sparsely punctured; labrum slightly concave apically; gena about 1/8 as deep as eye; eye subevenly ovate. Antenna slender, nearly as long as broad; segment 1 feebly arched, distinctly swollen distally; 2 nearly  $2 \times$  as long as broad, fairly stout apically; 3 about 3/5 as long as 1; 4 barely longer than 3; 4-10 subequal in length; 11 slightly longer than 10. Prothorax slightly over 3/5 as long as broad; anterior margin straight; basal margin weakly convex in central portion and oblique at side; lateral margin subevenly convex, widest somewhat anterior to middle; anterior angle slightly swollen and rounded; basal angle obtuse; disc subevenly convex, finely and irregularly punctured, the punctures mostly much more widely separated than their diameters, sparser around central portion and closer towards anterior portion of side. Scutellum subequilaterally triangular, convex and nearly impunctate. Elytron  $2.8 \times$  as long as broad, moderately convex at side and much broader behind middle than near base, broadly rounded apically with sutural angle subevenly rounded; lateral margin narrowly expanded; epipleuron slightly widened in basal 1/4 then gradually narrowed and fairly wide just before apex where it suddenly becomes narrow and disappears on apex; disc subevenly convex, with a slight postbasal swelling followed by a feeble depression; surface with fairly close small punctures, mostly about as large as interspaces and numbering approximately 30 across middle. Ventral surfaces shiny, largely impunctate on thorax and finely and irregularly punctured on sides of abdominal sternites; pygidium obtusely rounded and shallowly emarginate at middle of apex; last abdominal sternite with a deep rounded-trapeziform emargination reaching nearly to middle and with fairly long hairs on sides of emargination. Legs fairly slender; hind tibia weakly sinuate; hind tarsal segment 1 nearly 1/2 as long as tibia and  $1.5 \times$  as long as remaining segments combined, 2 slightly longer than 3 and last about 2/5as long as 1. Length 4.0 mm; breadth 2.15.

*Paratypes*: Some individuals with apical margin of elytron and pygidium fairly bright reddish brown; smallest specimens with red nearly lacking on elytron and almost entire body pale. Length 3.6-4.4 mm; breadth 1.7-2.2.

DISTRIBUTION: Hainan I.

Holotype Q (CAS), Ta-hian, 600 m, N side of Five Finger Mts., C. Hainan I., 16. VI. 1935, Gressitt, 5 paratypes (CAS, BISHOP, USNM); 2 paratopotypes, 11, 19. VI; 1, paratype, Fan-heang, N of Ta-hian, 7. VI; 1, Ta-hau, 30 m, 6. VII; 1, Dwa-bi (Tai-pin), 22. VII. 1935, Gressitt.

Differs from *fulvicornis* Chen in being slightly smaller, relatively broader, with much less dense elytral puncturation and shorter prothorax, as well as more slender antenna and paler venter.

# 381. Paleosepharia excavata (Chûjô), NEW COMBINATION

Monolepta excavata Chûjô, 1938 (May), Arb. Morph. Tax. Ent. Berlin-Dahlem 5 (2): 144 (Taiwan; DEI).

Paleosepharia polychroma Laboissière, 1938 (Oct.), Ark. Zool. 30 A (11): 8 (Kiangsu, Kiangsi; ?BRUXELLES). New Synonymy.

DISTRIBUTION: Taiwan, S. China (Kiangsu, Kiangsi, Kwangtung).

KWANGTUNG: 6, Tsha-jiu San, V-VI. 1912, Mell (ZMB).

# 382. Paleosepharia fasciata Gressitt and Kimoto, n. sp.

*Male*: Yellowish testaceous to pitchy ochraceous: head orange ochraceous; antenna reddish brown, slightly paler at base and apex; pronotum and scutellum ochraceous; elytron reddish pitchy, with a broad testaceous band which does not quite reach suture or external margin and apex somewhat pale; ventral surfaces ochraceous, more yellowish testaceous on abdomen; legs reddish ochraceous with tibiae and tarsi largely dark reddish brown. Body nearly glabrous above; antenna and legs moderately clothed with oblique reddish hairs; ventral surfaces quite sparsely clothed with suberect pale hairs.

Head not quite as broad as prothorax; occiput smooth and evenly convex; postantennal swellings short, transverse behind; interantennal area much broader than an antennal insertion, raised medially and raised area continuous with obtusely transverse raised area of frons; labrum slightly concave apically; gena extremely short; eye ovate. Antenna 3/4 as long as body; segment 1 slightly arched and fairly stout apically; 2 elliptical, not quite  $2 \times$  as long as broad; 3 slightly longer, more slender; 4 not quite as long as 2+3; 5 slightly longer than 4; 5–10 gradually decreasing in length; 11 slightly longer than 10. Prothorax not quite  $2 \times$  as broad as long; transverse anteriorly; weakly convex basally and basal margin slightly emarginate near side; lateral margin weakly convex, broadest near apex; anterior angle somewhat swollen and weakly produced; basal angle rounded obtuse; disc subevenly convex, weakly depressed transversely on each side of middle, with scattered fine punctures which are more distinct towards side. Scutellum equilaterally triangular, weakly convex and smooth. Elytron not quite  $3 \times$  as long as broad, moderately convex at side and widest just behind middle, sinuate-truncate apically and slightly rounded at sutural angle; lateral margin distinctly expanded; epipleuron quite broad basally and only gradually narrowing and considerably broadening again at apex; disc subevenly convex, rather deeply and unevenly punctured throughout, with punctures in part slightly larger than interspaces. Ventral surfaces shiny and largely almost impunctate; pygidium rounded-truncate apically; last abdominal sternite very large, with a broad shallowly depressed lobe which extends most of length of sternum and exceeds lateral lobes and is truncate and slightly emarginate apically, the depression continuing to base of sternite. Legs fairly slender;

1B

hind tibia almost straight; hind tarsal segment 1 slightly longer than remainder combined, 2 nearly as long as 3, last 1/2 as long as 1. Length 4.5 mm; breadth 2.55.

*Female*: Antenna 2/3 as long as body; last abdominal sternite rounded apically and slightly depressed before apex. Length 5.2 mm; breadth 3.5.

*Paratypes*: Length 4.6-5.8 mm; breadth 2.6-3.0. The specimens from Tsha-jiu San are larger than those from Lin Hsien.

DISTRIBUTION: S. China (Kwangtung).

Holotype & (LINGNAN), Fong-tong-ping, Hoh-kai-hon, Lin Hsien, 6-7. VII. 1934, F. K. To; allotype Q, same data, on same pin, in copula; 5 paratopotypes (2 in copula on same pin; LINGNAN, BISHOP, CAS, AC. SIN.), same data; 3 paratypes (ZMB, BISHOP), Tsha-jiu San, Kwangtung, V-VI. 1912, R. Mell.

Differs from *excavata* Chûjô in being shorter, with shorter and less oblong prothorax, and with elytron less banded, more regularly punctured, and more broadened postmedially.

#### 383. Paleosepharia fulvicornis Chen

Paleosepharia fulvicornis Chen, 1942, Notes d'Ent. Chinoise 9: 51 (Chekiang: Taichow; Ac. SIN.).

DISTRIBUTION: S. China (Chekiang, Fukien, Kwangtung, Hupeh, Szechuan, Yunnan).

CHEKIANG; 2, Hangchow, 24. V. 1923, Van Dyke (CAS); 1, Tung-lu, 8. V. 1921, Wright (CAS). FUKIEN: 1, Chi-chih, Chungan, 3. V. 1940, Maa. KWANGTUNG: 9, Tsing-leong Shan, 5. VI. 1936, Gressitt; 2, Yim-na Shan, 14. VI. 1936, Gressitt (CAS, BISHOP). HUPEH: 2, betw. Mo-tai-chi & Sang-hou-ken and Chi-au Shan & Wang-chia-ying, Szechuan-Hupeh border, 19–20. VII. 1948, Gressitt & Djou. SZECHUAN: 2, Sui-fu, 14. V. 1924, Graham; 2, Chungking, 6–27. V. 1930, Graham (US). YUNNAN: 2, Kunming?, VIII. 1944, C. L. Liu (2001: 131); 3, Yunnan-sen (ZMB).

### 384. Paleosepharia kolthoffi Laboissière

Paleosepharia Kolthoffi Lab., 1938, Ark. Zool. 30 A (11): 8 (Kiangsu; ?STOCKHOLM).

DISTRIBUTION: S. China (Kiangsu, Chekiang, Anhwei, Kweichow, Hupeh, Shensi). CHEKIANG: 1, Tien-mu Shan, Reitter (FREY). ANHWEI: 3, Tai-ping-shien, X. 1932,
G. Liu (MCZ). KWEICHOW: 1, Shih-men-kan, 19. VII. 1934, Graham (US); 1, Meitan, 900 m, E of Tseng-yih, 18. VII. 1940, Gressitt. HUPEH: many, Sui-sa-pa, Lichuan, VII-IX. 1948, Gressitt & Djou; Liang-ho-keu, IX. 1948, Djou; Shiao-ho, VIII. 1948, Gressitt (CAS, BISHOP). SHENSI: 2, Ching-ling Mts., S. Shensi, IV-V. 1904, Blackwelder (US).

385. Paleosepharia liquidambara Gressitt and Kimoto, n. sp.

*Male*: Pale testaceous to orange ochraceous and pitchy black: head, pronotum and scutellum bright orange ochraceous; antenna dark pitchy brown with segment 1 ochraceous and 2 pitchy reddish; elytron pale yellowish testaceous with suture (narrowly between swelling and band) and borders pitchy black and with a complete pitchy black band just behind middle and curving somewhat obliquely posteriorly toward lateral margin, as well as a short humeral stripe extending a short distance obliquely inward from behind humerus; ventral surfaces pale orange ochraceous, still paler on side of abdomen; legs ochraceous with tibiae and tarsi largely reddish brown to slightly pitchy. Dorsum largely glab-

1B

rous but with a few erect pale hairs on sides of postscutellar swelling and on posthumeral stripe; antenna moderately clothed with oblique reddish buff hairs; ventral surfaces and legs moderately clothed with fine suberect pale goldish hairs.

Head 3/4 as broad as prothorax; occiput subevenly convex, nearly impunctate and with a very weak median groove anteriorly; postantennal swellings moderately convex, distinctly bounded behind by a weakly arcuate shallow groove; interantennal area evenly convex, slightly wider than an antennal insertion; frontal area with an obtuse transverse swelling, which extends posteriorly to between antennal insertions; labrum rounded-truncate apically; gena about 1/5 as deep as eye; eye broadly rounded-oval. Antenna 3/4 as long as body, slender; segment 1 long, moderately arched and swollen apically; 2 fully  $2 \times$  as long as broad, moderately thick; 3 about 1/2 as long as 1; 4 about 1/3 longer than 3; 4-10 decreasing very slightly in length; 11 distinctly longer than 10. Prothorax slightly more than 1/2 as long as broad, anterior margin weakly concave in middle; basal margin sinuate, very weakly concave in middle and oblique at side; lateral margin weakly convex, widest well anterior to middle; anterior angle swollen and evenly rounded; basal angle obtuse and slightly protruding; disc subevenly convex, with fairly distinct small punctures which are mostly about 1/2 as wide as interspaces but sparser on central portion and closer towards side. Scutellum equilaterally triangular, moderately convex and smooth. Elytron  $3 \times$  as long as broad, unevenly convex at side and widest slightly anterior to middle, broadly roundedtruncate apically with sutural angle nearly forming a right angle; lateral margin distinctly but narrowly expanded; epipleuron quite broad and slightly sinuate at margin in basal 1/3, gradually narrowed to slightly behind middle, then curved and becoming gradually narrower and continuing narrowly on apical margin; disc strongly convex, with a swelling on suture just behind scutellum; suture depressed behind swelling; surface irregularly impressed with small punctures which are mostly about 1/2 to 1/3 as large as interspaces and much finer posteriorly, and denser near sutural swelling. Ventral surfaces shiny, with fine punctures which are denser on side of abdomen; pygidium broadly rounded-truncate apically; last abdominal sternite with a broad median lobe which is slightly longer than 1/2of segment and slightly broader apically and basally and slightly broader than long, and moderately depressed medially and weakly convex apically. Legs fairly slender; hind tibia distinctly arched preapically and with long apical spines; hind tarsal segment 1 slender, 1/2 as long as tibia and nearly  $2 \times$  as long as remaining segments combined, 2 about as long as 3, last 1/3 as long as 1. Length 4.2 mm; breadth 2.3.

*Female*: Elytral suture not raised but slightly depressed near end of basal 1/4; pygidium obtuse with apex feebly emarginate; last abdominal sternite subevenly rounded apically, very slightly emarginate at center. Length 4.8 mm; breadth 2.9.

*Paratypes*: A few specimens with postmedian transverse band not quite complete. Length 4.2-5.6 mm; breadth 2.4-3.0.

DISTRIBUTION: S. China (Fukien, Kwangtung, Kiangsi, Anhwei, Hupeh).

Holotype & (BISHOP 3302), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 27. IV. 1943, T. C. Maa; allotopotype ♀ (BISHOP), 16. XII. 1942, Maa; 33 paratopotypes (CAS, BISHOP, USNM, BMNH, AC. SIN., KIMOTO), III-VIII, XI-XII, 1942-43, Maa; 1, Liu-tun, Kienyang Distr., Fukien, 22. VIII. 1942, Maa; 2, Ma-hang, 350-600 m, Ng San, Lohchang Distr., N. Kwangtung Prov.; 4 (US), Yellow Dragon Temple, Ku-ling, N. Kiangsi Prov., 18. X. 1919, Loomis; 3 (MCZ), Tai-ping-shien, Anhwei Prov., X. 1932, G. Liu; 35, Sui-sapa, 1000 m, Lichuan Distr., W. Hupeh Prov., VIII-IX. 1948, Gressitt & Djou, mostly on *Liquidambar*, some on *Metasequoia*, *Salix* and *Cornus*; 5, Liang-ho-keu, 2, Shiao-ho, Lichuan, Hupeh, IX. 1948, Djou.

Differs from *excavata* Chûjô in being slightly shorter, in having only one black band on elytral disc, with rest of disc yellowish instead of largely whitish, with prothorax more narrowed anteriorly and less oblong. Differs from *kolthoffi* Lab. in having one band instead of 2 and in having elytral suture much less depressed postbasally in  $\mathcal{J}$ .

#### 386. Paleosepharia posticata Chen

Paleosepharia posticata Chen, 1942, Notes d'Ent. Chinoise 9: 50 (Shensi: Wei-tze-ping; HOANGHO-PAIHO).

DISTRIBUTION: W. China (Shensi, W. Hupeh, Szechuan).

HUPEH: many, Sui-sa-pa, 1000 m, 30. VII-31. VIII. 1948, Liang-ho-keu, 9. IX. 1948, Lichuan, Gressitt & Djou (CAS, BISHOP). SZECHUAN: 1, nr. Wen-chuan, 1000 m, 20. VII. 1933, Graham (US).

387. Paleosepharia subnigra Gressitt and Kimoto, n. sp.

*Male*: Largely dark pitchy brown to pitchy black; abdomen pale testaceous; anterior portion of head partly reddish brown. Dorsum nearly glabrous; antenna moderately clothed with oblique reddish brown hairs; ventral surfaces with very few hairs on thorax and scattered suberect pale golden hairs on abdomen; legs sparsely clothed on femora and with oblique reddish hairs on tibiae and tarsi.

*Head* 5/6 as broad as prothorax; occiput evenly convex and nearly impunctate; postantennal swellings nearly flat, bounded behind by a weakly arcuate shallow groove; interantennal area rather strongly convex, more than  $2 \times$  as wide as an antennal insertion; from the set of the se tions, fairly shiny but feebly punctured; labrum subtransverse apically; gena less than 1/10 as deep as eye; eye broadly ovate. Antenna 4/5 as long as body, fairly slender; segment 1 weakly thickened preapically, moderately arcuate; 2 fully  $2 \times$  as long as broad, fairly thick preapically; 3 more slender,  $1.5 \times$  as long as 2; 4 more cylindrical, 3/4 as long as 1; 4-10 decreasing slightly in length; 11 barely longer than 10, acute apically. Prothorax nearly 1/2 as long as broad; anterior margin weakly concave in center; basal margin moderately and subevenly convex; lateral margin evenly convex, widest well anterior to middle; anterior angle swollen and evenly rounded; basal angle obtuse; disc subevenly convex at side but flatter in central portion, with distinct but fairly widely spaced punctures which are sparser and weaker at central portion and much stronger on basal 1/2 of side than anteriorly. Scutellum equilaterally triangular, smooth. Elytron nearly  $3 \times$  as long as broad, distinctly convex at side and widest slightly behind middle, broadly rounded-truncate apically with sutural angle barely rounded; lateral margin distinctly expanded; epipleuron slightly broadened in basal 1/4, then gradually narrowed and moderately wide all the way to sutural angle, broadening slightly on apical margin; disc subevenly convex with a slightly raised area near scutellum and a slightly longitudinal depression along suture behind scutellum; surface with moderately deep medium sized punctures which are mostly a little smaller than interspaces but fairly uniform in size almost to apex. Ventral surfaces shiny, largely impunctate; pygidium subtruncate apically but with a short obtuse process at middle of apex; last sternite very long, with a broad subparallel-sided median lobe which is slightly narrowed at apex and shallowly emarginate on apical margin, entire process gently concave with depression extending back to base of segment and process about 3/4 as long as segment, lateral lobe with some fairly large shallow punctures and fairly blunt apex. *Legs* fairly slender; hind tibia nearly straight; hind tarsal segment 1 slightly arched, thickened apically, 2/5 as long as tibia and nearly  $1.5 \times$  as long as remaining segments combined, 2 about as long as 3, last 2/5 as long as 1. Length 4.4 mm; breadth 2.3.

Paratype: Length 4.5 mm; breadth 2.4.

DISTRIBUTION: SE China (Kiangsi).

Holotype & (CAS), Hong Shan, 1000 m, SE Kiangsi Prov., 15–29. VI. 1936, Gressitt; paratopotype & (BISHOP), same data.

Differs from *excavata* Chûjô in being shorter and stouter, much differently colored, and with shorter prothorax which is more rounded at side. Differs from *posticata* Chen in being much stouter, with prothorax shorter and less trapeziform, and elytron more heavily punctured and with epipleuron much broader at apex.

## Genus Macrima Baly

Macrima Baly, 1878, Cist. Ent. 2: 377; 1878, Second Yarkand Mission, 31 (type: M. armata Baly; monobasic; N. India).—Maulik, 1936, Fauna India, Galeruc., 561.

Sepharia Fairmaire, 1889, Soc. Ent. France, Ann. 58: 78.—Laboissière, 1936 (Oct.), op. cit.
105: 246 (type: S. rubricata Fairm.).—Ogloblin, 1936 (Dec.), Fauna USSR, 26, 1: 322, 436 (type: S. dilatipennis; but this is type species of Pseudosepharia).

Glechonis Weise, 1889, Soc. Ent. Ross., Horae 23: 130 (type: rubripennis Ws.=rubricata Fairm., monobasic; rubricata was designated as type of Sepharia by Laboissière).

In Laboissière, 1936, pp. 244-45, *testacea* All. & *nigrolimbata* Jac. were treated as species of *Macrima*. But in 1940, Mus. Hist. Nat. Belg., Bull. 16(37): 30, he transferred them to *Cynorita* together with *lutea* Lab.

Key to Chinese species of Macrima  $\partial \partial$ 

1.	Antennal segment 3 no longer than 2	2
	Antennal segment 3 longer than 2	4
2 (1).	Upper part of frons with a horizontal process on each side below antennal inser-	
	tion; median process yellow; pronotum $2 \times$ as broad as long	3
	Upper part of frons with 2 small obtuse lobes in middle; median process black,	
	prominent; a small spine on side of frons near middle of eye; pronotum $2.5 \times$	
	as broad as long	a
3 (2).	Clypeus with a bifid process in middle which is grooved above; median process	
	with a spherical tip; frontal processes short, below eyes; elytron orange lateral-	
	ly, paler suturally, not depressed at end of basal 1/3	ìs
	Clypeus not grooved above; tip of median process thick, oval; processes beneath	
	eyes broad and acute; elytron entirely pale, transversely depressed at end of	
	basal 1/3	a
4 (1).	Upper edge of frons with 2 processes	5
	Upper edge of frons with 1 or no processes	6

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5 (4). Processes of upper edge of frons acute, close together, reaching level of median
process; clypeus triangular, deeply excavated
Processes of upper edge of frons broader, more widely separated and situated
near antennal insertions; base of clypeus hardly protruding in middle and
without impression
6(4). Frons with a long median process, angulate apical ridge and sinuate lateral
ridge; elytron red 392. rubricata
Frons with a simple median ridge, bifucating apically (but not process), and a
long lateral ridge, nearly enclosing a tall cavity on each side; elytron yellow

Key to Chinese species of Macrima Q Q

1.	Raised portion of clypeus transverse2
	Raised portion of clypeus triangular4
2 (1).	Frontal depression with a small conical lobe in center; pronotum less than $2 \times$
	as broad as long
	Frontal depression continuing as a triangle between antennal insertions; clypeus
	divided by a median groove; prothorax more than $2 \times$ as broad as long
3 (2).	Frontal depression in form of inverted heart; a conical process in center and
	another larger one under each antennal insertion
	Frontal depression transverse, sinuous, shallower and narrower at base where it
	impinges into clypeus and angulately dilated at apex, with a shallower tri-
	angular depression between antennae
4 (1).	Upper part of frons without a process between antennae
	Upper part of frons with 2 small conical processes between antennae 390. cornuta
5 (4).	Frons with 2 broad impressions, with sometimes a weak shallow one near an-
	tennal insertions
	Frons with 3 distinct impressions, one between antennal insertions; pronotum $2\times$
	as broad as long; elytron orange at side, paler suturally
6(5).	Prothorax $1.5 \times$ as broad as long; elytron dull red; frons with a weak median
	depression near antennal insertions

# 388. Macrima armata Baly

Macrima armata Baly, 1878, Cist. Ent. 2: 377 (Kashmir; BM); 1878, Second Yarkand Mission, 31.—Maulik, 1936, Fauna India, Galeruc., 561 (Kulu, Kashmir, Darjeeling).
 Sepharia frontalis Jacoby, 1890, Entomologist 23: 254 (Kashmir; BM).—Laboissière, 1936,

Soc. Ent. France, Ann. 105: 246, 248-49.

DISTRIBUTION: N. India, Tibet.

TIBET: 1, Po-o, SW Tibet (FREY). We also have material from Manali, Kulu (FREY). HOST: Alnus nepalensis.

1963

# 389. Macrima aurantiaca (Laboissière), NEW COMBINATION

Sepharia aurantiaca Lab., 1936, Soc. Ent. France, Ann. 105: 250 (Yunnan: Pe-yen-tsin; ?PARIS).

DISTRIBUTION: SW China (Yunnan).

#### 390. Macrima cornuta (Laboissière), NEW COMBINATION

Sepharia cornuta Lab., 1936, Soc. Ent. France, Ann. 105: 250 (Sze-Tchouen: Tchoung-King, Ta-tsien-lou, Mo-si-mien; ?PARIS).

DISTRIBUTION: W. China (Szechuan, Sikang).

SZECHUAN: 6, Sui-fu, X. 1930, Graham; 4, Mt. Omei, 16. VII. 1932, Franck. SI-KANG: Ya-chow, 26. VII. 1930; Mu-ping, 17. VII. 1929, Graham; Ta-tsien-lu, 16. VIII. 1930, Graham; Yao-gi, nr. Mu-pin, 8. VII. 1929, Graham (US); Ni-tou to Ta-tsien-lu, Reitter (FREY); San-kiang, Wassuland, Friedrich (FREY); Ba-lang & Se-long, 4000 m, San-kiang-keu, Wassuland, VII-VIII. 1934, Friedrich (FREY).

391. Macrima pallida (Laboissière), NEW COMBINATION

Sepharia pallida Lab., 1936, Soc. Ent. France, Ann. 105: 249 (N. India: Kulu: Manali; ?PARIS).

DISTRIBUTION: India-Tibet border area.

We have specimens from Katrain & Manali, Kulu (FREY) and Sunderhunga Valley, 2500-3600 m, W. Almora, H. G. Champion (BMNH).

#### 392. Macrima rubricata (Fairmaire), NEW COMBINATION

Sepharia rubricata Fairm., 1889, Soc. Ent. France, Ann. 58: 78 (Moupin; PARIS).

Glechonis rubripennis Weise, 1889, Soc. Ent. Ross., Horae 23: 569, 632 (Sze-tschuan; ?ZMB). DISTRIBUTION: W. China (Sikang, Szechuan, Yunnan).

SIKANG: 4, Mu-ping, 1500 m, VII. 1929, Graham (US). SZECHUAN: Ching-cheng Shan, VII. 1932, G. Liu (MCZ); Sui-fu, 1922, Graham; Shin-kai-si, Mt. Omei, VI. 1934, Graham (US), 17. VII. 1932, Franck (BISHOP, CAS), 17. VIII. 1940, Gressitt; nr. Wei-chow, 2000 m, 26. VII. 1933, Graham. YUNNAN: 2, Chao-chow-fu, 2300 m, W. Yunnan, VIII-IX. 1914, Mell (ZMB).

393. Macrima straminea (Ogloblin), NEW COMBINATION

Sepharia straminea Ogl., 1936, Fauna USSR 26, 1: 324, 436 (Se-Tchouen: Yachow; ?Moscow).

DISTRIBUTION: W. China (Sikang, Szechuan).

SZECHUAN: 5, Shin-kai-si, Mt. Omei, 16. VII. 1932, Franck, 16. VI. 1934, Graham, 15. VIII. 1940, Gressitt; 1, Kuan-hsien, VIII. 1934, Graham (US).

394. Macrima yunnanensis (Laboissière), NEW COMBINATION

Sepharia yunnanensis Lab., 1936, Soc. Ent. France, Ann. 105: 249 (Yunnan: Yunnan-sen, Pe-yen-tsin; Kouy-Tcheou: Pin-Fa; ?BRUXELLES).

DISTRIBUTION: SW China (Yunnan, Kweichow).

#### Gressitt & Kimoto: Chrysomelidae of China

#### Genus Aplosonyx Chevrolat

Aplosonyx Chevrolat, 1837, IN Dejean, Cat. Col. ed. 2, 376; ed. 3, 399 (type: Galeruca albicornis Wiedemann, 1821).—Duponchel & Chevrolat, 1842, IN D'Orbingny, Dict. Univ. Hist. Nat. 2: 17.—Chevrolat, 1842, op. cit. 4: 5.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 608.

Haplosonyx Gistl, 1848, Nat. Thierr., 14 (emend. pro. Aplosonyx Chev.).—Weise, 1924, Coleopt. Cat. 78: 147.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 608.

# KEY TO CHINESE SPECIES OF APLOSONYX

1. Doi	rsum entirely pale reddish brown2
Dor	rsum partly or largely pitchy or metallic
2. Ely	tron with punctures roughly arranged in groups of longitudinal series separated
ť	by smooth lines; prothorax with fore and hind corners produced; head with a
s	mall central depression behind postantennal swellings
Ely	tron with 4 series of irregular rows of punctures divided by impunctate strips;
r	prothorax with hind corners produced 397. orientalis
3. Ely	tron partly pale and partly dark, with at least one band 4
Ely	tron entirely red or entirely dark purplish or bluish black 5
4. Pro	notum pale with basal black area or pair of spots; elytron pale with a broad
r	ourplish band anterior to middle, which extends forward along suture and expands
а	again on base; length 10-13 mm 395. ancora
Pro	notum and head pale, each with a central bronzy black spot; elytron bronzy
t	plack with sutural and sublateral stripes, and postmedian band and apex reddish
ť	prown; length 5 mm
5. Ely	tron red with fine punctures and very widely spaced large punctures; head and
I	prothorax black; venter black with abdomen and middle of metasternum brown;
1	ength 10.5 mm 399. rufipennis
Ely	tron blackish blue or purplish blue with fine punctures only, irregular in strips
8	alternating with impunctate strips; head and prothorax red; venter entirely pale;
1	ength 13–15 mm 396. chalybaeus

# 395. Aplosonyx ancora Laboissière

Aplosonyx ancora Lab., 1934, Ass. Nat. Levall.-Perret, Ann. 21: 110, fig. 1 (Tonkin, Yunnan; ?PARIS).

DISTRIBUTION: Vietnam, SW China (Yunnan, Kwangtung, Fukien), Hainan I.

KWANGTUNG: 1, Yim-na Shan, 600 m, 14. VI. 1936, Gressitt (CAS). FUKIEN: 2, nr. Foochow, 1924, Kellogg (US). HAINAN: 1, Dwa-bi (Tai-pin), 23. VII. 1935, Gressitt. VIETNAM: 3, Hoa-binh, Tonkin, Cooman (FREY).

# 396. Aplosonyx chalybaeus (Hope)

Galleruca chalybaeus Hope, 1831, IN Gray, Zool. Miscell., 28 (Nepal; ?Oxford).

Aplosonyx elongata Baly, 1863, Ent. Soc. Lond., Trans. ser. 3, 1: 624 (India; BM).

Haplosonyx chalybaeus, Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 440.—Baly, 1879, Cist. Ent. 2: 452 (chalybeus; Assam).

### Pac. Ins. Mon.

- Aplosonyx chalybeus var. Jeanvoinei Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 109 (Tonkin; ?PARIS).
- Aplosonyx chalybaeus, Maulik, 1936, Fauna India, Galeruc., 614 (Himalaya from Nepal to Burma).
  - DISTRIBUTION: Nepal, NE India, Burma, Tibet, Vietnam.
  - TIBET: 5, Thibet, coll. le Moult (FREY). VIETNAM: 1, Chapa, Tonkin (FREY).

# 397. Aplosonyx orientalis Jacoby

Haplosonyx orientalis Jac., 1892, Mus. Civ. Genova, Ann. 32: 962 (Burma; BM). Aplosonyx orientalis, Maulik, 1936, Fauna India, Galeruc., 619.

DISTRIBUTION: Burma, Vietnam.

VIETNAM: 1, Hoa-binh, Tonkin, de Cooman (FREY).

# 398. Aplosonyx pictus Chen

- Aplosonyx pictus Chen, 1939, Notes d'Ent. Chinoise 9 (3): 39 (Cheu-menn, Kansu; HOANGHO-PAIHO).
- Aplosonyx pictus subsp. omeiensis Chen, 1939, l. c., 40 (Omei Shan, Szechuan).

DISTRIBUTION: W. China (Kansu, Szechuan). We have seen no material and are not sure if it belongs in this genus.

### 399. Aplosonyx rufipennis Duvivier

Haplosonyx rufipennis Duv., 1892, Soc. Ent. Belg., Ann. 36: 439 (Pedong, Bengal; ?PARIS).
—Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 110 (Tonkin; Yunnan).

DISTRIBUTION: Bengal, N. Vietnam, SW China (Yunnan).

### 400. Aplosonyx varipes Jacoby

- Haplosonyx varipes Jac., 1892, Mus. Civ. Genova, Ann. 32: 964 (Burma; Tonkin; China; GENOVA).
- Galerucida indica Allard, 1889, Soc. Ent. France, Ann. ser. 6, 9: 310 (nec Harold).
- Sphenoraia tonkinensis Laboissière, 1922, Soc. Ent. France, Bull. 1922: 102 (new name for Galerucida indica All.); cited as Galerucida in Lab., 1934 below.
- Aplosonyx varipes, Laboissière, 1934, Ass. Nat. Levall.-Perret 21: 109 (Tonkin).

DISTRIBUTION: Burma, N. Vietnam, SW China.

# Genus Leptarthra Baly

Leptarthra B., 1861, Jour. Ent. 1: 202 (type: L. abdominalis B.; E. Himalayas); 1879, Cist.
Ent. 2: 454.—Chapuis, 1875, Gen. Col. 11: 224, 227.—Harold, 1880, Stett. Ent. Ztg.
41: 145.—Fairmaire, 1889, Soc. Ent. France, Ann. 58: 77.—Weise, 1922, Tijdschr.
Ent. 65: 69.—Maulik, 1936, Fauna India, Galeruc., 609.

#### KEY TO CHINESE SPECIES OF LEPTARTHRA

Black with brown elytron; thorax and appendages somewhat bluish; length 9.0-10.5 mm (Baly, 1891; E. Himalayas) ..... abdominalis\*

401. Leptarthra nigropicta Fairmaire Fig. 175, a.
Leptarthra nigropicta Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 76 (Moupin; PARIS).
DISTRIBUTION: W. China (Sikang).

SIKANG: 1, Yueh-shi to Bao-ngan, 200 m, 12. VIII. 1929, Graham (USNM).



Fig. 175. a, Leptarthra nigropicta Fairmaire; b, Sphenoraia (Sphenoraioides) micans (Fairmaire).

### Genus Sphenoraia Clark

Sphenoraia Clark, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 262.—Baly, 1879, Cist. Ent. 2: 453.—Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 131 (Type: Galleruca bicolor Hope by present designation).

Sphenoraioides Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 131 (type: Galleruca fulgida Redtb.). Subgenus.

This genus has been treated as a synonym of *Gallerucida*, but it is distinctly different, and is not in the tribe Gallerucidini.

#### KEY TO CHINESE SPECIES OF SPHENORAIA (SPHENORAIOIDES)

rac, ms. mon	Pac.	Ins.	Mon.
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2.	Elytron blue to coppery	. 3
	Elytron pale or pale spotted with black	. 4
3.	Elytron purplish blue, golden green or bronzy golden green; pronotum blue, with fine	
	irregular punctures alternating with impunctate stripes; intercoxal process of pro-	

notum pale with 2 black spots; length 5.5-7.0 mm ...... 403. nebulosa

### 402. Sphenoraia (Sphenoraioides) duvivieri (Laboissière)

Sphenoraia indica Duvivier 1887, (nec Harold, 1880), Soc. Ent. Belg., C. R. 3: XLVIII (Inde boreale)

- Galerucida Duvivieri Lab., 1926, Encycl. Ent. Coleopt. 1 (2): 53 (new name for *indica* Duvivier, *nec* Harold, 1880).
- Sphenoraia (Sphenoraioides) Duvivieri, Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 134.

Gallerucida amala Maulik, 1936, Fauna India, Galeruc., 549 (Burma; BM). New Synonymy.

Maulik's new species based on Duvivier's collection. He mentioned (p. 550) "I cannot trace any reference to such a species published by Duvivier." Laboissière, 1926, gave a new name for *indica* Duvivier, as a homonym of *indica* Harold, 1880. Although the latter is a species of *Gallerucida*, according to Article 59 of the new International code, *indica* cannot be used in *Sphenoraia*. This species is rather close to *micans* but in *micans* prosternal process of prothorax is elevated.

DISTRIBUTION: N. India, Burma, S. China (Yunnan, Kwangtung).

YUNNAN: 1 (ZMB). KWANGTUNG: 1, Lo-fau San, 4–8. IV. 1911, Mell; 2, Tshajiu San, V-VI. 1910, Mell (ZMB).

# 403. Sphenoraia (Sphenoraioides) nebulosa (Gyllenhal)

Galleruca nebulosa Gyll., 1808, IN Schönherr, Syn. Ins. 1 (2): 292, pl. 4, fig. 10 (E. Indies; Uppsala).

Galerucida nebulosa, Weise, 1889, Soc. Ent. Ross., Horae 23: 628.

Gallerucida nebulosa, Maulik, 1936, Fauna India, Galeruc., 552, fig. 135.

- Sphenoraia nebulosa, Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 132, fig. 7 (Tonkin, India, Burma, Siam).
- Doryida balyi, Allard, 1889, Soc. Ent. France, Ann. ser. 6, 9: 310; 1904, Mission Pavie 3: 163 (nec Duvivier; misidentification).—Laboissière, 1934, Ass. Nat. Levall.-Perret, Ann. 21: 132, fig. 7.

DISTRIBUTION: E. Indies, Vietnam, S. China (Kwangtung), Hainan I.

KWANGTUNG: 1, Ying-to, Hweiyang, 8. IV. 1940, Gressitt & To (LINGNAN); 1, Tingwu Shan, 7–12. VII. 1949, Gressitt; 3, Sui-chow Penin., IX. 1950, for Gressitt (CAS); 1, Ho-nam I., Canton, 4. VIII. 1933; 1, same but IX. 1939, Gressitt (LINGNAN); 1, Canton, 1909–1910, Mell; 1, Tsha-jiu San, W. River, 1910, Mell; 1, Lu-lin-kum, end VII. 1911, Mell (ZMB). HAINAN: 1, Ta-hau, W of No-doa, 5. VII. 1935, Gressitt; 2, Dwa-bi (Tai-pin), 23. VII. 1935, Gressitt (CAS). VIETNAM: 13, Hoa-binh, Tonkin, de Cooman (FREY).

404. Sphenoraia (Sphenoraioides) micans (Fairmaire) Fig. 175, b.

Eustetha micans Fairmaire, 1888, Soc. Ent. Belg., Ann. 32: 42 (Moupin; PARIS).

Galerucida fulgida, Weise, 1922, Tijdschr. Ent. 65: 90 (Fukien).

Galerucida fulgida ab. coerulescens Ws., 1922, l. c., 91 (Fukien).

Sphenoraia (Sphenoraioides) micans, Laboissière, 1934, Ass. Nat. Levall.- Parret, Ann. 21: 131 (Tibet, Szechuan).

Sphenoraia micans var. n. cyanella Lab. 1934, l. c., 132 (Tibet: Moupin; Fo-kien; PARIS). Galeruca fulgida, Ogloblin, 1936, Fauna USSR 26, 1: 363 (Szechuan, Fukien records only).

Ogloblin and Maulik overlooked the separation of *micans* and *fulgida* by Laboissière. Ogloblin's assignment of *intermedia* Jacoby (*Sphenoraia*) as an aberration of *fulgida* is erroneous. *Intermedia* is a distinct species of *Sermylassa*.

DISTRIBUTION: S. China (Tibet, Sikang, Kwangtung, Fukien, Chekiang).

SIKANG: 1, Mu-ping, 1929, Graham (US). KWANGTUNG: 1, Kau-lin Shan, 700–900 m, Lienping, 21. IV. 1940, Gressitt & To (LINGNAN). FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, V–VI. 1942–45, Maa; Kuatun, Chungan, V. 1945, Maa; Ao-tow, Shaowu, VI. 1942, Maa (CAS, BISHOP); 3, Yun-ling Shan (ZMB). CHEKIANG: 3, Tien-mu Shan, Reitter (FREY).

405. Sphenoraia (Sphenoraioides) paviei Laboissière

Sphenoraia Paviei Lab., 1934, Ass. Nat. Levall.-Perret, Ann. 1954: 134 (Louang Prabang à Theeg; PARIS).

DISTRIBUTION: Laos.

406. Sphenoraia (Sphenoraioides) rutilans (Hope)

Eumolpus rutilans Hope, 1831, IN Gray, Zool. Miscell., 30 (India; BM).

Chrysomela mutabilis Hope, 1831, l. c. (BM).

Galleruca fulgida Kollar & Redtenbacher, 1844, IN Hugel, Kaschmir 4: 554 (Himalaya, Massuri; ?WIEN).

Sphenoraia fulgida, Baly, 1879, Cist. Ent. 2: 454 (Assam).—Laboissière, 1934, Ass. Levall.-Perret 21: 131 (India, Burma, China).

Gallerucida rutilans, Maulik, 1936, Fauna India, Galeruc., 547.

DISTRIBUTION: Kashmir, Himalaya, N. India, Assam. We are not sure if this species occurs in China or not.

# Genus Solephyma Maulik

Euphyma Baly, 1879, Cist. Ent. 2: 457 (type: E. collaris Baly; monobasic; Assam).

- Solenia Jacoby, 1886, Mus. Civ. Genova, Ann. 34: 87 (type: E. collaris Baly) (new name for Euphyma Baly, 1879, nec Euphyma Baly, 1877).
- Solephyma Maulik, 1936, Fauna India, Galeruc., 329 (type: Euphyma collaris Baly) (new name for Euphyma Baly, 1879, nec Euphyma Baly, 1877, Cryptocephalinae, and Solenia

#### Pac. Ins. Mon.

Jacoby, 1886, nec Solenia Mulsant, 1875, Staphylinidae).

### KEY TO CHINESE SPECIES OF SOLEPHYMA

1.	Elytron with punctures largely arranged in double rows 2
	Elytron with punctures irregular, or not in double rows 4
2(1).	Antennal segment 3 at least 1/3 longer than 2; pronotum ochraceous; elytron
	largely ochraceous or purplish pitchy
	Antennal segment 3 but slightly longer than 2; pronotum red; elytron red with
	large subapical yellow spot surrounded with black or pitchy 409. ocellata
3 (2).	Dorsum ochraceous, with elytron testaceous postmedially; antennal segment 4
	longer than 5; abdomen testaceous 407. alticoides
	Pronotum and scutellum ochraceous; eytron purplish pitchy red; antennal seg-
	ment 4=5; abdomen pitchy brown 411. tinkhami
4(1).	Elytron more than $2 \times$ as long as broad, unicolorous or banded only at apex 5
	Elytron less than $2 \times$ as long as broad, tricolorous, with large premedian and
	apical testaceous spots
5(4).	Elytron with punctures in subregular rows; body ovate, distinctly convex at side 6
	Elytron with punctures irregular; body slender, weakly convex at side; purplish
	pitchy with pronotum testaceous 408. bicolor
6 (5).	Elytral punctures rather irregular; dorsum purplish pitchy with apex of elytron
	testaceous; pronotum distinctly punctured; length 4-5 mm
	Elytral punctures rather regular: dorsum reddish on pronotum and blue on ely-
	tron: pronotum indistinctly punctured: length 5-6 mm (Baly, 1879, Euphyma:
	India, Burma, Thai, Sumatra) collaris*

# 407. Solephyma alticoides Gressitt and Kimoto, n. sp. Fig. 176, a.

Male: Bright reddish ochraceous, slightly paler to testaceous on postmedian portion of elytron; apices of mandible and palpi pitchy; antenna dull reddish brown, slightly pitchy, but ochraceous on segments 1-2; tibiae and parts of tarsi slightly tinged with pitchy brown. Body nearly glabrous above, a few scattered hairs on head and a few short hairs on apical margin of elytron; ventral surfaces rather thinly clothed with suberect golden buff hairs; legs moderately clothed.

Head slightly narrower than apex of prothorax; occiput evenly convex, smooth and very weakly punctured, with a very slight apical median groove and a sinuate subtransverse groove behind postantennal swellings which are fairly broad, partly oblique and nearly impunctate; interantennal area slightly wider than an antennal insertion, rather strongly raised anteriorly and forming with raised area of frontoclypeus a broadly triangular convex area; labrum very slightly emarginate apically; gena about 1/6 as deep as eye; eye broadly ovate. Antenna nearly 4/5 as long as body, slightly stout; segment 1 moderately arched, swollen apically, rather smooth and shiny; 2 moderately thick,  $2 \times$  as long as broad; 3 about  $1.5 \times$  as long as 2; 4 slightly longer than 3; 4–10 decreasing very slightly in length; 11 about as long as 1. Prothorax 7/10 as long as broad, slightly narrower at apex than at base; anterior margin slightly concave and even; basal margin weakly and evenly convex; lateral margin moderately and evenly convex with expanded margin about  $3 \times$  as wide as basal margin; anterior angle produced forward and slightly outword; basal angle

obutse and slightly projecting; disc evenly convex, smooth, minutely and sparsely punctured. Scutellum rounded triangular, slightly convex, impunctate. Elytron 2.6× as long as broad, broadened from base to end of basal 1/5 and then very weakly convex in central portion and evenly narrowed and rounded apically; lateral margin narrowly expanded almost to apex; epipleuron rather broad and subevenly narrowed, continuing to extreme apex; disc quite evenly convex, impressed with about 16 subregular rows of punctures, arranged to some extend in pairs, with punctures mostly about 1/3 as wide as interspaces but in large part closer longitudinally than transversely. Ventral surfaces minutely and not very closely punctured, a little more strongly so on last abdominal sternite; pygidium rounded apically, somewhat swollen and medially grooved preapically; last abdominal sternite rounded-truncate between slight emargination on each side of middle. Legs moderately stout; hind tarsal segment 1 nearly as long as 2+3 and about 3× as long as broad, last nearly as long as 1. Length 4.2 mm; breadth 2.5.

*Female*: Antennal segments 1–2 slightly pitchy reddish; postmedian paler portion of elytron slightly ochraceous. Length 5.0 mm; breadth 2.65.

*Paratypes*: Antenna varying from reddish-brown to pitchy; postmedian pale area of elytron always recognizable. Length 4.5–5.1 mm; breadth 2.35–3.0.



Fig. 176. a, Solephyma alticoides n. sp.; b, S. bicolor n. sp.

# DISTRIBUTION: Hainan I.

Holotype & (CAS), Ta-hau, 25 m, W of No-doa, Hainan I., 3. VII. 1935, Gressitt; allotype & (CAS), Ta-hian, 600 m, foot of Five Finger Mts., 15. VI. 1935, Gressitt; 6 paratypes (BISHOP, LINGNAN, CAS): 1 paratopotype, 7. VII, Gressitt; 2 paratypes, Tai-pin-tsuen, Lam-ka-heung, nr. Lai-mo-ling, 25. VII. 1935, To; 2, Naam-fung, S of No-doa; 24. VI.

1932, Lau & To; 1, Hau-ying-tsuen, SE of No-doa, 31. VII. 1932, To.

Differs from *uniformis* in being more reddish, slightly smaller, and with pronotum not completely impunctate. Differs from *abdominalis* (Jac.) in being more reddish, with abdomen pale, prothorax less than  $2 \times$  as broad as long, and elytron pale and more regularly punctured.

# 408. Solephyma bicolor Gressitt and Kimoto, n. sp. Fig. 176, b.

*Male*: Purplish brown to testaceous: head pitchy reddish with a slightly purplish tinge, paler anteriorly; antenna dull reddish brown, paler apically and basally with upper apical portion of scape testaceous; prothorax orange testaceous; scutellum and elytron entirely dark reddish brown with a purplish tinge; ventral surfaces reddish brown on hind thorax and base of abdomen, testaceous on prosternum and apical portion of abdomen; legs dark reddish brown, somewhat ochraceous on coxae and trochanters and more reddish on tibiae and tarsi. Body largely glabrous above, with a few pale hairs on head and a few minute ones on apex of elytron; ventral surfaces rather sparsely clothed with oblique pale hairs; legs rather thinly clothed with oblique golden hairs.

*Head* distinctly narrower than prothorax at apex; occiput evenly convex, fairly smooth but microrugulose; postantennal swellings fairly large and rather flat and slightly wrinkled. with a very fine line between them; interantennal area about as broad as antennal insertion, moderately raised medially with raised area continuous with a transverse raised area on frontoclypeus; labrum feebly emarginate apically; gena about 1/5 as deep as eye; eye broadly oblong-oval. Antenna slightly longer than body, moderately slender; segment 1 moderately arched, swollen apically and feebly punctured; 2 nearly  $2\times$  as long as broad; 3 about 4/5 as long as 1, nearly as long as 4; 4=5; 5-10 decreasing slightly in length; 11 longer than 1. Prothorax 2/3 as long as broad; anterior margin nearly straight; basal margin very slightly convex; lateral margin subevenly rounded but widest well anterior to middle; anterior angle strongly produced; basal angle projecting laterally; expanded lateral margin not much wider than basal margin; disc subevenly convex, finely and sparsely punctured. Scutellum broadly rounded behind, fairly smooth. Elytron just over  $3 \times as$  long as broad, moderately convex at side, widest well behind middle, evenly rounded apically; lateral margin rather narrowly expanded; epipleuron fairly broad and subevenly narrowed. extending to extreme apex; disc subevenly convex, slightly swollen between humerus and suture, impressed with about 19 partly subregular rows of punctures, punctures mostly about 1/2 as large as interspaces but partly closer longitudinally and becoming smaller and more widely spaced posteriorly. Ventral surfaces very finely and sparsely punctured, in part shagreened or slightly wrinkled; pygidium rather strongly arched at apex, without a deep median groove; last abdominal sternite feebly convex on median apical lobe between slight sublateral indentations. Legs fairly long and not very stout; hind tarsal segment 1 slightly longer than 2+3, 2 longer than 3, and last slightly shorter than 1. Length 3.9 mm; breadth 2.3.

*Female*: Last abdominal sternite distinctly rounded in central portion of apical margin. Length 5.0 mm; breadth 2.25.

DISTRIBUTION: S. China (Kwangtung).
Holotype & (BISHOP 3303), Kau-lin San (Chiu-lien Shan), 700–900 m, Lien-p'ing Distr., N. Kwangtung Prov., 23. IV. 1940, Gressitt and F. K. To: allotype ♀ (LINGNAN), same data except 17. IV.

Differs from *collaris* Baly in being smaller, in having prothorax less emarginate apically, less convex basally and more punctate, and elytron less regularly and more closely punctured.

### 409. Solephyma ocellata Gressitt and Kimoto, n. sp. Fig. 178, a.

Male: Bright reddish, in part ochraceous to pitchy black; head and pronotum reddish, slightly pitchy on palpi and mandible; antenna pitchy brown, in part tinged with reddish, particularly on segments 1-2; scutellum red; elytron red with a large orange ochraceous postmedian spot almost completely surrounded with black including apices entirely black; ventral surfaces reddish; legs with apical portions of tibiae and parts of tarsi pitchy black. Body nearly glabrous above, a few scattered hairs on head and a few short hairs on apex of elytron; ventral surfaces rather thinly clothed with short oblique hairs; legs moderately clothed.

Head distinctly narrower than apex of prothorax; occiput evenly convex, minutely punctured and slightly pruinose; an arcuate groove on each side behind postantennal swellings which are broad, arcuate, in part feebly punctured, and separated by a median groove; interantennal area somewhat broader than an antennal insertion, distinctly raised medially and continuous with transverse raised area of frontoclypeus; labrum subtruncate apically; gena about 1/7 as deep as eye; eye broadly ovate. Antenna 3/4 as long as body, of moderate thickness; segment 1 fairly long, strongly thickened apically, feebly arched and finely punctured; 2 nearly  $2 \times$  as long as broad; 3 slightly longer than 2; 4 distinctly longer than 3; 4-10 decreasing very slightly in length; 11 not quite as long as 1, somewhat broadened preapically. Prothorax 2/3 as long as broad, almost as broad at apex as at base; anterior margin distinctly and evenly concave; basal margin moderately and evenly convex; lateral margin moderately convex, widest somewhat anterior to middle with expanded margin nearly  $4 \times$  as wide as basal margin; anterior angle produced forward and slightly outward; basal angle obtuse, moderately produced; disc evenly convex and smooth, minutely and sparsely punctured. Scutellum rounded triangular, slightly convex and nearly impunctate. Elytron 2.7 $\times$  as long as broad, subevenly convex at side and evenly narrowed and rounded apically; lateral margin moderately expanded almost to extreme apex; epipleuron broad, rather gradually narrowed and continuing almost to sutural angle; disc evenly convex, impressed with about 17 subregular rows of punctures, largely arranged in pairs with punctures in part nearly as large as interspaces longitudinally and a little more widely spaced transversely and becoming much smaller apically. Ventral surfaces with fine punctures which are denser on abdomen; pygidium rounded apically, deeply grooved medially above and strongly punctured on each side; last abdominal sternite feebly rounded apically with a slight indentation on each side of central portion of apical margin. Legs moderately stout; hind tarsal segment 1 distinctly shorter than 2+3 and nearly  $2\times$  as long as broad; 2 as long as 3 and last slightly longer than 1. Length 5.0 mm; breadth 3.2.

*Female*: Postmedian pale spot of elytron incompletely bordered anteriorly with pitchy; abdomen slightly tinged with pitchy preapically; last abdominal sternite evenly rounded-truncate apically. Length 6.6 mm; breadth 3.25.



Fig. 177. a, Solephyma ocellata n. sp.; b, S. terminalis n. sp.

# DISTRIBUTION: N. Vietnam.

Holotype ♂ (Mus. G. FREY), Hoa-binh, W. Tonkin, N. Vietnam, A. de Cooman; allotopotype ♀ (Bishop 3304), same data.

Differs from *abdominalis* in having elytron red with black-bordered yellow spot instead of entirely dark blue, and more heavily and more regularly punctured.

### 410. Solephyma terminalis Gressitt and Kimoto, n. sp. Fig. 177, b. (allotype)

*Male*: Pitchy red with a purplish tinge, in part testaceous: head and prothorax purplish red, in part nearly black, paler on labrum and mandible; antenna dark reddish brown, paler to nearly testaceous on segments 1-2; scutellum and elytron except apical 1/6 pitchy reddish with a fairly strong metallic purplish tinge, testaceous apically; ventral surfaces dark reddish brown on thorax and testaceous on abdomen; legs dark reddish brown, paler at apices of tarsi. Body nearly glabrous above, a few pale hairs on front of head and external margin of elytron; ventral surfaces sparsely clothed with oblique golden buff hairs; legs moderately clothed with silvery buff hairs.

Head slightly narrower than apex of prothorax; occiput smooth and even, evenly convex, almost impunctate, with a nearly transverse groove anteriorly behind postantennal swellings which are moderately broad, subevenly convex and smooth; interocular area as broad as antennal insertion, rather strongly convex medially, the ridge continuous with obtuse ridge on frontoclypeus; labrum rounded-truncate apically; gena 1/6 as deep as eye; eye broadly ovate. Antenna nearly 3/4 as long as body, moderately slender; segment 1 fairly long, moderately arched and swollen apically, finely punctured; segment 2 about 2/5 as long as 1, nearly  $2 \times$  as long as broad; 3 distinctly longer than 2 and shorter than 1,

not quite as long as 4; 4=5; 5-10 decreasing very slightly in length; 11 about as long as 1. Prothorax not quite  $2 \times$  as broad as long, slightly narrower at apex than at base; anterior margin moderately and evenly concave; basal margin evenly convex; lateral margin subevenly and fairly strongly convex, widest anterior to center; anterior angle rather strongly produced; basal angle obtuse and slightly produced; disc moderately and evenly convex, smooth, very finely and sparsely punctured. Scutellum subtriangular, rounded behind, convex and nearly impunctate. *Elytron* not quite  $3 \times$  as long as broad, subevenly convex at side and subevenly rounded apically; lateral margin slightly expanded; epipleuron broad basally, gradually narrowed after basal 2/5, continuing almost to extreme apex; disc evenly convex, slightly depressed just interior to humerus, impressed with about 19 subregular rows of fairly small deep punctures, the punctures mostly about 1/2 as wide interspaces transversely and about as wide as interspaces longitudinally, becoming finer and sparser poste-Ventral surfaces smooth, nearly impunctate on metasternum, finely and sparsely riorly. punctate on metepisternum and abdomen; pygidium strongly arcuate apically; last abdominal sternite with a convex median lobe between fairly deep indentations. Legs fairly slender; hind tarsal segment 1 slightly longer than 2+3, more than  $4\times$  as long as broad, 2 slightly longer than 3, last slightly shorter than 1. Length 3.7 mm; breadth 2.25.

*Female*: Occiput somewhat reddish in center; pronotum purplish pitchy; pygidium rounded apically; last abdominal sternite broadly rounded and somewhat closely punctured. Length 4.7 mm; breadth 2.8.

Paratypes: Length 3.1-4.7 mm; breadth 1.8-2.8.

DISTRIBUTION: S. China (Fukien, Kwangtung, Hupeh).

Holotype ♂ (BISHOP 3305), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 11. IV. 1943, T. C. Maa; allotopotype ♀ (BISHOP), same data but 17. IV; many paratopotypes (CAS, BISHOP, US, BMNH, Ac. SIN.), IV-VI. 1942, IV-VI. 1943, Maa; paratypes To-tze-tun, Kien-yang Distr., Fukien, 4. IX. 1942, Maa; San-chiang, Chungan, Fukien, 1. V. 1943, Maa; Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh, 23. VII-17. IX. 1948, Gressitt & Djou; Hsiaoho, Lichuan, Hupeh, 13. VIII-14. IX; Liang-ho-kou, Lichuan, Hupeh, 7. IX. 1948, Gressitt & Djou; 1, Cheung-nga San, Tin-tong, Lohchang, N. Kwangtung, 16. VIII. 1947, Tsang; 3 (ZMB), Tsha-jiu San, N. Kwangtung, VII-IX. 1910, Mell.

Differs from *apicalis* Bryant in being purplish pitchy instead of deep blue above, with elytral apex testaceous instead of ivory color, and pale area on extreme apex instead of obliquely along side and apex, venter pitchy reddish and testaceous instead of black, and legs pitchy reddish instead of black.

#### 411. Solephyma tinkhami Gressitt and Kimoto, n. sp. Fig. 178, a.

Male: Reddish ochraceous to darker reddish with a purplish tinge; head and prothorax bright reddish ochraceous, slightly duller on mandible and palpi; antenna dull reddish brown, ochraceous on segments 1–2 and fairly bright reddish on 3–4; scutellum orange ochraceous; elytron deep reddish brown with a strong purplish tinge; ventral surfaces reddish ochraceous with a slight pitchy metallic tinge on central portion of metasternum and on most of surface of abdomen; legs reddish ochraceous, slightly duller on tarsi. Body nearly glabrous above, a few pale hairs on anterior portion of head and apical margin of elytron; ventral surfaces quite sparsely clothed with oblique pale hairs; legs moderately clothed.

*Head* nearly as broad as apex of prothorax; occiput evenly convex, smooth and impunctate, somewhat sinuately depressed anteriorly behind postantennal swellings which are oblique, moderately swollen and quite smooth; interantennal area about as wide as an antennal insertion, strongly convex and continuous with transverse raised area of frontoclypeus; labrum feebly concave apically; gena about 1/8 as deep as eye; eye broadly ovate, rather coarsely facetted. Antenna nearly 3/4 as long as body, not very stout; segment 1 arched, swollen apically, fairly smooth and weakly punctured; 2 about  $1.5 \times$  as long as broad, moderately swollen; 3 about  $1.7 \times$  as long as 2, slightly thickened apically; 4 slightly longer than 3; 4=5; 6 very slightly longer; 6–10 decreasing very slightly in length; 11 nearly as long as 1. Prothorax 3/5 as long as broad, narrower at apex than at base; anterior margin slightly concave; basal margin somewhat convex, nearly transverse in central portion; lateral margin strongly and subevenly rounded, with expanded portion slightly wider than basal margin; anterior angle swollen and projecting forward; basal angle subobtuse and moderately projecting; disc strongly and unevenly swollen, minutely and sparse-Scutellum slightly longer than broad, narrowed and rounded apically, imly punctured. punctate. Elytron 2.7× as long as broad, widened rather evenly from base to behind middle and evenly narrowed and rounded apically; lateral margin slightly and evenly expanded almost to extreme apex; epipleuron broad basally, subevenly narrowing, continuing to extreme apex; disc rather evenly convex, impressed with about 19 sub-regular rows of rather small punctures which are mostly about 1/4 to 1/3 as large as interspace and slightly closer longitudinally than transversely. Ventral surfaces rather finely and irregularly punctured; pygidium rounded apically; last abdominal sternite with an obtuse emargination on each side of median arcuate lobe. Legs not very stout; hind tarsal segment 1 not quite as long as 2+3 and more than 1/2 as broad as long; 2 about as long as 3 and last fully as long as 1. Length 4.5 mm; breadth 2.55.



Fig. 178. a, Solephyma tinkhami n. sp.; b, S. tricolor n. sp.

*Female*: Antenna paler and more reddish throughout; elytron somewhat brighter red and with weaker purplish tinge; last abdominal sternite weakly rounded apically. Length 4.8 mm; breadth 2.7.

*Paratypes*: Tibiae and tarsi dark pitchy reddish on some specimens. Length 4.6-5.0 mm; breadth 2.4-2.8.

## DISTRIBUTION: N. Vietnam, S. China (Kwangtung).

Holotype & (BISHOP 3306), Lao-kay, Sino-Vietnam border, Tonkin, N. Vietnam, 12–15. VIII. 1934, Chauncey Brownell; allotype (CAS), Mei-hsien City, NE Kwangtung Prov., S. China, 31. V. 1936, Gressitt; paratopotype & (LINGNAN), same data as holotype but 13. VIII, E. R. Tinkham; 4 paratypes (FREY), Hoa-binh, Tonkin, N. Vietnam, A. de Cooman.

Differs from *collaris* Baly in being slightly smaller, more weakly ovate, with antenna and ventral surfaces paler, and elytron less bluish. Named for Ernest R. Tinkham who collected part of the type material.

# 412. Solephyma tricolor Gressitt and Kimoto, n. sp. Fig. 178, b.

Male: Reddish ochraceous, testaceous and black: head, prothorax and scutellum reddish ochraceous, paler on labrum and parts of palpi and darker on mandible; antenna pitchy black, largely reddish on scape; elytron pitchy black on basal 2/3 except for a very large testaceous spot immediately behind humerus and nearly touching external margin and some distance from suture as well as reddish sutural stripe, widening posteriorly, and apical 1/3 testaceous; ventral surfaces largely reddish ochraceous, becoming testaceous on border and apex of abdomen; legs reddish ochraceous with knees, tibiae and tarsi pitchy black. Body nearly glabrous above; moderately clothed with subadpressed golden buff hairs beneath and rather thinly clothed on legs.

Head considerably narrower than apex of prothorax; occiput evenly and weakly convex, fairly smooth with a bisinuate transverse groove behind postantennal swellings which are large, somewhat arched posteriorly and rather flat and smooth above and separated by a median groove; interantennal area as wide as an antennal insertion, moderately convex in middle and higher anteriorly and continuous with obtuse ridge of frontoclypeus; labrum broadly rounded anteriorly; gena 2/5 as deep as eye; eye subreniform. Antenna 3/5 as long as body, not very slender; segment 1 fairly long and slightly arched, moderately punctured; 2 not quite 1/2 as long as 1, thickened apically; 3 about  $1.6 \times$  as long as 2; slightly shorter than 4; 4 slightly longer than 5; 5–9 subequal in length (last 2 missing). Prothorax not quite  $2 \times$  as wide as length at middle; anterior margin deeply and evely concave; basal margin weakly and subevenly convex, with a short groove slightly closer to side than to middle; lateral margin moderately and evenly convex, widest near middle; anterior angle swollen and slightly projecting; basal angle obtuse and weakly projecting; disc evenly convex and smooth, finely and very sparsely punctured. Scutellum broadly rounded behind, smooth and impunctate. Elytron slightly more than  $2 \times$  as long as broad, broadly and evenly rounded at side from base to apex and much broader at middlethanat base; lateral margin very narrowly expanded; epipleuron very broad, subevenly narrowed after basal 1/3 and continuing through sutural angle; disc very evenly convex, impressed with nearly 20 irregular rows of fairly fine deep punctures, punctures mostly 1/3 to 1/2as large as interspaces, slightly closer longitudinally and tending to be smaller apically and more irregular laterally. Ventral surfaces very weakly punctured on thorax, more distinctly punctured on abdomen; pygidium rounded and slightly projecting apically, with a transverse groove just before apex; last abdominal sternite sinuate, convex at middle and concave on each side of middle. Legs moderately stout; hind tarsal segment 1 nearly as long as 2+3 and barely  $3\times$  as long as broad, 2 somewhat longer than 3, last barely longer than 1. Length 5.5 mm; breadth 4.0.

DISTRIBUTION: S. China (Kwangtung: Hong Kong).

Holotype & (BISHOP 3307), Un-long, 15 m, New Territories, Hong Kong, Kwangtung, S. China, 19. IX. 1940, Gressitt.

Differs from *collaris* Baly in being much broader, nearly round, quite differently colored with antennal segment 4 longer than 3, prothorax broader, and elytron much broader with punctures less regular and in more rows.

## Genus Haplosaenidea Laboissière

- Cynorta Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 249 (type: C. porrecta Baly, 1865); nec Cynorta Koch, 1839, Uebers. Arachnidensyst. 2: 20 (Arachnida).—Laboissière, 1940, Mus. Hist. Nat. Belg., Bull. 16 (37): 19 (as a synonym of Diaphaenidea Lab.).
- Haplosaenidea Laboissière, 1933, Soc. Ent. France, Ann. 102: 59 (type: H. touzalini Lab.; Yunnan).
- Diaphaenidea Lab., 1933, *l. c.*, 61 (type: *D. aerosa* Lab.); 1940, Mus. Hist. Nat. Belg., Bull. 16 (37): 19.—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 614. New Synonymy.

Micraenidea Laboissière, 1933, Soc. Ent. France, Ann. 102: 64 (type: M. coomani Lab., 1933); 1940, Mus. Hist. Nat. Belg., Bull. 16 (37): 32. New Synonymy.

Cynortana Strand, 1942, Folia Zool.-Hydrobiol. 11: 391 (n. n. for Cynorta Baly nec Koch). —Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 614.

Laboissière described *Diaphaenidea*, *Micraenidea* and *Haplosaenidea*, but these genera are mostly based on secondary sexual characters, so we are uniting them.

#### KEY TO CHINESE SPECIES OF HAPLOSAENIDEA

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Gressitt & Kimoto: Chrysomelidae of China

4 (2).	Frons of $\mathcal{J}$ with a fairly shallow depression, sometimes with tubercles or ridges 5 Frons of $\mathcal{J}$ with a very deep depression with a tubercle or slender paired pro-
	cesses
5 (4).	From sof $\mathcal{F}$ fairly smooth, with tubercles or ridges
	Frons of $\mathcal{J}$ with a central hooked tubercle and with a sharp, nearly tubercu-
	late ridge on border anterior to antennal insertion; head and prothorax och-
	raceous; elytron bluish brown; length 5.0-6.5 mm
6 (5).	Frons of $\mathcal{F}$ very shallowly depressed; prothorax somewhat sinuate at side, widest
	anterior to middle, with a transverse postmedian depression on disc
	Frons of $\mathcal{S}$ moderately concave; prothorax trapeziform, with a round depression
	on each side of disc just behind center; length 3.2-3.8 mm419. nitida
7 (6).	Venter pale; elytron golden green; median lobe of last abdominal sternite of $\delta^{A}$
	rounded; length 3.0-3.5 mm 416. coomani
	Venter pitchy blue-green; elytron blue to blue-green; median lobe of last abdo-
	minal sternite of 3 <sup>th</sup> emarginate; length 3.5-4.5 mm
8 (4).	Frons of $\mathcal{F}$ with a very deep depression, approaching center of head, without a
	prominent central tubercle; antennal segments 3-4 slender
	Frons of $\mathcal{F}$ with a moderately deep depression, with a prominent tubercle in
	center, another on ridge anterior to antennal insertion, and another with a
	lobe near center of anterior margin of depression; elytron bronzy black; an-
	tennal segments 3-4 broadened, concave beneath; length 5.5-7.0 mm 413. aerosa
9 (8).	Prothorax trapeziform; elytron green; frons of 3 with a pair of erect slender
	flap-like lobes arising from just anterior to center of cavity; length 3.6–4.8 mm
-1	
	Prothorax subrounded at side; elytron purplish brown with a slightly bluish
	angle; irons of 6' without a pair of erect lobes near center of cavity; length
	5.0-5.8 mm 418. Iraghis

# 413. Haplosaenidea aerosa (Laboissière), NEW COMBINATION

Diaphaenidea aerosa Lab., 1933, Soc. Ent. France, Ann. 102: 62, fig. 38 (Yunnan: Pe-yentsin; ?PARIS).

DISTRIBUTION: S. China (Yunnan, Kiangsi, Fukien, Shantung, ?Kweichow).

KIANGSI: 1, Hong Shan, 1000 m, 15. VI. 1936, Gressitt (CAS). FUKIEN: 5, Tachu-lan, 1000 m, Shaowu, 5–10. V. 1943, 1. V. 1945, Maa (CAS, BISHOP); 1, San-chiang, Chungan, 1. V. 1943, Maa; 1, Kua-tun, Chungan, 30. IV. 1942, Maa. ?KWEICHOW: 1, Kiau-tschau (FREY).

# 414. Haplosaenidea apicalis Laboissière

Haplosaenidea apicalis Lab., 1933, Soc. Ent. France, Ann. 102: 61 (Yunnan: Pe-yen-tsin; ?PARIS).

415. Haplosaenidea cavifrons Gressitt and Kimoto, n. sp. Fig. 179, a.

*Male*: Pale yellowish testaceous on head, prothorax, antenna, legs and ventral surfaces, slightly reddish at apex of mandible; scutellum dull ochraceous; elytron bright green-

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ish blue, more greenish basally and more bluish apically. Dorsum with a few erect pale hairs on front of head and posterior portion of elytron; ventral surfaces rather sparsely clothed with suberect golden buff hairs; legs quite thinly clothed particularly on femora.

Head barely broader than prothorax; occiput hardly convex, fairly smooth and slightly frosted, depressed medially at anterior end with a slightly sinuate depressed line behind postantennal swellings which are moderately convex, minutely punctured and separated by a median groove: interantennal area slightly wider than an antennal insertion, slightly raised anteriorly; entire frontal area very deeply depressed with a large and deep cavity between eyes; anterior portion of cavity not so deep and with a pair of flat tapering lobes extending vertically upward at middle of depressed area and a broader flat lobe at extreme side of cavity in front of eve: labrum slightly concave apically: disc about 3/4 as deep as eye: eye nearly round, strong, and convex. Antenna as long as body, slender; segment 1 slender and arched, finely punctured; 2 slightly longer than broad; 3 not quite as long as 1; 3-10 decreasing very slightly in length; 11 about as long as 7, suddenly tapering apically. Prothorax 3/4 as long as broad, moderately widened anteriorly; anterior margin slightly concave; basal margin distinctly and evenly convex; lateral margin convex and slightly sinuate, nearly straight and oblique basally, widened and convex anterior to middle and barely narrowed anteriorly, about as wide just anterior to middle as at apex: expanded lateral margin fairly narrow; anterior angle swollen but weakly produced; basal angle obtuse and moderately produced; disc uneven, but largely smooth and shiny, nearly impunctate but very finely frosted or micropunctate, a rather broad depression on each side of median line just behind center and a very slight depression on median line anterior to center and another behind center. Scutellum rounded triangular, weakly convex and micropunctate. Elytron about  $3.6 \times$  as long as broad, subparallel-sided but very slightly widened to behind middle, broadly rounded apically; lateral margin narrowly expanded; epipleuron not very wide basally, gradually narrowed and continuing to extreme apex; disc subevenly convex but with a moderate swelling between humerus and suture followed by a slight depression and another shallow longitudinal depression at middle in area on top of lateral declivity; surface with irregular punctures on basal 1/3 top of disc and on basal 3/5 of side, largest punctures in depressed area between humerus and basal swelling and in sublateral depression, these larger punctures mostly smaller than interspaces and remainder much smaller; rest of surface very weakly punctured but finely frosted. Ventral surfaces feebly punctured; pygidium rather strongly convex but slightly emarginate at extreme apex; last abdominal sternite broad, with a rounded truncate lobe at center with a deep arcuate notch at each side. Legs fairly long and slender; hind tibia straight; hind tarsal segment 1 slender, nearly as long as remainder, 2 slightly longer than 3 and last much shorter than 1. Length 3.4 mm; breadth 1.3.

*Female*: Antenna pitchy red beyond scape; metathorax and abdomen dark pitchy red; tarsi and apices of tibiae reddish brown; elytron somewhat bluish pitchy basally and gradually becoming more purplish pitchy to pitchy reddish brown at extreme apex; frontoclypeus large, nearly flat, somewhat in form of a broad triangle, continuing to adjacent corners of postantennal swellings with interocular area moderately raised at sides and slightly depressed medially; last abdominal sternite large, broadly and evenly rounded apically. Length 4.5 mm; breadth 1.5.

Paratype: Head and prothorax reddish ochraceous; antenna fairly dull; ventral sur-

faces largely pitchy brown; elytron greenish pitchy. Length 4.4 mm; breadth 1.7.

DISTRIBUTION: S. China (Kwangtung).

Holotype & (BISHOP 3308), Wui-lung to Tai-k'ang, via Lap-kai, 300 m, Sinfung Distr., E. River, Kwangtung Prov., 6. IV. 1940, Gressitt & F. K. To; allotype  $\mathcal{P}$  (LINGNAN), Kaulin Shan (Chiu-lien Shan), 700–900 m, Lien-p'ing Distr., N. Kwangtung, 17. IV. 1940, Gressitt & To; paratype  $\mathcal{P}$  (CAS), same data as allotype but 20. IV.



Fig. 179. a, Haplosaenidea cavifrons n. sp.; b, H. fragilis n. sp.; c, H. salicis n. sp.

Differs from *aerosa* Lab. in color and in having antennal segments all slender and frontal area with more oblong cavity, with erect pair of lobes anterior to center and a larger lateral pair.

# 416. Haplosaenidea coomani (Laboissière), NEW COMBINATION

Micraenidea coomani Lab., 1933, Soc. Ent. France, Ann. 102: 65, fig. 40 (Tonkin: Hoa-Binh; ?PARIS).

DISTRIBUTION: N. Vietnam.

VIETNAM: 2, Hoa-Binh, Tonkin, de Cooman (FREY).

# 417. Haplosaenidea cornuta (Laboissière), NEW COMBINATION

Diaphaenidea cornuta Lab., 1933, Soc. Ent. France, Ann. 102: 63, fig. 39 (Tonkin: Hoa-Binh; ?PARIS).

DISTRIBUTION: N. Vietnam.

VIETNAM: 5, Hoa-Binh, Tonkin, de Cooman (FREY).

418. Haplosaenidea fragilis Gressitt and Kimoto, n. sp. Fig. 179, b.

*Male*: Pale testaceous to dull reddish brown with a purplish tinge: head, prothorax, antenna and ventral surfaces and legs entirely pale orange testaceous, slightly more reddish on parts of head; scutellum dull ochraceous; elytron dark pitchy brown with a bluish to purplish tinge. Dorsum with a few erect fine hairs on front of head and on posterior

portion of elytron; ventral surfaces quite thinly and unevenly clothed with suberect pale hairs; legs rather thinly clothed particularly on femora.

Head slightly broader than prothorax; occiput evenly convex and fairly smooth and nearly impunctate; with a slight obtuse depression anteriorly which is directed posteriorly at middle behind postantennal swellings, which are moderately raised and separated by a median groove; area of frontoclypeus on anterior interocular area very deeply impressed, with a slender suberect lobe near eye and another wider and less erect one from side of frontoclypeal area; antennal insertions separated by a space about equal to width of one insertion and slightly raised medially behind deep anterior depression; labrum slightly emarginate apically; gena about 3/5 as deep as eye; eye nearly round, strongly convex and projecting. Antenna about as long as body, fairly slender; segment 1 long, fairly slender, arched and weakly punctured; 2 slightly longer than broad; 3 slightly shorter than 1, slender; 4 hardly longer than 3; 4=5; 6 shorter; 6-10 decreasing slightly in length; 11 barely longer than 10. Prothorax  $1.4 \times$  as broad as long, distinctly widened anteriorly and widest a short distance from apex; anterior margin nearly straight; basal margin weakly convex; lateral margin moderately convex, fairly straight and oblique behind middle; anterior angle strongly swollen and slightly projecting outward; basal angle rounded-obtuse, slightly projecting; expanded portion of lateral margin very narrow; disc somewhat unevenly convex but fairly smooth and nearly impunctate, a slight depression on each side of center and a slight swelling external to and behind this depression. Scutellum broadly rounded behind, somewhat convex and smooth. Elytron  $3.3 \times$  as long as broad, subparallel-sided, very slightly widened a short distance behind humerus, then slightly narrowed and very slightly widened again behind middle, broadly rounded apically; lateral margin very narrowly expanded; epipleuron moderately wide basally, gradually decreasing in width and extending to extreme apex; disc subevenly convex, somewhat depressed at side just anterior to middle and again just behind middle at top of lateral declivity; surface impressed with irregular punctures largely limited to basal 2/5 of disc and to outer 1/2 in basal 2/3, the punctures partly in longitudinal rows on outer portion and mostly about 1/2 as large as interspaces; remainder of surface very minutely punctured and somewhat frosted. Ventral surfaces minutely and sparsely punctured, more closely so on metepisternum; pygidium rounded apically; last abdominal sternite rather long, convex in middle and with an indentation on each side of convexity. Legs fairly long and slender; hind tibia straight; hind tarsal segment 1 not quite as long as remainder, 2 as long as 3, last slightly shorter than 1. Length 3.0 mm; breadth 1.25.

*Female*: Antenna slightly brownish distally; elytron a little more bluish basally; frontoclypeus rather large, about as long as broad and quite smooth and feebly depressed; interocular area moderately raised in middle; antennal segment 2 nearly  $2 \times$  as long as broad; 3 distinctly shorter than 4; last abdominal sternite broadly rounded apically. Length 3.4 mm; breadth 1.4.

Paratypes: Length 3.1–3.6 mm; breadth 1.3–1.5.

DISTRIBUTION: S. China (Kwangtung).

Holotype & (CAS), Ting-wu Shan, 500 m, W. River, C. Kwangtung Prov., 7–12. VII. 1949, Gressitt; allotopotype & (BISHOP 3309), same data; 2 paratypes (CAS, BISHOP), Taiyong, E. Kwangtung, 750 m, 3. VIII. 1936, Gressitt.

Differs from aerosa Laboissière in being almost entirely pale except for elytron which

is purplish brown instead of bronzy green, and in having antennal segments all slender, frontal excavation of  $\mathcal{J}$  more closely approaching antennal insertions with 2 lobes at each side instead of a projection in center. Differs from *cornuta* Lab. in being narrower, entirely pale beneath and in lacking the pronotal projections.

## 419. Haplosaenidea nitida Gressitt and Kimoto, n. sp.

*Male*: Pale yellowish testaceous to brilliant metallic green: head and pronotum pale yellowish testaceous, slightly reddish on apex and mandible; antenna dull reddish brown distally, pale ochraceous basally; scutellum ochraceous; elytron bright metallic green, becoming more pitchy green posteriorly; ventral surfaces testaceous on pro- and mesosterna, pitchy brown on remainder; legs testaceous, slightly reddish on tarsi and apices of tibiae. Dorsum with a few scattered suberect pale hairs, particularly on elytron and head; ventral surfaces a little more densely clothed with suberect pale hairs; legs moderately clothed with oblique golden buff hairs.

*Head* barely broader than prothorax; occiput evenly and weakly convex, smooth and nearly impunctate, with a bisinuate depression anteriorly benind postantennal swellings which are arcuate, fairly convex and smooth, with a deep groove between them; interantennal area slightly wider than an antennal insertion, slightly raised medially; frontoclypeus rather deeply impressed and rather smooth and shiny; labrum rounded apically; gena 1/3 as deep as eye; eye broadly ovate. Antenna nearly as long as body, fairly slender; segment 1 moderately long, slightly arched and thickened apically, with a few fine punctures and suberect hairs; 2 slightly longer than broad; 3 nearly as long as 1, slender; 4 barely longer than 3; 4-10 decreasing rather slightly in length; 11 about as long as 4. Prothorax 2/3 as long as broad, much broader anteriorly than posteriorly and subtrapeziform; anterior margin nearly straight; basal margin weakly convex; lateral margin slightly sinuate, widest slightly behind apex, with expanded margin slightly wider than basal margin; anterior angle swollen and rounded; basal angle obtuse and slightly produced; disc somewhat uneven but shiny, rather deeply depressed on each side just behind center and slightly grooved on median swelling just behind mid-point; surface almost impunctate. Scutellum triangular, angulate apically, convex and nearly impunctate. Elytron  $3.3 \times$  as long as broad, parallel-sided, hardly widened near middle, and broadly rounded apically; lateral margin narrowly expanded; epipleuron somewhat gradually narrowed, continuing to extreme apex; disc somewhat irregular, distinctly swollen near base between humerus and suture, impressed with irregular punctures of varying size but in part as large as interspace and with interspaces rather rugose, mostly in transverse direction, the punctures becoming finer and sparser posteriorly. Ventral surfaces rather smooth, finely and sparsely punctured; pygidium somewhat rounded and produced apically; last abdominal sternite rather long, with a median groove, subrounded apically. Legs fairly slender; hind tibia straight; hind tarsal segment 1 as long as remainder, 2 about as long as 3, and last distinctly shorter than 1. Length 3.2 mm; breadth 1.4.

*Female*: Elytron more greenish apically; pygidium strongly rounded apically; last abdominal sternite subevenly rounded on central portion. Length 3.6 mm; breadth 1.4.

Paratypes: Length 3.1–3.6 mm; breadth 1.3–1.4.

DISTRIBUTION: Hainan I.

Holotype  $\mathcal{F}$  (CAS), No-doa, 275 m, westcentral Hainan I., 10. VII. 1935, Gressitt; allotype  $\mathcal{P}$  (CAS), Fan-heang, 500 m, N of Five Finger Mts., C. Hainan, 7. VI. 1935, Gressitt; two paratypes  $\mathcal{F} \mathcal{P}$  (BISHOP), same data as allotype.

Differs from *coomani* (Lab.) in having frontoclypeus depressed and elytron with smaller punctures and more rugose.

### 420. Haplosaenidea pulchella (Laboissière), NEW COMBINATION

Micraenidea pulchella Lab., 1933, Soc. Ent. France, Ann. 102: 65 (Yunnan; Yunnan Sen, Pe-yen-tsin; ?PARIS).

DISTRIBUTION: SW China (Yunnan).

# 421. Haplosaenidea salicis Gressitt and Kimoto, n. sp. Fig. 179, c.

Female: Pitchy black to greenish and testaceous: head pitchy reddish, becoming greenish black posteriorly and paler reddish anteriorly; antenna reddish brown, slightly more pitchy on segments 3-6; pronotum dark pitchy brown with a greenish to purplish tinge; scutellum pitchy with a bronzy tinge; elytron pitchy red, strongly tinged with greenish basally and more purplish brown posteriorly; ventral surfaces dull reddish brown, but rather smooth and shiny with slight metallic tinges; legs testaceous. Dorsum with a few suberect pale hairs on anterior portion of head and a very few on posterior portion of elytron; ventral surfaces sparsely clothed with suberect golden buff hairs; legs somewhat thinly clothed.

Head slightly broader than prothorax; occiput evenly convex, minutely rugose-punctate giving a frosted appearance, with a short median depression anteriorly and separated from postantennal swellings by a narrow sinuate depression; postantennal swellings moderately convex, minutely punctured and separated by a median groove; interantennal area narrower than an antennal insertion, raised on each side of a median groove behind center and ridged anteriorly continuous with frontoclypeus which is fairly large, subtriangular and depressed on each side of median raised line; labrum slightly concave apically; gena about 2/5 as deep as eye; eye broadly oval, moderately prominent. Antenna 4/5 as long as body; segment 1 feebly arched, gradually thickened; 2 about  $2 \times$  as long as broad; 3 over  $2 \times$  as long as 2; 4 slightly longer than 3; 4-10 decreasing very slightly in length; 11 about as long as 4. Prothorax 82 % as long as broad, subtrapeziform, somewhat, gradually broadened from base to apex; anterior margin nearly straight; basal margin weakly convex, but slightly concave at center; lateral margin very slightly widened anterior to middle, expanded margin rather narrow; anterior angle slightly swollen but hardly prominent; basal angle slightly swollen and weakly prominent; disc largely smooth and shiny, fairly convex in anterior 1/2 with a round even depression on each side of middle just behind center; surface very minutely punctured. Scutellum subtriangular, rounded behind, convex and nearly impunctate. Elytron nearly  $4 \times$  as long as broad, subparallel, very slightly widened behind middle, broadly and evenly rounded apically; lateral margin very narrowly expanded; epipleuron moderately broad basally, gradually narrowed from basal 1/4 and continuing to extreme apex; disc subevenly convex but with a moderate swelling in basal 1/5 between humerus and suture followed by a very slight depression; surface with rather weak punctures arranged in part in sublongitudinal rows, punctures in part about as large as interspaces on basal 1/4 and becoming finer and in part much sparser

posteriorly and largely disappearing before apex. *Ventral surfaces* rather smooth and shiny, with very fine sparse punctures and with metepisternum more closely punctured; pygidium strongly rounded apically; last abdominal sternite subevenly rounded apically and more strongly punctured than preceding. *Legs* fairly long and slender; hind tibia straight; hind tarsal segment 1 slender, nearly as long as remainder, 2 barely longer than 3, and last distinctly shorter than 1. Length 4.2 mm; breadth 1.45.

Paratypes: Length 4.5-5.0 mm; breadth 1.4-1.7.

DISTRIBUTION: W. China (W. Hupeh).

Holotype  $\mathcal{Q}$  (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., nr. Szechuan border, on *Salix* sp., 26. VII. 1948, Gressitt & Y. W. Djou;  $4 \mathcal{Q}$  paratypes (CAS, BISHOP, LINGNAN), same data but 22–30. VII.

Differs from *touzalini* Lab. in being more slender, with head and pronotum pitchy instead of yellowish ochraceous, and elytron less regularly and less completely punctured.

#### 422. Haplosaenidea touzalini Laboissière

Haplosaenidea Touzalini Lab., 1933, Soc. Ent. France, Ann. 102: 60, fig. 37 (Yunnan: Peyen-tsin; ?PARIS).

DISTRIBUTION: SW China (Yunnan).

# Genus Trichobalya Weise

- Trichidea Baly, 1890 (nec Haan 1838), Ent. Monthly Mag. 26: 18 (type: T. bowringii Baly; monobasic; Hong Kong).
- Trichobalya Weise, 1924, Coleopt. Cat. 78: 152 (new name for Trichidea Baly, nec Haan 1938) (Note: In Neave's Nomenclator Zoologicus, this new name is recorded as "error?", and Trichidea Haan, 1838, is not listed).

# KEY TO CHINESE SPECIES OF TRICHOBALYA

423. Trichobalya bowringii (Baly)

Trichidea Bowringii Baly, 1890, Ent. Monthly Mag. 26: 13 (Hong Kong; BM).

- Trichobalya bowringi, Weise, 1924, Coleopt. Cat. 78: 152.
- Trichobalya tonkinensis Laboissière, 1936, Soc. Ent. France, Ann. 105: 260, fig. 58 (Ton-kin: Cho-ganh, Hoa-binh, Yen-bei; Yunnan: Pe-yen-tsin; ?PARIS). New Synonymy.
   DISTRIBUTION: S. China (Kwangtung, Yunnan), Hainan I., N. Vietnam.

KWANGTUNG: 8, Tsha-jiu San, VII-IX. 1912, Mell; 11, Canton, V-VII. 1911, Mell (ZMB); 4, Barker Rd., Victoria, Hong Kong, 6. VIII. 1934, Djou (LINGNAN). HAINAN: 2, No-doa, 10. VII. 1935, Gressitt; Ta-hian, 16. VI. 1935, Gressitt; 7, Ta-hau, 6. VII. 1935, Gressitt (CAS, BISHOP); 1, Loh-fung-tung, Yai Distr., 27. II. 1935, To; 1, Ta-tsing-lam-tsuen, nr. Loi Mother Mt., 17. VI. 1935, To (LINGNAN); 1, Hainan, 10–25. III. 1909, Schoede (ZMB). N. VIETNAM: 1, Hoa-binh, Tonkin, de Cooman (FREY).

## 424. \*Trichobalya gularis Laboissière

Trichobalya gularis Lab., 1936, Soc. Ent. France, Ann. 105: 261 (Tonkin: Hoa-binh; ?PARIS). DISTRIBUTION: N. Vietnam.

# 425. Trichobalya varians Gressitt and Kimoto, n. sp.

*Female*: Entirely yellowish testaceous with a slightly orange tinge; eye and tip of mandible pitchy black. Body moderately clothed above with fairly long erect hairs; antenna, ventral surfaces and legs moderately clothed with slightly shorter suberect pale hairs, but longer near apex of abdomen.

Head slightly broader than prothorax; occiput moderately convex, smooth and nearly impunctate, with a depression in middle of anterior portion; postantennal swellings distinct, separated anteriorly by interantennal ridge and posteriorly by a median groove; interantennal space about  $3 \times$  as wide as an antennal insertion, rather strongly raised in middle and continuous with subtransversely raised portion of frons; gena barely 1/4 as deep as eye. Antenna 2/3 as long as body; segment 1 feebly arched, widened just beyond middle and slightly narrowed at apex; 2 nearly 1/2 as long as 1; 3 nearly 1/2 again as long as 2; 4 shorter than 2+3; 4-10 decreasing slightly in length; 11 slightly longer than 4, acute apically. Prothorax 1/6 broader than long, much narrower in basal 1/2; anterior margin deeply convex; basal margin moderately convex; lateral margin sinuate, subparallel in anterior 2/5, strongly narrowed at middle, and subparallel posteriorly but slightly widened again at base; anterior angle projecting slightly outward; basal angle somewhat projecting; disc unevenly convex, slightly raised along median line and transversely raised anterior to middle, with a depression towards side anterior and posterior to premedian transverse swelling, a short longitudinal ridge on outer portion of postmedian depression and somewhat parallel to lateral margin, but curving inward to meet basal margin; surface incompletely, and minutely, punctured. Scutellum small, broader than long and subangulate posteriorly. Elytron  $3.8 \times$  as long as broad, moderately rounded at side and considerably broader just behind middle than at base, broadly rounded apically; epipleuron not very broad, not very distinctly set off basally, gradually narrowing from base to apex; disc subevenly convex, with a moderate swelling in basal 1/4, followed by a very weak depression; surface with 10 double rows of punctures besides a short scutellar row and with interstices between paired rows distinctly raised in basal 2/3 and rather smooth and shiny. Ventral surfaces weakly and sparsely punctured; last abdominal sternite broadly rounded apically and moderately punctured. Legs with hind femur distinctly swollen; hind tibia moderately stout and weakly arched; hind tarsal segment 1 slightly longer than 2+3 and last about as long as 1; claws of fore and mid-tarsi fairly small, divaricate and appendiculate, claws of hind tarsus very long, simple and weakly divergent. Length 4.5 mm; breadth 1.9.

*Paratypes*: Color varying from entirely testaceous to entirely pitchy black to brownish on scutellum, elytron, hind thorax and abdomen, or pitchy on scutellum, elytral margins, hind thorax and abdomen. Length 4.4–4.8 mm; breadth 1.7–1.95.

DISTRIBUTION: SE China (Fukien, Kwangtung, Kiangsu).

Holotype  $\mathcal{Q}$  (BISHOP 3310), Bohea Hills, Chungan Distr., NW Fukien Prov., 20. IV. 1940, T. C. Maa; paratype  $\mathcal{Q}$  (LINGNAN), Kau-lin San, 700–900 m, Lienping Distr., N. Kwangtung, 22. IV. 1940, Gressitt & To; 2 paratypes (CAS), Nanking, Kiangsu Prov., 3. V. 1923, Van Dyke. The Kiangsu specimens are partly dark.

Differs from *bowringii* (Baly) in being smaller, in having dorsal hairs more erect, antennal segment 3 relatively shorter, prothorax longer and less depressed on disc, and elytron with more distinctly paired puncture-rows and broader alternating ridges.

### Genus Theopea Baly

Theopea Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 237 (type: Crioceris impressa Fabr., 1801; Sumatra).—Chapuis, 1875, Gen. Col. 11: 242.—Maulik, 1936, Fauna India, Galeruc., 285.

### KEY TO CHINESE SPECIES OF THEOPEA

1. Frons of $\mathcal{J}$ without any excavation
Frons of $\mathfrak{F}$ with a deep excavation; antenna reddish brown with apical segments
darker; legs reddish
2. Subbasal antennal segments (3-6) somewhat swollen and arched; dorsum metallic
blue; black beneath; antenna and legs yellow; elytron with weak longitudinal
ridges; length 5.5-6.0 mm (Chûjô, 1935; Taiwan) sauteri
Subbasal antennal segments not swollen; antenna largely pitchy brown; legs brown
to pitchy; dorsum golden green to bluish green; pronotum with a fairly deep
round depression on each side of disc, reddish at bottom; elytron with quite
strong ridges between double rows of punctures; length 4.5-6.0 mm 428. coerules
3. Ventral surfaces dark; pitchy or metallic
Ventral surfaces entirely reddish brown; head and pronotum reddish; elytron bronzy
green with distinct longitudinal ridges, which are largely straight but partly si-
nuate; length 5–6 mm
4. Excavation of frons in $\mathcal{F}$ reaching margin of eye, and with a strong slightly hook-
ed tubercle projecting forward from back of cavity; antenna of $P$ with segment
2 shorter than 1/2 length of 3; dorsum bright golden green; elytral ridges most-
ly irregular, zig-zag or rugose; length 4.5-5.8 mm
Excavation of from in $\mathcal{A}$ not reaching margin of evel and with a pair of long

# 426. Theopea aeneipennis Gressitt and Kimoto, n. sp. Fig. 180, a.

Male: Orange ochraceous and testaceous to greenish bronzy and pitchy: head and

Ozomena Harold, 1876, Col. Hefte 15: 132.—Allard, 1889, Soc. Ent. Belg., C. R. 33: cxi (nec Chevr., 1845).

pronotum orange ochraceous; antenna reddish brown, paler and more orange on parts of segments 1-3; scutellum orange; elytron pitchy brown with a strong greenish blue tinge; ventral surfaces yellowish testaceous; legs orange ochraceous, more reddish on tarsi. Dorsum moderately clothed on head and sparsely on elytron with suberect pale hairs; ventral surfaces sparsely clothed with fairly long suberect golden buff hairs; legs moderately clothed with golden buff hairs, somewhat sparser on femora.

*Head* barely broader than prothorax; occiput weakly convex, finely frosted; a small round depression at middle of anterior margin; postantennal swellings strongly raised. moderately punctured; interantennal area strongly raised with antennal insertions on slopes of convexity, interantennal space nearly  $2 \times$  as wide as 1 antennal cavity, grooved medially and raised on each side of middle as continuation of postantennal swellings: entire frontal area very deeply impressed with a cavity reaching center of head, arcuate above and nearly reaching antennal insertions and at side reaching almost to edge of eve and to gena anterior to eye; a long erect paired process extending to level of opening from middle of cavity and a projecting ridge with an acute lobe at edge near antennal insertion as well as a median ridge at anterior edge and a lobed structure bearing hairs near side of cavity; labrum distinctly emarginate apically; gena 2/3 as deep as eye; eye broadly ovate, prominent. Antenna nearly as long as body, fairly slender; segment 1 fairly long, weakly arched, thickened apically and indistinctly punctured; 2 about  $1.5 \times$  as long as broad; 3 somewhat shorter than 1; 4 nearly as long as 1; 4–10 decreasing slightly in length; 11 about as long as 4. Prothorax 7/8 as long as broad, subtrapeziform, broadened anteriorly for 3/4 of length and then slightly narrowed to apex; anterior margin nearly straight; basal margin weakly convex; lateral margin straight and oblique in basal 2/3, then rounded and slightly narrowed, expanded margin narrow and very slightly wider than basal margin; anterior angle moderately swollen and slightly produced; basal angle roundedobtuse, weakly produced; disc fairly smooth and shiny, largely convex but with a fairly large moderately deep depression on each side of median line just behind center; surface very finely punctured and nearly impunctate on median portion. Scutellum fairly short and broad, rounded obtuse behind, convex and nearly impunctate. Elytron  $3.5 \times$  as long as broad, subparallel, hardly widened behind middle, broadly rounded apically; lateral margin very weakly expanded; epipleuron moderately broad, somewhat evenly narrowed and continuing to extreme apex; disc somewhat uneven, with approximately 7 groups of largely paired rows of punctures on upper surface with each pair divided from next by a somewhat irregular ridge and in addition 3 or 4 irregular rows of weaker punctures on lateral declivity; most of punctures on central portion of disc larger than interspaces within double rows and nearly as large as width of ridges between paired rows; a moderate swelling in basal 1/5 between humerus and suture; longitudinal ridges 5 and 7 more conspicuous than others and both commencing from humerus and reaching beginning of apical Ventral surfaces smooth and shiny, finely and sparsely punctured; pygidium declivity. strongly convex, arched apically; last abdominal sternite fairly long, with rounded-truncate apical lobe separated from lateral lobes by deep narrow incisions. Legs fairly long and somewhat slender; hind tibia nearly straight; hind tarsal segment 1 long and slender. longer than remainder combined, 2 distinctly longer than 3, and last about 3/5 as long as 1. Length 5.0 mm; breadth 2.3.

*Female*: Pronotum reddish orange; elytron pitchy with a strong bronzy green tinge; frons somewhat raised medially and depressed on each side of center and with an arcuate



Fig. 180. a, Theopea aenipennis n. sp.; b, T. azurea n. sp.

ridge at side concentric with center of antennal insertion; last abdominal sternite somewhat evenly rounded apically. Length 5.4 mm; breadth 2.2.

Paratypes: Length 5.0-6.3 mm; breadth 2.0-2.2.

DISTRIBUTION: SE China (Fukien, Kiangsi, Kwangtung).

Holotype & (BISHOP 3311), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien, 1. VII. 1942, T. C. Maa; allotype ♀ (BISHOP), Upper Kua-tun, 1400 m, Chungan Distr., NW Fukien, 6. VIII. 1945, Maa; 21 paratypes (CAS, BISHOP, US, Ac. SIN.): 4 paratopotypes, 24. VI-14. VII, 1942-46, Maa; 2 paratypes, same data as allotype; 1, Kwang-keng, Kienyang Distr., Fukien, Maa; 8, Tai-au-hong, SE Kiangsi Prov., 4–6. VII. 1936, Gressitt; 2, Wongsa-shue, 8–11. VII. 1936, Gressitt; 1, Lung-tau Shan (Yiu Village above Tso-kok-wan, 600 m), N. Kwangtung, 10. VI. 1947, Gressitt; 1, Loh-fau Shan, 600–1200 m, Kwangtung, 4. VIII. 1933, E. R. Tinkham.

Differs from *sauteri* Chûjô in having subbasal antennal segments of  $\mathcal{F}$  slender instead of swollen, and in having a deep excavation in frontal area of head of  $\mathcal{F}$ .

427. Theopea azurea Gressitt and Kimoto, n. sp. Fig. 180, b.

*Male*: Largely azure blue to bluish green above and greenish blue to pitchy beneath with appendages largely pale: head reddish anteriorly, bluish under eyes, greenish on vertex and azure blue on occiput; pronotum bluish to greenish with a slightly golden tinge; scutellum dark blue; elytron greenish blue, somewhat tinged with golden and more steely blue apically; prosternum bluish pitchy; mesosternum reddish pitchy; metasternum and abdomen greenish blue; antenna testaceous, slightly duller at apex; legs testaceous, dull

reddish brown on tarsi and apices of tibiae. Dorsum moderately clothed with suberect pale hairs on parts of head and on most of elytron; ventral surfaces more densely clothed with suberect silvery buff hairs; legs rather thinly clothed with whitish buff hairs; antenna with brief adpressed pale golden pubescence.

*Head* barely broader than prothorax; occiput weakly convex, micropunctulate, with a few vague somewhat widely spaced shallow pits; postantennal swellings somewhat arcuate. convex and micropunctulate and separated by a median groove; interantennal space somewhat wider than an antennal insertion: entire frontal area very deeply concave, the cavity transversely suboval, and reaching nearly to middle of head with a paired suberect process at center which nearly reaches level of opening, parts of edges black or pitchy, in part ochraceous with most of inner surface of cavity pale; labrum slightly concave apically; gena about 3/5 as deep as eye; eye broadly reniform, fairly prominent. Antenna not quite as long as body, moderately slender; segment 1 distinctly arched, moderately thick, swollen and weakly punctured; segment 2 about as broad as long; 3 somewhat shorter than 1, subcylindrical: 4 slightly longer than 3: 4=5: 5-9 decreasing slightly in length: 10 much shorter than 9: 11 slightly longer then 9. *Prothorax* slightly more than 7/10 as long as broad, subtrapeziform; anterior margin straight; basal margin weakly convex; lateral margin broadened from base to end of anterior 1/3 and then slightly narrowed, expanded lateral margin somewhat wider than basal margin; anterior angle swollen and rounded, weakly projecting; basal angle obtuse, hardly projecting; disc somewhat irregularly convex, subevenly raised on anterior 1/2 and with a fairly large oblique depression on each side of median line just behind center and again somewhat raised towards side and parallel to base; surface impressed with punctures of varying sizes, those in distal depression larger and those on anterior portion mostly smaller and irregular and in part quite close but with a fairly large impunctate callosity on central portion. Scutellum triangular, convex and punctured apically. Elytron  $3.4 \times$  as long as broad, feebly convex at side, slightly narrowed from behind and broadly rounded apically; lateral margin narrowly flattened; epipleuron moderately broad; gradually narrowed and terminating on apex; disc with a moderate swelling in basal 1/5 between humerus and suture and with 8 fairly prominent longitudinal ridges and another short basal one near scutellum with double rows of fairly large punctures between each two ridges; ridges 1-3 as well as extra basal one broadened on subbasal swelling: many of punctures confluent transversely between ridges and punctures mostly larger than interspaces longitudinally and transversely between ridges; ridge 5 somewhat arcuate and prominent and 7 also fairly prominent. Ventral sufraces feebly punctured and in part micropunctulate; pygidium broadly rounded apically; last abdominal sternite subtruncate on median lobe which is separated from lateral lobes by fairly deep incision. Legs fairly stout; hind tibia nearly straight; hind tarsal segment 1 long and slender, slightly longer than remaining, 2 slightly longer than 3, and last much shorter than 1. Length 7.0 mm; breadth 2.8.

*Female*: Head bronzy green; labrum reddish; pronotum largely golden green; elytron bronzy greenish to bluish green; frons with a strong median carina and a moderate depression on each side at center and an arcuate ridge anterior to antennal insertion; last abdominal sternite broadly rounded apically. Length 7.5 mm; breadth 3.0.

DISTRIBUTION: S. China (Kwangtung), Hainan I.

Holotype & (CAS), Kwangtung Prov., probably Lui-chow Peninsula, VIII. 1950, for

Gressitt; allotype ♀ (LINGNAN), Faan-na, 12 km E of No-doa, Tan Distr., Hainan I., 12– 13. VII. 1932, F. K. To.

Differs from *nigricollis* Jacoby in being larger, metallic blue instead of black on head and pronotum, in having antenna almost uniformly colored and with middle segments hardly flattened and nearly cylindrical.

### 428. Theopea coerulea Gressitt and Kimoto, n. sp.

Male: Dorsum largely bluish green to golden green with purplish to pitchy reflections; anterior portion of head ochraceous, pitchy at apex of mandible; antenna dull reddish brown, paler to testaceous on segments 1-4; ventral surfaces pitchy reddish with greenish to bluish reflections; legs including coxae testaceous, slightly reddish brown on tarsi and apices of tibiae. Dorsum with a few suberect pale hairs on head and on posterior portion of elytron; ventral surfaces somewhat thinly clothed with suberect silvery buff hairs; legs rather thinly clothed with oblique golden buff hairs.

*Head* not quite as broad as prothorax; occiput moderately convex and uneven, rather rugulose-punctate; postantennal swellings fairly large, rounded behind, convex and slightly frosted but fairly shiny and separated by a median groove; interantennal area about as wide as an antennal insertion, grooved medially behind center and raised anteriorly to join posterior end of median ridge of frons, which is distinct from clypeus and bears a fairly large deep cavity on each side of median ridge and fairly broadly and obliquely raised above near antennal insertion; labrum weakly concave apically; gena about 1/5 as deep as eye; eye somewhat broadly ovate, strongly convex. Antenna about 4/5 as long as body, not very slender; segment 1 slightly arched, fairly stout apically and feebly punctured: 2 slightly longer than broad, widened apically; 3 subcylindrical, with 2 about as long as 1; 4 about as long as 1, and as 5; 6 shorter than 5; 6-10 decreasing slightly in length and diameter; 11 slightly longer than 10. Prothorax slightly more than 3/4 as long as broad, subtrapeziform with greatest width about 1/3 from apex; anterior margin straight; basal margin weakly convex, slightly concave at middle; lateral margin obliquely widened from base to anterior to middle and evenly rounded and narrowed slightly at apex, with expanded margin slightly wider than basal margin; anterior angle slightly produced; basal angle obtuse and slightly produced; disc convex except for a fairly deep subrounded concavity on each side of median line just behind center; surface irregularly punctured, fairly large punctures in distal depression and smaller, in part close, punctures towards side and with punctures much sparser near middle of anterior portion but fairly strong near basal margin. Scutellum rounded triangular, convex and nearly impunctate. Elytron slightly more than  $3 \times$  as long as broad, subparallel, very weakly convex at side and slightly narrowed behind middle, broadly rounded apically; lateral margin narrowly expanded; epipleuron not very broad, gradually narrowed and continuing to apex; surface moderately swollen in basal 1/5 between humerus and suture, with 7 moderately raised lines separating pairs of puncture rows, punctures mostly about as large as interspaces longitudinally and transversely within pairs and remaining fairly large almost to apex, elevated ridges rather weak on subbasal swelling. Ventral surfaces fairly smooth and shiny, micropunctuate; pygidium rounded apically; last abdominal sternite with a subtruncate median lobe separated from lateral rounded lobes by a fairly deep and and not very narrow incision. Legs fairly slender; hind tarsal segment 1 slender, as long as remainder combined, 2 slightly longer than 3 and last much shorter than 1. Length 4.5 mm; breadth 1.8.

*Female*: Depressions on pronotum pitchy reddish at bottom; last abdominal sternite broadly rounded apically with a slight median notch. Length 4.6 mm; breadth 1.8.

*Paratypes*: Dorsum varying from golden green to greenish blue. Length 4.0-5.1 mm; breadth 1.8-2.0.

DISTRIBUTION: S. China (Fukien, Kwangtung, ? Kweichow), N. Vietnam.

Holotype & (BISHOP 3312), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 9. V. 1943, T. C. Maa; allotype ♀ (BISHOP), Wui-chi Shan, Chungan Distr., NW Fukien, 10. VI. 1944, Maa; 36 paratypes (CAS, BISHOP, AMNH, US, LINGNAN, FREY): 6 paratopotypes, 21. V -9. VI, 1942-43, Maa; 3, Sui-pei-kai, Shaowu, Fukien, 21. V. 1943, Maa; 1, Tao-yuendung, Wingan, Fukien, 11. V. 1940, Maa; 1, San-chiang to Miao-wan, Chungan, Fukien, 10. VI. 1943, Maa; 2, nr. Foochow, Fukien, 1921-24, Kellogg; 8, Yen-ping, Fukien, 11. VI. 1917 (Ac. 5148 AMNH); 3, Yen-ping-fu, Fukien, Reitter; 1, Lung-tau Shan, 400 m, N. Kwangtung, 10. VI. 1947, Gressitt & Lam; 2, Taam-yuen-tung, Lin Distr., N. Kwangtung, 7-9. VI. 1934, To; 4, Kiau-tschau; 2, Hoa-binh, Tonkin, de Cooman.

Differs from *nigricollis* Jac. in having head and pronotum metallic bluish instead of black, antenna dull brown instead of partly whitish apically, elytron greenish blue to golden green instead of deep blue, and prothorax subtrapeziform instead of subsquarish.

### 429. Theopea smaragdina Gressitt and Kimoto, n. sp.

*Male*: Dorsum almost entirely bright metallic golden green, with some slight bluish tinges and becoming pitchy brown on apex and border of elytron and testaceous on anterior portion of head; antenna pale reddish brown, testaceous on segments 1-3; ventral surfaces pitchy brown, strongly tinged with metallic green; legs ochraceous, slightly reddish brown on tarsi and apices of tibiae. Dorsum with a few scattered suberect pale hairs mostly on posterior 1/2 of elytron and a few erect hairs on head; ventral surfaces quite sparsely clothed with suberect silvery buff hairs; legs moderately clothed with golden buff hairs.

Head barely broader than prothorax; occiput moderately convex, fairly smooth but with sparse shallow punctures and fine micropunctuation; postantennal swellings fairly short behind antennal insertions, but enlarged between them, moderately convex, micropunctate and separated by a median groove; interantennal space about as wide as an antennal insertion; entire frontal area deeply concave, concavity reaching front of antennal insertion and eye; fairly large forward directed slightly hooked tubercle arising from back of cavity; labrum very weakly concave apically; gena about 1/4 as deep as eye; eye broadly ovate, strongly swollen. Antenna slightly longer than body, moderately slender; segment 1 long and moderately arched, gradually swollen and weakly punctured; segment 2 about as broad as long; 3 nearly as long as 1, slightly thickened and oblique at apex; 4 as long as 2+3, very slightly arched and oblique apically; 5 similar to 4 but slightly shorter; 6-10 straighter and more slender, gradually slightly decreasing in length; 11 barely longer than 10. Prothorax 4/5 as long as broad, subtrapeziform, widened from base to end of anterior 1/3and then very slightly narrowed at apex; anterior margin nearly straight; basal margin weakly convex, fairly straight in central portion; lateral margin gradually widened and slightly narrowed apically, the expanded margin slightly wider than basal margin; anterior angle swollen and somewhat produced; basal angle obtuse and hardly produced; disc

convex except for a large subobliquely transverse depression on each side of middle just behind center; surface rather closely subrugose-punctate almost throughout but smooth at bottom of distal depression, punctures somewhat larger near base and finer anteriorly. Scutellum subtriangular, rounded behind, convex and weakly punctured. Elytron  $3.25 \times$  as long as broad, subparallel, narrowed and rounded apically, with sutural angle rounded; lateral margin very narrowly expanded; epipleuron gradually narrowed posteriorly and terminating at apex; disc moderately swollen in basal 1/4 between humerus and suture, and with 7 or 8 longitudinal ridges which are partly irregular or confused and in part in form of zig-zag rugosities between punctures rows which are mostly made up of fused punctures of double rows so that they appear as rather wide transverse punctures where fused. Ventral surfaces smooth, very finely and sparsely punctured; pygidium narrowly emarginate at middle of apex; last abdominal sternite long, with a median rounded lobe which is about 2/3 as long as broad and separated from rounded lateral lobes by a deep incision. Legs fairly long and slender; hind tibia straight; hind tarsal segment 1 slender, slightly longer than remainder combined; 2 distinctly longer than 3 and last hardly 2/3as long as 1. Length 5.0 mm; breadth 1.6.

*Female*: Head and pronotum more golden green and elytron darker golden green; frons without a cavity, golden green, with a fairly broad median ridge and an oblique ridge on each side separating two cavities, the upper one smaller than the lower one but both shallow; antennal segment 2 nearly  $2 \times$  as long as broad; pygidium rounded apically; last abdominal sternite long, with an obtuse tooth in middle of shallow apical emargination. Length 5.0 mm; breadth 1.65.

Paratypes: Length 5–6 mm; breadth 1.1–1.5.

DISTRIBUTION: Hainan I. and S. China (Kwangtung).

Holotype ♂ (CAS), Ta-hau, 25 m, W. Hainan I., 6. VII. 1935, Gressitt; allotopotype ♀ (BISHOP 3313), same data; 1 ♀ paratopotype (CAS), same data; 1 ♀ (CAS), Fei-ha to Fei-loi, N. River, C. Kwangtung Prov., 1. VII. 1949, Gressitt; 1 ♂ (LINGNAN), White Cloud Mt., Canton, Kwangtung, 6. V. 1934, E. R. Tinkham; 1 ♂ (ZMB), Fati, Canton, 10. V. 1910, R. Mell.

Differs from *mouhoti* Baly in being slightly smaller, and in being golden green instead of reddish above.

#### Genus Paraplotes Laboissière

Paraplotes Lab., 1933, Soc. Ent. France, Ann. 102: 51 (type: P. rugosa Lab.; Tonkin).

#### KEY TO CHINESE SPECIES OF PARAPLOTES

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### 430. Paraplotes antennalis Chen

Paraplotes antennalis Chen, 1942, Notes d'Ent. Chinoise 9: 33 (Shensi: Weitze-ping; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Shensi).

# 431. Paraplotes clavicornis Gressitt and Kimoto, n. sp. Fig. 181, a.

*Male*: Castaneous to testaceous or pitchy: head pitchy black, largely ochraceous beneath and behind eyes, and reddish on apical portion of labrum and mandible; antenna pitchy black, and in part tinged with reddish at apices of segments; pronotum orange testaceous; scutellum pitchy brown; elytron bright chestnut brown; ventral surfaces chestnut brown on thorax and ochraceous on abdomen; legs chestnut brown to pitchy brown, somewhat pale on tarsal segment 3 and reddish at apices of tarsi. Dorsum nearly glabrous, a few pale hairs on anterior portion of head; antenna briefly clothed with subadpressed buff hairs; ventral surface very sparsely clothed with oblique pale hairs, nearly glabrous on central portion of metasternum; legs rather thinly clothed with pale hairs.

*Head* not quite as broad as prothorax; occiput evenly convex, with a distinct median groove, almost impunctate; postantennal swellings fairly large, smooth and shiny; interantennal area barely wider than antennal insertion, rather strongly and evenly convex and continuous with triangular raised area of frontoclypeus; gena about 1/4 as deep as eye; eye broadly oval, not very prominent. Antenna 2/3 as long as body, strongly swollen in distal 1/3; segment 1 feebly arched, fairly stout apically and shiny; 2 about  $1.5 \times$  as long as broad; 3 nearly  $2 \times$  as long as 2, subequal to 4; 5 slightly shorter, broadened apically, 6 barely shorter than 5, quite stout apically; 7 as long as 6, nearly as broad as long; 8 still broader, broader than long, slightly oblique apically; 9 much broader than long, strongly oblique and acutely produced endoapically; 10 very broad, much longer on outer edge than on inner edge and with a fairly large cavity above with a slender erect process; 11 fully as large as 10, rather abruptly tapering and acute apically. *Prothorax* slightly more than  $2 \times$  as broad as long, subrectangular; anterior margin subevenly concave; basal margin weakly convex, feebly sinuate; lateral margin nearly straight, slightly broadened near anterior angle with margin barely broader than basal margin; anterior angle swollen and produced forward; basal angle barely projecting; somewhat rounded and placed well forward on posterior margin with an even curve between; disc convex anteriorly and very broadly and evenly concave across posterior 1/2 and more than posterior 1/2 in central portion; surface nearly impunctate. Scutellum triangular, slightly rounded apically, smooth and nearly impunctate. Elytron  $3 \times$  as long as broad, slightly narrowed behind basal 1/4and weakly widened just behind middle, broadly rounded apically with sutural angle somewhat rounded; lateral margin moderately expanded almost to apex; epipleuron rather narrow and parallel-sided almost throughout, narrowed and terminating on apex; surface fairly flat above and with a very strong carina extending posteriorly from humerus to apex along top of lateral declivity which is in part vertical and in part concave or overhanging; disc slightly uneven, in part nearly rugulose with fairly dense small irregular punctures, the punctures in part as large as interspaces but becoming somewhat smaller posteriorly.



Fig. 181. a, Paraplotes clavicornis n. sp.; b, Epaenidea subvirida n. gen. & n. sp.

Ventral surfaces fairly smooth, finely and sparsely punctured; pygidium rounded and somewhat produced apically; last abdominal sternite rather flat and even apically. Legs not very stout, somewhat flattened; hind tibia very feebly arched; hind tarsal segment 1 moderately slender, slightly longer than 2+3, 2 somewhat longer than 3, and last shorter than 1. Length 4.8 mm; breadth 2.4.

*Female*: Elytron somewhat more pitchy reddish brown, nearly pitchy black on humerus and lateral ridge; occiput reddish castaneous; antenna not very stout; segment 2 nearly  $2 \times$  as long as broad; 3 slightly shorter than 1, barely longer than 4; 5 slightly shorter; 5=6; 7 and 8 slightly shorter, subequal; 9 slightly longer than 8 and about as broad as long; 10 longer than broad; last missing; pygidium obtusely rounded apically; last abdominal sternite slightly emarginate at center. Length 4.5 mm; breadth 2.6.

Paratypes: Length 4.6-4.8 mm; breadth 2.5-2.7.

DISTRIBUTION: SE China (Fukien).

Holotype & (BISHOP 3314), Ta-chu-lan, 1000 m, Shaowu Distr., MW Fukien Prov., 14. V. 1942, T. C. Maa; allotopotype & (BISHOP), 12. VI. 1943, Maa; 3 paratopotypes (CAS, BI-SHOP), 31. V. 1942, 4. X. 1942, 16. V. 1943, Maa.

Differs from *rugosa* Lab. in being dark castaneous instead of ochraceous yellow, in having prothorax just over  $2 \times$  as long as broad instead of  $3 \times$  as long as broad, and an-

tennal segments 9-11 with diameters much greater.

#### 432. Paraplotes rugosa Laboissière

Paraplotes rugosa Lab., 1933, Soc. Ent. France, Ann. 102: 52 (Tonkin; Hoa-binh; ?PARIS). DISTRIBUTION: N. Vietnam.

### Genus Epaenidea new genus

Luperini: Antennal insertions slightly separated, slightly convex between them; frons triangular, somewhat raised medially; labrum slightly emarginate apically, with 2 inconspicuous setigerous pores near each side; maxillary palp with penultimate segment very large, swollen apically and last segment very much smaller, tapering and acute; gena about 1/4 as deep as transverse diameter of eye; eye nearly as wide as deep; antenna 2/3 as long as body with segment 2 about 1/4 as long as 3 which is nearly as long as 4; prothorax subrectangular, broader than long, with side and base distinctly margined, anterior border indistinctly margined and disc with shallow cavity on each side behind center; elytron in central portion with subgeminate punctures alternating with feebly raised lines, and epipleuron broad basally and gradually narrowing to extreme apex; prosternum abbreviated between coxae with coxae adjacent and their cavities closed posteriorly; last abdominal sternite with apical lobe subrectangular, about  $2\times$  as broad as long, and lateral lobe broadly rounded; hind tibia with many minute spines; hind tarsal segment 1 barely longer than 2+3; tarsal claws appendiculate.

Type species: Epaenidea subvirida n. sp.

Differs from *Paraenidea* Lab. in having frons and antenna normal, antennal insertions much closer, eye much larger and elytral puncture rows less regular. Differs from *Palpoxena* Baly in having frons raised medially, antennal insertions much closer, antenna stouter, eye smaller and elytron with puncture rows. Differs from *Hyphaenia* Baly and *Acroxena* Baly in having frons more normal, eye larger, antenna not flattened, and elytron with puncture rows.

#### 433. Epaenidea subvirida Gressitt and Kimoto, n. sp. Fig. 181, b.

*Male*: Pale yellowish testaceous to metallic bronzy green: head testaceous; antenna yellowish testaceous; pronotum pale ochraceous, darker along central portion of median line and central portion of lateral margin; scutellum pitchy brown; elytron pitchy reddish with a strong bronzy green tinge; ventral surfaces pale ochraceous; legs testaceous. Dorsum nearly glabrous; antenna thinly clothed with subadpressed pale golden hairs; ventral surfaces and legs sparsely clothed with suberect goldish hairs.

*Head* nearly as broad as prothorax; occiput evenly convex, slightly frosted; postantennal swellings fairly large, broader than long, separated by a distinct groove; interantennal area barely wider than an antennal insertion; slightly grooved medially and raised on each side; frontoclypeus moderately swollen medially and transversely so anteriorly; gena nearly 1/4 as deep as eye; eye broadly ovate. *Antenna* nearly as long as body, moderately slender; segment 1 strongly thickened apically and arched; 2 slightly longer than broad; 3 as long as 1, subcylindrical; 4 as long as 3; 4–10 decreasing slightly in length; 11 distinctly longer than 10. *Prothorax* 5/7 as long as broad, subrectangular; anterior margin sinuate, concave at middle; basal margin moderately concave and slightly sinuate, weakly concave at middle; lateral margin slightly sinuate, broadest well anterior to middle and straight posteriorly; anterior angle swollen and produced forward and slightly outward; basal angle obtuse; disc rather strongly convex but with a fairly deep roundish concavity on each side of median line slightly behind center; surface minutely and somewhat sparsely punctured. Scutellum slightly broader than long, subtriangular, slightly convex and somewhat frosted. Elytron about  $4 \times$  as long as broad, weakly convex at side, broadly rounded apically with sutural angle rounded-obtuse; lateral margin slightly expanded; epipleuron moderately broad basally, somewhat gradually narrowing and extending almost to extreme apex; disc distinctly convex in basal 1/4 and slightly depressed between swelling and humerus and behind swelling, also a longitudinal depression at middle of side; surface with fairly deep punctures which are much stronger basally, particularly in depressions beside and behind subbasal swelling, most of punctures about as large as interspaces, but much finer and sparser posteriorly, partly arranged in subregular rows, about 15 across middle. Ventral surfaces hardly punctured on thorax, moderately punctured at side of abdomen; pygidium rounded apically; last abdominal sternite with median apical lobe about  $2 \times$  as broad as long, truncate apically and rounded at side. Legs fairly long and stout; hind tibia nearly straight; hind tarsal segment 1 longer than 2+3, slightly longer than last, 2 somewhat longer than 3. Length 5.8 mm; breadth 2.3.

*Female*: Frons as in  $\mathcal{F}$ ; last abdominal sternite broadly rounded apically. Length 6.5 mm; breadth 2.8.

Paratypes: Length 4.6-7.2 mm; breadth 1.8-2.9.

DISTRIBUTION: Hainan I.

Holotype & (CAS), Ta-hau, 30 m, nr. west coast, Hainan I., 6. VII. 1935, Gressitt; allotopotype ♀ (CAS), same data; 22 paratypes (CAS, BISHOP, AC. SIN., USNM, BMNH, KIMOTO): 12 paratopotypes, same data as holotype; 3, No-doa (Na-ta), 10. VII. 1935, Gressitt; 1, Dome Mt., nr. No-doa, 13. VII. 1935, Gressitt; 1, Lia-mui (Ling-men), 250 m, 2. VIII. 1935, Gressitt; 2, No-doa, 27. IV. 1932, F. K. To; 1, Nam-po-hui, Lin-kao Distr., 27. V. 1932, To.

Similar in appearance to *Paraenidea azurea* Lab. but with undifferentiated frons and antenna, larger eye, etc. Differs from species of *Fleutiauxia* in having fore coxal cavity closed behind, body a little more robust, and frons undifferentiated. The  $\mathcal{J}$  is similar in appearance to the  $\mathcal{P}$  of *Fleutiauxia mutifrons*, n. sp.

#### Genus Paraenidea Laboissière

Paraenidea Lab., 1933, Soc. Ent. France, Ann. 102: 66 (type: Pa. azurea Lab.; Yunnan). Platyxanthoides Lab., 1933, l. c., 71 (type: Pl. variceps Lab.; Tonkin). New Synonymy.

### KEY TO CHINESE SPECIES OF PARAENIDEA

1.	Antennal	segment	3	of	δ	broadl	y tria	ngula	r or	gloł	oose	•••••		• • • • • • •		2
	Antennal	segment	3	of	Ъ	much	longe	r than	bro	ad,	fairly	slender;	elytron	rede	lish	
	ochra	ceous					•••••							437.	varice	s
2.	Antennal	segment	3	of	б	globos	e; 2	very	smal	1						3

1963

#### Pac. Ins. Mon.

- - tennal segment 8 reniform; elytron bright golden green; pronotum yellowish
  - testaceous; length 6.5-7.5..... 434. aureipennis

## 434. Paraenidea aureipennis Laboissière

Paraenidea aureipennis Lab., 1933, Soc. Ent. France, Ann. 102: 69 (Yunnan: Pe-yen-tsin; ?PARIS).

DISTRIBUTION: SW China (Yunnan).

### 435. Paraenidea azurea Laboissière

- Paraenidea azurea Lab., 1933, Soc. Ent. France, Ann. 102: 67 (Hoa-Binh, Louang-Prabang; ?PARIS).
- Paraenidea azurea var. n. hoabinhia Lab., 1933, Soc. Ent. France, Ann. 102: 69 (Hoa-Binh, environs de Tuyen-Quan; Tien-Yen; Siam; Lakhon; PARIS).

Elytral coloration variable, from magenta to bronzy pitchy and blue-green.

DISTRIBUTION: N. Vietnam, Laos, N. Thailand.

VIETNAM: 12, Hoa-binh, Tonkin, de Cooman (FREY).

# 436. Paraenidea occipitalis Laboissière

Paraenidea occipitalis Lab., 1933, Soc. Ent. France, Ann. 102: 70 (Tonkin: Hoa-binh; ?PARIS).

DISTRIBUTION: N. Vietnam.

VIETNAM: 4, Hoa-binh, Tonkin, de Cooman (FREY).

## 437. Paraenidea variceps (Laboissière), NEW COMBINATION

Platyxanthoides variceps Lab., 1933, Soc. Ent. France, Ann. 102:71 (Tonkin: Hoa-binh; ?PARIS).

DISTRIBUTION: N. Vietnam.

VIETNAM: 4, Hoa-binh, Tonkin, de Cooman (FREY).

## Genus Platyxantha Baly

*Platyxantha* B., 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 233 (type: *P. apicalis* B.; Sumatra). —Chapuis, 1875, Gen. Col. 11: 244.—Weise, 1903, Deutsche Ent. Zeits. 1903: 327.

We are uncertain of the status of this genus in continental Asia. Maulik (1936) placed the Indian species in *Palpoxena* after he had described the following Chinese species.

#### 438. Platyxantha chinensis Maulik

Platyxantha chinensis Maul., 1933, Ann. Mag. Nat. Hist. ser. 10, 12: 563 (Kiangsu, Chekiang; type untraced); 1936, Fauna India, Galeruc., 38 (biology).

We question whether this species is properly placed in this genus or not. No specimens could be located in the British Museum (N. H.), and we seem to have no material.

DISTRIBUTION: E. China (Kiangsu, Chekiang).

HOST: Morus sp. (adult on leaves; larva on roots).

# Genus Palpoxena Baly

Palpoxena Baly, 1861, Jour. Ent. 1: 203 (type: Palpoxena laeta Baly).—Chapuis, 1875, Gen.
 Col. 11: 244, 246.—Maulik, 1936, Fauna India, Galeruc., 568.

Aenidea Baly, 1874, Ent. Soc. Lond., Trans. 1874: 179.—Harold, 1877, Deutsch. Ent. Zeits.
21: 366.—Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 749 (designation of *laeta* Baly as type).

(?) Neochrolea Jac., 1887, Zool. Soc. Lond., Proc. 1887: 117, pl. 11, fig. 4 (type: N. cavifrons Jac.; monobasic; Ceylon).

Oenidea Baly, 1885, Linn. Soc. Lond., Jour. 20: 159 (subsequent spelling of Aenidea).

We have only a  $\bigcirc$  of the type species of *Palpoxena* but the description indicates no cavity on front of head of  $\eth$ . Maulik's use of *Palpoxena* may not be correct, as he includes species with frontal cavities. The species which were included in *Palpoxena* by Maulik in Fauna India may all belong to *Platyxantha*. We have not studied the type of *Platyxantha*. Further, *Dorydea* might be a good genus in having "the surface of each elytron with about eight indistinctly raised longitudinal vittae" (after Baly's description of *insignis*, the type). We have *insignis*. *Neochrolea* Jac. is a monobasic genus based on a species from Ceylon. We are not sure whether this is a synonym of *Palpoxena* or not.

## 439. \*Palpoxena laeta Baly

Palpoxena laeta Baly, 1861, Jour. Ent. 1: 204, pl. 11, fig. 7 (Borneo; BM). DISTRIBUTION: Borneo, Vietnam.

VIETNAM: 1, Hoa-binh, Tonkin, de Cooman (FREY).

### Genus Acroxena Baly

Acroxena Baly, 1879, Cist. Ent. 2: 462 (type: Acroxena nasuta Baly; Assam).—Maulik, 1936, Fauna India, Galeruc., 564, fig. 138.

#### KEY TO CHINESE SPECIES OF ACROXENA

Antennal segment 3 only 3/5 as long as 1; frons slightly convex and smooth; antenna
somewhat pitchy above
Antennal segment 3 nearly 4/5 as long as 1; frons transversely and shallowly concave;
antenna entirely pale

# 440. \*Acroxena nasuta Baly

Acroxena nasuta Baly, 1879, Cist. Ent. 2: 462 (Assam; BM). DISTRIBUTION: NE India.

### 441. \*Acroxena paradoxa Laboissière

Acroxena paradoxa Lab., 1936, Soc. Ent. France, Ann. 105: 240, fig. 43 (Tonkin: Hoa-

binh; ?PARIS). DISTRIBUTION: N. Vietnam VIETNAM: 3, Hoa-binh, Tonkin, de Cooman (FREY).

# Genus Hyphaenia Baly

- Hyphaenia Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 410 (type: Luperus pilicornis Motschulsky; Burma).—Chapuis, 1875, Gen. Col. 11: 242.—Maulik, 1936, Fauna India, Galeruc., 486.
- Trichocerastes Motschulsky, 1866, Soc. Nat. Moscou, Bull. 39, 1 (2): 413 (type: L. pilicornis Mots.).

### KEY TO CHINESE SPECIES OF HYPHAENIA

#### 442. Hyphaenia aenea Laboissière

Hyphaenia aenea Lab., 1936, Soc. Ent. France, Ann. 105 : 243, figs. (Yunnan-Sen; ?PARIS). DISTRIBUTION: SW China (Yunnan).

### 443. Hyphaenia cyanescens Laboissière

Hyphaenia cyanescens Lab., 1936, Soc. Ent. France, Ann. 105: 242 (Tonkin: Hoa-binh; Yunnan: Lon-Lan, Yunnan-Sen; Pe-Yen-tsin; ?PARIS).

DISTRIBUTION: N. Vietnam, SW China (Yunnan).

VIETNAM: 1, Hoa-binh, Tonkin, de Cooman (FREY).

### Genus Proegmena Weise

Pro'egmena Ws., 1889, Soc. Ent. Ross., Horae 23: 628 (type: P. pallidipennis Ws.; Kansu).— Ogloblin, 1936, Fauna USSR 26, 1: 326, 376.

### KEY TO CHINESE SPECIES OF PROEGMENA

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# 444. Proegmena bipunctata Chen

Proëgmena bipunctata Chen, 1942, Notes d'Ent. Chinoise 9(3): 41 (Kansu: Pei-la-hia; HOANGHO-PAIHO).

This species was described from a  $\mathcal{P}$ , and we have not seen material and are not certain that it belongs here.

DISTRIBUTION: NW China (Kansu).

445. Proegmena impressicollis (Jacoby), NEW COMBINATION

Dercetes impressicollis Jac., 1891, Entomologist, suppl. 25: 38 (Tibet; BM).

Cneorane fossicollis Fairmaire, 1889, Soc. Ent. France, Ann. ser. 6, 9: 80 (Moupin; PARIS). New Synonymy.

Proëgmena aeneipennis Ogloblin, 1936, Fauna USSR 26, 1: 327, 437 (Ta-tsien-lu; ?Moscow). New Synonymy.

DISTRIBUTION: W. China (Tibet, Sikang).

SIKANG: 1, Ta-tsien-lu to Kiu-lung, Reitter (FREY); 1, nr. Ta-tsien-lu, 3000 m, 25. VI. 1923, Graham (US); 1, nr. Mu-ping, 2300 m, 6. VII. 1929, Graham (US).

446. Proegmena pallidipennis Weise Fig. 182, a.

Proegmena pallidipennis Ws., 1889, Soc. Ent. Ross., Horae 23: 569, 630 (Kan-ssu; Sze-tschuan; ?ZMB).—Ogloblin, 1936, Fauna USSR 26, 1: 327, 437, fig. 135 (Kansu, Szechuan).

Antipha elongata Jacoby, 1890, Entomologist 23: 197 (Chang-yang, Hupeh; BM). New Synonymy.

Dercetes? elongata, Weise, 1924, Coleopt. Cat. 78: 144.



Fig. 182. a, Proegmena pallidipennis Weise; b, Arthrotus bipartita (Jacoby).

Proëgmena crux Chen, 1942, Notes d'Ent. Chinoise 9: 40 (Kansu; HOANGHO-PAIHO). New Synonymy.

DISTRIBUTION: China (Kansu, Shensi, Sikang, Hupeh, Fukien, Chekiang, Kiangsu).
SHENSI: 1, S. Shensi (FREY); 2, S. Shensi, V. 1904, Blackwelder (US); 1, Ta-pai
Shan, Tsin-ling Mts., 1700 m, 10. V. 1936, Höne (ZMB). KANSU: 1, Hoei-sien, S. Kansu
(ZMB). SIKANG: 2, Wo-lung, 2000 m, San-kiang, San-kiang-kou, VIII. 1934, Friedrich
(FREY); 1, nr. Mu-ping, VII. 1929, Graham (US). FUKIEN: many, Ta-chu-lan, Shaowu,
III-IV. 1942, Maa (CAS, BISHOP). CHEKIANG: 1, Tien-mu Shan (FREY). KIANGSU:
1, Chin-kiang, Reitter (FREY).

## 447. Proegmena smaragdina Gressitt and Kimoto, n. sp.

Male: Testaceous to metallic green: head pale ochraceous; palpi duller; antenna pitchy brown, reddish on segments 1-2; pronotum ochraceous with a slightly pitchy and submetallic sheen; scutellum metallic pitchy; elytron metallic pitchy greenish; ventral surfaces ochraceous with a bronzy tinge; legs pitchy reddish with a slight metallic tinge; body nearly glabrous above except for anterior portion of head; antenna densely clothed with brief golden buff pubescence except for a few hairs on segments 1-3; ventral surface sparsely clothed with very short hairs; legs moderately clothed with oblique hairs.

Head slightly narrower than anterior end of prothorax; occiput moderately convex, fairly smooth and feebly punctured with a central depression anteriorly and a subtransverse groove behind postantennal insertions which are moderately large, fairly swollen and almost impunctate; interocular area narrower than antennal insertion, strongly carinate medially, carina joining with obtuse carina on frontoclypeus; labrum fairly emarginate apically; gena about 1/6 as deep as eye; eye nearly round, strongly convex. Antenna 1/5 longer than body; segment 1 fairly short, arched, shiny and nearly impunctate; 2 and 3 each very short and subequal; 4 more than  $2 \times$  as long as 1; 4-10 decreasing very slightly in length; 11 about as long as 8. Prothorax nearly 2/3 as long as broad and very slightly wider anteriorly than posteriorly; anterior margin evenly and moderately concave; basal margin moderately convex, slightly emarginate at center; lateral margin nearly straight, slightly widened anteriorly to middle; anterior angle expanded and slightly projecting laterally; basal angle obtuse and very slightly projecting; all margins distinctly set off and lateral margins more widely so than anterior and posterior margins; disc rather smooth and evenly convex, nearly impunctate. Scutellum rounded triangular, convex and fairly smooth. Elytron not quite  $3 \times$  as long as broad, subparallel-sided but very slightly convex at side and broadly rounded apically; lateral margin very slightly expanded; epipleuron quite broad in basal 1/4 and gradually narrowed while tilting somewhat outward and disappearing on apex; disc strongly convex, raised in basal 1/4 following which is a distinct transverse depression; surface deeply impressed with moderately large punctures which are in part arranged in irregular rows near suture; punctures mostly about as large as interspaces and numbering about 19 in a row across elytron just anterior to middle. Ventral surfaces quite finely punctured, more densely so on metepisternum. Legs fairly slender; hind tarsal segment 1 nearly as long as 2+3, 2 barely longer than 3, and last slightly longer than 1. Length 6 mm; breadth 3.

*Female*: Head and pronotum yellowish testaceous; scutellum bronzy purplish; elytron brilliant purplish, more greenish bronzy posteriorly; ventral surfaces greenish black; legs

yellowish testaceous with tarsi and outer edges of tibiae bronzy pitchy. Length 8 mm; breadth 4.

Paratypes: Length 6-8 mm; breadth 2.6-4.05.

DISTRIBUTION: W. China (Sikang).

Holotype  $\mathcal{J}$  (Mus. G. Frey), Ta-tsien-lu to Kiu-lung, Sikang Prov., Reitter; allotopotype  $\mathcal{Q}$  (Frey) and 27 paratopotypes (Frey, Bishop, CAS), same data.

Differ from *impressicollis* Jacoby in having pronotum evenly convex and without transverse impression, prothorax less sinuate at side, and elytron more regularly punctured near suture.

### Genus Arthrotus Motschulsky

Arthrotus Mots., 1857, Etudes Ent. 6: 38 (type: A. niger Mots.; Japan).—Chapuis, 1875, Gen. Col. 11: 250.—Jacoby, 1885, Zool. Soc. London, Proc. 1885: 750.—Laboissière, 1932, IN Straelen, Res. Sci. Voy. Indes Or. Neerl. Leopold Belg. 4 (4) Col. 1: 174. —Ogloblin, 1936, Fauna USSR 26, 1: 328, 376.

### KEY TO CHINESE SPECIES OF ARTHROTUS

1.	Body length more than 4 mm
	Body length 3 mm; head and pronotum pale; pronotum finely punctured; ely-
2 (1)	Eletron supervised more on loss in longitudinal news
2(1).	Elytron punctured more or less in longitudinal rows
	Elytron quite irregularly punctured, more than $3 \times$ as long as broad; protho-
	rax subrectangular, evenly convex and very finely punctured; dorsum en-
	tirely ochraceous
3 (2).	Pronotum nearly impunctate, strongly convex
	Pronotum with some fairly distinct punctures on disc
4 (3).	Prothorax nearly $2 \times$ as broad as long; elytron metallic
	Prothorax more than $2\times$ as broad as long, anterior margin strongly concave
	in dorsal view : side rounded : elytron with about 15 puncture rows : dorsum
	largely reddish ochraceous nitchy on humeri
5 (1)	Bronger or normal to niteby : alutron grounich or brongy with 15 19 puncture
5 (4).	Pronotum orange to pitchy, erytron greenish of bronzy, with 13-16 puncture
	rows; prothorax suboblong
	Dorsum purplish to steely blue; elytron with about 20 puncture rows; protho-
	rax distinctly broadened anteriorly 451. coerulea
6 (5).	Head dark; prothorax pale; elytron with 18 or more rows of punctures
	Head and prothorax pale to pitchy metallic, but similarly colored; elytron
	with 15–16 rows of punctures
7 (3).	Pronotum with punctures rather general and generally without a depression on
. (-).	each side of disc
	Pronotum with nunctures largely limited to middle of each side of disc or
	much stronger in this area and disc generally depressed in same area 10
	much shought in this area, and use generally depressed in same area 10

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Taphinella Jacoby, 1889, Mus. Civ. Genova, Ann. 27 : 224 (type: T. nigripennis Jac.). New Synonymy.

8(7).	Prothorax about $2 \times$ as broad as long or broader; dorsum largely pale, or bluish black, or elytron with postmedian oblique dark band and narrowly
	dark margins9
	Prothorax less than $2\times$ as broad as long, strongly convex basally but weak-
	ly concave apically in dorsal outline; dorsum entirely purplish blue; abdo-
	men pale
9(8).	Prothorax about $2\times$ as broad as long; dorsum pale, often with reddish prono-
	tum and elytron with dark borders and postmedian oblique band; antennal
	segment 3 of 3 longer than broad 460. nigrofasciatus
	Prothorax more than $2 \times$ as broad as long; dorsum entirely pale; antennal
	segment 3 of 7 broader than long
10 (7).	Elvtron black or banded with black or pitchy
	Elvtron entirely pale
11 (10).	Pronotum strongly convex, with a feeble depression or no depression; elytron
()-	entirely black; antenna black and strongly flattened and broadened in $\mathcal{J}$
	459. nigripennis
	Pronotum not very strongly convex, with a strong depression; elytron pale
	with median and apical dark bands; antenna fairly pale and slender
12 (10).	Pronotum and elytron reddish brown, sometimes slightly dark on pronotum13
, í	Pronotum much darker than elytron, former generally nearly black14
13 (12).	Head brownish black; pronotum and elytron reddish brown with a metallic
	tinge; length 4.5 mm
	Head reddish; pronotum and suture more reddish than elytral disc; neither
	with metallic tinge; length generally more than 5 mm
14 (12).	Prothorax much less than $2 \times$ as broad as long
	Prothorax nearly $2 \times$ as broad as long, strongly emarginate anteriorly, moder-
	ately convex at base and side, with angles strongly projecting; pronotal disc
	distinctly depressed on each side, with fairly strong punctures; head pitchy;
	prothorax black; elytron reddish
15 (14).	Prothorax subtrapeziform, distinctly wider anteriorly than basally, and fairly
	straight at side, nearly as broad as elytron; pronotum pitchy at base; ely-
	tron yellowish
	Prothorax subrectangular, hardly wider anteriorly than basally, much narrower
	than elytron; pronotum red at base; elytron reddish

# 448. Arthrotus bipartitus (Jacoby), NEW COMBINATION Fig. 182, b.

Antipha bipartita Jac., 1890, Entomologist 23 (1): 196, pl. 2, fig. 5 (Chang-yang; BM). Dercetes bipartita, Weise, 1924, Coleopt. Cat. 78: 144.

DISTRIBUTION: China (Hupeh, Chekiang).

HUPEH: 3, Sui-sa-pa, Lichuan, 27. VII-13. IX. 1948, Gressitt & Djou; 3, Liang-ho-keu, Lichuan, 5-10. IX. 1948, Djou; 1, Hsiao-ho, Lichuan, 17. VIII. 1948, Gressitt (CAS, BISHOP). CHEKIANG: 1, Tien-mu Shan, Reitter (FREY).

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### Gressitt & Kimoto: Chrysomelidae of China

# 449. Arthrotus brownelli Gressitt and Kimoto, n. sp. Fig. 183, a.

*Female*: Pitchy to bronzy green above, paler beneath: head purplish brown, with a bluish tinge and paler reddish brown anteriorly; antenna reddish brown, somewhat pitchy to reddish on basal segments; pronotum pitchy reddish with a purplish tinge; scutellum purplish pitchy; elytron pitchy with a strong bronzy greenish tinge; ventral surfaces reddish brown; somewhat bluish pitchy on metasternum and more pale on abdomen; legs pitchy brown, somewhat purplish on femora. Body glabrous and sparsely clothed with short pale hairs beneath.

*Head* distinctly narrower than prothorax; occiput moderately convex, shiny and impunctate, shallowly grooved medially and impressed transversely behind postantennal swellings which are likewise transverse and fairly smooth; interantennal area about as wide as one antennal insertion, strongly raised medially and continuous with a transversely raised frontoclypeus; labrum nearly transverse anteriorly; gena about 1/4 as deep as eye; eye rounded oval and strongly convex. Antenna 4/5 as long as body, slender; segment 1 slightly arched and distinctly punctured; 2 about  $2 \times$  as long as broad; 3 nearly  $2 \times$  as long as 2; 4 longer than 2+3; 4–10 gradually decreasing in length; 11 barely longer than 10. Prothorax  $1.6 \times$  as broad as long; anterior margin strongly and evenly emarginate; basal margin subevenly convex; lateral margin very weakly convex, very slightly widened anteriorly; angle swollen and moderately prominent; basal angle somewhat projecting; expanded portion of lateral margin hardly wider than basal margin; disc rather strongly and subevenly convex, very weakly punctured, with a few distinct punctures near side. Scutellum subtriangular, convex and nearly impunctate. Elytron  $2.4 \times$  as long as broad, strongly convex at side and widest somewhat behind middle, broadly rounded apically; lateral margin narrowly expanded; epipleuron quite broad basally, gradually narrowed and terminating at extreme apex; disc strongly convex, raised in basal 1/4 somewhat near suture and humerus and depressed behind basal swelling; surface heavily punctured in about 17 partly subregular rows anterior to middle, the punctures mostly larger than interspaces



Fig. 183. a, Arthrotus brownelli n. sp.; b, A. freyi n. sp.; c, A. elongatus n. sp.

even as far as apex. *Ventral surfaces* rather smooth and shiny, very finely and sparsely punctured. *Legs* relatively slender; hind tarsal segment 1 nearly as long as remainder combined, 2 about as long as 3. Length 7.0 mm; breadth 3.9.

Paratype: Length 6.6 mm; breadth 3.9.

DISTRIBUTION: W. China (Yunnan, Sikang).

Holotype  $\mathcal{P}$  (BISHOP 3315), Dragon Noir, 1500 m, 30 km S of Meng-tze, SW Yunnan, 19. VIII. 1934, Chauncey W. Brownell; paratopotype  $\mathcal{P}$  (LINGNAN), same data but E. R. Tinkham. Two specimens (AMNH) labelled "Tibet Prov., F. 4722" are probably from Sikang. They are not designated paratypes as they differ slightly; another (USNM) from between Ya-chow and Ta-tsien-lu, Sikang, 10. VII. 1920, D. C. Graham, and 5 specimens (FREY), Yunnan and Soling-ho Valley, Yunnan, also differ slightly.

Differs from *chinensis* Baly in being broader and more widened posteriorly, with pronotum less strongly swollen, and elytron with punctures slightly larger and closer and in less regular rows.

# 450. Arthrotus chinensis (Baly), NEW COMBINATION

Dercetes chinensis Baly, 1879, Ann. Mag. Nat. Hist. ser. 5, 4: 115 (N. China; BM).

Cneorane caeruleiceps Fairmaire, 1889, Soc. Ent. France, Ann. ser. 5, 9: 80 (Moupin; PA-RIS). New Synonymy.

The type specimen might have come from Kiangsu, Anhwei or Chekiang in E. China.

DISTRIBUTION: China (Chekiang, Fukien, Hupeh, Szechuan, Shensi).

CHEKIANG: 1, Mo-kan Shan, 14. VII. 1927, Wright (CAS); 11, Tien-mu Shan, Reitter (FREY). FUKIEN: 12, Ta-chu-lan, Shaowu, 22. IV. 1943, Maa; 2, Tsi-li-chiao, 1000 m, Chungan, 28. IV. 1945, Maa; San-chiang, Chungan, 1. V. 1943, Maa (CAS, BISHOP). HU-PEH: 7, Sui-sa-pa, Lichuan, 20. VIII–17. IX. 1948, Gressitt & Djou; 1, Hsiao-ho, Lichuan, 8. VIII. 1948, Gressitt (CAS). SZECHUAN: 2, Pe-pei, 300 m, N of Chungking, 26. VII. 1940, Gressitt (LINGNAN). SHENSI: 1, S. Shensi, V. 1904, Blackwelder (6431; US).

451. Arthrotus coerulea (Chen), NEW COMBINATION

Proëgmena coerulea Chen, 1942, Notes d'Ent. Chinoise 9: 43 (Sikang: Chow-kon-shan; Ac. SIN.).

DISTRIBUTION: SW China (Sikang, Yunnan).

SIKANG: 2, Ta-tsien-lu to Kiu-lung, Reitter (FREY). YUNNAN: Many, Yunnansen (ZMB); 1, Chao-chow-fu, 23. VIII–21. IX. 1914, Mell (ZMB); 3, So-ling-ho Riv. Valley (FREY); 2, Western Hills, 2100 m, nr. Kunming, 6. VII. 1940, Gressitt (LINGNAN, BISHOP).

# 452. Arthrotus elongatus Gressitt and Kimoto, n. sp. Fig. 183, c.

*Male*: Orange ochraceous, in part pitchy or dark brown: head ochraceous, slightly duller on labrum and palpi; antenna dull brown, more reddish pitchy on segments 1–3; pronotum and scutellum orange ochraceous; elytron pale ochraceous; ventral surfaces slightly reddish ochraceous, somewhat pitchy brown on abdomen; legs ochraceous, duller brown on tibia, pitchy brown on tarsi except claws reddish. Dorsum nearly glabrous, a few pale hairs on front of head and apical margin of elytron; ventral surfaces thinly clothed with oblique pale hairs; legs moderately clothed but sparsely so on femora.

*Head* barely as broad as prothorax; occiput moderately convex, smooth and largely impunctate, slightly depressed medially at apex and with a somewhat obtuse subtransverse depression behind postantennal swellings which are fairly broad and smooth but not strongly convex, grooved between them; interantennal area about as broad as 1 antennal insertion, grooved posteriorly and convex medially on anterior portion connecting with obtuse ridge of frontoclypeus; labrum moderately concave anteriorly; gena about 1/20 as deep as eye; eye nearly round, moderately convex. Antenna 9/10 as long as body, moderately slender; segment 1 arched and swollen, smooth and nearly impunctate; 2 slightly longer than broad; 3 a little longer than broad and oblique apically; 4 longer than 1-3 combined, slightly longer than 5; 5-10 decreasing very slightly in length; 11 slightly longer than 10. Prothorax 4/7 as long as broad, subrectangular; anterior margin nearly straight; posterior margin moderately and subregularly convex; lateral margin nearly straight, very slightly widened just anterior to center; anterior angle swollen and projecting laterally; basal angle moderately swollen and slightly projecting; expanded lateral margin about  $3 \times$  as wide as basal margin and distinctly grooved above; disc rather evenly convex, smooth and very finely and sparsely punctured. Scutellum rounded triangular, slightly longer than broad, strongly convex and smooth. Elytron  $3.3 \times$  as long as broad, subparallel-sided, slightly sinuate laterally, evenly narrowed and rounded apically; lateral margin hardly expanded, not visible from above except near apex; epipleuron rather evenly narrowed posteriorly and extending to extreme apex; surface rather evenly convex, with fairly irregular moderately small punctures, numbering approximately 25 in a row across middle. Ventral surfaces rather shiny and impunctate on metathorax, feebly punctured and slightly uneven on abdomen; pygidium rounded apically; last abdominal sternite subtruncate apically with a slight notch on each side. Legs fairly slender and straight; hind tarsal segment 1 slightly longer than 2+3, 2 barely longer than 3, last about as long as 1. Length 6.8 mm; breadth 3.5.

*Female*: Elytral suture slightly reddish, particularly near base; last abdominal sternite rounded truncate apically and partly carinate medially. Length 8.0 mm; breadth 4.2.

Paratype: Dorsum slightly more reddish. Length 8.2 mm; breadth 4.3.

DISTRIBUTION: W. China (Sikang).

Holotype  $\mathcal{J}$  (Mus. G. FREY), Wo-lung, 2000 m, San-kiang-kou, Wassuland, Sikang Prov., VII-X. 1934, Friedrich; allotopotype  $\mathcal{P}$  (FREY), same data; paratopotype  $\mathcal{P}$  (BI-shop), same data.

Differs from pale specimens of *nigrofasciatus* Jacoby in being much longer, with prothorax longer and less convex at side, with disc much less punctured, and elytron with lateral margin largely hidden in dorsal view and disc more finely and much less regularly punctured.

## 453. Arthrotus freyi Gressitt and Kimoto, n. sp. Fig. 183, b.

*Male*: Largely testaceous, slightly more reddish on head and pronotum; antenna pitchy brown with segments 1-3 reddish ochraceous; scutellum slightly reddish. Ventral surfaces rather pale; legs testaceous with tibiae brown, duller apically, and tarsi paler reddish brown. Body glabrous above except for a few pale hairs on anterior portion of head and a few on external and apical margins of elytron; ventral surfaces very sparsely

clothed with shortish oblique pale hairs; legs thinly clothed on femora and moderately clothed on tibiae and tarsi.

*Head* slightly narrower than prothorax; occiput rather smooth and evenly convex, and nearly impunctate, grooved medially on anterior portion and with oblique depression behind postantennal swellings which are fairly broad, oblique and nearly impunctate; interocular area nearly as wide as one antennal insertion, moderately raised, fairly flat on raised portion and slightly punctured, raised triangular portion continuous with obtuse raised line on frontoclypeus; gena almost touching eye; eye broadly oval, moderately convex. Antenna 3/4 as long as body, moderately slender; segment 1 fairly short, stout, arched and finely punctured; 2 slightly broader than long; 3 distinctly broader than long and suboblique apically; 4 as long as 1-3 combined, oblique apically; 5 slightly shorter than 4; 5-10 decreasing slightly in length; 11 as long as 4. Prothorax  $2\times$  as broad as long; anterior margin slightly and evenly concave; basal margin moderately convex, slightly more oblique at side; lateral margin rather evenly convex, widest somewhat anterior to center; anterior angle swollen and expanded somewhat externally; basal margin fairly prominent and angulate; expanded lateral margin nearly  $3 \times$  as wide as basal margin; disc moderately convex, rather smooth and shiny with a small depression on each side between middle and side and slightly behind center, depressed area with a few large punctures and remainder of surface nearly impunctate. Scutellum subtriangular, somewhat rounded behind, slightly convex and smooth. Elytron  $3.5 \times$  as long as broad, weakly rounded at side and narrowed and subrounded apically; lateral margin very narrowly expanded; epipleuron rather suddenly narrowed slightly beyond basal 1/4, then gradually narrowed and terminating at apex; disc rather evenly convex, impressed with about 18 subregular rows of punctures slightly anterior to middle, punctures larger than interspaces on postbasal and central portions, smaller near base and on apical 1/3. Ventral surfaces fairly smooth, finely and sparsely punctured. Legs fairly slender; femora rather strongly flattened; hind tibia slightly arched; hind tarsal segment 1 about as long as 2+3 and last nearly as long as 1. Length 5.0 mm; breadth 2.5.

*Female*: Antenna with 2nd segment  $2 \times$  as long as broad and 3 nearly  $4 \times$  as long as broad; 4–10 subequal. Length 5.6 mm; breadth 2.5.

*Paratypes*: One female with head, prothorax, scutellum and elytral suture and margin pitchy reddish. Length 4.6–4.8 mm; breadth 2.8–3.0.

DISTRIBUTION: W. China (Sikang).

Holotype  $\partial^{\uparrow}$  (Mus. G. FREY), Ta-tsien-lu to Kiu-lung, Sikang, Reitter; allotopotype  $\mathcal{P}$  (FREY), same data;  $4\mathcal{P}$  paratopotypes (FREY, BISHOP), same data.

Differs from pale specimens of *nigrofasciatus* Jacoby in having pronotum much less punctured and elytron longer and more evenly convex. Differs from *testaceus* n. sp. in having antenna and tibiae dark; pronotum much less punctate and elytron longer.

454. Arthrotus liquidus Gressitt and Kimoto, n. sp. Fig. 184, a.

Male: Orange ochraceous, in part marked with pitchy brown: head orange ochraceous, slightly paler anteriorly but darker on distal portions of mandible and palpi; antenna dull reddish brown, orange ochraceous on segments 1-2; pronotum orange ochraceous, paler at anterior angle; scutellum slightly paler orange; elytron testaceous, with a broad
band just anterior to middle and apical band of pitchy brown, former wider at suture and margin and continuous with narrow dark borders; apical band darker anteriorly and paler towards apex, marginal narrow stripe almost continuous around basal portion; ventral surfaces ochraceous; legs ochraceous with tibiae slightly duller and tarsi brownish basally and ochraceous apically. Body largely glabrous above with just a few pale hairs on head and elytral margin; ventral surfaces sparsely clothed with suberect pale buff hairs; legs moderately clothed, quite sparsely on femora.

Head slightly narrower than prothorax; occiput moderately convex, very finely punctured, slightly depressed medially on anterior portion and with an obtuse depression behind postantennal swellings which are subtransverse and fairly smooth; interocular area barely broader than an antennal insertion, moderately raised but fairly flat and punctured on raised portion which is continuous with obtuse raised line on frontoclypeus; labrum very weakly concave apically; gena about 1/9 as deep as eye; eye broadly oval, fairly strongly convex. Antenna 4/5 as long as body, not very slender; segment 1 distinctly arched, fairly shiny and hardly punctured; 2 about as broad as long; 3 broader than long, oblique apically; 4 fully as long as 1–3 combined, slightly longer than 5; 5–10 subequal in length and decreasing slightly in diameter; 11 nearly as long as 4. Prothorax just over  $2 \times$  as broad as long; anterior margin rather strongly and evenly emarginate; basal margin rather strongly and subevenly convex; lateral margin moderately convex, widest anterior to center; anterior angle strongly swollen and produced laterally; basal angle moderately produced laterally; expanded lateral border distinctly wider than basal border; disc subevenly convex, very slightly depressed on each side of median line just behind center; surface with somewhat irregular punctures, the largest near middle of each side and distinctly smaller than interspaces, those on median and anterior portions smaller and much sparser. Scutellum slightly longer than broad, subtriangular, convex and feebly punctured. *Elytron* slightly less than  $3 \times$  as long as broad, rather slightly convex behind basal 1/3, evenly narrowed and rounded apically; lateral margin very narrowly expanded; epipleuron quite broad in nearly basal 1/3, then rather strongly narrowed and more evenly narrowed posteriorly and terminating at extreme apex; disc quite evenly convex, impressed with moderately deep punctures in about 18 subregular rows just anterior to middle; some



Fig. 184. a, Arthrotus liquidus n. sp.; b, A. nigripennis (Jacoby); c, A. ochreipennis n. sp.

of the rows along median portion with slightly larger and less regular punctures; all the rows with punctures much smaller and sparser towards apex. *Ventral surfaces* smooth and shiny, hardly punctured on metathorax, feebly punctured on abdomen; pygidium and last abdominal sternite rounded apically. *Legs* not very stout; hind tibia slightly arched; hind tarsal segment 1 not quite as long as remainder combined, 2 longer than 3 and last nearly as long as 1. Length 4.9 mm; breadth 2.55.

*Female*: Median elytral band broader in middle and apical band shorter, occupying only about apical 1/6; abdomen reddish brown, paler at apex; antennal segment 2 about  $2 \times$  as long as broad; 3 nearly  $3 \times$  as long as broad. Length 5.3 mm; breadth 3.3.

DISTRIBUTION: W. China (W. Hupeh, Yunnan).

Holotype  $\mathcal{F}$  (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., nr. Szechuan border, W. Hupeh Prov., 12. IX. 1948, Gressitt & Djou, on *Liquidambar*; allotype  $\mathcal{P}$  (Zool. Mus. BERLIN), Chao-chow-fu, 2300 m, forest slope, W. Yunnan, 23. VIII–21. IX. 1914, R. Mell.

#### HOST: Liquidambar formosana.

Differs from *nigrofasciatus* Jacoby in having elytral bands broader, prothorax less rounded laterally, pronotum depressed on each side and more sparsely punctured in center, and elytron more evenly convex at side and less regularly punctured.

## 455. Arthrotus longicornis (Jacoby), NEW COMBINATION

Taphinella longicornis Jac., 1890, Entomologist 23: 194 (Chang-yang; BM). DISTRIBUTION: C China (Hupeh).

#### 456. Arthrotus maai Gressitt and Kimoto, n. sp.

Male: Body reddish ochraceous, in part testaceous or slightly pitchy: head ochraceous, slightly paler on labrum and reddish on mandible; antenna reddish brown, paler and somewhat orange on segments 1-2; pronotum orange ochraceous; scutellum slightly paler; elytron yellowish testaceous, with a pitchy area on front of humerus and incomplete pitchy stripe along middle of lateral margin and a slight transverse pitchy spot 1/5 from apex and slightly near external margin than suture; suture slightly reddish near scutellum; ventral surfaces and legs ochraceous. Body nearly glabrous above with a few hairs on anterior portion of head and apical margin of elytron; ventral surfaces very sparsely clothed with pale buff hairs; legs moderately clothed with golden buff hairs.

Head slightly narrower than prothorax at apex; occiput moderately convex, shiny and sparsely and finely punctured, with a median groove and bordered anteriorly by a transverse groove behind postantennal swellings, which are fairly large and somewhat flattened and nearly impunctate; interocular area about as broad as an antennal insertion, moderately convex in middle and continuous with very strongly and obtusely raised frontoclypeus; gena about 1/7 as deep as eye; eye rounded oval, moderately convex. Antenna nearly 2/3 as long as body, moderately stout; segment 1 fairly short, strongly arched, swollen and shiny; 2 as broad as long, shiny and glabrous; 3 broader than long, somewhat oblique at apex, and slightly hairy; 4 about as long as 1-3 combined, gradually thickened to apex; 5 about 3/4 as long as 4; 5–10 decreasing slightly in length (last missing). Prothorax 2.3× as broad as long; anterior margin strongly and evenly emarginate; basal margin quite strongly convex, slightly angulate at middle of each side; anterior margin strongly

ly convex, widened to well anterior to middle; anterior angle strongly swollen, subevenly rounded; basal angle obtuse and distinctly projecting; margins all distinct with lateral margin about twice as wide as basal margin; disc evenly convex, rather smooth and shiny, with only a few moderately distinct punctures near side. Scutellum triangular, rounded behind, convex and impunctate. Elytron  $2.6 \times$  as long as broad, subparallel in basal 3/5 and evenly rounded apically; lateral margin narrowly expanded; epipleuron quite broad basally, more strongly narrowing in middle portion and terminating at apex; disc heavily punctured in about 17 subregular rows at middle, punctures in part slightly larger than interspaces but smaller near base and in apical 1/3. Ventral surfaces smooth and shiny, very sparsely and finely punctured. Legs with femora rather stout and tibiae slender; hind tarsal segment 1 not quite as long as remainder combined, 2 nearly as long as 3, and last somewhat shorter than 1. Length 4.6 mm; breadth 2.8.

*Female*: Elytron slightly darker along anterior portion of lateral margin and with a vague incomplete transverse pitchy band at middle; antennal segment 2 slightly longer than broad and 3 distinctly longer than broad. Length 4.9 mm; breadth 2.7.

Paratypes: Reddish pitchy near scutellum. Length 3.8-5.0 mm; breadth 2.4-3.2.

DISTRIBUTION: SE China (Fukien, N. Kwangtung).

Holotype & (BISHOP 3316), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 14. V. 1942, T. C. Maa; allotopotype & (BISHOP) same data; 4 paratypes (CAS, BISHOP, US); 3 paratopotypes, 30. IV. 1942, 17. V. 1942, 17. V. 1945, Maa; 1, Cheung-nga San, Tin-tong, Lohchang Distr., N. Kwangtung, 19. VIII. 1947, W. T. Tsang.

Differs from *nigrofasciata* Jacoby in being somewhat shorter and broader, with pronotum smooth instead of distinctly punctured in central portion, and elytron without a distinct postmedian oblique band and without a completely dark suture.

# 457. Arthrotus micans (Chen), NEW COMBINATION

Proëgmena micans Chen, 1942, Notes d'Ent. Chinoise 9: 43 (Szechwan: Omei Shan; U. NAN-KING).

DISTRIBUTION: W. China (Szechuan).

# 458. Arthrotus nigricollis (Chen), NEW COMBINATION

Proëgmena nigricollis Chen, 1942, Notes d'Ent. Chinoise 9: 41 (Kiangsi; Ac. SIN.).

DISTRIBUTION: S. China (Kiangsi, Kweichow).

KWEICHOW: 1, Shih-men-kan, 19. VII. 1934, Graham (US).

# 459. Arthrotus nigripennis (Jacoby), NEW COMBINATION Fig. 184, b.

Taphinella nigripennis Jac., 1889, Mus. Civ. Genova, Ann. 27: 224 (Burma; GENOVA); 1900,
Soc. Ent. Belg., Mem. 7: 140; 1905, Fasc. Malay., App. 2: 5 (Siam).—Maulik, 1936,
Fauna India, Galeruc., 329.

DISTRIBUTION: Burma, Thailand, Vietnam, Hainan I.

HAINAN: 1, Hau-ying-ts'uen, SE of No-doa, 31. VII. 1932, To; 1, Faan-na, S of Nodoa, 12. VII. 1932, To (LINGNAN); 1, No-doa, 25. VI. 1935, Gressitt; 1, Ta-hau, W of Nodoa, 6. VII. 1935, Gressitt (CAS). VIETNAM: 2, Hoa-binh, Tonkin, Cooman (FREY).

# 460. Arthrotus nigrofasciatus (Jacoby)

Antipha nigrofasciata Jac., 1890, Entomologist 23: 196, pl. 2, fig. 6 (Chang-yang; BM). Dercetes nigrofasciata, Weise, 1924, Coleopt. Cat. 78: 145.

DISTRIBUTION: S. China (Hupeh, Szechuan, Anhwei, Checkiang, Kiangsi, Fukien, Kwangtung).

HUPEH: many, Sui-sa-pa, 1000 m, Lichuan Distr., VII-IX. 1948, Gressitt & Djou (CAS, BISHOP); Wang-chia-ying, 20. VII. 1948; Hsiao-ho, 10. VIII. 1948, Gressitt, partly on *Metasequoia, Brassica, Liquidambar, Pterocarya, Pyracantha, Salix*; Liang-ho-keu, 1. IX. 1948, Djou. SZECHUAN: 2, Chau-chia-tu, Kintung, 24. IV. 1949, Djou; 1, Kuan-hsien, 24. VIII. 1928 (CAS); 1, betw. Kia-ting & Sui-fu, 26. VI, Graham (US). ANHWEI: 2, Tai-ping-shien, X. 1932, G. Liu (MCZ). CHEKIANG: 8, Tien-mu Shan, Reitter (FREY). KIANG-SI: 1, An-yuen, 23. V. 1948, Gressitt & Djou (CAS); 2, Kiu-kiang (ZMB). FUKIEN: 1, Niu-ling, Changting, 21. IV. 1941, Maa. KWANGTUNG: 1, Hau-leng, Tin-tong, Lohchang, 10. VIII. 1947, Tsang & Lam (CAS); 1, Hoh-kai-hon, Lung-tau Shan, 9. VI. 1947, Gressitt & Lam.

HOSTS: Metasequoia glyptostroboides, Salix sp., Liquidambar formosana, Pterocarya stenoptera, Pyracantha crenulata, Brassica sp.

#### 461. Arthrotus ochreipennis Gressitt and Kimoto, n. sp. Fig. 184, c.

*Female*: Orange ochraceous with parts of anterior portion, antenna and legs pitchy: head largely pitchy black, ochraceous on central portion of occiput and on anterior portion of head; antenna reddish brown, darker on segment 1; prothorax largely pitchy brown, nearly black on center of disc, ochraceous basally and with some pale areas near anterior margin; scutellum orange ochraceous; elytron orange ochraceous, slightly more reddish on lateral declivity in anterior 1/2; ventral surfaces ochraceous behind prothorax; legs ochraceous with tibiae largely pitchy black and tarsi pitchy brown basally and ochraceous apically. Body nearly glabrous above, with a few erect hairs on head and a few on posterior portion of elytron; ventral surfaces very sparsely clothed with fairly short pale hairs; legs rather thinly clothed, particularly on femora.

Head not quite as broad as prothorax; occiput rather evenly convex, smooth and feebly punctured, depressed anteromedially and arcuately depressed behind postantennal swellings which are oblique, rather shiny and nearly impunctate; interocular area barely wider than one antennal insertion, strongly and rather broadly carinate medially, the carina connecting with obtuse ridge of frontoclypeus; labrum slightly concave apically; gena about 1/7 as deep as eye; eye rounded oval, moderately convex. Antenna 2/3 as long as body, fairly slender; segment 1 rather slender, arched and feebly punctured; 2 nearly  $2\times$  as long as broad; 3 more slender, about  $2.5\times$  as long as broad and slightly longer than 2; 4 slightly longer than 2+3, subequal to 5; 5-8 decreasing slightly in length; 8-11 missing. Prothorax 5/7 as long as broad; anterior margin feebly concave; basal margin strongly and evenly convex; lateral margin very slightly sinuate, nearly straight but slightly widened anterior to middle; anterior angle strongly swollen and slightly projecting laterally; basal angle obtuse and slightly projecting; expanded lateral margin very slightly wider than basal margin; disc moderately convex, slightly depressed on each side of central portion behind middle and with scattered moderate punctures, mostly much smaller than interspaces and sparse or lacking on median and anterior portions. Scutellum subtriangular, rounded behind, smooth and nearly impunctate. Elytron  $2.7 \times$  as long as broad, distinctly widened and evenly rounded behind middle, narrowed and moderately rounded apically; lateral margin very narrowly expanded; epipleuron broad basally and quite strongly narrowed in second quarter, continuing narrowly to extreme apex; disc rather evenly convex, hardly depressed interior to humerus and behind basal quarter; punctures moderate sized, mostly smaller than interspaces and arranged in about 18 subregular rows, somewhat anterior to middle, the rows becoming quite confused on parts of posterior half. Ventral surfaces fairly smooth and shiny, nearly impunctate on metasternum and feebly punctured and somewhat wrinkled on abdomen; pygidium and last abdominal sternite evenly rounded apically. Legs fairly slender; hind tibia straight; hind tarsal segment 1 slightly shorter than remainder combined, 2 about as long as 3, last slightly shorter than 1. Length 5.6 mm; breadth 2.6.

Paratypes: Length 4.6-5.6 mm; breadth 2.2-2.7.

DISTRIBUTION: SE China (Fukien).

Holotype  $\mathcal{Q}$  (BISHOP 3317), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 1– 3. V. 1943, T. C. Maa; paratype  $\mathcal{Q}$  (CAS), Tai-li-chiao, 1000 m, Chungan Distr., NW Fukien, 28. IV. 1945, Maa; paratopotype  $\mathcal{Q}$  (BISHOP), 17. V. 1945, K. S. Lin.

Differs from pale specimens of *nigrofasciatus* Jacoby in having elytron relatively longer, more widened postmedially, and less heavily and less regularly punctured, and prothorax longer, less rounded at side, less convex and depressed on each side.

# 462. Arthrotus purpurea Gressitt and Kimoto, n. sp. Fig. 185, a.

*Female*: Purplish pitchy to testaceous: head purplish pitchy, more redddish anteriorly with palpi dull testaceous; antenna reddish brown, slightly pitchy basally; pronotum metallic purplish brown; scutellum and elytron purplish reddish brown; thoracic sterna pitchy reddish with a slight purplish tinge; abdomen yellowish testaceous; legs purplish red, paler on tarsi. Body nearly glabrous above with a few hairs on anterior portions of head and apex of elytron; antenna moderately clothed with oblique pale hairs, almost lacking on segments 1-3; ventral surfaces sparsely clothed with golden buff hairs; legs moderately clothed with oblique silvery buff hairs.

Head distinctly narrower than prothorax; occiput strongly and evenly convex, smooth and nearly impunctate, anterior portion with a short median groove and a fairly deep obtuse depression behind postantennal swellings which are obliquely transverse and fairly convex and smooth; interantennal space nearly as wide as an antennal insertion, strongly carinate medially, the carina continuous with narrow obtuse ridge on frontoclypeus; labrum distinctly emarginate apically; gena about 1/8 as deep as eye; eye broadly oval, moderately convex. Antenna 2/3 as long as body, moderately slender; segment 1 arched and moderately punctured; 2 about  $2\times$  as long as broad; 3 slightly longer than 2, more slender and oblique apically; 4 slightly longer than 2+3 and somewhat oblique apically, distinctly longer than 5; 5–10 decreasing slightly in length; 11 slightly longer than 10. Prothorax nearly  $1.5\times$  as broad as long; anterior margin weakly concave; basal margin strongly and evenly convex; lateral margin very weakly convex, slightly widened anterior to middle; anterior angle swollen and slightly prominent; basal angle obtuse and slightly projecting; expanded lateral margin very slightly wider than basal margin; disc strongly and subevenly convex, with scattered moderate punctures which are rather scarce on median and anterior portions and slightly heavier on each side of median line behind center. Scutellum subtriangular, smooth and nearly impunctate. Elytron not quite  $3 \times$  as long as broad, subparallel-sided but weakly convex laterally, broadly rounded apically; lateral margin very narrowly expanded; epipleuron moderately broad and gradually narrowing in basal 2/3, quite narrow posteriorly but continuing to apex; disc subevenly convex, slightly more raised at base between humerus and scutellum; surface deeply impressed with fairly large punctures in about 17 very irregular rows anterior to middle and other punctures mostly about as large as interspaces and only slightly smaller posteriorly. Ventral surfaces rather smooth and shiny on metasternum and finely punctured and slightly wrinkled on abdomen; pygidium and last abdominal sternite rounded apically. Legs not very stout; hind tibia straight; hind tarsal segment 1 slightly shorter than remainder combined, 2 about as long as 3 and last nearly as long as 1. Length 5.4 mm; breadth 2.6.

Paratype: Length 5.0 mm; breadth 2.4.

DISTRIBUTION: W. China (Szechuan).

Holotype  $\mathcal{P}$  (U. S. NAT. MUS.), Shin-kai-si, 1400 m, Mt. Omei, near Kia-ting, Szechuan Prov., 6–16. VII. 1934, D. C. Graham; paratype  $\mathcal{P}$  (BISHOP), same data except 1923.

Differs from *niger* Mots. in being more elongate, more metallic, with pronotum less heavily punctured and elytron more heavily and less regularly punctured. Differs from *coerulea* Chen in being smaller, with prothorax more oblong and more distinctly punctured, and elytron less regularly punctured.



Fig. 185. a, Arthrotus purprea n. sp.; b, A. testaceus n. sp.; c, Dercetina carinipennis n. sp.

# 463. Arthrotus testaceus Gressitt and Kimoto, n. sp. Fig. 185, b.

*Male*: Body almost entirely orange testaceous, paler testaceous on antenna and somewhat reddish ochraceous on metasternum and metepisternum. Body nearly glabrous above except for anterior portion of head; antenna very thinly clothed with adpressed silvery buff hairs beyond segment 3 and a few erect hairs on basal segments and apices of following segments; ventral surfaces very sparsely clothed with suberect golden buff hairs; legs moderately clothed, more sparsely so on femora.

Head slightly narrower than prothorax at anterior end; occiput evenly convex and very sparsely and finely punctured, with a short median depression anteriorly and a transverse depression behind enclosed antennal swellings which are oblique, moderately raised and fairly smooth; interantennal space fully as wide as 1 antennal insertion, moderately raised and slightly punctured in center, this area continuous with raised portion of frontoclypeus; gena about 1/9 as deep as eye; eye rounded oval, strongly convex. Antenna not quite 3/4 as long as body, not very stout; segment 1 slightly arched and increasing considerably in diameter to near apex, slightly punctured; 2 about as long as broad; 3 shorter than 2; 4 slightly longer than 1-3 combined, gradually increasing in diameter to apex and oblique apically; 5 about 4/5 as long as 4, oblique apically; 6-9 each subequal to 5; 10 slightly shorter; 11 nearly as long as 4. Prothorax slightly more than  $2 \times$  as broad as long; anterior margin strongly and evenly emarginate; basal margin similarly convex; lateral margin moderately convex and slightly narrowed anteriorly; anterior angle strongly produced forward and slightly outward; basal angle obtuse and slightly projecting; all borders distinctly margined with lateral margin wider than apical and basal margin; disc subevenly convex, impressed with fairly strong punctures which are mostly about as widely separated as diameters or slightly more widely separated. Scutellum triangular, slightly convex and impunctate. Elytron not quite  $3 \times$  as long as broad, slightly convex at side and broadly rounded apically; lateral margin very narrowly expanded; epipleuron broad in basal 1/4, gradually narrowed and disappearing just before extreme apex; disc strongly and evenly convex, with rather deep punctures arranged in about 19 subregular rows just before middle, with interspaces convex and almost rugose. Ventral surfaces smooth and shiny, very sparsely and finely punctured, with only a few punctures at metepisternum; pygidium evenly rounded apically; last abdominal sternite with a convex apical lobe with a slight identation on each side of lobe. Legs moderately stout; hind tarsal segment 1 nearly as long as remainder combined, 2 about as long as 3 and last slightly shorter than 1. Length 5.8 mm; breadth 3.15.

*Female*: Antenna about 2/3 as long as body, fairly slender; last abdominal sternite subtruncate at apex. Length 6.2 mm; breadth 3.5.

Paratypes: Length 4.5-6.5 mm; breadth 3.0-3.5.

DISTRIBUTION: S. China (Fukien, Chekiang, Hupeh).

Holotype ♂ (BISHOP 3318), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 26. III. 1942, T. C. Maa; allotopotype ♀ (BISHOP), 6. V. 1943, Maa; 19 paratypes (CAS, BI-SHOP, US, Ac. SIN.), 2 paratopotypes, 8. IV. 1943, 12. IV. 1943, Maa; 8, Sui-sa-pa, 1000 m, Lichuan, W. Hupeh, 23. VII-12. IX. 1948, Gressitt & Djou; 4, Hsiao-ho, Lichuan, Hupeh, 9-11. VIII. 1948, Gressitt; 1, Mo-kan Shan, Chekiang Prov., 18. IX. 1927, Dora E. Wright. One paratype (FREY), Tien-mu Shan, Chekiang, Reitter.

Differs from pale specimens of *nigrofasciatus* Jacoby in being slightly larger and in having antennal segments 2 and 3 of  $\partial$  much shorter, with 3 broader than long instead of longer than broad.

# Genus Dercetina New Name (New name for *Dercetis* Clark)

- Dercetis Clark, 1865, Ann. Mag. Nat. Hist. ser. 3, 15: 146 (nec Dercetis Muenster & Agassiz, 1834, N. Jahrb. f. Min. 1834, p. 389; Pisces). (type: D. depressa Clark).—Maulik, 1936, Fauna India, Galeruc., 348.—Hincks, 1949, Ann. Mag Nat. Hist. ser. 12, 2: 611.
- Antipha Baly, 1865 (nec Antipha Walker, 1855 List Specimens Lep. Ins. Brit. Mus. 4: 806; Lepidoptera); Ann. Mag. Nat. Hist. ser. 3, 16: 251 (type: Antipha picipes Baly; monobasic India).—Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 611.
- Dercetes Jacoby, 1892, Entomologist 25: 162 (error for Dercetis Clark).—Weise, 1913, Philippine Jour. Sci. 8 (3D): 225 (nota); 1916, Deutsch. Ent. Zeits. 1916: 39 (error for Dercetis Clark).—Hincks, 1949, Ann. Mag. Nat. Hist. ser 12, 2: 611 (not new emendation; not status in nomenclature).

Hincks, 1949, used *Dercetes* Weise for *Dercetis* Clark (*nec* Muenster & Agassiz), recognizing *Dercetis* as preoccupied, but not noting that *Dercetes* Ws. was actually a misspelling rather than an emendation. According to the Rules, an emendation must be so stated to be accepted. A justified emendation is the correction of an incorrect spelling, and any other emendation is unjustified (new Rules, Art. 33a).

Dercetina is not a very homogeneous genus. In China there are roughly three groups. The first group includes chinensis, bifasciata and hainana, the second group includes amoena and the third group (which has been largely treated as species of Proegmena) includes carinipennis, cyanipennis, flaviventris and minor. Dercetina is very close to Arthrotus, and only  $\mathcal{F}$  specimens are separable.

## Key to Chinese species of Dercetina

1.	Elytral punctures in part arranged in longitudinal rows; body more or less broad-
	ened posteriorly 2
	Elytral punctures completely irregular; body nearly round in dorsal outline;
	color variable, from entirely blue to entirely ochraceous, often with elytral
	disc blackish blue or with 2 large discal spots; length 5.7-6.0 mm 564. amoena
2(1).	Pronotum with a foveum or a depressed and more heavily punctured area on
	side of disc
	Pronotum evenly convex on disc and lacking foveum or punctured depression 6
3 (2).	Center of pronotal disc not depressed and almost impunctate 4
	Pronotal disc slightly depressed across middle just behind center (between sub-
	lateral depressions), and somewhat punctured across depression; dorsum gen-
	erally testaceous to brownish, rarely pitchy; length 3.5-4.0 mm 470. minor
4 (3).	Pronotum with a shallow depression on each side of disc; elytron without a
	sublateral ridge 5
	Pronotum with a fairly deep round foveum on each side of disc; elytron with
	a distinct posthumeral ridge along upper edge of lateral declivity; dorsum en-
	tirely bluish; abdomen generally pale; length 4.8-5.8 mm 466. carinipennis
5 (4).	Pronotum with a subtransverse depression with moderately strong punctures on
	each side of disc; head and pronotum pale; elytron bluish; length 5.0-5.6 mm

Pronotum with very shallow and feebly punctured depression on side of disc; color variable, from entirely pale to entirely purplish blue above; length 6.0-

7 (6). Elytron evenly convex, not depressed postbasally; pronotum about  $3 \times as$  broad

# 464. Dercetina amoena (Weise), NEW COMBINATION

Dercetes amoena Ws., 1922, Tijdschr. Ent. 65: 95 (Tonkin: Mts. Mauson; ?Stockholm).

DISTRIBUTION: Vietnam, Hainan I., S. China (S. Kwangtung).

HAINAN: Many, Ta-hian, 13. VI; Fan-heang, 7. VI.; Dome Mt. 12. VII; Ta-hau, 7. VII; Dwa-bi, 25. VII; Lia-mui, 2. VIII. 1935, Gressitt (CAS, BISHOP); 1, Lin-fa Shan, 5. VIII. 1929, Nodoa, 17. VIII, Lingnan U. 5th Hainan Exped.; Cheung-kon, 29. III. 1935, To; Tai-tsing-lam-tsuen, 6. VI. 1935, To (LINGNAN); 5, Hainan, 10–25. III. 1909, Schoede (ZMB). KWANGTUNG: 1, Lui-chow Penin., 1. IX. 1950, for Gressitt (CAS).

## 465. Dercetina bifasciata (Clark), NEW COMBINATION

Dercetes bifasciata Clark, 1865, Ann. Mag. Nat. Hist. ser. 3, 15: 146 (Pulo Penang; BM). Antipha feae Jacoby, 1892, Mus. Civ. Genova, Ann. 32: 973 (Burma; ?BM, Genova). New Synonymy.

Dercetes feae, Maulik, 1936, Fauna India, Galeruc., 329 (Burma, Sumatra).

This species is easily separable from the other Chinese species in being very round and convex.

DISTRIBUTION: Malaya, Sumatra, Burma, S. China (Yunnan, Kiangsi, Kwangtung), Hainan I.

KIANGSI: 8, Tai-au-hong, S of Sungwu, 6–7. VII. 1936, Gressitt (CAS); 1, Wong-sashue, 8. VII. 1936, Gressitt. YUNNAN: 1, Yunnan-fu (FREY). KWANGTUNG: 2, Taiyong, 4. VIII. 1936, Gressitt; 1, Kau-lin San, 24. IV. 1940, Gressitt & To; 1, Lung-tau Shan, 10. VI. 1947, Gressitt & Lam (CAS). HAINAN: Dwa-bi (Tai-pin), 19–30. VII. 1935, Gressitt; Ta-hau, 3. VII; Fan-heang, 7. VI; No-doa, 10. VII; Ta-han, 21. VI. 1935, Gressitt (CAS); Naam-fung, 24. VI. 1932, Lau & To; Cheung-kon, 13. IV. 1935, To; Lok-kei, 18. VI. 1932, Lau & To (LINGNAN).

466. Dercetina carinipennis Gressitt and Kimoto, n. sp. Fig. 185, c.

*Male*: Dorsum largely violet purplish blue; abdomen testaceous; legs largely pitchy reddish; head reddish pitchy anteriorly; antenna dull reddish brown, brighter reddish on basal segments. Body feebly clothed above with very sparse minute hairs; ventral surfaces thinly clothed with longer suberect pale hairs; legs moderately clothed with golden buff

hairs.

*Head* slightly broader than apex of prothorax, occiput moderately convex, feebly and irregularly punctured, a central shallow depression just behind postantennal swellings which are somewhat oblique, moderately convex and slightly frosted; interantennal space nearly as large as an antennal insertion, rather strongly convex with ridge joining obtuse ridge on frontoclypeus; gena about 1/10 as deep as eye; eye strongly convex, nearly round. Antenna 3/4 as long as body, not very slender; segment 1 distinctly arched and swollen apically, weakly punctured; 2 just over 1/2 as long as 1; 3 slightly shorter than 1; 4 as long as 2+3, distinctly longer than 5; 5-10 decreasing slightly in length; 11 about as long as 7. Prothorax 1/2 again as broad as long, suboblong, slightly wider anteriorly than posteriorly; anterior margin straight; basal margin moderately convex; lateral margin slightly convex anterior to middle and nearly straight posteriorly; anterior angle swollen and prominent; basal angle obtuse and slightly projecting; disc rather smooth and shiny, swollen across anterior portion and evenly depressed on each side just behind center; surface very sparsely and finely punctured. Scutellum longer than broad, narrowed and rounded apically, convex and nearly impunctate. Elytron  $3.6 \times$  as long as broad, subparallel-sided, very weakly convex laterally and broadly and evenly rounded apically with sutural angle obtuse; lateral margin slightly expanded; epipleuron moderately wide and subparallel-sided in nearly basal 1/3, then somewhat suddenly narrowed and then gradually narrowed and continuing to apex; disc rather strongly convex, with an obtuse ridge continuing posteriorly from humerus to apical declivity and above it a shallow longitudinal depression, almost suggesting another ridge parallel to an outer one; latter declivity nearly vertical; surface with rather deep punctures which are mostly about as large as interspaces and partly arranged in irregular longitudinal lines, particularly anteriorly, punctures becoming smaller and sparser towards apex, in about 18 rows just anterior to middle. Ventral surfaces rather smooth and shiny, sparsely and feebly punctured; metepisternum fairly smooth and partly frosted; pygidium rounded apically; last abdominal sternite very feebly emarginate on central lobe. Legs not very stout; hind tarsal segment 1 longer than 2+3 and not quite as long as remainder, 2 barely longer than 3, and last slightly shorter than 1. Length 4.8 mm; breadth 2.4.

*Female*: Prothorax nearly straight at side; elytron with sublateral ridge the same as in  $\mathcal{S}$ . Length 5.7 mm; breadth 2.7.

Paratypes: Length 5.5-6.0 mm; breadth 2.6-3.1.

DISTRIBUTION: SE China (Fukien, Chekiang).

Holotype & (BISHOP 3319), Ta-chu-lan, 1000 m, Shaowu Distr., NW Fukien Prov., 3. V. 1943, T. C. Maa; allotopotype  $\heartsuit$  (BISHOP), 2–5. V. 1943, 6  $\heartsuit$  paratopotypes (CAS, BI-SHOP, AC. SIN.), 30. IV. 1941, 27. V. 1942, 21. V. 1945, 10. VI. 1942, 2. VI. 1943, Maa; 1 $\heartsuit$  paratype (FREY), Tien-mu Shan, Chekiang Prov. (erroneously labelled "NW China"), Reitter.

This species was evidently represented as the  $\mathcal{P}$  of *flaviventris* by Jacoby. Thus Laboissière redescribed *flaviventris* as *abdominalis* because of Jacoby's error. Differs from *flaviventris* Jacoby in having a fairly prominent ridge on elytron along top of lateral declivity, in both sexes.

467. Dercetina cyanipennis (Chen), NEW COMBINATION

Proëgmena cyanipennis Chen, 1942, Notes d'Ent. Chinoise 9: 42 (Szechwan: Pehpei; Ac. SIN.).

We are not quite certain that the following are correctly identified.

DISTRIBUTION: W. China (Szechuan, W. Hupeh, S. Shensi).

HUPEH: 1, Liang-ho-keu (Leong-ho-kow), Lichuan, 9 Sept. 1948, Djou (CAS). SHENSI: 1, S. Shensi (FREY).

468. Dercetina flaviventris (Jacoby), NEW COMBINATION Fig. 186, a.

Antipha flaviventris Jac., 1890, Entomologist 23: 214 (Chang-yang; BM). Dercetes flaviventris, Weise, 1922, Tijdschr. Ent. 65: 94 (Formosa: Kosempo) Proëgmena abdominalis Laboissière, 1935, Arkiv Zool. 27A 15: 8 (S. Kansu; ?STOCKHOLM).

-Ogloblin, 1936, Fauna USSR 26, 1: 328, 437. New Synonymy.

As indicated under *carinipennis* n. sp., Laboissière described a synonym because Jacoby wrongly associated  $\mathcal{Q}$  of *carinipennis* with  $\mathcal{J}$  of *flaviventris*.

DISTRIBUTION: S. China (Hupeh, Sikang, Kweichow, Yunnan, Kwangtung), Taiwan.

SIKANG: 1, nr. Mu-ping, 2000 m, 20. VII. 1929, Graham (US). HUPEH: 3, Sui-sapa, Lichuan, 24–31. VII. 1948, Gressitt & Djou (CAS). KWEICHOW: 1, Kweiyang, 12. VII. 1940, Gressitt (LINGNAN). YUNNAN: 1, So-ling-ho R. Vall (FREY); 1, W. Hills, 2400 m, nr. Kunming, 4. IX. 1934, Tinkham; 2, W. Hills, 2200 m, 7. VII. 1940, Gressitt; 1, Kunming, 1900 m, 4. VII. 1940, Gressitt (LINGNAN, BISHOP); 1, Yunnan-sen (ZMB). KWANG-TUNG: 4, "Canton", Mell (ZMB).



Fig. 186. a, Dercetina flaviventris (Jacoby); b, D. minor n. sp.; c, D. varipennis (Jacoby).

# 469. Dercetina hainana Gressitt and Kimoto, n. sp.

*Female*: Reddish ochraceous to pitchy brown and nearly black: head pale reddish ochraceous with an arcuate pitchy band between upper portions of eyes; antenna orange testaceous, very slightly darkened in part on subapical segments; pronotum orange ochraceous; scutellum pitchy reddish; elytron pitchy with 2 orange ochraceous spots on basal portion and a large subcentral ochraceous part leaving fairly broad sutural and marginal pitchy bands and a rather narrow band between humeral and central pale areas; apical

1B

margin somewhat reddish; ventral surfaces ochraceous except for metasternum and metepisternum pitchy to nearly blackish; legs ochraceous with tibiae largely pitchy brown and tarsi ochraceous brown with claws reddish. Body nearly glabrous above with widely scattered very small hairs; ventral surfaces with longer sparse pale hairs; legs moderately clothed but rather thinly so on femora.

Head nearly as broad as prothorax at apex; occiput rather smooth and weakly convex with a fairly deep central depression between postantennal swellings which are moderately convex and impunctate; interocular area as wide as antennal cavity; frontoclypeus subtriangular, moderately convex and not distinctly punctured; labrum slightly emarginate at middle of apex; gena about 1/10 as deep as eye. Antenna slender, nearly 3/4 as long as body; segment 1 slender, moderately swollen and slightly arched distally; 2 about 1/3 as long as 1, moderately swollen; 3 slender, about 2/3 as long as 1; 4 as long as 2+3; 5 slightly shorter; 5-10 decreasing slightly in length; 11 about as long as 8. Prothorax nearly  $2 \times$  as broad as long; anterior margin feebly concave; posterior margin distinctly and subevenly convex; lateral margin slightly convex with both anterior and posterior angles prominent and slightly projecting, anterior angle somewhat separated from anterior margin; disc rather evenly convex, smooth and quite finely and sparsely punctured. Scu*tellum* subtriangular, convex and feebly punctured. *Elytron* slightly more than  $2 \times as$  long as broad, moderately widened to behind middle and subevenly rounded apically; lateral margin slightly expanded; epipleuron quite broad and parallel-sided in basal 1/4, then rather suddenly narrowed and continued almost to apex; disc somewhat evenly convex but with a distinct transverse depression after swollen area on basal 1/4; surface with fairly deep punctures in partial longitudinal rows on basal 1/2 near suture, rows becoming more irregular both in arrangement and in size of punctures externally and posteriorly, punctures quite small on posterior 1/3. Ventral surfaces largely impunctate, slightly wrinkled at side. Legs with femora fairly stout and tibiae and tarsi rather slender; hind tarsal segment 1 distinctly longer than 2+3, but not quite as long as remainder, with 2 slightly shorter than 3 and last as long as 2+3. Length 5.0 mm; breadth 3.05.

*Paratypes*: Elytron with basal spots merged or lacking and postbasal dark band incomplete or central spot much reduced in size. Length 3.0-3.8 mm; breadth 2.4-2.9.

DISTRIBUTION: Hainan I.

Holotype ♀ (CAS), Dwa-bi (Tai-pin-ts'uen), 325 m, Kiung-shan Distr., C. Hainan I., 19-30. VII. 1935, Gressitt; paratopotype ♀ (CAS), 22. VII; paratopotype ♀ (BISHOP), 19-20. V. 1935, F. K. To; paratype ♀ (LINGNAN), Sam-kwong-ts'uen, Lam-wan-tung (Loi Terr.), Kiung-shan Distr., 16-18. VIII. 1935, To.

Differs from *chinensis* Weise in being more expanded postmedially, in having antennal segment 4 more distinctly longer than 3, and in usually having a postbasal dark band and a large central pale spot, instead of being striped, banded across middle or entirely dark or pale on elytron.

470. Dercetina minor Gressitt and Kimoto, n. sp. Fig. 186, b.

*Female*: Orange ochraceous to pitchy red or nearly blackish: head ochraceous, slightly duller posteriorly; antenna ochraceous brown, more reddish basally; pronotum pitchy reddish, in part nearly blackish; scutellum reddish pitchy; elytron reddish pitchy, more reddish basally and apically; ventral surfaces largely reddish pitchy on thorax and ochraceous

golden buff hairs; legs moderately clothed, more sparsely so on femora.

Head nearly as broad as prothorax at apex, weakly convex on occiput with a fine median groove at anterior depression; postantennal swellings obliquely transverse, rather convex and nearly impunctate; interantennal area wider than an antennal insertion, moderately convex and continuous with obtuse swelling of frontoclypeus; labrum feebly concave apically; gena about 1/10 as wide as eye; eye rounded oval, strongly convex and projecting. Antenna nearly 3/4 as long as body, moderately slender; segment 1 long and slender basally, arched and swollen preapically; 2 about 2/5 as long as 1, slightly swollen; 3 hardly longer than 2; 4 nearly as long as 2+3, slightly longer than 5; 5–10 subequal; 11 about as long as 5. *Prothorax* about 6/10 as long as broad, slightly broader anteriorly than posteriorly; anterior margin nearly straight; basal margin moderately and evenly convex; lateral margin feebly convex; anterior angle swollen and prominent; basal angle somewhat obtuse and slightly projecting; disc largely convex, with a depressed area on each side just behind center; depressed portion moderately punctured and a few fairly large but more widely spaced punctures at side and anterior median and posterior portions very feebly punctured. Scutellum rounded triangular, smooth and slightly convex. Elytron  $2.6 \times$  as long as broad, slightly convex at side and broadly rounded apically; lateral margin very slightly expanded; epipleuron rather broad and subparallel in basal 1/4, narrowed and curved and then more gradually narrowing and continuing almost to apex; disc strongly and subevenly convex, slightly more swollen near scutellum and feebly depressed behind basal 1/4; surface with fairly strong punctures partly arranged in longitudinal rows particularly on basal 1/2 of disc, the punctures mostly about as large as interspaces and becoming finer and sparser posteriorly, in about 16 rows just anterior to center. Ventral surfaces smooth and shiny, very feebly punctured and slightly convex and frosted on metepisternum. Legs fairly slender; hind tarsal segment 1 nearly as long as remainder combined, 2 as long as 3 and last slightly longer than 2+3. Length 4.2 mm; breadth 2.4.

*Male*: Prothorax hardly wider anteriorly than posteriorly and somewhat narrower than in  $\mathcal{P}$ ; last abdominal sternite barely emarginate apically and moderately punctured; dorsum reddish castaneous, paler on upper portion of head and on humerus, darker and nearly pitchy on pronotum. Length 4.0 mm; breadth 1.8.

*Paratypes*: Color varying from testaceous with prothorax partly pitchy brown to largely pitchy black with slightly reddish head and pale abdomen. Length 2.6–4.0 mm; breadth 1.7–2.0.

DISTRIBUTION: SE China (SE Kiangsi, SW Fukien, NE Kwangtung).

Holotype  $\mathcal{Q}$  (CAS), Hong Shan, 1000 m, SE Kiangsi, at corners of Fukien and Kwangtung Provinces, 15–29. VI. 1936, Gressitt; allotype  $\mathcal{J}$  (BISHOP 3320), Kau-lin San (Chiu-lien Shan), 700–900 m, Lien-p'ing Distr. NE Kwangtung Prov., 19. IV. 1940, Gressitt & To; 8  $\mathcal{Q}$ paratypes (LINGNAN, Ac. SIN., BISHOP), same data as allotype; 1  $\mathcal{Q}$  paratype (CAS), Liungchon Shan, 325 m, S of Shang-hang, SW Fukien Prov., 22. VII. 1936, Gressitt.

Differs from *cyanipennis* Chen in being smaller, more broadened posteriorly, with pronotum less expanded anteriorly and less depressed on disc, with elytron paler, less metallic, and a little more heavily punctured. 471. Dercetina varipennis (Jacoby), NEW COMBINATION Fig. 186, c.

Arthrotus chinensis Ws. (nec Baly, 1879), 1889, Soc. Ent. Ross., Horae 23: 626, note (Peking; ZMB); 1890, op. cit. 24: 485 (Sze-tschuan).—Ogloblin, 1936, Fauna USSR 26, 1: 331 (Gansu).

Antipha varipennis Jacoby, 1890, Entomologist 23: 214, pl. 2, fig. 7 (Chang-yang; BM).

Dercetis taiwana (& ab. melania) Chûjô, 1938, Arb. Morph. Taxon. Ent. Berlin-Dahlem 5 (2): 140 (Taiwan). New Synonymy.

DISTRIBUTION: China (Hopei, Kansu, Sikang, Szechuan, Hupeh, Kweichow, Yunnan, Kwangtung, Fukien, Kiangsi, Chekiang, Anhwei), Taiwan.

SIKANG: 1, Ni-tou-Ta-tsien-lu; 1, Ta-tsien-lu-Yü-ling, Reitter (FREY); Ya-chow, Graham (US). SZECHUAN: Mt. Omei, 3300 m, 19. VIII. 1934, Graham (US); Wa-shan, 2200 m, Graham; Mo-tau-chi, 19. VII. 1948, Gressitt & Djou (CAS); Ching-cheng Shan, VII. 1932, G. Liu (MCZ); Yueh-shi, VII. 1928, Graham (US); Mt. Omei, VII. 1932, Franck; Kuan-hsien, VII. 1928; Fu-liu, VII. 1928; Si-gi-pin, VIII. 1937, Graham. HUPEH: Many, Sui-sa-pa, Lichuan, VII-VIII. 1948, Gressitt & Djou; Liang-ho-keu, 10. IX. 1948; Chi-au Shan to Wang-chia-ying, 20. VII. 1948, Gressitt & Djou (CAS); Hsiao-ho, VIII. 1948, Gressitt. KWEICHOW: Shi-men-kan, VII. 1934, Graham (US). YUNNAN: 8, Chao-chow-fu, W. Yunnan, 23. VIII-21. IX. 1941, Mell. KWANGTUNG: Many, Tsha-jiu San, V-VI. 1912, Mell (ZMB). FUKIEN: Many, Ta-chu-lan, Shaowu, III-IV. 1942, Maa (CAS); San-kang, Chungan, 5. V. 1945, Maa; Upper Kua-tun, 1400 m, Chungan, IV. 1943, Maa (BISHOP). KIANGSI: Many, Hong San, 22. VI. 1936, Gressitt (CAS). CHEKIANG: 1, Mo-kan Shan, 19. IX. 1927, Wright (CAS). ANHWEI: Kiu-hua Shan, IX. 1932, G. Liu (MCZ).

# Tribe CAPULINI

## Genus Capula Jacobson

Capula Jac., 1925, Rev. Russe Ent. 19: 145 (type: C. metallica Jac.; Tibet).—Ogloblin, 1936, Fauna USSR 26, 1: 342, 376.

This genus contains only the following species, which has prothorax strongly widened anteriorly and elytron strongly widened posteriorly, and is bronzy green and 4.4-6.0 mm in length.

#### 472. Capula metallica Jacobson

Capula metallica Jac., 1925, Rev. Russe Ent. 19: 147 (Tibet, Kukunor; ?Moscow).—Ogloblin, 1936, Fauna USSR 26, 1: 343, fig. 140.

DISTRIBUTION: W. China (Sikang, 4200 m; Tsinghai).

#### Tribe GALLERUCIDINI

#### Genus Doryida Baly

Doryida Baly, 1865, Ent. Monthly Mag. 2: 97 (type: D. Mouhoti Baly; Siam); 1890, op. cit. ser. 2, 1: 12.—Chapuis, 1875, Gen. Col. 11: 237, 239.—Jacoby, 1892, Mus. Civ. Genova, Ann. 32: 989.

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#### KEY TO CHINESE SPECIES OF DORYIDA

473. Doryida fraterna Laboissière

Doryida fraterna Lab., 1931, Soc. Ent. France, Ann. 100: 142 (Yunnan; ?BRUXELLES). DISTRIBUTION: SW. China (Yunnan).

474. Doryida mouhoti Baly

Doryida Mouhoti Baly, 1865, Ent. Monthly Mag. 2: 97 (Siam, Laos; BM).—Jacoby, 1892, Mus. Civ. Genova, Ann. 32: 990 (Carin Cheba).

DISTRIBUTION: Thailand, Laos, N. Vietnam.

N. VIETNAM: 5, Hoa-binh, Tonkin, Cooman (FREY).

# Genus Doryidomorpha Laboissière

Doryidomorpha Lab., 1931, Soc. Ent. France, Ann. 100: 144 (type: D. sousyrisi Lab.; Yunnan).

Laboissière described 4 species from Yunnan and 2 from Tonkin, distinguishing them primarily on color characters. We have only studied one specimen in this genus, and the following key has been constructed from the original descriptions.

## KEY TO CHINESE SPECIES OF DORYIDOMORPHA

1.	Dorsum generally pale: ochraceous to reddish brown
	Elytron black; antenna blackish beyond segment 2; tibiae and tarsi blackish; length
	9–11 mm
2.	Antenna generally black beyond segment 2 3
	Antenna pale; dorsum reddish brown; legs pale; length 9-11 mm 475. fulva
3.	Dorsum ochraceous; femora yellow; tibiae and tarsi black; length 10-11.5 mm
	Reddish brown; antenna black with base and apex of segment 1 testaceous and 2
	more or less testaceous; metasternum, abdomen and legs black; coxae testa-
	ceous; length 8.5-10.5 mm 478. variabilis

# 475. Doryidomorpha fulva Laboissière

Doryidomorpha fulva Lab., 1931, Soc. Ent. France, Ann. 100: 146 (N. Yunnan; PARIS). DISTRIBUTION: SW China (Yunnan).

# 476. Doryidomorpha nigripennis Laboissière

Doryidomorpha nigripennis Lab., 1931, Soc. Ent. France, Ann. 100: 146 (Yunnan; ?BRUXEL-LES).

DISTRIBUTION: SW China (Yunnan, Szechuan).

SZECHUAN: 1, Yun-ling Mts. (FREY).

1963

#### 477. Doryidomorpha sousyrisi Laboissière

Doryidomorpha Sousyrisi Lab., 1931, Soc. Ent. France, Ann. 100: 145, fig. 31 (NE Yunnan; PARIS).

DISTRIBUTION: SW China (Yunnan).

# 478. Doryidomorpha variabilis Laboissière

Doryidomorpha variabilis Lab., 1931, Soc. Ent. France, Ann. 100: 147 (Kouangsi-tien, Yunnan; PARIS).

DISTRIBUTION: SW China (Yunnan).

# Genus Haemodoryida Chen

Haemodoryida Chen, 1942, Notes d'Ent. Chinoise 9 (3): 35 (type: H. sanguinea Chen; China).

This genus has the following single known species.

# 479. Haemodoryida sanguinea Chen

Haemoderyida sanguinea Chen, 1942, Notes d'Ent. Chinoise 9 (3): 35 (Mu-pin=Mouping; Ac. SIN.).

Blood red with head and venter ochraceous, and tibiae, tarsi and antennal segments 1-3 brownish black; rest of antenna densely golden brown pubescent; body broad, oblong; head sunk in prothorax to hind borders of eyes; antennal insertions separated by a deep groove; antenna stout with segments 2 and 3 small and subequal, 4th  $1.5 \times$  as long as 1; prothorax more than  $2 \times$  as broad as long, finely margined anteriorly, narrowed basally and with prominent angles; elytra separately rounded apically, with irregular rows of punctures; length 7.5 mm; breadth 4.2 (after Chen).

DISTRIBUTION: W. China (Sikang).

# Genus Laphris Baly

Laphris Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 231 (type: L. emarginata Baly; Fukien, Kiangsi).

This is the only known species of this genus.

## 480. Laphris emarginata Baly Fig. 187, a-b.

Laphris emarginata Baly, 1864, Ent. Soc. Lond., Trans. ser. 3, 2: 231 ♀ (N. China; BM).— Fairmaire, 1889, Soc. Ent. France, Ann. 58: 77 ♀.—Jacoby, 1888, Zool. Soc. Lond., Proc. 1888: 351 ♂ (Kiukiang).

Testaceous with elytral disc pitchy black but with margins and an oblique indentation near middle of side testaceous, sometimes entirely testaceous; body broad; head raised between antennal insertions but grooved posteriorly; antenna stout with segment 2 short and 3 as long as 1 and equal to 4; prothorax more than  $2\times$  as broad as long, emarginate anteriorly, convex basally; slightly sinuate at side and transversely grooved on disc; elytron produced and rounded apically, with fine irregular punctures. Length 10.4 mm; breadth 5.5.

DISTRIBUTION: SE China (Fukien, Chekiang, Kiangsi, Kwangtung, Hupeh).



Fig. 187. a-b, Laphris emarginata Baly.

CHEKIANG: 1, Mo-kan Shan, 18. VII. 1924, Illingworth (BISHOP); 1 Mo-kan Shan, 20. VIII. 1947, Wright; 3, Tien-mu Shan, Reitter (FREY). KWANGTUNG: 1, Tsha-jiu San, V-VI. 1912, Mell (ZMB). HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan Distr., 22. VII. 1948, Gressitt & Djou; 2, Liang-ho-keu & Liang-ho-keu to Wang-chia-ying, 1300 m, 4–18. IX. 1948, Djou (CAS); Wang-chia-ying to Sui-sa-pa, 1200–1400 m, 21. VII. 1948, Gressitt & Djou.

## Genus Agelasa Motschulsky

Agelasa Mots., 1860, Etudes Ent. 9: 25 (type: A. nigriceps Mots.; N. Japan).—Weise, 1886, Ins. Deutschl. 6 (4): 578.—Ogloblin, 1936, Fauna USSR 26, 1: 344, 377.

#### 481. Agelasa nigriceps Motschulsky

Agelasa nigriceps Mots., 1860, Etudes Ent. 9: 25 (N. Japan; ?Moscow).—Ogloblin, 1936, Fauna USSR 26, 1: 345 (Ussuri, Manchuria, N. China, Japan).—Haku, 1936, Chosen Nat. Hist. Soc., Jour. 21: 122 (Hakko Zan, Korea).—Mochizuki & Tsunekawa, 1937, op. cit. 22: 84 (Syoyo Zan).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 155 (Keiki-Do).

Metallic golden to bronzy green with orange pronotum. Length 6-7 mm.

DISTRIBUTION: Japan, E. Siberia, NE China (Kirin), Korea.

KIRIN: 7, Cheng-hou-tze, nr. Harbin, 15. VI. 1939, Loukashkin; 2, Yablonya, 16. VI. 1940, Weymarn; 1, Er-tao-ho-tze, Chinese Eastern Railway, 23. V. 1939, Loukashkin (CAS); 2, Harbin Distr., 23. VIII. 1951 (BM 1953-715). S. SIBERIA: 2, Anutschino, S. Ussuri, Hauser (ZMB).

HOST: Actinidia kolomikta Max.

#### Genus Gallerucida Motschulsky

Gallerucida Mots., 1860, Etudes Ent. 9: 24 (type: G. bifasciata Mots.; Japan).—Maulik, 1936, Fauna India, Galeruc., 545.

Eustetha Baly, 1861, Jour. Ent. 1: 296 (type: E. flaviventris Baly; N. China).

Melospila Baly, 1861, Jour. Ent. 1: 297 (type: M. nigromaculata Baly; N. China).

Hylaspes Baly, 1865, Ent. Soc. Lond., Trans. ser. 3, 2: 436 (type: *H. longicornis*; Himalaya). New Synonymy.

Galerucida, Chapuis, 1875, Gen. Col. 11: 224, 227.—Harold, 1880, Stett. Ent. Ztg. 41: 146. —Weise, 1912, Archiv Naturg. 78 A 2: 90.—Ogloblin, 1936, Fauna USSR 26, 1: 346, 441.

Coptomesa Weise, 1912, Archiv Naturg. 78 A 2:91.

Eusthetha, Weise, 1924, Coleopt. Cat. 78: 142.—Laboissière, 1934, Ass. Nat. Levallois-Peret, Ann. 21: 128.

Some species of this genus have considerable color variation. Unfortunately it has not been possible to construct an adequate key using structural characters, as many of the descriptions do not include the appropriate characters, and we have not seen material of all species, nor have we been able to find all the type specimens.

# Key to Chinese species of Gallerucida

1.	Pronotum reddish or yellowish brown with black spots 2
	Pronotum not pale with distinct black spots
2 (1).	Pronotum with 2-4 black spots
	Pronotum with 5 black spots; elytron reddish with violaceous lustre
3 (2).	Elytron unicolorous : bluish or purplish 4
	Elytron with blackish spots
4 (3).	Pronotum with 4 black spots; elytron steel blue; length 8 mm 520. thoracica
	Pronotum with 3 black spots; elytron purplish red; length 7 mm 526. trinotata
5 (3).	Brown; head, antenna, 3 pronotal spots, a spot at elytral apex, and tibiae and
	tarsi black; pronotum pale yellowish brown; pronotum and elytron with
	purplish lustre; length 6.5 mm 486. apicalis
	Reddish brown; antenna, scutellum, 2 small pronotal spots, tibiae, tarsi and
	apices of femora black; elytron pale yellow with 2 black spots, 1st sub-
	quadrate, antemedian, 2nd transversely oval, preapical, and suture narrowly
	black; length 7.5 mm 507. posticalis
6(1).	Elytron with spots, bands, stripes or at least dark or pale dots7
	Elytron unicolorous or bicolorous or iridescent, but without spots, dots, bands
	or stripes
7 (6).	Elytron with small dark or pale dots, or with apical pale area with dark
	spots
	Elytron with distinct large spots, band or stripes 10
8 (7).	Elytron with small dark or pale dots
	Elytron dark reddish brown with humeral and apical area yellowish, latter

	with 2 blackish spots; rarely entire elytron yellowish except for apical spots
9 (8).	Elytron yellowish or dark brown with a number of irregularly placed black
	dots in large punctures 500. nigrofoveolata
	Dorsum reddish brown with many minute yellowish spots all over surface
10 (7).	Prosternal process elevated behind, distinctly separating coxal cavities
	Prosternal process not elevated behind, narrowly or incompletely separating
	coxal cavities
11 (10).	Elytral punctures of 2 sizes, large ones in longitudinal rows become confused
	toward side; pronotum reddish brown with basal markings black; elytron
	black with large basal and subapical yellowish areas; length 6.2 mm, 525. tricolor
	Elvtral punctures of one kind, of moderate size, irregular; pronotum dark
	brown with black lateral, anterior and basal markings; elytron reddish brown
	with nearly basal 1/4 and 2 subrounded preapical spots of black: length
	7 mm (Hoa-binh, Tonkin: Frey Mus.)
12 (10).	Interstices between elvtral puncture rows smooth, shining, in most cases with
	fine punctures 13
	Interstices between elvtral puncture rows alutaceous: pronotum black with
	greenish lustre: elytron greenish blue with 3 transverse brownish bands:
	length 7.0–8.5 mm. 524. tricincta
13(12)	Elytron not blackish bordered with pale sublateral stripe connected to sutural
	stripe by 1 or 2 suboblique bands behind middle
	Elytron black bordered with pale vellowish and with pale stripe on side of
	disc parallel to external margin connected with sutural stripe by 1 or 2
	suboblique bands: elvtron with 11 semiregular rows of punctures, lacking
	minute punctures in interstices: pronotum black with slight greenish lustre:
	length 8.5 mm
14 (13).	Length of body less than 6.5 mm
	Length of body more than 6.5 mm in $3^{\circ}$ and 7.0 mm in $9^{\circ}$
15 (14).	Elytron with 3 subtransverse bands and a longitudinal stripe; 1st band sub-
	basal, triangular, free from suture and lateral stripe, 2nd in middle, free
	from suture but connected with lateral stripe, 3rd subapical, hardly reaching
	to lateral margin and connecting with 2nd band; length 5.8-6.5 mm
	Pattern variable: 1) pronotum black (typical) or reddish (fulvicollis type); 2)
	venter entirely black (typical) or abdomen partly or entirely black : 3) elytron
	vellowish, usually with a small spot on basal margin, a humeral spot, a
	transverse band or 2 spots in middle, a broader transverse band in post-
	median area, and a small apical spot, of black; often black markings
	enlarged, with sometimes only humeral area vellowish : length 5.5-6.0 mm
	501. nigropicta
16 (14).	Side of prothorax rounded; length of body less than 9 mm
	Side of prothorax constricted behind middle: length of body 11 mm: reddish
	brown; elytron with 5 large black markings: 1 subbasal. 2 submedian and
	1 subapical; antenna pale brown with last 4 segments black; legs pale with
	Side of prothorax constricted behind middle; length of body 11 mm; reddish brown; elytron with 5 large black markings: 1 subbasal, 2 submedian and 1 subapical; antenna pale brown with last 4 segments black; legs pale with

	apices of tarsi black
17 (16).	Elytron not pale yellow with large black marking in middle 18
	Elytron pale yellow with a large black marking in middle; head and pronotum
	reddish brown; length 7.0–7.5 mm 488. bimaculata
18 (17).	Elytron not largely black; pronotum entirely blackish
	Elytron almost entirely black, only latero-basal part of elytron narrowly yellow-
10 (18)	Anical portion of elytral margin not reddish brown
17 (10).	Apical 1/4 of lateral margin and suture of elvtron always reddish brown
	except for a small spot at tip; usually 3 transverse bands, basal margin,
	apical 1/4 of lateral margin and suture, and lateral longitudinal stripe start-
	ing from humerus and extending almost 3/4 length of elytron, reddish
	brown; pronotum blackish with slightly bluish lustre; length 6.5-8.0 mm
•• (10)	
20 (19).	Subbasal blackish or bluish marking free from basal margin and usually cover-
	rather slender: length 6.5-80 mm (typical form) 503 ornationnis
	Subbasal blackish marking always connected with basal margin and in most
	cases humeri free from this black marking; one median and one subapical
	transverse yellowish band both more or less zigzag; length 6.0-7.5 mm
21 (6).	Elytron entirely black, blue or green, in some cases with greenish, violaceous
	or slightly bronzy lustre
22 (21)	Elytron entirely or partly yellowish, brownish, reddish, reddish purple or bronzy 28
22 (21).	envities 23
	Prosternal process very narrow, indistinct behind
23 (22).	Elytral puncturation of only one kind, the punctures fairly distinct and irre-
	gular in arrangement; puncturation of pronotum fine and sparse 24
	Elytral puncturation of 2 kinds, large and small, the large ones tending to
	form in rows, and their interstices with small punctures; black, elytral sur-
	face shagreened; abdomen largely black with apical and lateral areas blackish
24 (23)	Body elongate: dorsum minutely shageened: hlue sometimes with slight green.
24 (25).	ish lustre: abdomen entirely vellowish brown: length 7.5–8.5 mm 493. flaviventris
	Body subrounded; dorsum smooth and shining; color variable; 1) brown;
	elytron black with epipleura and posterior $1/2$ of margin narrowly pale;
	antenna entirely pale; 2) legs and venter (except pale side of abdomen)
	black; upper surface of head pitchy brown; antenna black with basal seg-
	ments paler; scutellum and elytron black; pronotum black with 3 basal
	reddisn spots: middle one smaller; length 6.8-8.0 mm (types C and D of
25 (22)	Dorsum entirely blue violaceous or greenish violaceous 26
	Elytron, antenna, tibiae and tarsi black; rest reddish brown or brownish red:
	length 7.0–8.5 mm
26 (25).	Side of pronotum rounded; venter entirely blue or black

	Sides of prontoum parallel; elytron strongly and closely punctured; blackish
	blue; elytron with slightly violaceous lustre; abdomen yellowish brown; $\mathcal{J}$ :
	antennal segment 2 slightly longer than 3; 1-3 blackish brown and rest
	paler and thickly covered with long hairs; length 6.5-7.0 mm 482. abdominalis
27 (26).	Elytron with 2 sizes of punctures, larger punctures arranged in subregular
().	rows and smaller ones confused; elytron violaceous blue and pronotum blue
	with slight greenish lustre: abdomen black: length 65-80 mm (violacea
	tuna) 503 arratinannia
	Elytron densely and finally munitured; head antenna soutellum venter and
	Less blocks proportion ground hier punctured, head, and hier south with slightly bronzy
	legs black, producting greenish black, erytron greenish with slightly bronzy
20 (21)	lustre; length 6.5 mm
28 (21).	Elytron bicolorous: bronzy, readish purple or rea, and metallic or golden
	green or bluish
	Elytron unicolorous, or sometimes margin darker or blackish
29 (28).	Fore coxal cavities completely separated by prosternal process; venter largely
	greenish or greenish blue 30
	Fore coxal cavities incompletely separated by prosternal process; abdomen
	yellowish brown; pronotum shining black with side bronzy, lateral margin
	and anterior corner greenish; scutellum red; elytron red with bluish reflec-
	tions; length 7 mm 509. reflecta
30 (29).	Fore coxal cavities widely separated; legs purplish; elytron iridescent reddish
	purple and golden green; former dominant subbasally and postmedially, and
	latter dominant laterally and suturally: pronotum with former dominant
	apically and latter basally; pronotum strongly swollen near side behind a
	rather deep transverse groove: elytral punctures of 2 contrasted sizes larger
	ones quite strong and irregular in spacing length 75-85 mm 496 gloriosa
	Fore coval cavities narrowly senarated by prosternal process: less black with
	femore greenish blue: elutron bronzy with suture lateral margin and eni
	plaura metallia green; pronotum metallia green bronzy in middle golden
	green et side and blyich vielet en mansing, manstyre fachty swellen neer
	green at side and bluish violet on margins; pronotum reedy swollen near
	side benind a moderate transverse groove; elytral punctures fairly regular
	in size and spacing, although not in very regular rows; length 6.5–7.0 mm
31 (28).	Size large, longer than 9 mm; dorsum entirely pale yellow to yellowish brown32
	Size smaller, shorter than 8.5 mm
32 (31).	Venter entirely pale; legs partly blackish
	Black; middle of vertex, pronotum and elytron pale yellow; abdomen pale
	yellow with segments darker on basal portions; length 9-11 mm 490. facialis
33 (32).	Prosternal process relatively wide, elevated posteriorly, separating fore coxal
	cavities
	Prosternal process rather narrow, generally hardly separating fore coxal cavities35
34 (33).	Yellowish brown; articulations of legs, tibial apices and tarsi (except bases),
	blackish; length 11.0-11.5 mm 506. podontioides
	Pale or reddish brown; antenna (except basal segments), tibiae and tarsi
	black; length 10 mm
35 (33).	Venter entirely pale; legs partly blackish

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Black; middle of vertex, pronotum and elytron pale yellow, abdomen pale yellowish, each segment more or less darker at base; length 9-11 mm ...... 36(35). Pronotum  $2\times$  as wide as long; lateral border straight; yellowish brown; an-Pronotum more than  $2 \times$  as wide as long; lateral border strongly constricted behind middle; brownish red or reddish brown; antenna, tibiae and tarsi dark brown; length 8–9 mm ...... 497. lutea 37 (31). Prosternal process elevated behind and distinctly separating fore coxal cavities...38 38 (37). Elytral punctures of 2 kinds: large ones in semiregular rows but confused in Elytral punctures mainly of one kind, fairly strong and entirely irregular...... 40 39 (38). Elytral punctures quite large, their interstices at side smaller than punctures; elytral epipleuron strongly impressed with large punctures; ochraceous; elytron yellowish; antenna (except for reddish basal 3-4 segments), tarsi and bases and apices of tibiae, blackish; length about 8 mm ...... 497. lutea Elytral punctures not extremely large, their interstices wider than punctures at side; elytral epipleuron with fine punctures; head and prothorax black; antenna, mesothorax, fore and mid legs and hind tibia and tarsus blackish brown; metathorax and abdomen reddish brown; scutellum, basal and basilateral areas reddish brown and middle to apex yellowish brown; length Metasternal process distinctly produced forward; color variable: 1) shining reddish brown; antenna blackish with segments 1-3 paler; 2) apices of femora, tibiae and tarsi black; 3) venter, except abdomen, brownish, and legs, pronotum and scutellum black, and antenna blackish with segments 1-3 reddish brown; length 6.8-8.0 mm (types A & B of Laboissière).......494. fulva 41 (40). Surface of pronotum smooth, rather finely and sparsely punctured; metasternal process widely separating hind coxal cavities, but connecting horizontally with mesosternal process; antenna (except reddish segments 1-3), tibiae (except paler bases), and tarsi blackish brown; length 8 mm...... sp. B Surface of pronotum rather strongly but not closely punctured, and interstices finely granulated; metasternal process connected perpendicularly with mesosternal process; dorsum bronzy with slight greenish lustre; venter and legs dull reddish brown; tibiae and tarsi more blackish; antenna black with segments 1-2 or 1-3 reddish; length about 6 mm..... sp. C 43 (42). Pronotum black with slight greenish lustre, or largely black; elytron pale; 44 (43). Pronotum evenly convex; finely and sparsely punctured; elytron with somewhat irregular rows of large punctures (var. decolora)............. 503. ornatipennis Pronotum uneven, with transverse groove deep in middle of side and surface

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with irregular punctures, many of them quite large; elytron with 10 regular rows of large punctures, besides small punctures between rows... 492. flavipennis 45 (43). Larger, over 6 mm long; elytral puncturation of one size, fairly strong and Smaller, about 5 mm long; elytral puncturation of 2 kinds: larger punctures partly in geminate rows, smaller punctures confused; pronotum minutely granulate; dorsum bronzy or metallic reddish brown, slightly paler on pronotum; venter pale reddish brown; antenna and legs blackish with antennal 46 (45). Brown with slight bluish or greenish lustre; vertex dark green; antenna, tibiae and tarsi black; abdomen yellowish or reddish brown and with a transverse band on middle of base and a spot at side of each segment, of black; in some cases abdomen almost entirely blackish except apical borders of ster-Reddish brown; thorax and elytron with pearly lustre; pronotum slightly metallic; frons bronzy black; occiput metallic green; antenna black with segments 1-3 reddish; tibiae and tarsi black; length 6-7 mm .....516. spectabilis 48 (47). Tibiae and tarsi reddish brown; length 7.4–9.5 mm....... 510. reflexa Tibiae and tarsi dark brown or black ...... 49 49 (48). Elytron yellowish brown with lateral and sutural margins and inner margin of epipleuron black; scutellum and epipleuron red; length 7 mm (9 fromTien-mu Shan)......sp. D Elytron pale yellow; antenna and femoral apices black; scutellum brown; length 7 mm ...... 504. pallida Elytron pale reddish brown, sometimes with suture line and lateral margin blackish, length 6–8 mm...... 505. pectoralis 51 (50). Elytron pale yellow; scutellum brown; length 7 mm ...... 504. pallida Elytron pale testaceous, with sutural line slightly darkened; scutellum brownish black; length 7 mm......489. confusa

# 482. Gallerucida abdominalis Gressitt and Kimoto, n. sp. Fig. 189, a.

*Male*: Dorsum steely blue, with a purplish tinge, pronotum reddish purple at corners; thoracic sterna reddish pitchy to bluish green at sides; abdomen testaceous, more ochraceous on median basal portion; legs pitchy brown with greenish to bluish tinges. Body largely glabrous above with a few pale hairs on front of head and side of pronotum; ventral surfaces moderately clothed with fine suberect pale hairs; legs moderately clothed with more adpressed golden buff hairs.

Head distinctly narrower than prothorax, about as broad as long; occiput feebly convex, shagreened and with scattered moderately fine punctures; interocular area subtransversely depressed between posterior portions of eyes, moderately raised behind antennal insertions; frontoclypeus subtriangular, feebly raised and hardly ridged between antennal insertions. Antenna nearly 3/4 as long as body, fairly broad; scape arched, punctured and moderately

shiny; segment 2 is 1/3 as long as 1; 3 not quite as long as 2; 4 distinctly longer than 1-3 combined, slightly longer than 5; 5–9 subequal (last 2 missing). Prothorax slightly more than  $2 \times$  as broad as long, subevenly convex basally and concave anteriorly; side nearly straight, very slightly narrowing anteriorly, with anterior corner rather broadly expanded and produced very slightly externally with a brief obtuse angle; disc moderately convex but subdepressed transversely near middle, more deeply so towards side; surfaces in large part subfinely and rather sparsely punctured, some of punctures in part larger near side. Scutellum subtriangular, longer than broad, rounded-acute apically. Elytron  $2.5 \times$  as long as broad, subparallel-sided but slightly broadened behind middle, and subevenly narrowed and rounded apically; disc somewhat heavily punctured in rows which are quite irregular, about 20 rows across central portion, the punctures mostly a little smaller than interspaces and in a few areas, particularly behind humerus, slightly larger than interspaces, punctures quite distinct to extreme apex. Ventral surfaces smooth and shiny on thorax with only a few fine scattered punctures, and somewhat shagreened at side; abdomen with irregular sparse fine punctures: last abdominal sternite narrowly incised on each side of short subtruncate median lobe. Legs fairly stout; hind tibia feebly arched; hind tarsal segment 1 longer than 2+3 and not quite as long as 2-5 combined. Length 7.0 mm; breadth 4.5.

*Paratype*  $\mathcal{J}$ : Antennal segment 10 nearly as long as 9; 11 nearly as long as 4. Elytral coloration paler, pitchy reddish brown with purplish tinge; darker pitchy reddish with a purplish to bronzy or greenish tinge on head and pronotum; thoracic sterna reddish brown. Length 6.0 mm; breadth 3.9.

DISTRIBUTION: S. China (Kwangtung).

Holotype & (CAS), above Tso-kok-wan, 250m, Lung-tau Shan, N. Kwangtung Prov., 10. VI. 1947, Gressitt & Lam; paratype & (BISHOP), Kau-lin San (Chiu-lien Shan), 700–900 m, Lienping Distr., 22. IV. 1940, Gressitt & To.

Differs from *flaviventris* Baly in being smaller and relatively shorter, with antenna longer and more flattened, pronotum more extensively grooved across middle and elytron more finely and regularly punctured.

#### 483. Gallerucida aenea Laboissière

Galerucida aenea Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 118 (Pe-yen-tsin, Yunnan; ? BRUXELLES).

DISTRIBUTION: SW China (Yunnan).

## 484. Gallerucida aeneomicans Ogloblin

Galerucida aeneomicans Ogl., 1936, Fauna USSR 26, 1: 361, 446 (Ta-mui-van, Szechuan; ? Moscow).

There is a possibility that this species is the same as spectabilis.

DISTRIBUTION: W. China (Sikang, Szechuan, Kansu).

SIKANG: 1, Ning-yuen-fu, 2400 m, 13. VIII. 1928, Graham (US); 1, Mu-pin, 1900 m, 19. VII. 1929, Graham. SZECHUAN: 1, nr. Wen-chuan, 1200 m, 19. VII. 1933, Graham (US).





Fig. 188. a, Gallerucida gansuica Chen; b, G. rubrozonata Fairmaire; c, G. tenuefasciata Fairmaire; d-j, G. nigropicta Fairmaire.

## 485. Gallerucida aenescens Weise

Galerucida aenescens Ws., 1889, Soc. Ent. Ross., Horae 23: 569, 626 (Kan-ssu; Szechuan; ?Moscow); 1912, Archiv Naturg. 78: 90.—Ogloblin, 1936, Fauna USSR 26, 1: 357, 442, fig. 146, a (Kansu, Szechuan).

DISTRIBUTION: W. China (Kansu, Szechuan).

## 486. Gallerucida apicalis Laboissière

Galerucida apicalis Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 124 (Pe-yen-tsin, Yunnan; ? BRUXELLES).

DISTRIBUTION: SW China (Yunnan).

### 487. Gallerucida bifasciata Motschulsky

Gallerucida bifasciata Mots., 1860, Etudes Ent. 9: 24 (Japan; ? Moscow).—Chûjô, 1940, Mushi 13: 6 (Kwantung); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (221): 160 (Korea).

Melospila nigromaculata Baly, 1861, Jour. Ent. 1: 297 (N. China; BM).

Melospila bifasciata, Baly, 1874, Ent. Soc. Lond., Trans. 1874: 185 (Japan, N. China, Manchuria).

Melospila consociata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 185 (Hakodadi; BM).

Galerucida nigrofasciata Baly, 1879, Cist. Ent. 2: 453, note ("nigrofasciata, mihi" seems to be error for nigromaculata Baly, because nigromaculata is the only one of Baly's species which is treated by Harold, 1874, Cat. Col., as a synonym of bicolor) (syno-

nymized with G. bifasciata Mots.).-Weise, 1912, Archiv Naturg. 78: 90, note.

- Galerucida bifasciata, Weise, 1886, Ins. Deutschl. 6 (4): 578, note 2 (Amur).—Heyden, 1887, Soc. Ent. Ross., Horae 21: 263 (Korea).—Weise, 1912, Archiv Naturg. 78: 90 (Japan).—Jacobson, 1911, Käfer Russl. 9: pl. 59, fig. 29.—Chûjô, 1935, Arb. Morph. Tax. Ent. Berlin-Dahlem 2(3): 169 (Taiwan).—Ogloblin, 1936, Fauna USSR 26, 1: 354, 441 (Japan, Korea).
- Galerucida nigromaculata, Ogloblin, 1936, Fauna USSR 26, 1: 350, 356, 442, figs. 145-146n. --Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 163.

DISTRIBUTION: E. Siberia, N. and C. China (Kirin, Shensi, Kansu, Szechuan, Hupeh, Kweichow, Kiangsi, Fukien, Chekiang, Kiangsu), Korea, Japan, Taiwan.

KIRIN: 1, Er-sen-tien-tze, 22. VI. 1940, Weymarn (CAS). KIANGSU: 1, Chinkiang, 2. VII. 1924, Illingworth (BISHOP); 16, Hangchow, 10. VI. 1924, Illingworth (BISHOP). CHEKI-ANG: 10, Ning-po (ZMB). KIANGSI: 1, Chang-tsing-cheng (ZMB); Kiu-kiang (ZSBS). FUKIEN: 1, Cha-po-hui, Kienyang Distr., 10. V. 1933, Ngu (LINGNAN); 3, Autow, Shaowu, III. 1942; 9, Shui-pei-kai, Shaowu, 26. III–2. V. 1942, Maa (CAS, BISHOP); 1, Yen-ping, 1919 (AMNH); 1, Foochow, Kellogg (US). KWEICHOW: 1, Tseng-yi, 14. VII. 1940, Gressitt (LINGNAN). KANSU: 5, Hoei-sien, S. Kansu (ZMB). SHENSI: Ta-pai Shan, 1700 m, Tsing-ling Shan, S. Shensi, 16. V. 1936, Höne (ZMB); 5, Chin-ling Mts. IV–V. 1904, Blackwelder (US). HUPEH: Mo-tai-chi to San-hou-keu, Hupeh-Szechuan border, 19. VII. 1948, Gressitt & Djou (CAS). SZECHUAN: 1, Chengtu to Kuanhsien, 2. VII. 1924, Graham (US); 1, Chungking, 600 m, V. 1930, Graham. SIKANG: 1, nr. Mu-pin, 2400 m, 6. VII. 1929, Graham (US). SE SIBERIA: 1, Vladivostok, 1923, Prinada (US). KOREA: Gensan (ZSBS).

HOSTS: Polygonum cuspidatum Sieb. & Zucc., P. sachalinensis Fr. Schm., Rumex acetosa L., R. japonicus Houtt. (after Chûjô & Kimoto).

## 488. Gallerucida bimaculata Laboissière

Galerucida bimaculata Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 122 (Pe-yen-tsin & Djo-kou-la, N. Yunnan; PARIS).

DISTRIBUTION: SW China (Yunnan).

# 489. Gallerucida confusa Ogloblin

Galerucida confusa Ogl., 1936, Fauna USSR 26, 1: 354, 444 (Batan, W. Szechuan; ? Moscow).

There is a possibility that this species may be a synonym of *pectoralis*. DISTRIBUTION: W. China (Sikang).

# 490. Gallerucida facialis (Laboissière), NEW COMBINATION

Hylaspes facialis Lab., 1931, Soc. Ent. France, Ann. 100: 136, fig. 29 (Yunnan; PARIS). DISTRIBUTION: SW China (Yunnan).

# 491. Gallerucida flava Ogloblin

Galerucida flava Ogl., 1936, Fauna USSR 26, 1: 351, 444 (Ussuri; ? Moscow). DISTRIBUTION: SE Siberia (Ussuri).

# 492. Gallerucida flavipennis Solsky

Galerucida flavipennis Sols., 1872, Soc. Ent. Ross., Horae 8: 257 (E. Siberia; ? Moscow).— Weise, 1912, Archiv Naturg. 78 A 2: 90.—Ogloblin, 1936, Fauna USSR 26, 1: 352, 441, fig. 143 (Ussouri, Japon).

Gallerucida flavipennis, Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 161 (Korea).

Ogloblin synonymized *melanocephala* Jacoby with this species, but the two are different. Thus *melanocephala* occurs in Japan, but *flavipennis* is to be deleted from the Japanese fauna.

DISTRIBUTION: E. Siberia, E. China.

KIRIN: 1, Er-sen-tien-tze, 23. VI. 1940, Weymarn (CAS). FUKIEN: 1, Pu-cheng City, 16. VI. 1945, Maa. E. SIBERIA: 1, Vladivostok, 1923, Prinada (US).

# 493. Gallerucida flaviventris (Baly) Fig. 189, b.

Eustetha flaviventris Baly, 1861, Jour. Ent. 1: 296 (N. China; BM).—Fairmaire, 1887, Revue d'Ent. 6: 334 (Pekin).

Galerucida (Eusthetha) flaviventris, Weise, 1924, Coleopt. Cat. 78: 142.

Galerucida flaviventris Ogloblin, 1936, Fauna USSR 26, 1: 365, 443 (Chine).

DISTRIBUTION: China (Kiangsu, Anhwei, Chekiang, Kiangsi, Szechuan).

KIANGSU: 1, Soochow, Gee (US). ANHWEI: 1, Tung-lu, 30. III. 1926, Wright. CHEKIANG: 5, Hangchow, 3. IV, 2. VII. 1924, Illingworth (BISHOP). KIANGSI: 1, Hong Shan, 1000 m, Kwangtung border, 30. VI. 1926, Gressitt (CAS). SZECHUAN: 1, Chang-



Fig. 189. a, Gallerucida abdominalis n. sp.; b, G. flaviventris (Baly).

tau-ching, 300 m, 18. VII. 1948, Gressitt & Djou (CAS).

494. Gallerucida fulva Laboissière

Galerucida (Eusthetha) fulva Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 129 (Hoa-binh & Kep, Tonkin; ? PARIS).

Three specimens from Hainan Island (Ta-hian, Ta-hau, VI-VII. 1935, Gressitt) are rather questionably referred here. They are slightly smaller and paler, but with scutellum darker than rest of dorsum. They have wider elytral epipleuron and slightly finer elytral puncturation.

DISTRIBUTION: N. Vietnam, Hainan (?).

N. VIETNAM: 3, Hoa-binh, Tonkin (FREY).

495. Gallerucida gansuica Chen Fig. 188, a.

Galerucida gansuica Chen, 1942, Notes d'Ent. Chinoise 9 (3): 38 (Cheu-menn, Kansu; HOANG-HO-PAIHO).

In the key it is indicated that this species has 1 or 2 suboblique bands connecting sublateral and sutural stripes. The type has 2 bands, one at middle and the other between middle and apex, whereas our specimen has only one band, located between middle and apex.

DISTRIBUTION: NW China (Kansu, Szechuan).

SZECHUAN: 1, betw. Gin-keo-ho & Dawes, 500 m, 1. VIII. 1925, Graham (US).

#### 496. Gallerucida gloriosa (Baly)

Eustetha gloriosa Baly, 1861, Jour. Ent. 1: 296 (N. China; BM).—Fairmaire, 1887, Revue d'Ent. 6: 334 (Pekin).

Eustetha seriata Fairm., 1878, Soc. Ent. France, Ann. 47: 136 (C. China; ? PARIS).—Laboissière, 1940, Mus. Hist. Nat. Belg., Bull. 16 (3): 25 (Pekin).

Galerucida gloriosa, Jacobson, 1911, Käfer Russl. 9: pl. 59, fig. 10.—Ogloblin, 1936, Fauna USSR 26, 1: 365, 444 (Chine).

Galerucida jacobsoni Ogloblin, 1936, Fauna USSR 26, 1: 364, 446 (Ussuri, Amur, Korea, Manchuria, Peking, Ganssu; ? Moscow).—Laboissière, 1940, Mus. Hist. Nat. Belg., Bull. 16(3): 25 (synonymized with seriata Fairm.).

DISTRIBUTION: N. & C. China.

KIRIN: Yalu R., 250 km from mouth, V. 1914, Sowerby (US); 1, Kirin, 7. IX. 1923, Van Dyke (CAS). KIANGSU: 1, Nanking, 23. III. 1923, Van Dyke (CAS). ANHWEI: 1, Tai-ping-shien, X. 1932, Liu (MCZ). CHEKIANG: 9, Hangchow, 5. VI. 1924, Illingworth (BISHOP). KIANGSI: 3, Kiu-kiang, Bau (ZMB). HUNAN: 1, Chang-sha (ZMB); 2, Ouhou, C. China. HUPEH: 1, Ichang (ZMB). SZECHUAN: 1, Shin-kai-sze, Mt. Omei, Graham (US). KOREA: 1, Bau (ZMB).

497. Gallerucida lutea Gressitt and Kimoto, n. sp. Fig. 190, a.

*Male*: Pale testaceous to ochraceous, subhyaline in part: head and pronotum largely orange ochraceous, prothorax partly testaceous along base and margins; antenna ochraceous, somewhat duller in distal 1/2; scutellum and elytron testaceous to a somewhat hyaline

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pale ochraceous tinge; ventral surfaces reddish ochraceous; legs reddish ochraceous, with extreme apices of femora, extreme bases of tibiae and side of tarsi pitchy black. Body fairly glabrous above, with fine hairs on parts of head; antenna clothed with rather close fine golden buff pubescence beyond segment 3 and a few oblique hairs. Ventral surfaces moderately clothed with fine suberect pale hairs. Legs moderately clothed with similar hairs, sparser on femora.

*Head* much narrower than prothorax, nearly as broad as long; occiput strongly convex, sparsely and finely punctured, briefly grooved at middle of anterior portion, wrinkled and punctured near borders of eyes; interocular area transversely grooved behind middle of eyes, somewhat narrowly raised around antennal insertions; frontoclypeus almost merging with raised areas behind antennal insertions; raised portions almost forming a "T." Antenna probably just over 1/2 as long as body; scape arched and fairly shiny; segment 2 is 1/3 as long as 1; 3 slightly longer than 2; 4 longer that 2+3; 4-7 similar (rest missing). Prothorax slightly more than  $2 \times$  as broad as long, convex basally and concave anteriorly; side somewhat straight in basal 2/3 and then rounded and narrowed anteriorly with anterior corner expanded in a somewhat rounded fashion and projecting anteriorly; disc rather strongly uneven, with large punctures irregularly scattered on most of surfaces except for some areas before and behind middle and near base, with some small punctures between them. Scutellum subtriangular, longer than broad, rounded apically. Elytron not quite  $3 \times$  as long as broad, subparallel-sided, feebly convex at side and broadly rounded apically; disc with about 11 somewhat irregular rows of punctures, the rows also irregularly spaced and punctures irregularly spaced and varying considerably in size, with some minute punctures in interspaces, larger punctures mostly as large or larger than spaces between them longitudinally and sometimes larger than spaces between them transversely,



Fig. 190. a, Gallerucida lutea n. sp.; b, G. maxima n. sp.

particularly on outer 1/2, punctures quite strong to extreme apex. Ventral surfaces finely shagreened or wrinkled with some indistinct punctures; last abdominal sternite rounded apically but concave on central portion just before apex and more hairy in this area. Legs fairly stout and short; hind tarsal segment 1 slightly longer than 2+3 and shorter than 3-5. Length 7 mm; breadth 4.

*Female*: Antenna just over 1/2 as long as body; proportions of segments 1–7 as in male; 8–10 each barely shorter than 7; 11 longest, more slender than preceding. Length 7.6 mm; breadth 4.2.

DISTRIBUTION: S. China (N. Kwangtung, W. Hupeh).

Holotype  $\mathcal{F}$  (CAS), Lochang Distr., nr. Hunan border, N. Kwangtung Prov., VII–VIII. 1947, Tsang & Lam, for Gressitt: allotopotype  $\mathcal{P}$  (BISHOP 3321), and paratopotype  $\mathcal{P}$ , same data. Additional specimen  $\mathcal{P}$  (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 30. VII. 1948, Gressitt & Djou.

Differs from *pectoralis* Lab. in being larger, much more heavily punctured, and entirely pale on ventral surfaces and scutellum, and more extensively pale on legs.

# 498. Gallerucida maxima Gressitt and Kimoto, n. sp. Fig. 190, b.

*Female*: Large and broad, strikingly marked; body testaceous, tinged with ochraceous to pitchy reddish on center of occiput, across central portion and on postmedian area of pronotum and on most of ventral surfaces and central portions of femora; last 4 antennal segments black; elytron with 4 large pitchy black spots: 1) subbasal, extending from side of humerus to near suture and from end of 1st 1/5 to nearly middle of extreme base; 2) post humeral; occupying much of outer 1/2 of 2nd 1/4 and extending farther basally towards humerus; 3) slightly smaller than 2 and 1, on inner 1/2 of 2nd 1/4 not quite reaching suture; 4) preapical, slightly larger than 1 and nearly reaching suture and external margin; tarsal segments 3-9 dark pitchy, with claws pitchy reddish. Body fairly glabrous above but with a few minute scattered hairs and some distinct ones at apex of elytron and on head; antenna very finely clothed with subadpressed pale hairs; ventral surfaces with largely sparse suberect pale hairs, becoming denser towards apex and abdomen; legs moderately clothed with stouter oblique pale hairs, sparser on sides of femora.

Head considerably narrower than prothorax, nearly as broad as long; occiput moderately convex and sparsely punctured, depressed anteriorly in center; interocular area slightly raised transversely behind antennal insertions but with a wide median groove; frontoclypeus largely convex, not distinctly ridged except posteriorly between antennal insertions. Antenna 3/5 as long as body; scape slightly arched and punctured; segment 2 about 1/2as long as 1; 3 nearly  $2\times$  as long as 2; 4 as long as 2+3, slightly longer than 5; 5–7 subequal; 8–10 shorter; 11 about as long as 7; 5–11 gradually more compressed. Prothorax slightly more than  $2\times$  as broad as long, convex and sinuate basally with central portion nearly transverse; subevenly and arcuately concave anteriorly; side strongly sinuate, rather deeply indented just behind middle, with posterior angle quite prominent but not quite acute, and anterior corner broadly swollen, somewhat convex in dorsal outline and barely protruding at side; disc not very strongly convex, subtransversely depressed on each side of middle, rather weakly and sparsely punctured, but punctures a little larger and closer in depressed area. Scutellum subequilaterally triangular, almost acute apically. Elytron not quite  $3 \times as$  long as broad, subparallel-sided and very weakly broadened behind middle, broadly and subevenly rounded apically; disc with some partial irregular rows of medium sized punctures on inner portions of basal 1/2 almost as far as humerus, these punctures about as large as interspaces longitudinally but much smaller than interspaces transversely; remainder of surface and spaces between rows rather finely punctured with an occasional medium sized puncture on basal 2/3, most of these punctures about 1/4 or 1/5 as wide as interspaces. *Ventral surfaces* in large part finely and sparsely punctured, more heavily so on metepisternum; anterior process of metasternum large, raised and more or less vertical anteriorly; last abdominal sternite broadly rounded apically and not very strongly punctured and not depressed before apex. *Legs* fairly stout; hind tibia nearly straight; hind tarsal segment 1 slightly longer than 2+3 and about as long as 5. Length 11 mm; breadth 6.35.

#### DISTRIBUTION: Hainan I.

Holotype  $\mathcal{Q}$  (CAS), Ta-hian (Ta-sian-kwan), 600 m, N. side Five-Finger Mts., southcentral Hainan I., 16. VI. 1935, Gressitt.

Differs from other Chinese species of *Gallerucida* in its large size and striking black areas on testaceous background. Differs from *Laphris emarginata* Baly in the antennal character and in having 4 distinct spots instead of one large blackish area on elytron.

## 499. Gallerucida moseri Weise

Galerucida Moseri Ws., 1922, Tijdschr. Ent. 65: 93 (Tonkin; STOCKHOLM).

We are not certain that this species is distinct from *podontioides*. Our specimens from Kwangtung and Kiangsi appear to be *moseri*. Those from Hupeh are close to those from Kwangtung and Kiangsi, but have rather confused punctures on side of elytron.

DISTRIBUTION: N. Vietnam, S. China (Kwangtung, Kiangsi, Hupeh).

KWANGTUNG: 1, Yim na Shan, 500 m, 13. VI. 1936, Gressitt (CAS). KIANGSI: 1, Wong-sa-shue, 300 m, S of Sung-wu, 10. VII. 1936, Gressitt (CAS). HUPEH: 4, Sui-sa-pa, 1000 m, 24. VII-12. IX. 1948, Gressitt & Djou (CAS).

#### 500. Gallerucida nigrofoveolata (Fairmaire)

Eustetha nigrofoveolata Fairm., 1889, Soc. Ent. France, Ann. 58: 80 (Moupin; ?PARIS).

Galerucida nigrofoveolata, Weise, 1924, Coleopt. Cat. 78: 141.—Ogloblin, 1936, Fauna USSR 26, 1: 362, 442 (Se-Tchouen).

DISTRIBUTION: SW China (Sikang, Szechuan, Yunnan).

SIKANG: 1, Mu-pin, 1200 m, 29. VII. 1929, Graham (US). SZECHUAN: 1, NE of Mo-tau-chi, 1200 m, Wan Distr., 26. IX. 1948, Djou (CAS). YUNNAN: 2, Yunnan-sen (ZMB).

501. Gallerucida nigropicta Fairmaire Fig. 188, d-j.

Galerucida nigropicta Fairm., 1888, Soc. Ent. Belg., Ann. 32: 40 (Yunnan; PARIS).—Weise, 1912, Archiv Naturg. 78: 89.

*Eustetha nigropunctata* Fairm., 1889, Soc. Ent. France, Ann. 58: 79 (Moupin; PARIS).— Jacoby, 1890, Entomologist 23: 193, pl. 2, fig. 4 (Chang-yang).

Galerucida nigropicta subsp. fulvicollis Laboissière, 1934, Ass. Nat. Levallois-Peret, Ann.

21: 119 (Pe-yen-tsin, Yunnan; ?BRUXELLES).

Galerucida nigropunctata, Ogloblin, 1936, Fauna USSR 26, 1: 362, 442 (Chine).

DISTRIBUTION: SW China (Yunnan, Sikang).

YUNNAN: 6, ?Kunming, 1. VIII. 1944, C. L. Liu, 2001: 86 & 107 (US); 3, Yunnan, and 3, Yunnan-sen (ZMB); 8, Chao-chow-fu, 2300 m, 23. VIII-21. IX. 1914, Mell (ZMB). SIKANG: 1, Mu-pin, 1400 m, VII. 1929, Graham (US). HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan Distr., 6. VIII. 1948, Gressitt & Djou (CAS).

# 502. Gallerucida nigropunctatoides Mader

Galerucida nigropunctatoides Mader, 1942, Ent. NachrBl. 12: 58 (Soling-ho R. Vall.; MADER coll.).

DISTRIBUTION: SW China (Yunnan).

503. Gallerucida ornatipennis (Duvivier) Fig. 191.

Hylaspes? ornatipennis Duv., 1885, Stett. Ent. Ztg. 46: 397 (Chine; ?location of type).

Eustetha annulipennis Fairmaire, 1889, Soc. Ent. France, Ann. 58: 79 (Koui-Tcheou).

Galerucida ornatipennis, Weise, 1924, Coleopt. Cat. 78: 141.

Galerucida ornatipennis var. decolora Laboissière, 1934, Ass. Nat. Levallois-Peret, Ann. 21: 120 (SE and WNW Yunnan; PARIS).

Galerucida ornatipennis var. violacea Laboissière, l. c. (Pe-yen-tsing, Kweichow, Chungking; PARIS).

Galerucida ornatipennis abb. inornata & aeneicollis Mader, 1942, Ent. NachrBl. 12: 57 (Solingho R. Vall.; MADER coll.).

This species is very variable in color, the elytron ranging from purplish blue to yellow



Fig. 191. Gallerucida ornatipennis (Duvivier).

or blackish with 4 narrow yellow bands, 1-2 and 3-4 connected along suture.

DISTRIBUTION: S. China (Chekiang, Kweichow, Szechuan, Yunnan, Sikang).

CHEKIANG: 1, Tien-mu Shan, Reitter (FREY). KWEICHOW: 2, Kweiyang, 1000 m, 12. VII. 1940, Gressitt (BISHOP); 1, Shih-men-kan, VII. 1934, Graham (US). YUNNAN: 1 (FREY); 6 (ZMB); 15, Yunnan-sen (ZMB); 3, Yunnan, Donckier (ZMB); 2, Yunnan, Hauser (ZMB); 1, Kunming ?, 1. VIII. 1944, C. L. Liu 2001: 85 (US); 6, same data but 2001: 76. SIKANG: 1, Ning-yuen-fu, 2500 m, 4. VIII. 1928, Graham. SZECHUAN: 1, betw. Ya-chow & Sui-fu, 15. VI. 1929, Graham; 1, Sui-fu, 23. IV. 1925, Graham; 2, Mt. Omei, 1500 m, VIII. 1924, Graham (US); 1, Chao-tung, VII–VIII. 1934, Graham.

#### 504. Gallerucida pallida Laboissière

Galerucida pallida Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 123 (Szechuan; ?BRU-XELLES).

DISTRIBUTION: W. China (Szechuan).

505. Gallerucida pectoralis Laboissière

Galerucida pectoralis Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 123 (Yunnan, Kweichow; PARIS) (with var. humeralis, Pe-yen-tsin & Kweichow with type).

DISTRIBUTION: SW China (Kweichow, Yunnan).

YUNNAN: 1, Chao-chow-fu, W. Yunnan, 2300 m, 23. VIII-21. IX. 1914, Mell (ZMB).

# 506. Gallerucida podontioides Chen

Galerucida podontioides Chen, 1942, Notes d'Ent. Chinoise 9 (3): 37 (Yaosan, Kwangsi; Ac. SIN.).

DISTRIBUTION: SW China (Kwangsi).

# 507. Gallerucida posticalis Laboissière

Galerucida posticalis Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 123 (Yunnan-sen; ?BRUXELLES).

DISTRIBUTION: SW China (Yunnan).

# 508. Gallerucida puncticollis (Fairmaire)

Eustetha puncticollis Fairm., 1888, Soc. Ent. Belg., Ann. 32: 42 (Moupin; PARIS).

Galerucida puncticollis Weise, 1924, Coleopt., Cat. 78: 141.—Ogloblin, 1936, Fauna USSR 26, 1: 361, 443 (Chine: Se-Tchouen).

DISTRIBUTION: W. China (Sikang).

# 509. Gallerucida reflecta Laboissière

Galerucida reflecta Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 126 (Kweichow; PARIS). DISTRIBUTION: SW China (Kweichow).

510. Gallerucida reflexa Gressitt and Kimoto, n. sp. Fig. 192.

*Male*: Body elongate, somewhat oblong; reddish orange above, paler on parts of head, basal portion of pronotum, scutellum and preapical portion of elytron; ventral surfaces yellowish to orange ochraceous; legs dull yellowish, somewhat reddish ochraceous

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on swollen portions of femora and slightly reddish on outer edges of tibiae and distal portions of tarsi. Body fairly glabrous above, a few isolated hairs on apical portion of elytron and moderate hairs on anterior portion of head; antenna very briefly clothed with fine golden buff hairs beyond segment 3 and a very few slightly longer oblique hairs; ventral surfaces sparsely clothed with suberect pale hairs; legs sparsely clothed on femora, and more densely clothed on tibiae and tarsi.

*Head* distinctly narrower than prothorax, about as broad as long; occiput moderately convex, slightly depressed in center and irregularly depressed anteriorly between posterior portions of eyes; interocular area behind antennal insertions with a weakly raised area on



Fig. 192. Gallerucida reflexa n. sp.

each side and grooved medially; frontoclypeus moderately large, rather strongly raised, the raised area tapering posteriorly and terminating between anterior portions of antennal insertions. Antenna 5/6 as long as body, moderately expanded and flattened; segment 1 fairly slender and arched, moderately shiny and slightly punctured; 2nd 1/4 as long as scape; 3 nearly  $2 \times$  as long as 2; 4 nearly as long as 1-3 combined, slightly longer than 5; 5-10 gradually decreasing slightly in length; 11 slightly longer than 10. Prothorax  $2 \times$  as broad as long, suboblong but deeply emarginate behind each side; basal margin moderately convex, anterior margin slightly concave; side strongly sinuate with basal angle strongly protruding laterally and anterior angle somewhat swollen and rounded but slightly protruding laterally; disc moderately convex and slightly uneven, shallowly depressed transversely and with a partial shallow median groove anteriorly and with surfaces rather sparsely and irregularly impressed with moderately small punctures. Scutellum fairly large, convex, slightly longer than broad and rounded apically. Elytron slightly over  $3 \times$  as long as broad, subparallel-sided,

very slightly widened behind middle, evenly rounded apically; external margin slightly swollen; disc with about 10 irregular rows of moderately large punctures, rows tending to be partly geminate on central portion and mostly almost as large as interspaces longitudinally and distinctly smaller than spaces between rows, these interstices also with scattered minute punctures, all punctures becoming finer posteriorly. *Ventral surfaces* rather shiny and largely impunctate on metasternum and with small punctures or wrinkles on metepisternum and sides of abdominal sternites; last sternite with a broad median lobe rounded apically and with a rather slight indentation on each side and its surface shallowly concave. *Legs* fairly stout; hind tibia nearly straight; hind tarsal segment 1 barely longer than 2+3and hardly longer than 5. Length 8.0 mm; breadth 4.6.

*Female*: Antenna nearly 3/4 as long as body, almost as broad and flat as in  $3^{\wedge}$ . Length 7.4 mm; breadth 4.4.

Paratypes: Length 7.5-9.5 mm; breadth 4.3-5.4.

DISTRIBUTION: W. China (Szechuan).

Holotype  $\mathcal{J}$  (U. S. NAT. MUS.), Beh-luh-din, 1750 m, 50 km N of Chengtu, VII-VIII. 1933, D. C. Graham; allotopotype  $\mathcal{P}$  (US), same data; 16 paratopotypes (US, BISHOP), same data; 1 paratype  $\mathcal{P}$  (US), Mt. Omei, 3300 m, VII. 1936, Graham; 1 paratype  $\mathcal{P}$ , Shin-kai-sze, 1500 m, Omei Shan, 8. VIII. 1940, Gressitt. Both of the Omei specimens are of a less brilliant red color.

Differs from *aeneomicans* Ogl. in being non-iridescent, more completely pale, and in having prothorax emarginate instead of convex at side and elytron with heavier punctures larger and in more distinct lines and weaker punctures much smaller.

#### 511. Gallerucida rubrozonata Fairmaire Fig. 188, b.

Galerucida rubrozonata Fairm., 1889, Soc. Ent. France, Ann. 58: 75 (Moupin; PARIS).— Ogloblin, 1936, Fauna USSR 26, 1: 359, 442, fig. 146, r (Ta-tsien-lu).

Galerucida rubrozonata ab. atronotata Fairm., 1889, Soc. Ent. France, Ann. 58: 76.

DISTRIBUTION: W. China (Sikang).

SIKANG: 2, Ta-tsien-lu to Kiu-lung, Reitter (FREY); 5, nr. Ta-tsien-lu, 3000 m, 25. VI. 1923, Graham (US).

512. Gallerucida rufometallica Gressitt and Kimoto, n. sp. Fig. 193, a.

*Male*: Dorsum reddish brown with a bronzy tinge, slightly greenish on occiput; antenna reddish ochraceous basally, pitchy reddish brown beyond segment 3; ventral surfaces orange ochraceous; legs pitchy reddish brown on tibiae and tarsi and ochraceous on femora. Body nearly glabrous above, with some fairly long hairs on anterior portion of head; antenna rather closely clothed with short pale pubescence beyond segment 3 and a few longer thick hairs at apices of all segments; ventral surfaces very sparsely clothed with fine pale hairs becoming denser towards apex of abdomen; legs sparsely clothed on femora and more densely clothed on tibiae and tarsi with pale hairs.

Head much narrower than prothorax, about as broad as long; occiput convex and sparsely and minutely punctured, with a brief median groove posteriorly and another short one near anterior border which is slightly wrinkled and punctured; interocular area with an irregular transverse groove and a squarish smooth raised area on each side just behind antennal insertions, with a groove between; frontoclypeus broader than long, fairly strongly raised and minutely punctured. Antenna 3/5 as long as body, relatively slender; segment 1 arched and shiny; 2nd 2/5 as long as 1; 3 about as long as 2; 4 slightly longer than 2+3; 5 slightly shorter than 4; 5-10 subequal in length; 11 slightly longer. Prothorax nearly  $3 \times$  as broad as long, rather strongly convex basally and concave and emarginate anteriorly; sides subevenly rounded, narrower anteriorly and basally, with anterior angle enlarged, swollen and produced forward; disc feebly convex, slightly irregular toward side, with scattered moderate to fairly strong punctures, stronger toward sublateral portion. Scutellum subtriangular, slightly longer than broad, rounded apically. Elytron nearly  $3 \times$ as long as broad, subparallel-sided in basal 2/3, with margins slightly irregular and subevenly rounded to near sutural angle which is considerably produced and rounded apically; disc with about 10 irregular rows of punctures, the rows in part double or changing

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from single to double and in part almost unrecognizable as rows with scattered much finer punctures in interspaces, most of the major punctures subequal in size and as large as the largest pronotal punctures, punctures fairly distinct to extreme apex. *Ventral surfaces* shiny, largely impunctate on metasternum and somewhat vaguely punctured or wrinkled on metepisternum and sides of abdominal sternites; last sternite subrounded apically, with a moderate apical depression. *Legs* fairly stout; femora rather round and flat; tibiae slightly irregular; hind tarsal segment 1 longer than 2+3 and slightly shorter than 2-5. Length 4.9 mm; breadth 3.3.



Fig. 193. a, Gallerucida rufometallica n. sp.; b, G. submetallica n. sp.

*Female*: Antenna barely over 1/2 as long as body; last abdominal sternite with a somewhat wider and shallower apical depression. Length 5.0 mm; breadth 3.4.

DISTRIBUTION: W. China ("Tibet").

Holotype ♂ (AMER. MUS. NAT. HIST.), "Tibet Prov.", probably Sikang, F 4722; allotopotype ♀ (BISHOP 3322), same data.

Differs from *aeneomicans* Ogloblin in being much smaller, relatively shorter, less convex, darker in general color but with paler head and with much heavier punctures on pronotum and elytron.

# 513. Gallerucida serricornis (Fairmaire)

Eustetha serricornis Fairm., 1888, Soc. Ent. Belg., Ann. 32: 41 (Moupin; PARIS).

Galerucida serricornis, Weise, 1921, Archiv Naturg. 78: 90.—Ogloblin, 1936, Fauna USSR 26, 1: 360, 442 (Se-Tchouen).

DISTRIBUTION: W. China (Sikang).
### 514. Gallerucida singularis Harold

Galerucida singularis Har., 1880, Stett. Ent. Ztg. 41: 146 (Darjeeling; ?loc. of type).— Weise, 1921, Archiv Naturg. 78: 90.

Galerucida Gebieni Weise, 1922, Tijdschr. Ent. 65: 92 (Fukien; STOCKHOLM). New Synonymy. Gallerucida singularis, Maulik, 1936, Fauna India, Galeruc., 551 (Mungpu, Assam, Burma, Tonkin).

DISTRIBUTION: Himalaya, N. Vietnam, S. China (Kwangtung, Fukien, Szechuan).
KWANGTUNG: 2, Tsha-jiu San, VII-IX. 1910, Mell (ZMB); 1, Hong Kong, 3. III.
1932, Hadden (BISHOP); 1, Yim-na San, 14. VI. 1936, Gressitt; 1, exposed ridge, 900 m,
Lung-tau Shan, 8. VI. 1947, Gressitt & Lam (CAS). FUKIEN: 1, nr. Foochow, 1924, Kellogg (US); 1, Sa-tai-hion, Hok-chiang, Futsing Distr., 4. X. 1932, Tang (LINGNAN). SZE-CHUAN: 1, Wanhsien, 3. X. 1948, Djou (CAS); 1, Chungking, 600 m, 6. V. 1930, Graham;
1, Sui-fu, 1923, Graham (US).

### 515. Gallerucida speciosa Laboissière

Galerucida speciosa Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21:127 (Pe-yen-tsin; ?Bruxelles).

DISTRIBUTION: SW China (Yunnan).

#### 516. Gallerucida spectabilis Laboissière

Galerucida spectabilis Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 125 (Pe-yen-tsin, Moupin; PARIS).

DISTRIBUTION: W. China (Yunnan, Sikang).

SIKANG: 2, Ta-tsien-lu to Kiu-lung, Reitter (FREY).

### 517. Gallerucida submetallica Gressitt and Kimoto, n. sp. Fig. 193, b.

*Female*: With dull metallic colors, mostly pitchy reddish black above with bronzy and greenish tinges; antenna dark pitchy red on segments 1-3 and pitchy black on remainder; ventral surfaces pitchy brown strongly tinged with greenish or bronzy on thorax and more reddish brown and less metallic on abdomen; legs dark pitchy tinged with greenish on coxae and bronzy to slightly bluish on remainder. Body largely glabrous with a very few minute pale hairs anteriorly and posteriorly; ventral surfaces with sparse scattered pale hairs, a little denser on apex of abdomen; legs moderately clothed with oblique golden buff hairs, but sparser on sides of femora.

Head much narrower than prothorax, about as broad as long; occiput moderately convex, with scattered moderate punctures and depressed and slightly grooved and ridged anteriorly; frontoclypeus transversely rather strongly raised and with a median ridge extending backward between antennal insertions and more or less continuing with subtransverse postantennal raised areas. Antenna 3/5 as long as body, moderately stout and only slightly flattened; scape moderately long, arched and slightly punctuate; segment 2 about 1/3 as long as 1; 3 nearly 2 × as long as 2; 4 nearly as long as 2+3; 4 slightly longer than 5; 5–10 subequal; 11 slightly longer than 1. Prothorax 2 × as broad as long, strongly convex basally and emarginate and concave apically; side fairly straight basally but arching gradually inward anteriorly with anterior angle swollen and projecting somewhat forward

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and basal angle barely projecting; disc moderately convex, with a transverse-arcuate groove, which is fairly narrow, more or less parallel to basal margin and slightly closer to it than to anterior margin, and interrupted in central portion; surface fairly closely impressed with rather deep punctures which are in part as large as interspaces. Scutellum almost as broad as long, fairly broadly rounded apically. Elytron  $2.5 \times$  as long as broad, slightly widened to just behind middle and then evenly and broadly rounded apically; disc strongly and rather closely punctured, the major punctures arranged in about 10 rather irregular rows which are somewhat confused in posthumeral area, the interspaces with fairly distinct punctures mostly about 1/3 to 1/2 as large as major punctures, interspaces between major punctures longitudinally mostly smaller than punctures and interspaces between minor punctures mostly barely larger than those punctures. Ventral surfaces moderately shiny, largely impunctate on metasternum and rather closely punctured on metepisternum, more finely and vaguely punctured and somewhat wrinkled or shagreened on abdominal sternites and lateral edge of metasternum; last abdominal sternite rather heavily punctured and slightly concave before the rounded apex. Legs fairly stout; hind tibia nearly straight; hind tarsal segment 1 slightly longer than 2+3 and barely longer than 5. Length 6.8 mm; breadth 4.6.

DISTRIBUTION: E. Mongolia.

Holotype ♀ (Zool. Mus. BERLIN), Chan-heou, E. Mongolia.

Differs from *speciosa* Baly in being more depressed, much less brilliantly metallic and much less smooth, with more irregular pronotum and much more coarsely and unevenly punctured elytron.

518. Gallerucida tenuefasciata Fairmaire Fig. 188, c.

Galerucida tenuefasciata Fairm., 1888, Soc. Ent. Belg., Ann. 32: 40 (Yunnan; PARIS).

Galerucida potanini Ogloblin, 1936, Fauna USSR 26, 1: 358, 442, fig. 146 (Ta-tsien-lu; ? Moscow). New Synonymy.

DISTRIBUTION: W. China (Yunnan, Sikang).

SIKANG: 2, betw. Ning-yen-fu & Den-shiang-uin, 2000 m, 5. VIII. 1928, Graham (US); 1, Ning-yuen-fu, 2400 m, 13. VIII. 1928, Graham; 1, 40 km W of Ta-tsien-lu, 1500 m, 20. VI. 1928, Graham (US); 1, Li-to, 1500–2200 m, 25. VIII. 1930, Graham.

519. Gallerucida tenuicornis (Laboissière), NEW COMBINATION

Hylaspes tenuicornis Lab., 1931, Soc. Ent. France, Ann. 100: 140 (Yunnan; ? BRUXELLES). DISTRIBUTION: SW China (Yunnan).

# 520. Gallerucida thoracica (Jacoby)

Eustetha thoracica Jac., 1888, Zool. Soc. Lond., Proc. 1888: 348 (Kiu-kiang; BM); 1890, Entomologist 23: 193 (Chang-yang).

Galerucida (Eusthetha) thoracica, Weise, 1924, Coleopt. Cat. 78: 142.

Galerucida thoracica, Ogloblin, 1936, Fauna USSR 26, 1: 362, 443 (C. Chine).

DISTRIBUTION: S. China (Kiangsi, Hupeh).

S. CHINA: 2, Mell (ZMB).

### 521. Gallerucida tibialis (Laboissière), NEW COMBINATION

# Hylaspes tibialis Lab., 1931, Soc. Ent. France, Ann. 100: 138 (Yunnan; ? BRUXELLES). DISTRIBUTION: SW China (Yunnan).

### 522. Gallerucida tienmushana Gressitt and Kimoto, n. sp. Fig. 194, a.

*Female*: Body largely orange ochraceous, in part pitchy black or testaceous: head pitchy black, partly reddish on mandible and palpi; antenna dull reddish brown, pitchy and shiny on segment 1-3; prothorax pitchy black, slightly more reddish near anterior corners; scutellum orange ochraceous; elytron orange ochraceous basally and laterally with most of upper postmedian portion of disc and apex yellowish testaceous; ventral surfaces orange ochraceous, paler on side of apex of abdomen; legs reddish brown, slightly pitchy on fore and mid leg and orange ochraceous on hind leg with basal portions of tibiae darker in each case. Body nearly glabrous above with a few pale hairs on anterior portion of head and posterior elytral margin; ventral surfaces quite sparsely hairy; hairs also sparse on femora but closer on tibiae and tarsi; antenna with segments 3-11 closely clothed with subadpressed reddish buff hairs, and with a few longer oblique hairs on apices of segment.

*Head* much narrower than prothorax, nearly as broad as long; occiput feebly convex and quite sparsely but distinctly punctured, anterior portion with a triangular concavity in middle which continues forward as a groove between hind borders of antennal insertions; frontoclypeus broader than long, quite strongly raised, with raised area tapering to acute Antenna slightly more than 1/2 as long as body, not point between antennal insertions. very stout or flattened; scape feebly arched, distinctly punctured; segment 2 about 3/5 as long as 1; 3 about 1/3 again as long as 2; 4 about as long as 1+2 and slightly longer than 5; 5-8 decreasing successively in length; 8-10 decreasing very slightly in length; 11 about as long as 5. Prothorax about  $2 \times$  as broad as long, slightly irregularly convex on basal margin, evenly emarginate-concave on anterior margin; side straight in basal portion curving slightly outward just anterior to middle and curving strongly inward to anterior corner which is expanded, flattened and projecting forward and slightly outward; disc somewhat evenly convex except for a rather deep obliquely oval depression on middle of each side, the depression coarsely and deeply punctured; remainder of surface rather finely and sparsely punctured. Scutellum subtriangular, slightly longer than broad and subacute apically. *Elytron* somewhat less than  $3 \times$  as long as broad, feebly convex at side and widest just behind middle, evenly narrowed and subevenly rounded apically; disc with about 10 rows of subregular punctures which decrease in size from posthumeral area to apex, the punctures mostly about as large as interspaces longitudinally on central portion and about 1/3to 1/4 as wide as interspaces transversely, but some punctures larger than this; interspaces with fine but distinct punctures. Ventral surfaces rather shiny and feebly punctured, with a few punctures and irregularities at sides of abdominal segments; last abdominal sternite evenly rounded posteriorly; prosternum narrow but complete between coxae; metasternal process hardly raised and not projecting forward. Legs stout; hind tibiae feebly arched; hind tarsus with segment 1 slightly longer than 2+3 and slightly shorter than 2-5 combined. Length 7.0 mm; breadth 4.4.

*Paratype*: Agreeing with type except that head abnormal with right antenna and antennal insertion missing at appropriate place, but a possible vestigial antenna between eye



Fig. 194. a, Gallerucida tiemushana n. sp.; b, G. tricolor n. sp.; c, G. trinotata n. sp.

and base of mandible, with area of antennal insertion covered by a slightly enlarged postantennal swelling and anterior portion of occiput distorted and right eye slightly smaller than left. Length 6.3 mm; breadth 3.8.

DISTRIBUTION: E. China (Chekiang).

Holotype  $\mathcal{P}$  (Mus. G. FREY), Tien-mu Shan, Chekiang Prov.; paratopotype  $\mathcal{P}$  (Bishop), same data.

Differs from *ornatipennis* (Duvivier) in being slightly narrower and less convex, in having pronotum deeply impressed on each side with heavy punctures in impression and very fine punctures otherwise, and in having elytron more regularly punctured in rows, and with punctures in interspaces between rows much finer.

#### 523. Gallerucida tonkinensis Laboissière

Galerucida tonkinensis Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 120 (Hoa-binh, Tonkin; PARIS).

DISTRIBUTION: N. Vietnam.

### 524. Gallerucida tricincta Laboissière

Galerucida tricincta Lab., 1934, Ass. Nat. Levallois-Peret, Ann. 21: 116, fig. 4 (Pe-yen-tsin & Djo-kou-la, N. Yunnan border; PARIS).

DISTRIBUTION: SW China (N. Yunnan).

YUNNAN: 1, Djo-kou-la, 1200 m, NW Yunnan (US).

525. Gallerucida tricolor Gressitt and Kimoto, n. sp. Fig. 194, b.

*Male*: Subelongate oval, strongly convex; yellowish testaceous to reddish brown or pitchy black: head reddish ochraceous; pronotum reddish ochraceous with most of basal margin and central portion of basal 1/2 (except for a small pale spot), pitchy black; scutellum pitchy reddish; elytron black to pitchy black with a large basal and a large

preapical pale creamy yellow spot, the basal spot reaching external margin and most of basal margin and leaving a narrow blackish area along inner part of base, scutellum and suture; 2nd spot nearly as large as 1st, but not reaching suture or external margin partly pitchy brown near base and on apical portion as well as extreme apical portion of suture; ventral surfaces largely pitchy black on metathorax, somewhat pitchy reddish on mesepisternum, reddish pitchy on abdomen, and reddish ochraceous on pro- and mesosterna as well as coxae; legs with femora ochraceous and tibiae and tarsi pitchy black but slightly reddish on distal portion of tarsi. Body largely glabrous above, a few pale hairs on anterior portion of head; antenna with rather close minute adpressed pale hairs beyond segment 3 and a few longer oblique hairs on apices of most segments; ventral surfaces largely glabrous on thorax but with a very few sparse hairs and with moderately sparse hairs on abdomen but becoming denser near apex; legs with femora rather sparsely clothed but tibiae and tarsi much more closely clothed with oblique pale hairs.

Head distinctly narrower than apex of prothorax, about as broad as long; occiput evenly convex, finely and sparsely punctured, depressed and wrinkled anteriorly; interocular area with an obliquely transverse raised area behind each antennal insertion, the 2 divided by short median groove; frontoclypeus transversely raised anteriorly and longitudinally raised almost to posterior borders of antennal insertions. Antenna slightly more than 1/2 as long as body; scape slightly arched, not very long; segment 2 nearly 1/2 as long as 1; 3 about  $1.5 \times$  as long as 2; 4 as long as 2+3; 5 slightly shorter than 4, 5-10 subequal; 11 barely longer than 1. Prothorax nearly  $2 \times$  as broad as long, moderately convex basally and fairly strongly concave apically; side somewhat straight on basal portion and curving slightly inward anteriorly, with anterior angle swollen and rounded, projecting forward; hind angle not projecting; disc moderately convex, with a sinuate depressed transverse line on each side slightly behind middle but not reaching central portion; surface minutely and sparsely Scutellum slightly longer than broad, triangular, rounded-subacute apically. punctured. *Elvtron* nearly  $3 \times$  as long as broad, subparallel-sided, hardly widened behind middle, evenly narrowed apically; disc strongly convex with about 10 rows of moderate punctures, the rows partly irregular or unrecognizable externally and postmedially, the punctures forming these rows irregularly placed but mostly much smaller than interspaces longitudinally and still smaller than interspaces transversely, the interspaces with very minute irregular Ventral surfaces rather smooth and shiny on metasternum, metasternal process punctures. strongly raised, projecting forward and rounded-vertical anteriorly; metepisternum moderately punctured; abdomen slightly punctured or irregular at side; last sternite with a broad short rounded lobe at apex which is shallowly concave and has a slight indentation on each side. Legs stout, femora rather shiny and sparsely punctured; hind tibia feebly sinuate; hind tarsal segment 1 slightly longer than 2+3 and longer than 5. Length 6.2 mm; breadth 3.5.

# DISTRIBUTION: SW China (Yunnan).

Holotype & (Mus. G. FREY), Soling-ho River Valley, Yunnan Prov.

Differs from *nigropicta* Fairmaire in being partly reddish, in having 2 wide broken bands on elytron instead of 3 irregular bands or small spots, and also in having elytron more narrowed posteriorly and less heavily and distinctly punctured and in having metasternal process much more pronounced.

# 526. Gallerucida trinotata Gressitt and Kimoto, n. sp. Fig. 194, c.

*Female*: Pale testaceous to reddish brown tinged with purplish or marked with black: head shiny black; antenna pitchy brown, slightly more reddish on segments 1-3; pronotum yellowish, with 3 distinct pitchy brown spots arranged subtransversely; scutellum ochraceous, hyaline. Elytron bright reddish brown with a strong purplish tinge; ventral surfaces testaceous, tinged with reddish brown on thoracic pleura and side of metasternum; legs largely reddish brown, largely pale on posterior portions of fore coxa and dark on most of middle coxa; outer edges of tibiae and upper portions of tarsi rather dark reddish brown. Body largely glabrous above, with a few minute hairs near apex of elytron and scattered hairs on anterior portions of head; antenna rather closely clothed with adpressed pale hairs beyond segment 3 and with a few longer oblique hairs on most of segments; ventral surfaces with very sparse suberect pale hairs; legs with similar sparse hairs on femora and much denser oblique golden buff hairs on tibiae and tarsi.

Head considerably narrower than prothorax, nearly as broad as long, occiput evenly convex and very sparsely punctured, with an obtuse depressed area anteriorly at center; interocular area transversely raised behind antennal insertions and with a deep median groove; frontoclypeus subtriangular, rather strongly raised, the raised area narrowing and projecting between antennal insertions. Antenna just over 1/2 as long as body, very slightly flattened and broadened; scape arched and shiny, with a few punctures; segment 2 about 1/3 as long as 1; 3 nearly 1/2 again as long as 2; 4 about as long as 1+2, distinctly longer than 5; 5–10 decreasing very slightly in length; 11 longer than 1 and shorter than 4. Prothorax about  $2 \times as$  broad as long, feebly convex basally and rather strongly arcuate emarginate anteriorly; side nearly straight in basal 2/3 and then curving strongly inward anteriorly, with anterior angle strongly swollen, somewhat arched and projecting anteriorly and with a strong pore on upper surface near the very slightly laterally projecting angle; basal angle hardly projecting but with a strong subdorsal pore; disc moderately convex, with a deep subrounded cavity between middle and side slightly larger than lateral spot and having several large punctures within the spot area; remainder of surface very smooth and sparsely and minutely punctured. Scutellum longer than broad, subtriangular, roundedacute apically. Elytron  $3 \times$  as long as broad, slightly broadened from behind humerus to slightly behind middle and then evenly narrowed and broadened apically; disc with about 10 subregular rows of fairly large punctures, the rows mostly oblique on premedian portion and the punctures about as large as interspaces longitudinally and about 1/4 as large as interspaces transversely, spaces between rows with sparse minute punctures, all punctures fairly distinct to extreme apex. Ventral surfaces finely and sparsely punctured, metepisternum somewhat shagreened; sides of abdominal sternites somewhat irregular and in part more heavily punctured; last abdominal sternite broadly rounded apically and without a concavity. Legs fairly stout; hind tibia nearly straight; hind tarsal segment 1 not quite as long as 3-5 combined. Length 6.5 mm; breadth 3.6.

DISTRIBUTION: W. China (Szechuan).

Holotype ♀ (BISHOP 3323), Pe-pei, 300 m, N of Chungking, Szechuan Prov., 27. VII. 1940, Gressitt.

Differs from *puncticollis* Fairmaire in having 3 instead of 5 spots on pronotum, in lacking spots on abdomen, and in having elytron much more heavily punctured, with punctures distinct to apex.

527. Gallerucida variolosa Laboissière

Galerucida (Eustheta) variolosa Lab., 1938, Arkiv Zool. 30 A (11): 4, 19 (Kiang-Si, Kiangsu; PARIS).

DISTRIBUTION: E. China (Kiangsi, Kiangsu, Chekiang, Fukien).

CHEKIANG: 1, tentatively referred here, Hangchow, 10. V. 1923, Van Dyke (CAS). FUKIEN: 1, Pu-cheng City, 16. VI. 1945, Maa (BISHOP).

# Subfamily ALTICINAE

This is the second largest subfamily of Chrysomelidae in China, with about 310 species for China and Korea. Our material at hand is quite limited, and the treatment is somewhat incomplete. Nonarthra (nos. 1–7)

Nonarinra (nos. 1–7)

coreanum; 2. cyaneum (=nigricolle); 3. formosense; 4. postfasciatum; 5. pulchrum;
 variabilis; 7. viridiceps.

Psylliodes (nos. 8–16)

8. angusticollis (=sinensis); 9. attenuata; 10. brettinghami; 11. cucullata gansuica; 12. difficilis; 13. obscurofasciata; 14. plana; 15. punctifrons; 16. subrugosa.

Eutrea (no. 17)

17. bowringii.

Sangariola (nos. 18-19)

18. fortunei (=bicostata var. atriceps); 19. punctatostriata.

Lipromorpha (no. 20) 20. difficilis.

Epitrix (nos. 21–22)

21. setosella; 22. abeillei.

Micrepitrix (nos. 23–24) 23. coomani; 24. laboissierei.

Lipromima (no. 25)

25. minuta.

Omeiana (no. 26) 26. rufipes.

Leptodibolia (no. 27) 27. cyanipennis.

Griva (nos. 28-29)

28. nigricollis; 29. regularis.

Crepidosoma (nos. 30-31)

30. incertum; 31. cribricolle.

Pseudodera (nos. 32-33)

32. inornata; 33. xanthospila (=balyi).

Crepidoderoides (no. 34)

34. choi.

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Sinocrepis (no. 35)
     35. micans.
 Asiorestia (nos. 36-46)
     36. cheni; 37. convexa; 38. hummeli; 39. interpunctata; 40. laevicollis; 41. manobioides;
 42. minima; 43. obscuritarsis; 44. oculata; 45. resina; 46. sublaevis.
 Xuthea (nos. 47-48)
     47. orientalis; 48. sinuata.
 Crepidodera (=Chalcoides) (nos. 49–53)
     49. aurata; 50. picipes; 51. pluta; 52. sinensis; 53. viridis.
Chaetocnema (nos. 54-75)
     54. bella; 55. concinnicollis; 56. concinnipennis; 57. costulata; 58. cylindrica; 59.
hortensis; 60. ingenua (=japonica, =sinuata); 61. modesta; 62. basalis; 63. concinna (=
lewisii); 64. discreta discreta; 65. discreta yunnanica; 66. fortecostata; 67. hainanensis; 68.
koreana; 69. kwangsiensis; 70. major manchurica; 71. simplicifrons; 72. sinuata; 73. tonki-
nensis; 74. tristis; 75. yaosanica.
Podontia (nos. 76-79)
     76. affinis; 77. dalmani; 78. lutea; 79. soriculata.
Ophrida (nos. 80-82)
     80. scaphoides; 81. spectabilis (=rufoflava); 82. xanthospilota.
Throscoryssa (no. 83)
     83. citri.
Podagricomela (nos. 84-86)
     84. cyanea; 85. nigricollis; 86. weisei.
Clitea (nos. 87-89)
     87. fulva; 88. metallica; 89. shirahatai.
Mantura (nos. 90-91)
     90. bicoloripes; 91. rustica.
Podagricella (no. 92)
    92. cyanipennis.
Neorthaea (nos. 93–97)
     93. coerulea; 94. flavipes; 95. micans; 96. piceicollis; 97. suturalis.
Nisotra (no. 98)
    98. orbiculata.
Tebalia (no. 99)
    99. coeruleata.
Colpodes = (Acrocrypta) (no. 100)
    100. convexa.
Aphthonoides (nos. 101-102)
    101. beccarii; 102. sagaris.
Dibolia (nos. 103-106)
    103. ordosana; 104. potanini; 105. sinensis; 106. velox.
Philopona (nos. 107-108)
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107. mouhoti; 108. vibex.

Hyphasis (=Hyphasoma) (nos. 109–114)

109. flava; 110. fulvicornis; 111. fuscifrons; 112. inconstans; 113. moseri; 114. tristis. Hespera (nos. 115-127)

115. aterrima; 116. brevipilosa; 117. byrsa; 118. cavaleriei; 119. crassicornis; 120. fulvicornis; 121. lomasa; 122. longicornis; 123. oculata; 124. sericea; 125. sinensis; 126. tenebrosa; 127. viridis.

Letzuella (nos. 128–129)

128. viridis; 129. yonyonae.

Laotzeus (no. 130)

130. gracilicornis. Argopistes (nos. 131–136)

131. biplagiatus; 132. coccinelliformis; 133. hoenei; 134. sinensis; 135. tsekooni; 136. unicolor.

Pentamesa (nos. 137-138)

137. nigrofasciata; 138. trifasciata.

Chilocoristes (nos. 139–141)

139. funestus; 140. pallidus; 141. smilacis.

Argopus (nos. 142–152)

142. fortunei; 143. frontoclypeatus; 144. koreanus; 145. melanocephalus; 146. nigrifrons; 147. nigripes; 148. nigritarsis; 149. similis; 150. splendens; 151. subfurcatus; 152. unicolor. Sphaeroderma (nos. 153–173)

153. alienum; 154. alternatum; 155. apicale; 156. atrithorax; 157. balyi hupehensis; 158. chongi; 159. confine; 160. fraternale; 161. fuscicorne; 162. melli; 163. nilum; 164. piceum; 165. postfasciatum; 166. resinulum; 167. rubi; 168. rufotestaceum; 169. seminigrum; 170. separatum; 171. seriatum; 172. sinuatum; 173. subfurcatum.

Lesneana (no. 174)

174. rufopicea.

Parargopus (no. 175)

175. sphaerodermoides.

Schenklingia (no. 176)

176. ornatipennis.

Parathrylea (nos. 177–178) 177. apicipennis; 178. septempunctata.

Taizonia (nos. 179-180)

179. maculata; 180. ochracea.

Hemipyxis (nos. 181–200)

181. caenotes; 182. chinensis; 183. dichroa; 184. facetus; 185. flavipennis; 186. foveifrons; 187. gibbosulus; 188. jeanneli; 189. kiangsuana; 190. limbatus; 191. lusca; 192. moseri; 193. nigricornis; 194. plagioderoides (= yunnanica); 195. privignus; 196. quadrimaculata; 197. similis; 198. tendomarginalis; 199. troglodytes; 200. variabilis.

Longitarsus (nos. 201–232)

201. arakii; 202. bimaculatus; 203. brevicornis; 204. consobrinellus; 205. cyanipennis; 206. dorsopictus; 207. femoratus; 208. fusus; 209. godmani; 210. haemorrhoidalis (=tsii); 211. hedini; 212. hopeianus; 213. hsienweni; 214. kwangsiensis; 215. lewisii; 216. muralis; 217. nasturtii; 218. paitanus; 219. piceorufus; 220. pinfanus; 221. pulexoides; 222. puncticeps; 223. rugithorax; 224. sinensis; 225. sjostedti; 226. stramineus; 227. subniger; 228. subruber; 229. szechuanicus; 230. tsinicus; 231. violentus; 232. yangsoensis.

Luperomorpha (nos. 233-241)

233. antennata; 234. birmanica; 235. boja; 236. nigra; 237. nobilis; 238. rubra; 239. suturalis; 240. xanthodera (=similis); 241. yunnanensis.

Aphthona (nos. 242–267)

242. binotata; 243. brevis; 244. chinchihi; 245. chinensis; 246. coreana; 247. erythropoda; 248. foudrasi; 249. hananoi; 250. howenchuni; 251. interstitialis; 252. laeta; 253. licentana; 254. melanopoda; 255. opaca; 256. piciventris; 257. renhwai; 258. rufosanguinea; 259. sajanica; 260. seriata; 261. silinica; 262. splendida; 263. strigosa; 264. suturanigra; 265. varipes; 266. yangsoensis; 267. yaosanica.

Trachyaphthona (nos. 268–272)

268. cyanea; 269. lewisi; 270. obscura; 271. sordida; 272. suturalis.

Phyllotreta (nos. 273–278)

273. nemorum; 274. ochripes; 275. rectilineata; 276. striolata; 277. vittula; 278. yunnanica.

Batophila (nos. 279–282)

279. acutangula; 280. sinensis; 281. subcostata; 282. subplana.

Sinaltica (no. 283)

283. exigua.

Aphthonomorpha (no. 284)

284. collaris.

Manobidia (nos. 285-287)

285. intermedia; 286. nipponica; 287. simplicithorax.

Liprus (nos. 288–289)

288. nuchalis; 289. punctatostriatus.

Ogloblinia (no. 290) 290. affinis.

Manobia (nos. 291–292)

291. sinensis; 292. piceipennis.

Phygasia (nos. 293-296)

293. dorsata; 294. eschatia; 295. fulvipennis; 296. ornata.

Lactica (nos. 297–298)

297. hanoiensis; 298. perraudieri.

Altica (nos. 299-310)

299. ampleophaga koreana; 300. brevicosta; 301. caerulescens; 302. cirsicola; 303. coerulea; 304. cyanea; 305. derserticola; 306. kozlovi; 307. latericosta; 308. pamiranica; 309. tamaricis weisei; 310. viridicyanea.

# Gressitt & Kimoto: Chrysomelidae of China

# Key to Chinese genera of Alticinae

1.	Anterior coxal cavities closed behind 2
	Anterior coxal cavities open behind 36
2(1).	Antenna 9 or 10-segmented; hind tarsus inserted before apex of tibia
	Antenna 11-segmented 4
3(2).	Antenna 9-segmented, terminal segments usually flattened; body ovate Nonarthra
	Antenna 10-segmented, terminal segments usually thickened; body elliptical
	Psylliodes
4(2).	Pronotum and elytra pubescent 5
	Pronotum and elytra not pubescent 12
5(4).	Hind tibia with 1 apical spine
	Hind tibia with 2 apical spines; body elongate, densely covered with adpressed
	hairs; postantennal tubercles contiguous Eutrea
6(5).	Length exceeding 5.0 mm; pronotum with ante-basal and anterior, transverse
	impressions, disc foveolate7
	Length 1.2-3.5 mm; pronotum with ante-basal, transverse impression (anterior
	impression may be prominent in some genera)
7(6).	Antenna thickly pubescent, middle segments dilated; claws bifid (Pic, 1927;
	type: L. sculpturata Pic; Tonkin) Laboissierea*
	Antenna not thickly pubescent, filiform; claws appendiculate Sangariola
8(6).	Prothorax constricted behind middle
	Prothorax not distinctly constricted behind 10
9(8).	Pronotum longer than broad, sides strongly constricted behind middle Lipromorpha
	Pronotum broader than long, sides weakly constricted (Chūjô & Kimoto, 1960;
10(0)	type: Liprus hirtus Baly; Japan) Pseudoliprus*
10(8).	Pronotum transverse, almost as broad as base of elytra
11 (10)	Pronotum quadrate, much narrower than breadth of elytra Lipromima
11 (10).	Pronotum with ante-basal, transverse impression shallow, bounded laterally by
	a small, deep impression deep attaining lateral margin of property
	Ante-basal, transverse impression deep, attaining fateral margin of pronotum
12 ( 4 )	Calenceiform : ontonno filiform : pronotum transvorsaly depressed in contar or
12(4).	Galeruchorm; antenna innorm, pronotum transversely depressed in center of
	bind tibia with a small anical spine other tibiae unarmed
	Differing from above combination of characters
13 (12)	Hind tibia with a bifid anical spine
15 (12).	Hind tibia without a bifid apical spine
14(13)	Pronotum with an ante-basal, transverse impression
1.(10).	Pronotum without a distinct ante-basal impression
15 (14).	Length of ante-basal impression less than $1/2$ of the breadth of pronotum.
()	without a fovea at each end of impression (Chen, 1933; type: L. cyanipennis
	Chen; Tonkin) Laboissierella*
	Length of ante-basal impression more than $1/2$ of breadth of pronotum, with
	a fovea at each end of impression 16
16 (15).	Scutellar row of punctures not attaining posterior $1/2$ of elytron; ante-basal

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	impression of pronotum deep 17
	Scutellar row of punctures attaining apex of elytron; ante-basal impression of
17 (10)	pronotum shallow, or obsolete Griva
17 (16).	Postantennal tubercies distinct
	Postantennal tubercles absent; sinuate furrow partially circumscribing base of
10 (17)	antenna and extending to inner margin of eye Crepidosoma
18 (17).	Postantennal tubercle elongate, extending to interantennal space
10 (10)	Postantennal tubercles short, not extending to interantennal space
19 (18).	Elytral punctures arranged in paired rows Pseudodera
20 (10)	Elytral punctures arranged in single rows Crepidoderoides
20 (18).	Ante-basal impression mesally sinuate, with ends bounded by a longitudinal
	impression not attaining basal margin of pronotum (Chen, 1933; type: H.
	tonkinensis Chen) Haemaltica*
	Ante-basal impression not mesally sinuate, with ends bounded by a short,
21 (20)	longitudinal impression extending to basal margin of pronotum
21 (20).	Ante-basal impression distinctly separated or distant from basal margin of
	pronotum; elytron with distinct row of punctures
	Ante-basal impression not distinctly separated from basal margin of pronotum;
22 (21)	Destantanzal typerales transverse distinctly concreted from yortex by a grootex
22 (21).	Postantennal tubercles transverse, distinctly separated from vertex by a groove 25
	rostantennar tubercies founded, contiguous, not distinctly separated from ver-
22 (22)	Lex
23 (22).	Length 0.5-6.0 min, apical segments of antenna not unated, postantennal tu-
	Length 2.0.40 mm; anical segments of antenna weakly dilated; postantennal
	tubercles not widely separated (-Chalcoides)
24 (14)	Mid and hind tibiae excavated anically: each side of excavation with a mar-
24 (14),	vind and mind toble excertated apleany, each side of excertation with a mar
	Mid and hind tibiae not as above
25 (24).	Rows of elvtral punctures easily counted: disc of elvtron with 9 complete
().	rows: interantennal space usually broad
	Rows of elvtral punctures indistinct or confusedly punctate
26 (25)	Body massive length 8–17 mm : pronotum with fossettes : claws bifid
20 (25).	Differing from above combination of characters
27 (26).	Prosternum triangularly excavated to fit mesosternum: hind femur angularly
27 (20).	dilated on inner edge
	Prosternum truncate along posterior margin; hind femur not angularly dilated
	Ophrida
28 (26).	Fore tibia armed with 1 apical spine, mid and hind tibiae with 2 apical spines;
	claws simple
	Tibiae unarmed or with 1 apical spine
29 (28).	Body subquadrate; each tibia armed with 1 apical spine Podagricomela
	Body not subquadrate; front tibia unarmed apically
30 (29).	Dorsum granulate; antennae widely separated, each insertion near or touching
	inner margin of eye Clitea
	Dorsum not granulate; elytron with scutellar row of punctures extending to

**B** 

	posterior $1/2$ ; sides of pronotum with a short, longitudinal impression at
31 (25)	Claws simple : antero-lateral area of pronotum directed ventrad, not visible
51 (25).	from above
	Claws appendiculate
32 (31).	Vertex evenly convex, disc not elevated, sides not deeply excavated above eye 33 Vertex with disc longitudinally elevated; sides deeply excavated above eye Neorthaea
33 (32).	Sides of pronotum with opposing, short, longitudinal impressions situated on anterior and basal margins Nisotra
	Pronotum not as above
34 (33).	Hind tarsus inserted subapically on tibia; body rounded, metallic; length 4 mm (Maulik, 1926; type: <i>Amphimela cyanea</i> Duvivier; India, Vietnam, Tai- wan) Glaucosphaera*
	Hind tarsus inserted apically on tibia
35 (34).	Abdominal sternite 1 not longer than 2Tebalia
	Abdominal sternite 1 distinctly longer than 2; apical segments of maxillary pal-
0((1))	pus forming a spherical globule; terminal segment of antenna flattened Colpodes
36(1).	Hind femur with a long, straight, apical spine, exceeding tiola in lengthAphthonoides
37 (36)	Hind tibia with broad anical spine ending in 2 or 3 teeth
57 (50).	Hind tibia with ordad, apical spine chang in 2 or 5 teeth
38 (37).	Body ovate or subrotundate, metallic; 3rd tarsal segment bilobed; hind tibia
	with apical spine bifid Dibolia
	Body oblong, not metallic; hind tibia with apical spine distinctly tridentate;
	3rd tarsal segment entire (Chen, 1933; type: T. rufa Chen; Tonkin) Tribolia*
39 (37).	Claw-segment of hind tarsus strongly dilated
40 (00)	Claw-segment of hind tarsus not strongly dilated
40 (39).	Pronotum with an ante-basal, transverse impression
A1 (30)	Pronotum without an ante-basal impression
41 (39).	Pronotum and elytra not densely publication and elytra elytra and elytra el
42 (41).	Pronotum evenly convex, without a distinct ante-basal, transverse impression
	(several spp. of <i>Aphthona</i> and <i>Manobidia</i> are somewhat depressed transversely at base or middle of pronotum)
	Pronotum with transverse impression, usually near and parallel to basal margin 68
43 (42).	Prosternum not attaining posterior margin of coxae, apex not dilated; post- antennal tubercles usually pointed 44
	Prosternum exceeding posterior margin of coxae (obscure in <i>Luperomorpha</i> , see couplet 62)
44 (43).	Postantennal tubercles separated, subtriangular; antenna with thickened apical segments: punctation of elytron confused
	Postantennal tubercles contiguous, subquadrate with small anterior process : an-
	tenna filiform; punctation of elytron forming irregular rows Laotzeus
45 (43).	Tarsus with segment 3 entire
	Tarsus with segment 3 bilobed

46 (45).	Body ovate; length less than 10 mm; apex of tibia not angularly produced on
	external surface
	Body oblong, massive; length 10 mm; apex of tibia angularly produced on ex-
	ternal surface (Chen, 1934; type: L. variabilis; Vietnam, Laos) Laosia*
47 (46).	Hind tibia not produced apically, tibial spine and tarsus inserted at apex 48
	Hind tibia produced apically, projection usually curved, tibial spine and tarsus
	inserted subapically Argopistes
48 (47).	All femora incrassate, dilated between middle and apex; front tibia of $3$
	elbowed, with posterior 1/2 sulcate on outer surface Pentamesa
	Legs differing from the above 49
49 (48).	Maxillary palpus stout, last segment pointed apically; elytron with epipleuron
	(more or less) horizontal 50
	Maxillary palpus with 2 apical segments incrassate, forming a spherical globule;
	elytron with epipleuron vertical Chilocoristes
50 (49).	Prosternal process not longitudinally channeled 51
	Prosternal process longitudinally channeled 52
51 (50).	Clypeus bilobed with anterior margin emarginate Argopus
	Clypeus entire, anterior margin truncate Sphaeroderma
52 (50).	Prosternal process strongly elevated between coxae; frontal tubercles obsolete 53
	Prosternal process not elevated between coxae; frontal tubercles transverse;
	interantennal space rather broad Parargopus
53 (52).	Elytron confusedly punctate; epipleuron excavated in middle for reception of
	hind femur Lesneana
	Elytron regularly punctate; epipleuron not excavated in middle for reception
	of hind femur (Maulik, 1926; type: Sphaerophysa piceicollis Jacoby; Burma)
	Jacobyana*
54 (45).	Antenna with length of segment 1 attaining or exceeding the combined lengths
	of 2-4; metasternum produced anteriorly, concealing mesosternum Schenklingia
	Differing from above combination of characters
55 (54).	Elytron with punctation irregular, confused or obsolete
	Elytron with punctation arranged in 10 or 11 rows
56 (55).	Interantennal space broad, with breadth equaling or exceeding transverse di-
	ameter of eye 57
	Interantennal space usually narrow, with breadth much less than transverse
	diameter of eye
57 (56).	Length 2.0–3.1 mm; antenna with segment 4 not exceeding length of 2
	Length 3.5–7.0 mm; antenna with segment 4 exceeding length of 2 Parathrylea
58 (57).	Metasternum with anterior margin produced, fitting between mesothoracic coxae;
	abdominal sternite 1 similarly produced, fitting between metathoracic coxae
	Taizonia
	Metasternum and abdominal sternite I normal (Jacoby, 1887; type: A. dorsalis
/	Jac.; Ceylon, Japan) Amphimeloides*
59 (56).	Hind tibia with an axial excavation extending from apex to basal $1/4$ or more 60
	Hind tibia without, or with a short, subapical excavation
60 (59).	Postantennal tubercles subquadrate or transverse; interantennal space carinate;
	body usually ovate (= Sebaethe) Hemipyxis

	Postantennal tubercles triangular; interantennal space not carinate; body sub-
	quadrate (Chen, 1934; type: S. castanea Chen; Tonkin) Sebaethoides*
61 (59).	Hind tarsus with segment 1 distinctly shorter than 1/2 length of tibia
	Hind tarsus with segment 1 equaling or exceeding 1/2 length of tibia Longitarsus
62 (61).	Elytron not pubescent
	Elytron with sparse, fine pubescence on apical edge; prosternum narrow; an-
	tenna with segments 2 and 3 small, nearly equal in length Luperomorpha
63 (62).	Postantennal tubercles obsolete: hind tibia with apical spine inserted medially
	on apex Phyllotreta
	Postantennal tubercles prominent hind tibia with anical spine inserted laterally
	on apex 64
64 (63)	Postantennal tubercles subovate not extending to interantennal space Aphthona
01 (05).	Postantennal tubercles triangular with a pointed process extending to in-
	terantennal space (see couplet 77)
65 (55)	Color metallic: elytron without a reised humerus: soutellum small distinctly
05 (55).	broader than long
	Color not matallia : alutron with raised hymerys : coutallym not distinctly broad
	or then long 66
66 (65)	Destantannal typerales distinctly reised : interantennal space narrow 67
00 (05).	Postantennal tubercles distinctly faised, interantennal space harlow
(7) ((())	Postantennal tubercles absent of obsolete, interantennal space broad Smanra
07 (00).	rostantennal tubercles configuous, not distinctly definited from vertex
	Destantes and the set of the destant desta
(0, (10))	Postantennal tubercles separated, distinctly delimited from vertex
68 (42).	Elytron with punctation regularly arranged in 10 or 11 rows
(0)	Elytron with punctation irregular, confused or obsolete
69 (68).	Pronotum with ante-basal, transverse impression limited on sides by a short,
	Disgutuumat line
	short longitudinal line
70 (60)	Destantannal tubercles elongate extending to interantennal space
10 (09).	Postantennal tubercles clongate, extending to interantennal space
	1976 tures L fang Baly: Oriental
71 ((0)	Changes hildhod with antonion margin amorginate (Chan 1022), type R alu
/1 (09).	Cippeus Onobeu, with anterior margin emarginate (Chen, 1955; type. F. cip-
	Character with enterior magnin transate
72 ((0))	Cippeus with anterior margin truncate
12 (68).	Pronotum with ante-oasai, transverse impression limited on sides by a short,
	Iongitudinal impression
	Pronotum with ante-basal, transverse impression not limited on sides by a
<b>7</b> 2 (72)	snort, longitudinal impression
13 (12).	Length 2.0–2.5 mm; antenna slender, segment 2 stouter than 3, with length
	about equal; 4 shorter than 3 (Foudras, 1860; type: Haltica cicatrix Illiger;
	widespread) Hermaeophaga*
	Differing from above combination of characters
74 (73).	Postantennal tubercles extending to interantennal space; antenna with inter-
	mediate segments dilated Phygasia
	Postantennal tubercles not extending to interantennal space; antenna with in-

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Lactica	termediate segments not d
	75 (72). Mesosternum not excavated i
Ogloblinia	Mesosternum excavated in cer
ending to sides of pronotum	6 (75). Ante-basal, transverse impress
g to sides of pronotum Altica	Ante-basal transverse impress
listinctly shorter than three times as	7 (76). Antenna rather robust, preap
as long as wide Trachyaphthona	long as wide, and in most
almost three times as long as wide;	Antenna rather slender, preag
verse furrow near base which is not	pronotum with distinct and
nger, 1924; type: Haltica angustata	extending to lateral margi

# Baly; Japan) ...... Aphthonaltica\*

# Genus Nonarthra Baly

- Nonarthra Baly, 1862, Jour. Ent. 1: 455 (type: N. variabilis Baly).—Chapuis, 1872, IN Lacordaire, Gen. Col. 11: 142.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 27; 1925, op. cit. 11 (3-4): 53.—Maulik, 1925, Fauna India, Chrys. & Halt., 114.—Chen, 1933, Sinensia 3: 212; 1934, op. cit. 5: 225, 237.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 354, 357.—Chen, 1936, Sinensia 7 (6): 665.
- Enneamera Harold, 1875, Col. Hefte 13: 185.—Blackburn, 1896, Roy. Soc. S. Australia, Trans. 20: 41

## KEY TO CHINESE SPECIES OF NONARTHRA

1.	Elytron deep or purplish blue 2
	Elytron not blue 4
2(1).	Pronotum and elytron concolorous
	Pronotum evenly testaceous 3. formosense
3(2).	Length 3.5-4.5 mm; legs and ventral surfaces black, with 4 apical abdominal
	sternites testaceous 2. cyaneum
	Length 3.0 mm; legs and ventral surfaces black, with last abdominal sternite
	dark reddish brown; apical angles of pronotum sometimes dark reddish
	brown1. coreanum
4(1).	Legs largely yellowish, hind femur occasionally darkened or black 5
	Legs with all femora black; occiput greenish blue; length 4.0-4.3 mm7. viridiceps
5(4).	Ventral surfaces testaceous to dark brown; elytron usually marked, occasionally
	unicolorous 6
	Ventral surfaces piceous; elytron evenly pale ochraceous, occasionally marked
	with brown spots or bands 4. postfasciatum
6(5).	Elytron densely and finely punctured, punctures mostly as large as interspaces;
	hind femur testaceous 5. pulchrum
	Elytron finely punctulate, punctures mostly $1/2$ as large as interspaces; hind
	femur occasionally darkened

# 1. Nonarthra coreanum Chûjô

Nonarthra coreanum Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 358-60 (Korea: Koryo); 1941, op. cit. 31: 172 (Korea: Heian-Hokudo).

#### DISTRIBUTION: Korea.

#### 2. Nonarthra cyaneum Baly

Nonarthra cyaneum Baly, 1874, Ent. Soc. Lond., Trans., 210 (Nagasaki; BM).—Chen, 1933, Peking Nat. Hist. Bull. 8: 46 (Kwangtung: Tsha-jiu-san; Peiping; Chekiang).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 358 (Hokkaido, Honshu, Kyushu).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 186 (hosts).

Nonarthra nigricollis Weise, 1889, Soc. Ent. Ross., Horae 23: 641 (Szechuan; ZMB).—Chen, 1933, Sinensia 3: 212.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 358, 360 (Taiwan). New Synonymy.

Nonarthra cyanea: Chen, 1934, Sinensia 5: 239 (Peiping, Hangchow, Canton; Tonkin: env. Lang-Son & Bao-Lac).

DISTRIBUTION: Japan, China (Hopei, Szechuan, Sikang, Hupeh, Anhwei, Chekiang, Kweichow, Kiangsi, Kwangtung, Fukien), Taiwan.

SZECHUAN: O-er, nr. Wei-chow, 6–18. VIII. 1933; 3, Sui-fu, X. 1920, X. 1924, IV. 1930, Graham (US). SIKANG: 3, nr. Mu-pin, 2100–3900 m, VII–VIII. 1929; 1, betw. Luk-shan & Mu-pin, 750–1500 m, 27. VI–1. VII. 1929, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, VI–IX; 25, Liang-ho-keu, 5–18. IX; 2, Liang-ho-keu to Wang-chia-ying, 1350 m, 18. IX; 8, Hsiao-ho, 10–15. VIII, 14. IX; 4, Wang-chia-ying to Sui-sa-pa, 1050–1410 m, 21. VII, Lichuan, 1948, Gressitt & Djou (CAS); 2, Wu-chow, 1932, G. Liu (MCZ). ANHWEI: 2, Tai-ping-shen, 1932, G. Liu (MCZ). KWEICHOW: 1, Mei-tan, E of Tseng-yih, 900–950 m, 19. VII. 1940, Gressitt (BISHOP). KIANGSI: 1, Tai-au-hong, 4. VII; 1, Hong San, 25. VI. 1936, Gressitt (CAS). KWANGTUNG: 2, Tintong, Lochang Distr., 18. VIII. 1947, Gressitt (CAS); 4, Tsha-jiu-san, VII–IX. 1910, Mell (ZMB). FUKIEN: 24, Ta-chu-lan, 1000 m, III–IV. 1942, III–V. 1943; 1, Shui-pei-kai, 26. IV. 1943, Shaowu, Maa; 1, Shui-pei-kai, Shaowu, 16. III. 1949, K. S. Lin; 10, Upper Kua-tun, 1400 m, Chungan, 12. IV. 1943, Maa (CAS, BISHOP).

HOSTS: Beta vulgaris L. var. altissima Rossig., Rosa Wichuraiana Crep.).

## 3. Nonarthra formosense Chûjô

Nonarthra formosense Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 358, 360 (Taiwan; TARI).

DISTRIBUTION: Taiwan, China (Fukien, Yunnan).

FUKIEN: 1, Ku-hsien-kai, Shaowu, VI. 1944, Maa (CAS). YUNNAN: 1, Yunnan-sen (ZMB).

# 4. Nonarthra postfasciatum (Fairmaire)

Amphimela postfasciata Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 73 (Moupin; PARIS).
 Nonarthra nigricepes Weise, 1889, Soc. Ent. Ross., Horae 23: 642 (Szechuan; ?LENINGRAD).
 —Jacoby, 1890, Entomologist 23: 163.

Nonarthra postfasciata: Chen, 1934, Sinensia 5: 238; 1935, Arkiv Zool. 27 A (5): 5 (S. Kansu).

DISTRIBUTION: China (Sikang, Szechuan, Kansu).

SZECHUAN: 17, O-er, nr. Wei-chow, 2400–2700 m, 6–18. VIII; Wei-chow, 1740–2700 m, 4. I. 1933, Graham (US). SIKANG: 1, nr. Mu-ping, 2100–3000 m, 8–9. VII. 1920, Gra-

ham (US).

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### 5. Nonarthra pulchrum Chen

Nonarthra pulchrum Chen, 1934, Sci. Soc. China, Trans. 8: 65, fig. 4 (Nanking; Kiangsi: Sintze; FAN. MEM. INST.); 1934, Sinensia 5: 237, 238, fig. 34; 1938, Arkiv Zool. 30 B (4): 2 (Kiangsu).

DISTRIBUTION: China (Kiangsu, Anhwei, Kiangsi).

ANHWEI: 1, Tai-ping-shien, 1932, G. Liu (MCZ). KIANGSU: 1, Nanking, 11. V. 1923, Van Dyke (CAS).

# 6. Nonarthra variabilis Baly Fig. 195, a.

Nonarthra variabilis Baly, 1862, Jour. Ent. 1: 456 (N. India; BM).—Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 423.—Maulik, 1926, Fauna India, Chrys. & Halt., 116 (United Provinces, Sikkim, Simla Hills, Assam).—Chen, 1933, Peking Nat. Hist. Bull. 8 (1): 46 (Kwangtung, Hainan, Szechuan, Tonkin); 1934, Sinensia 5 (3-4): 235, figs. 20-31 (Canton, Formosa, India).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 354, 360 (Botel-Tobago I.).

Enneamera variabilis: Baly, 1878, Cist. Ent. 2: 376 (Murree, N. India).

Nonarthra albofasciata Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 424 (Kurseong; ?BRU-XELLES).

Enneamera scutellata Jacoby, 1900, Soc. Ent. Belg., Mem. 7: 126.

DISTRIBUTION: N. India, China (Szechuan, Hupeh, Kiangsi, Fukien, Kwangtung), Hainan I., N. Vietnam, Taiwan.



Fig. 195. a, Nonarthra variabilis Baly ; b, Psylliodes punctifrons Baly.

SZECHUAN: 2, Hua-yin Shan, 110 km N of Chungking, 750, 5. VII. 1933, Graham (US). HUPEH: 1, Chi-au Shan to Wang-chia-ying, 20. VII. 1948, Gressitt & Djou (CAS). KIANGSI: 3, Hong San, 1000 m, VI; 1, Tai-au-hong, 6. VI, Gressitt, 1936 (CAS). FU-KIEN: 29, Ta-chu-lan, 1000 m, Shaowu, III, IV, VI, VIII, XI. 1942, Maa; 1, Shui-pei-kai, Shaowu, 23. VI. 1942, K. S. Lin (CAS); 8, V. 1942, IV, VII. 1943; 1, Ao-tow, Shaowu, 13. X. 1941; 1, Shaowu City; 1, Kua-tun, Chungan, 22. VIII. 1945; 10, Kwang-keng, Kienyang, Maa (CAS, BISHOP). KWANGTUNG: many, Tsin-leong Shan, 5. VI; 3, Yim-na Shan, 10–15. VI, Gressitt, 1936 (CAS); 2, Tin-tong, 18. VIII; 3, Sa-tin, Tin-tong, VIII, Lochang Distr., 1947, Tseng & Lam (CAS). HAINAN I.: 1, Ta-hian, 14. VI. 1935, Gressitt (CAS).

#### 7. Nonarthra viridiceps Chen

Nonarthra viridiceps Chen, 1939, Sinensia 10: 56 (Kansu: Pei-la-hia, Hopei; Pai-ta; Ho-ANGHO-PAIHO).

DISTRIBUTION: China (Kansu, Hopei).

### Genus Psylliodes Latreille

Psylliodes Latr., 1825, Fam. Nat. Regne Anim., 405.—Heikertinger, 1921, Kol. Rundsch. 9: 39–62; 1924, op. cit. 11 (1–2): 28, fig. 1–4; 1925, l. c. (3–4): 53, 70; 1926, op. cit. 12: 101–138.—Maulik, 1926, Fauna India, Chrys. & Halt., 124, fig. 47.—Chen, 1933, Sinensia 3: 213; 1934, op. cit. 5: 225, 239.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 354, 362.—Chen, 1936, Sinensia 7 (6): 665.

Macrocnema Stephens, 1816 (nec Hübner), Illustr. Brit. Ent. Mandib. 4: 317.

Macrocnema Weise, 1888 (nec Steph.), Naturg. Ins. Deutschl. Col. 6: 785, 793.

Eupus Wollaston, 1854, Ins. Mader., 452, fig. 5.

Psyllomima Bedel, 1898, Faune Col. Bassin Seine 5: 200 (subg., new name for Macrocnema Weise, nec Steph.).

Phyllomima C. Waterhouse, 1902, Ind. Zool. 1: 287 (err.)

KEY TO CHINESE SPECIES OF PSYLLIODES

1.	Dorsal surface entirely bluish	2
	Head and pronotum reddish brown; elytron blackish with base brownish; hind wing not developed; length 25 mm	a
0(1)	II a listing the magnetized about	a n
2(1).	Head distinctly punctured above	3
	Head impunctate above	7
3(2).	Surface of elytral epipleuron shining, glabrous	4
	Surface of elytral epipleuron finely granulate, sparsely pubescent; body shiny dark greenish blue above; antenna black with basal 2 or 3 segments yel-	
	lowish brown: body black beneath: legs reddish brown with hind femur	
	blackish brown to black; length $3.0 \text{ mm}$ (=balyi)	S
4(3).	Hind femur bluish to bluish brown	5
	Hind femur reddish brown to dark pitchy brown	6
5(4).	Occiput subgranulate or smoothish; body above dark blue, antenna black with	
	2 or 3 basal segments reddish brown, but in some cases entirely reddish	
	brown; body black beneath; legs black with tibiae and tarsi largely pale;	
	length 2.5–2.8 mm	a

#### Pac. Ins. Mon.

Occiput wrinkled; body blue with slight greenish lustre above; antenna black with basal 3 segments yellowish brown; body beneath black; legs blackish with hind femur with bluish lustre; length 3.0-4.0 mm..... 12. difficilis 6(4). Legs entirely reddish brown; body greenish blue above; antenna with basal 3 segments reddish brown; elytral interstices swollen apically; length 2.5-3.0 Legs dark pitchy brown; body pure blue above; antenna with basal 2 or 3 segments yellowish brown; elytral interstices not swollen; length 3.0 mm... 14. plana 7 (2). Postantennal tubercles distinctly raised, narrow, oblique; a deep oblique groove at side above antennal insertion; dorsal surface cupreous with greenish lustre; antenna reddish brown; body beneath black, legs reddish brown with hind femur, in some cases mid femur also, black; length 2.0-2.5 mm (= Postantennal tubercles not distinctly raised, subtriangular, transverse; a subobsolete oblique groove at side above antennal insertion; dorsal surface black with slight cupreous (in some cases greenish or bluish) lustre; antenna reddish brown, in some cases blackish with 3 or 4 basal segments paler; body beneath black, legs reddish with hind femur blackish brown; length 2.0-2.5 

### 8. Psylliodes angusticollis Baly

Psylliodes angusticollis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 209 (Nagasaki; BM).— Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 362, 365 (Japan, Taiwan).—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 189.

Psylliodes sinensis Chen, 1934, Sinensia 5(3-4): 240 (Kweichow; Yunnan-Tonkin border: Laokay; PARIS). New Synonymy.

DISTRIBUTION: Sachalin, Japan (Honshu, Sado, Hachijo, Shikoku, Kyushu, Tsushima, Yakushima), Ryukyu Is. (Borodino, Okinawa), Taiwan, Korea, S. China (Szechuan, Fukien, Kwangtung), N. Vietnam.

SZECHUAN: 1, O-er, 2100–2700 m, nr. Wei-chow, 6–16. VIII. 1933, Graham (US). FUKIEN: 4, Ta-chu-lan, 1000 m, Shaowu, IV–V. 1942, III, 4. V. 1943; 8, Wang-chuang, Foochow, 9. III. 1945, Maa (BISHOP, CAS). KWANGTUNG: 2, Yim-na Shan, 10–15. VI. 1936, Gressitt (CAS).

#### 9. Psylliodes attenuata (Koch)

Haltica attenuata Koch, 1803, Ent. Hefte 2: 34, pl. 2, fig. 10 (Europe).

- Psylliodes attenuata: Heikertinger, 1940, Col. Cat. 166: 534.—Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32 (220): 41(Suigen, Korea).—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 190 (hosts).
- Psylliodes japonica Jac. 1885, Zool. Soc. Lond., Proc. 740 (Sapporo; BM).—Chen, 1934, Sinensia 5 (3-4): 403 (Kweichow).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 363, 364 (Kyushu).
- *Psylliodes angusticollis*: Chûjô, 1936 (*nec* Baly, 1874), Umeno Ent. Lab., Bull. **3**: 12 (Korea: Hokusammen, Keisho-hokudo).

DISTRIBUTION: Europe, Siberia, SW China (Kweichow), Japan (Hokkaido, Hon-

shu, Sado, Shikoku, Kyushu), Korea.

HOSTS: Cannabis sativa L., Humulus japonicus Sieb. & Zucc., H. Lupulus L. var. coridofolius (Miq.) Maxim.

## 10. Psylliodes brettinghami Baly

Psylliodes Brettinghami Baly, 1862, Jour. Ent. 1: 457 (India; BM).—Maulik, 1926, Fauna India, Chrys. & Halt., 126 (Bengale, Burma).—Chen, 1934, Soc. Ent. France, Ann. 103: 175, 179 (Taiwan, Tonkin); 1934, Sinensia 5 (3-4): 241 (Yunnan; Tonkin: Hoa-Binh).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 364, 368.—Chen, 1939, Sinensia 10 (1-6): 30 (Yangso, Kwangsi).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 190.

DISTRIBUTION: NE India, Burma, SW China (Yunnan, Kwangsi), Vietnam, Ryukyu Is.

HOST : Brinjal.

### 11. Psylliodes cucullata gansuica Jacobson

Psylliodes cucullata subsp. gansuica Jacobson, 1922, Mus. Zool. Acad. Sci. Russie, Ann. 23: 526 (Kanssu; ? LENINGRAD).

We are not certain of the status of this entity. It is not included in the key. DISTRIBUTION: NW China (Kansu).

## 12. Psylliodes difficilis Baly

- Psylliodes difficilis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 210 (Nagasaki; BM).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 364, 367 (Kyushu).
- Psylliodes sera Jacobson, 1922, Mus. Zool. Acad. Sci. Russie, Ann. 23: 527 (China; ? LENIN-GRAD).—Heikertinger, 1940, Col. Cat. 166: 550 (synonymized).

DISTRIBUTION: Japan (Honshu, Sado, Shikoku, Kyushu, Tsushima), N. China.

# 13. Psylliodes obscurofasciata Chen

Psylliodes obscurofasciata Chen, 1933, Soc. Ent. France, Bull. 38: 143 (Kan-sou; Lan-Tscheou, Chen-si; PARIS).

DISTRIBUTION: NW China (Kansu, Shensi).

# 14. Psylliodes plana Maulik

Psylliodes plana Maul., 1926, Fauna India, Chrys. & Halt., 128 (India; BM).—Chen, 1934, Sinensia 5(3-4): 242 (N. Tonkin); 1939, Sinensia 10 (1-6): 30 (Yangso, Kwangsi).
DISTRIBUTION: India, N. Vietnam, SW China (Kwangsi).

## 15. Psylliodes punctifrons Baly Fig. 195, b.

Psylliodes punctifrons Baly, 1874, Ent. Soc. Lond., Trans. 1874: 209 (Nagasaki; BM).—
Weise, 1889, Soc. Ent. Ross., Horae 23: 570 (Kan-ssu).—Chen, 1934, Sinensia 5(3-4): 403, fig. 35 (Kiangsu, Chekiang, Kiangsi, Szechuan); 1935, Arkiv Zool. 27 A (5): 5 (S. Kansu, NE Szechuan).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 364, 366 (China, Japan).—Chen, 1939, Sinensia 10 (1-6): 30 (Yangso, Kwangsi).—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 190 (hosts Cruciferae).

Psylliodes balyi Jacoby, 1884, Leyden Mus., Notes 6: 30 (Sumatra; LEIDEN).—Chen, 1934, Sinensia 5 (3-4): 242 (Kwei-chow, Tonkin).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 364, 368 (Taiwan, Indo-China, Sumatra, China).

DISTRIBUTION: Japan, S. Ryukyu Is. (Iriomote), Taiwan, China (Kansu, Szechuan, Kwangsi, Kiangsu, Hupeh, Anhwei, Chekiang, Kiangsi, Fukien), N. Vietnam (Tonkin), Sumatra.

SZECHUAN: 16, Cheng-tu, 16, V. 1932, Hadden (CAS); 2, Cheung-mu-tsang, 50 km NW of Chungking, 8, VII. 1948, Gressitt & Djou (CAS); 1, Sui-fu, V. 1925; 1, Shin-kai-si, Mt. Omei, 1320 m, nr. Kia-ting, 1921, Graham (US); 1, Mt. Omei, 16, VII. 1932, Franck (CAS); 1, Chang-tang-ching, Wan-hsien, 26–30, X. 1948, Gressitt & Djou (CAS). HUPEH: 2, Liang-ho-keu, 7, IX. 1948; 2, Sui-sa-pa, 1000 m, 6, VIII.; 1, Shao-ho, 10, VIII, Lichuan Distr., Gressitt & Djou (CAS). ANHWEI: Tai-ping-shien, 1932, G. Liu (MCZ). CHE-KIANG: 1, Hangchow, 19, V. 1923, Van Dyke (CAS). KIANGSI: 2, Shang-jao, 7, IV. 1939, Maa (BISHOP). FUKIEN: many, Ta-chu-lan, 1000 m, IV–V, XII. 1942, IV–V. 1943; 1, Si-men, 8, XII. 1942; Kua-tun, Chungan, 13, V. 1945, Maa (BISHOP, CAS).

HOSTS: Wild and cultivated Cruciferae.

#### 16. Psylliodes subrugosa Jacoby

Psylliodes subrugosa Jac., 1885, Zool. Soc. Lond., Proc. 1885: 739 (Hakodate, Hokkaido; BM).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 363, 365.—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 191 (Hachijo I., Kyushu).

Psylliodes intermedia: Jac., 1885, Zool. Soc. Lond., Proc. 1885: 739 (Otsu, Honshu; BM). -Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 363, 366.

Psylliodes mitchyi Chûjô, 1951, Shikoku Ent. Soc., Trans. 2 (3): 44, fig. 4 (Shikoku; Chujo). DISTRIBUTION: Japan (Hokkaido to Kyushu), W. China (W. Hupeh).

Distribution. Supar (normalio to Ryasha), w. china (w. hupon).

HUPEH: Sui-sa-pa, 1000 m, Lichuan Distr., 22. VII. 1948, Gressitt & Djou (CAS).

#### Genus Eutrea Baly

*Eutrea* Baly, 1875, Ent. Soc. Lond., Trans. 1875: 24 (type: *E. Bowringii* Baly; Hong Kong). --Chen, 1936, Sinensia 7 (6): 646.

We have not seen any material of this genus. It is characterized by a double spine at end of hind tibia.

### 17. Eutrea bowringii Baly

Eutrea Bowringii Baly, 1875, Ent. Soc. Lond., Trans. 1875: 25 (Hong Kong; BM).

DISTRIBUTION: S. China (Hong Kong).

# Genus Sangariola Jacobson

Charidea Baly, 1888 (nec Dalman, 1816, Lep.), Linn. Soc. Lond., Zool. Jour. 20: 157 (type: Galleruca? punctato-striata Mots.).

Allophyla Weise, 1889 (nec Loew, 1862, Dipt.), Soc. Ent. Ross., Horae 23: 624 (type: A. aurora Weise, 1889; monobasic).—Chen, 1936, Sinensia 7 (6): 647.

Sangariola Jac., 1922, Mus. Zool. Petrograd, Ann. 23: 522 (type: Galleruca? punctato-striata Mots.).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 49 52.—Chen, 1933, Sinensia 3: 216.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 354; 1935, t. c., 392. Lophallya Hincks, 1949, Ann. Mag. Nat. Hist. ser. 12, 2: 616 (new name for Allophyla Weise, nec Loew). New Synonymy.

#### KEY TO CHINESE SPECIES OF SANGARIOLA

medially; elytron with all interstices equally and weakly elevated ... 19. punctatostriata

## 18. Sangariola fortunei (Baly)

Charidea Fortunei Baly, 1888, Linn. Soc. Lond., Zool. Jour. 20: 158 (N. China; BM).

Allophyla aurora Weise, 1889, Soc. Ent. Ross., Horae 23: 626 (Kanssu; ?ZMB).—Jacoby, 1890, Entomologist 23: 217 (China).—Weise, 1905, Deuts. Ent. Ztschr. 1905: 188.

Allophylla Fortunei: Weise, 1905, Deuts. Ent. Ztschr. 1905: 188.

Sangariola fortunei: Chen, 1933, Sinensia 3: 230, fig. 10 (Kweichow, Hangchow).—Heikertinger, 1948, Kol. Rundsch. 31: 47 (Formosa).

Charidea pieli Pic, 1937, Notes d'Ent. Chinoise 4: 175 (Mokanshan; PARIS).

Charidea nigro-suturalis Pic, 1937, l. c., 176 (Mokanshan; PARIS). New Synonymy.

Sangariola fortunei var. unicoloripennis Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31: 173 (Korea: Keiki-Do; TARI).

Charidea bicostata var. atriceps Pic, 1938, Arkiv Zool. 30 A (13): 18 (Anhwei; PARIS). New Synonymy. (description of bicostata not traced.)

DISTRIBUTION: China (Chekiang, Kweichow, Kwangtung, Fukien).

CHEKIANG: 1, Hangchow, 18. V. 1923, Van Dyke (CAS). FUKIEN: Foochow, 1921 -24, Kellogg; 3, Niu-ling, Changting, 21. IV. 1941; 15, Shui-pei-kai, 14. IV. 1942, 11. IV. 1943, V. 1944; 4, Ta-chu-lan, 1000 m, Shaowu, 12. V. 1942, 27. IV. 1943, 10. VI. 1943; 1, Ku-yuenchie, Shaowu, 16. V. 1944, Maa (BISHOP, CAS). KWANGTUNG: Kau-lin San, 700-900 m, Lien-ping Distr., 18. IV. 1940, Gressitt & To.

19. Sangariola punctatostriata (Motschulsky)

Galleruca? punctato-striata Mots., 1860, Etudes Ent. 9: 25 (Japan; ? type lost).

Sangariola punctatostriata: Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25 (136-139): 86 (Okinawa).—Heikertinger, 1948, Kol. Rundsch. 31: 47 (China; Formosa).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 191 (hosts).

DISTRIBUTION: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Ryukyu Is. (Okinawa), Korea, N. China, Taiwan.

HOSTS: Lilium cordatum (Thunb.) Koidz., L. Leichtlinii Hook. fil. var. tigrinum (Regal) Nicols., Erythronium Japonicum Decne, Smilax China L.

#### Genus Lipromorpha Chûjô and Kimoto .

Lipromorpha Chûjô & Kimoto, 1960, Niponius 1 (4): 9 (type: Liprus difficilis Chen).

This genus is distinguished by having the prothorax longer than broad, strongly con-

Pac. Ins. Mon.

stricted near base, and much narrower than breadth of elytra at basal margin.

20. Lipromorpha difficilis (Chen)

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Liprus difficilis Chen, 1934, Sinensia 5: 264, fig. 41 (Tonkin; PARIS).



Fig. 196. Lipromorpha difficilis (Chen).

#### KEY TO CHINESE SPECIES OF EPITRIX

Pronotum with ante-basal impression deep; color bronzy above; length 1.2-1.4 mm

Pronotum with ante-basal impression shallow; color testaceous above, elytron pice-

21. Epitrix setosella (Fairmaire)

Crepidodera setosella Fairm., Soc. Ent. Belg., Ann. 32: 45 (Fokien; ? PARIS). Epitrix setosella: Chen, 1933, Sinensia 3: 231 (Kiangsi).

DISTRIBUTION: E. China (Kiangsi).

### 22. Epitrix abeillei (Bauduer)

Crepidodera Abeillei Bauduer, 1874, Soc. Ent. France, Bull. 163 (Jerusalem; ? PARIS). Epitrix Abeillei: Chen, 1935, Arkiv Zool. 27 A (5): 7 (S. Kansu).

DISTRIBUTION: Israel, W. Asia, NW China (S. Kansu, Turkestan).

Fig. 196.

Lipromorpha difficilis : Chûjô & Kimoto, 1960, Niponius 1(4): 9.

Shiny deep chestnut brown, paler on antenna; elytron seriately punctured. Length 2.5 mm.

DISTRIBUTION: S. China (Kiangsi, Hupeh, Kwangtung).

KIANGSI: 1, Hong Shan, 1000 m, 25. VI. 1936, Gressitt (CAS). HUPEH: 1, Sui-sa-pa, 1000 m, 31. VII; 2, Liang-ho-keu, 9-10. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). KWANG-TUNG: 1, Kau-lin San, 700-900 m, Lien-p'ing Distr., 22. IV. 1940, Gressitt & To.

## Genus Epitrix Foudras

- Epitrix Foudras, 1860, Soc. Linn. Lyon, Ann. (n. s.) 6: 147; 1860, op. cit. 7: 52.—Maulik, 1926, Fauna India, Chrys. & Halt., 130, 133.
- Epithrix: Heikertinger, 1912, IN Reitter, Fauna Germ. 4: 145, 156; 1924, Kol. Rundsch. 11 (1-2): 41; 1925, t. c. (3-4): 52, 69.—Chen, 1933, Sinensia 3: 217; 1936, op. cit. 7(6): 647.-Heikertinger, 1948, Kol. Rundsch. 31: 36.

#### Gressitt & Kimoto: Chrysomelidae of China

#### Genus Micrepitrix Laboissière

Micrepitrix Lab., Mus. Paris, Bull. ser. 2, 5: 205 (type: M. coomani Lab.; Indo-China).— Gressitt, 1955, Ins. Micronesia 17 (1): 35.

#### KEY TO CHINESE SPECIES OF MICREPITRIX

General color brown, with head, pronotum and breast slightly more deeply colored than elsewhere; apical segments of antenna fuscous; length 1.4 mm ...... 24. laboissierei Shining blackish brown, dorsal surface darker; antenna pale brown with apical seg-

#### 23. Micrepitrix coomani Laboissière

Micrepitrix coomani Lab., 1933, Mus. Paris, Bull. 1933: 206 (Tonkin: ? PARIS).

DISTRIBUTION: N. Vietnam (Tonkin), Hainan I.

HAINAN: 2, Ta-hian, 14, 16. VI. 1935, Gressitt (CAS).

# 24. Micrepitrix laboissierei Chen

Micrepitrix laboissierei Chen, 1935, Sinensia 6: 777 (Kiangsi; PARIS). DISTRIBUTION: E. China (Kiangsi).

## Genus Lipromima Heikertinger

Lipromima Hktgr., 1924, Kol. Rundsch. 11 (1-2): 41 (type: Liprus minutus Jacoby; Japan; monobasic); 1925, t. c. (3-4): 52.—Chen, 1933, Sinensia 3 (9): 217.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1935, t. c., 398.—Chen, 1936, Sinensia 7 (6): 648.—Heikertinger, 1948, Kol. Rundsch. 31: 47.

25. Lipromima minuta (Jacoby)

Liprus minutus Jacoby, 1885, Zool. Soc. Lond., Proc. 725 (Nagasaki; BM).

Lipromima minuta: Heikertinger, 1924, Kol. Rundsch. 11: 41.—Chen, 1934, Sinensia 5(3-4): 405 (Kiangsu).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 398.—Hktgr., 1948, Kol. Rundsch. 31: 47.

DISTRIBUTION: Japan, S. China (Szechuan, Hupeh, Kiangsi, Fukien).

SZECHUAN: 1, Shin-kai-sze, 1500 m, Omei Shan, 15. VIII. 1940, Gressitt (BISHOP). HUPEH: many, Sui-sa-pa, 1000 m, 23. VII-12. IX; Liang-hou-keu, 4–9. IX, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). KIANGSI: 1, Hong Shan, 1000 m, 15–29. VI. 1936, Gressitt (CAS). FUKIEN: 6, Ta-chu-lan, 1000 m, Shaowu, IV. 1942, IV-VI. 1943, 21. IV. 1945, Maa (BISHOP, CAS).

# Genus Omeiana Chen

*Omeia* Chen, 1934 (*nec* Hsü, 1933), Sci. Soc. China, Trans. **9** (1): 63 (type: *rufipes* Chen; monobasic; China).

Omeiana Chen, 1934, Sinensia 5 (3-4): 411 (new name for Omeia Chen); 1936, op. cit.

7 (6): 650.—Heikertinger, 1948, Kol. Rundsch. 31: 49.

We do not have material of this genus, which is distinguished by a metallic dorsum, pale apical antennal segment and antennal segment 4 longer than 3.

#### 26. Omeiana rufipes (Chen)

Omeia rufipes Chen, 1934, Sci. Soc. China, Trans. 65, figs. 2-3 (Szechuan: Omei; Ac. SIN.).
Omeiana rufipes: Chen, 1935, Sinensia 7(6): 650.—Hktgr., 1948, Kol. Rundsch. 31: 50.
Blue with red legs; length 4.2 mm.

DISTRIBUTION: W. China (Szechuan).

#### Genus Leptodibolia Chen

Leptodibolia Chen, 1941, Sinensia 12 (1-6): 194 (type: L. cyanipennis Chen; monobasic; China).

We have not seen material of this genus.

### 27. Leptodibolia cyanipennis Chen

Leptodibolia cyanipennis Chen, 1941, Sinensia 12 (1-6): 194 (Szechuan; Ac. SIN.). DISTRIBUTION: W. China (Szechuan).

# Genus Griva Maulik

Griva Maulik, 1926, Fauna India, Chrys. & Halt., 176, 241 (type: Pseudodera cyanipennis Jac.; India).—Chen, 1933, Sinensia 3 (9): 218; 1934, op. cit. 5 (3-4): 227, 257; 1936, op. cit. 7(6): 651.

## Key to Chinese species of Griva

### 28. Griva nigricollis Chen

Griva nigricollis Chen, 1939, Sinensia 10: 57 (Szechuan: Pehpei; Ac. SIN.).

We have not seen this species.

DISTRIBUTION: W. China (Szechuan).

### 29. Griva regularis Chen

- Pseudodera cyanipennis: Chen, 1933 (nec Jacoby), Peking Nat. Hist. Bull. 8 (1): 50 (Kwangtung: Canton).
- Griva regularis Chen, 1934, Sinensia 5 (3-4): 258, fig. 39 (Canton; Tonkin: Hoa-Binh; Sikkim; PARIS).

Our material differs slightly in having middle of base of pronotum bluish.

DISTRIBUTION: S. China (Kwangtung, Szechuan, Hupeh, Yunnan); N. Vietnam (Tonkin), Sikkim.

SZECHUAN: 1, Ching-chen Shan, VIII. 1932, G. Liu (MCZ). HUPEH: 1, Sui-sa-

pa, 1000 m, Lichuan Distr., 19. VIII. 1948, Gressitt & Djou (CAS). YUNNAN: 1, Yunnansen (ZMB).

#### Genus Crepidosoma Chen

Crepidosoma Chen, 1939, Sinensia 10 (1-6): 57 (type: Crepidodera incerta Chen; monobasic; China); 1941, Sinensia 12 (1-6): 194-195.

We have not seen material of this genus, which is characterized by absence of postantennal tubercles, an oblong interantennal space, and thick anterior margin of pronotum.

# KEY TO CHINESE SPECIES OF CREPIDOSOMA

Pronotum nearly impunctate, excepting fine punctures along antebasal impression.. 30. incertum Pronotum closely punctate, with punctures small and deep......31. cribricolle

#### 30. Crepidosoma incertum (Chen)

Crepidodera incerta Chen, 1935, Sinensia 6: 775, fig. 4 (Yunnan; AC. SIN.). Crepidosoma incerta: Chen, 1939, op. cit. 10 (1-6): 57. Crepidosoma incertum: Chen, 1941, op. cit. 12 (1-6): 195. DISTRIBUTION: SW China (Yunnan).

#### 31. Crepidosoma cribricolle Chen

Crepidosoma cribricolle Chen, 1941, Sinensia 12: 194 (Szechwan).

DISTRIBUTION: W. China (Szechuan).

# Genus Pseudodera Baly

Pseudodera Baly, 1862, Jour. Ent. 1: 200 (type: Pseudodera xanthospila Baly).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 41; 1925, loc. cit. 11 (3-4): 53.—Maulik, 1926, Fauna India, Chrys. & Halt., 176, 273.—Chen, 1933, Sinensia 3 (9): 218; 1934, op. cit. 5 (3-4): 227, 230, 258, fig. 14; 1934, Peking Nat. Hist. Bull. 8: 44.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1935, t. c., 400.—Chen, 1936, Sinensia 7 (6): 653.—Heikertinger, 1948, Kol. Rundsch. 31: 44.

### KEY TO CHINESE SPECIES OF PSEUDODERA

- 2. Elytron red, with a nearly impunctate flavous oval spot near apex, body reddish above; antenna, tibiae and tarsi black; length 6.4-9.5 mm (=balyi).....

Elytron flavous, with black basal and apical transverse bands, extreme apex sometimes flavous; punctures distinct on whole surface; body red or pale pitchy; antenna black; length 8.5–9.5 mm (Baly, 1877; Tonkin, India)......orientalis\*

32. Pseudodera inornata Chen

Pseudodera inornata Chen, 1933, Sinensia 3 (9): 233 (Yunnan: Pe-yen-tsin, Djou-kou-la;

PARIS); 1934, op. cit. 5 (3-4): 259. DISTRIBUTION: SW China (Yunnan).

### 33. Pseudodera xanthospila Baly

Pseudodera xanthospila Baly, 1862, Jour. Ent. 1: 200 ("N. China"; BM); 1874, Ent. Soc. Lond., Trans. 1874: 190 (Yokohama).—Weise, 1912, Archiv Naturg. 78A (2): 94 (China).—Chen, 1933, Peking Nat. Hist., Bull. 8: 49 (Kwangtung: Tsha-jiu-san; Kweichow, Kiangsi, Kiangsu, Chekiang); 1934, Sinensia 5: 260, fig. 40 (Kiangsi: Kiu-kiang; Kweichow: Pinfa; Canton).—Heikertinger, 1948, Kol. Rundsch. 31: 44 (Formosa). —Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 189 (host).

Pseudodera balyi Jac., 1891, Entomologist 24 (suppl.): 62 (Hupeh: Chang-yang; BM). New Synonymy.

DISTRIBUTION: S. China (Kiangsu, Chekiang, Kiangsi, Kweichow, Hupeh, Kwang-tung), Japan.

KIANGSI: 5, Kiu-kiang (ZSBS). KWANGTUNG: 3, Canton, Shiu-chow-fu, no date, Hauser (ZMB).

HOST: Smilax China L.

#### Genus Crepidoderoides Chûjô

Crepidoderoides Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32 (220): 36 (type: C. choi Chûjô; Korea).

We have not seen any material of this genus, which differs from *Asiorestia* in having elongate postantennal tubercles and bifid tarsal claws.

### 34. Crepidoderoides choi Chûjô

Crepidoderoides choi Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32 (220): 37, fig. 3 (Korea : Mt. Kwambo Zan, Kankyo-Hokudo ; TARI).

Shiny testaceous, with members partly dull. Length 4.2-4.3 mm.

DISTRIBUTION: Korea.

### Genus Sinocrepis Chen

Sinocrepis Chen, 1933, Sinensia 3 (9): 218, 232, fig. 66 (type: S. micans Chen; China); 1934, Soc. Ent. France, Ann. 103: 177.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355, 462 (err., Sinocrepans); 1935, t. c., 462.—Chen, 1936, Sinensia 7 (6): 652.

# 35. Sinocrepis micans Chen Fig. 197, a.

Sinocrepis micans Chen, 1933, Sinensia 3 (9): 233 (Kweichow; PARIS); 1934, Soc. Ent. France, Ann. 103: 181 (Taiwan).

DISTRIBUTION: S. China (Kweichow, Hupeh, Kiangsi, Chekiang).



Fig. 197. a, Sinocrepis micans Chen ; b, Asiorestia cheni n. sp.

HÚPEH: 9, Sui-sa-pa, 1000 m, 23. VII–24. VIII, 13. XI; 2, Hsiaoho, 8. VIII–14. IX. 1948. KIANGSI: 2, An-yuen, 23. V. 1948, Gressitt & Djou (CAS). CHEKIANG: 1, 28. VIII. 1927, Wright (CAS); 1, T'en-gan (ZMB).

### Genus Asiorestia Jacobson

Asiorestia Jac., 1925, Mus. Zool. Acad. Leningrad, Ann. 26: 274 (type: A. kozhantshikovi Jac.).—Hincks, 1952, Soc. Brit. Ent., Jour. 4 (5): 113.

Crepidodera auctt: Heikertinger, 1912, IN Reitter, Fauna Germ. 4: 145, 149; 1924, Kol. Rundsch. 11 (1-2): 42; 1925, t. c. (3-4): 52, 69.—Maulik, 1926, Fauna India Chrys. & Halt., 175, 234 (part).—Chen, 1933, Sinensia 3: 218, fig. ba; 1934, op. cit. 5: 227, 261.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1935, t. c., 459.—Chen, 1936, Sinensia 7(6): 653.

This genus has been called *Crepidodera* Chevrolat but the type-species of *Crepidodera* is *nitidula* which is a member of *Chalcoides* Foudras. Thus *Crepidodera* replaces *Chalcoides* Foudras. *Asiorestia* Jacobson has been considered as a synonym of *Crepidodera*. (See Hincks, 1952, Soc. Brit. Ent., Jour. 4: 113.)

### KEY TO CHINESE SPECIES OF ASIORESTIA

1963

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Pronotum with disc evenly punctulate or finely punctate
2(1). Pronotum with ante-basal impression distinctly punctate
Pronotum with ante-basal impression impunctate 5
3 (2). Length less than 2.0 mm; ante-basal impression with 1 row of fine punctures;
testaceous above, with head darker brown; length 1.8 mm
Length exceeding 2.0 mm 4
4 (3). Pronotum with anterior angle sinuate, almost evenly continuing with lateral margin; lateral margin convex; ante-basal impression relatively shallow; 3 <sup>th</sup> with lateral margin of aedeagus weakly constricted subapically; length 3.2-
4.0 mm
basal impression relatively deep; 3 with lateral margin sinuate; ante- basal impression relatively deep; 3 with lateral margin of aedeagus not constricted subapically; length 2.1–3.4 mm
5 (2). Elytron distinctly depressed below humerus; length 2.0-2.2 mm 41. manobioides
Elytron not distinctly depressed below humerus; length 3.0-3.6mm; 3, ventral outline of aedeagus distinctly curved as viewed laterally
6(1). Length 4.5-5.5 mm; pronotum with lateral margin evenly convex; ante-basal
impression relatively shallow, but deeper and distinctly bordered at side
Length less than 4.5 mm7
7 (6). Length 2.0-2.3 mm; pronotum with lateral margin weakly sinuate, ante-basal
impression more heavily punctured than disc
Length exceeding 2.5 mm
<ul> <li>8 (7). Pronotum with posterior angle slightly produced, somewhat acute; lateral margin weakly sinuate; J, ventral outline of aedeagus strongly bent anteriorly as viewed laterally; length 3.1-4.1 mm</li></ul>
Pronotum with posterior angle nearly square; lateral margin strongly and evenly convex; $\mathcal{J}$ , ventral outline of aedeagus nearly straight as viewed laterally; length 2.9-3.2 mm

36. Asiorestia cheni Gressitt and Kimoto, n. sp. Fig. 197, b & 199, a.

Male: Reddish ochraceous; in part marked with pitchy black: anterior portion of head partly pitchy; antenna largely blackish brown, reddish brown on apices of most segments and on apical halves of segments 1-4, last 2 segments entirely dull brown; femora blackish brown in apical quarters; tibiae largely pitchy brown to blackish; tarsi blackish on segment 1 and brown on remainder. Body largely glabrous above with a few pale hairs on head; ventral surfaces thinly to moderately clothed with subadpressed whitish hairs; legs moderately clothed with pale hairs, which are a little denser on apices of femora and on tibiae.

Head distinctly narrower than prothorax at anterior angles; occiput moderately convex, smooth, shiny and nearly impunctate; postantennal swellings subrounded, moderately distinct and separated by a shallow groove; interantennal area  $2 \times$  as wide as an antennal insertion, somewhat narrowly raised along middle, raised area continuing onto frons; labrum slightly emarginate apically; gena about 1/3 as deep as eyes; eye subrounded. Antenna 5/6 as long as body; segment 1 fairly stout, weakly arched and punctuate; 2 nearly 1/2 as long as 1; 3 slightly longer than 2 and more slender; 4 barely longer than 3; 5 as long

as 1: 5-10 subequal in length; 11 slightly longer than 10. Prothorax 8/11 as long as broad; anterior margin weakly sinuate; basal margin weakly convex; lateral margin slightly sinuate, widest in middle, nearly straight near base and narrowed anterior to middle, then widened to anterior angle and then oblique to anterior margin; disc rather strongly and evenly convex, minutely and sparsely punctate; subbasal depression shallow but distinct, slightly arcuate and sublateral grooves short, deep and slightly curved. Scutellum short Elytron just over  $3 \times$  as long as broad, distinctly convex at side and rounded apically. and gradually narrowed to briefly rounded apex; epipleuron moderately broad basally, somewhat gradually narrowed and continued almost to apex; disc with 10 complete grooves with regular punctures and a sutural row of basal 1/3; punctures mostly about as large as interspaces longitudinally and about 1/3 to 1/4 as large as interspaces transversely, becoming much weaker posteriorly and with interspaces slightly raised posteriorly. Ventral surfaces weakly punctate on thorax, rather finely and subdensely punctate on abdomen; last abdominal sternite slightly swollen, with a faint median line and extreme apex convex and shallowly emarginate on each side of convexity. Legs large; hind femur strongly swollen, nearly 1/3 as wide as long; hind tibia weakly sinuate; hind tarsus 4/5 as long as tibia; segment 1 fully as long as 2+3 and slightly longer than last. Length 3.5 mm; breadth 1.6.

*Female*: Antenna and anterior portion of head slightly darker; antenna 2/3 as long as body; last abdominal sternite simple, weakly convex and barely convex on apical margin. Length 3.4 mm; breadth 1.7.

Paratypes: Length 3.0–3.6 mm; breadth 1.5–1.7.

DISTRIBUTION: W. China (Hupeh).

Holotype & (CAS), Liang-hou-keu (Leong-ho-kow), 800 m, Lichuan Distr., W. Hupeh Prov., 7. IX. 1948, Gressitt & Djou; allotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., 20. VIII. 1948, Gressitt & Djou; 3 paratypes (CAS, LINGNAN, BISHOP), same data as allotype; 1 paratype, Hsiao-ho, near Sui-sa-pa, 8. VIII. 1948, Gressitt.

Differs from *hummeli* (Chen) in having ante-basal impression of pronotum impunctate and apical portions of femora blackish.

#### 37. Asiorestia convexa Gressitt and Kimoto, n. sp. Fig. 198, a.

*Female*: Dorsum uniform reddish brown, slightly paler on apical portion of head; labrum ochraceous; antenna with flagellar segments evenly pale brown, scape and pedicel slightly darker brown; lateral margin of pronotum dark brown behind anterior angle, antebasal impression slightly darker; scutellum dark pitchy brown; ventral surfaces pitchy, reddish brown on thorax, slightly paler on abdominal sternites; anterior margin of metasternum dark pitchy brown; legs brownish; hind femur pitchy brown, hind tibia slightly paler than femur, hind tarsus ochraceous. Dorsum glabrous, except for scattered hairs on anterior portion of head; labrum with 4 or 5 hairs forming a transverse row along middle; clypeus with a group of subadpressed hairs sublaterally; antenna with scape slightly clothed, pedicel and flagellar segments moderately clothed with subadpressed hairs; prosternum and metasternum with suberect hairs medially and subadpressed hairs laterally; abdomen with sternite 1 moderately pubescent with suberect hairs, sternites 2–4 with a single, slightly clothed, transverse row of hairs, last sternite moderately clothed apically; legs slightly to moderately pubescent, hind femur with rather short adpressed hairs, hind tibia moderately clothed with longer subadpressed hairs, hind tarsus moderately clothed above on segments 1-2, 3 with fewer hairs above.

*Head* slightly narrower than prothorax at anterior angles, nearly as wide as long; labrum with anterior margin very slightly convex; frontoclypeus subtriangular, distinctly elevated medially; interantennal space distinctly narrower than antennal sockets, slightly convex; antennal sockets distinctly elevated, distinctly separated from inner margin of eye; gena moderately convex beneath antennal sockets, becoming convex below, granulate; eye subrounded; frontal tubercles transverse rounded, distinctly elevated, narrowly separated mesally by a shallow groove; vertex impunctate. Antenna 2/3 as long as body, subbasal segments more slender; segment 2 less than 1/2 as long as 1; 3 slightly longer than 4; 4– 10 subequal in length. *Pronotum* about 3/4 as long as wide, greatest breadth at apical 1/3, weakly constricted basally; anterior margin nearly straight, anterior angle oblique and slightly convex, lateral margin slightly sinuate, posterior angle without an acute projection; basal margin evenly convex, disc sparsely punctate, ante-basal impression distinct, nearly as deep as sublateral fovea. Scutellum distinctly broader than long, pointed apically. Elytron about  $2/5 \times$  as long as broad, lateral margin rather evenly convex, apical 1/4 gradually narrowing to apex; epipleuron sinuate, widest at apical 1/3, briefly narrowing behind widest portion, ending acutely slightly before apex; humerus slightly swollen; disc with 10 complete, regular rows of punctures and a scutellar row ending before basal 1/3; punctures distinctly larger than longitudinal interspaces and 1/2 to 1/3 as large as transverse interspaces, but distinctly narrower on apical 1/4; interspaces not distinctly elevated. Ventral surfaces punctulate to granulate; prosternum with intercoxal piece barely excavated; anterior margin of metasternum slightly convex and produced between mesocoxae, surface finely punctulate; abdominal sternite 1 with basal margin strongly produced between metacoxae, apex evenly rounded, surface finely punctulate; sternites 2-4 nearly impunctate excepting a single transverse row of punctures; last sternite with apex broadly and evenly rounded. Legs large; hind femur strongly swollen about  $1/2 \times$  as wide as long, widest at middle; hind tibia with length subequal to femur; hind tarsus about  $2/3 \times$  as long as tibia, length of segment 1 about as long as 2+3, apical segments nearly as long as 1. Length 2.0 mm; breadth 1.2.

*Paratypes*: Pitchy brown to reddish pitchy brown; length 2.1–2.3 mm; breadth 1.1–1.2. DISTRIBUTION: SE China (Fukien).

Holotype (BISHOP 3314), Ta-chu-lan, 1000 m, Shaowu Distr., Fukien Prov., 4. X. 1942, T. C. Maa; 2 paratopotypes (CAS, BISHOP), 25. IV. 1943, 23. IX. 1942, T. C. Maa.

Differs from *laevicollis* (Jac'y) in being much smaller, with pronotum more convex and with ante-basal impression more heavily punctured.

38. Asiorestia hummeli (Chen), NEW COMBINATION Fig. 199, b.

Crepidodera Hummeli Chen, 1935, Arkiv Zool. 27 A (5): 7, fig. 4 (Urumchi; STOCKHOLM). —Heikertinger, 1948, Kol. Rundsch. 31: 79.

The following material is somewhat tentatively associated with this name.

DISTRIBUTION: China (Sikiang, Szechuan, Hupeh, Anhwei, Kiangsi, Fukien).

SZECHUAN: NE of Mo-tau-chi, Wan-hsien, 1200–1400 m, 22–27. IX. 1948, Gresitt & Djou (CAS). HUPEH: Many, Liang-ho-keu, 1–10. IX; Sui-sa-pa, 1000 m, 19–31. VII, 6–31. VIII, 17. IX; Hsiao-ho, 10–15. VIII; Wang-chia-ying, 1100–1400 m, 21. VII, 23. IX, Li-chuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). ANHWEI: Tai-ping-shien, 1932, G.

Liu (MCZ). KIANGSI: Hong Shan, 15–29. VI. 1936, Gressitt (CAS). FUKIEN: Ta-chu-lan, 1000 m, Shaowu, 6. VI. 1943, Maa (CAS).

### 39. Asiorestia interpunctata (Motschulsky), NEW COMBINATION

Crepidodera interpunctata Mots., 1859, Soc. Imp. Nat. Moscou, Bull. 32 (2): 498 (Amur; ?type lost).—Heikertinger & Csiki, 1939, Col. Cat. 166: 289 (N. Europe, Kuriles, Japan).—Hktgr., 1948, Kol. Rundsch. 31: 64 (Japan, Kuriles).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 178 (S. Sachalin, Kaiba I., Hokkaido, Honshu, Kyushu).

This species probably occurs in China, as it is recorded from along the northern border.

DISTRIBUTION: Europe, Siberia, Sachalin, Kuriles, Japan (Hokkaido, Honshu, Kyu-shu).

40. Asiorestia laevicollis (Jacoby), NEW COMBINATION Fig. 200, a.

Crepidodera laevicollis Jac., 1885, Zool. Soc. Lond., Proc. 1885 : 722 (Oiwake, Japan; BM). —Heikertinger, 1948, Kol. Rundsch. 31 : 79.—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 179 (Honshu, Sado, Shikoku).

DISTRIBUTION: Japan (Honshu, Sado, Shikoku), S. China (Kiangsu, Hupeh).

KIANGSU: 1, Ku-ling, nr. Kiu-kiang, 18. X. 1919, Loomis (US). HUPEH: 5, Sui-sapa, 1000 m, Lichuan Distr., 21–26. VIII. 1948, Gressitt (CAS, BISHOP).

41. Asiorestia manobioides (Chen), NEW COMBINATION

Crepidodera manobioides Chen, 1939, Sinensia 10: 34 (Kwangsi: Yaosan; Ac. SIN.).-Heikertinger, 1948, Kol. Rundsch. 31: 87 (China). DISTRIBUTION: SW China (Kwangsi).



Fig. 198. a, Asiorestia convexa n. sp.; b, A. minima n. sp.; c, A. obscuritarsis (Motschulsky).

#### 42. Asiorestia minima Gressitt and Kimoto, n. sp. Fig. 198, b. & 200, b.

Male: Pitchy, reddish brown, head and pronotum slightly darker than elytron; antenna with scape and pedicel pitchy brown, flagellar segments dull brown; ventral surfaces reddish brown, much darker than dorsum; basal and lateral margins of metasternum dark pitchy brown; abdominal sternite 1 with margin adjacent to metacoxa dark pitchy brown; legs testaceous to pale brown, hind femur and tibia testaceous, hind tarsus slightly paler than tibia. Dorsum glabrous, excepting scattered hairs on head; frontoclypeus sparsely pubescent; labrum with several long hairs forming an irregular, transverse row; antenna, ventral surfaces and legs moderately pubescent, with mostly subadpressed hairs; hind femur slightly clothed, and hind tibia moderately clothed, with subadpressed hairs, hind tarsus moderately clothed above on segments 1–2.

Head slightly more than 3/4 as long as wide, breadth slightly narrower than apical portion of pronotum, greatest breadth at eyes; labrum transverse, slightly convex, anterior margin truncate, but with anterior corners slightly rounded, with a median, subapical maculation; frontoclypeus subtriangular, slightly elevated medially, finely punctuate; interantennal space slightly convex, nearly equal to diameter of antennal socket; antennal socket not elevated, well separated from eye; postantennal tubercles distinct, subtriangular, with inner corners nearly contiguous; vertex slightly convex, nearly impunctate, with a shallow fovea near dorsal margin of eye; eye suboval; gena excavated below antennal socket, convex laterally. Antenna about 2/3 as long as body, cylindrical, apical 5 segments noticeably thicker; segment 1 fully  $2 \times$  as long as wide; 2 slightly longer than wide, about 1/2 as long as scape; 3 much narrower and slightly longer than 2; 4 slightly longer than 3, narrower than 2; 5 slightly longer than 4; 6 slightly shorter than 5; 7 nearly equal to 6, slightly thicker; 8 slightly shorter than 7, but noticeably thickened; 9 slightly longer than 8; 10 slightly shorter than 9; 11 about 1/3 longer than 10. Prothorax 2/3 as long as broad, with greatest breadth at middle; apical margin nearly straight, anterior angle oblique, slightly produced posteriorly; lateral margin slightly convex, slightly narrower behind, posterior angle produced and pointed apically; basal margin convex; disc evenly convex, rather impunctate; ante-basal impression shallow, ending in deeper longitudinal grooves. Scutellum triangular, slightly wider than long, pointed apically. Elytron slightly less than  $2.5 \times$  as long as broad, lateral margin evenly convex to apical 1/3, then narrowing acutely to apex; humerus slightly elevated; epipleuron somewhat sinuate, widest apically, then gradually narrowing and ending subapically; disc with 10 rows of punctures, becoming faint to obsolete on apical 1/4 and a scutellar row ending at basal 1/3; punctures mostly as large as longitudinal interspaces and about 1/3 as large as transverse interspaces. Ventral surfaces finely punctulate on thorax and abdomen; last abdominal sternite with a large impression medially, slightly concave near anterolateral corner. Legs large; hind femur strongly swollen, nearly 1/2 as wide as long; hind tibia as long as femur; hind tarsus nearly 2/3as long as tibia, segment 1 slightly longer than 2+3. Length 1.8 mm; breadth 0.9.

*Female*: Pronotum and elytron slightly paler in color. Antenna about 3/5 as long as body; last abdominal sternite with surface evenly convex, apex evenly and broadly rounded. Length 1.8 mm; breadth 0.9.

Paratype: Reddish brown; length 1.8 mm; breadth 0.9.

DISTRIBUTION: W. China (W. Hupeh, Szechuan border).

Holotype 3' (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 26. VIII. 1948,

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Gressitt & Djou; allotopotype ♀ (CAS), 1200–1500 m, 25. VII. 1948, Gressitt; 1 paratype (BISHOP), Mo-tai-chi to Chi-au-shan, Szechuan–Hupeh border, 28. VII. 1948, Gressitt & Djou.

Differs from *laevicollis* (Jac'y) in being paler, much smaller and in having ante-basal pronotal depression more heavily punctured.



Fig. 199. & genitalia. a, Asiorestia cheni n. sp.; b, A. hummeli (Chen); c, A. oculata n. sp.; d, A. obscuritarsis (Motschulsky).

43. Asiorestia obscuritarsis (Motschulsky), NEW COMBINATION Fig. 199, d.

Crepidodera obscuritarsis Mots., 1859, Bull. Mosc. 4: 498 (Amur; ? type lost); 1860, Etudes Ent. 9: 27 (Amur).—Jacoby, 1890, Entomologist 23: 162 (Hupeh: Chang-yang).—Heikertinger, 1948, Kol. Rundsch. 31: 54, 80 (Manchuria, Japan).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 179 (Siberia, NE China, Japan).

Crepidodera lewisi Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 721 (Japan; BM). Jacoby's record from Hupeh may require verification.

DISTRIBUTION: SE Siberia (Amur), China (Kirin, Hupeh, Kweichow), Japan (Hokkaido, Honshu, Kyushu).

SIBERIA: 3, Kongaus, VIII. 1923, Cockerell (US). MANCHURIA: 2, ? 31. VIII. 1923, Van Dyke (CAS). KIRIN: Hunchun, 13. VII. 1942, Nakao (Kimoto).

44. Asiorestia oculata Gressitt and Kimoto, n. sp. Fig. 199, c & 201, a.

*Male*: Testaceous above, with head darker pitchy brown; antenna with segments 1-2 testaceous, 3-4 slightly darker, 5-11 dull reddish brown, apices of flagellar segments indistinctly paler in color; ventral surfaces testaceous to pale reddish brown; legs with fore and mid femora testaceous, but slightly darkened at apices, tibiae and tarsi reddish brown; hind femur brown on basal 1/2, pitchy reddish brown apically, hind tibia dull reddish brown, hind tarsus reddish brown on segment 1, 2-3 slightly paler. Dorsum glabrous, except for scattered hairs on head; labrum with a transverse row of about 6 pale hairs, fronto-clypeus with scattered hairs and a submedian row of pale subadpressed hairs extending to

interantennal area, vertex glabrous; antenna with scape and pedicel sparsely clothed with short, mostly appressed hairs, flagellar segments moderately clothed with pale subadpressed hairs; ventral surfaces moderately clothed with mostly subadpressed hairs; legs moderately pubescent; hind femur sparsely clothed with short, appressed hairs on swollen area and with longer pale hairs apically, hind tibia moderately clothed, hind tarsus with segments slightly clothed above.

*Head* almost as long as wide, distinctly narrower than breadth of pronotum at anterior angles; labrum abruptly but shallowly emarginate on anterior margin; frontoclypeus subtriangular, distinctly elevated medially; interantennal space convex, slightly narrower than greatest diameter of antennal socket; antennal socket distinctly elevated, slightly produced behind and forming an acute point separated from eye by a shallow excavation; eye large, subrounded, with a slight emargination adjacent to antennal socket; gena convex, granulate; postantennal tubercles suboval, distinctly elevated and indistinctly separated by a median, shallow groove, laterally separated from eye by a deep excavation; vertex with surface evenly convex, nearly impunctate. Antenna about 3/4 as long as body, cylindrical, apical segments of flagellum slightly thicker than pedicel; segment 1 fully  $2 \times as$  long as wide; 2 distinctly longer than wide, distinctly narrower than scape; 3 slightly longer and wider than 2; 4 longer than 3; 5th 3/8 as long as 4; 6 slightly shorter than 5; 7 nearly as long as 5; 8-10 distinctly longer than 7, lengths subequal; 11th 1/5 longer than 10. Prothorax 5/11 as long as broad, greatest breadth at middle, weakly constricted basally and distinctly narrower than basal breadth of elytron; anterior margin nearly straight; anterior angle oblique and swollen; lateral margin weakly sinuate; posterior angle not forming an acute projection, posterior margin convex and minutely sinuate; disc punctulate, ante-basal impression deep, but not as distinct as sublateral impression. Scutellum nearly as broad as long, apex subrounded. Elytron  $3 \times$  as long as broad, lateral margin rather straight, with apical 1/3 converging evenly to bluntly rounded apex; epipleuron convex, widest basally, gradually narrowed to an acute point slightly before apex; disc with 10 regular rows of punctures and one scutellar row ending near basal 1/3, punctures as large to 1/2 as large as longitudinal interspaces and 1/2 to 1/3 as large as transverse interspaces; punctures becoming smaller and more closely spaced apically; interspaces not distinctly elevated. *Ventral surfaces* punctulate to rugulose on thorax and punctate on abdominal sternites; apical abdominal sternite with surface rather evenly convex and with a dark, narrow line running medially to extreme apex, apical margin briefly, but evenly rounded. Legs large; fore and mid femora moderately incrassate; hind femur greatly swollen, nearly 1/2 as wide as long; hind tibia slightly longer than femur; hind tarsus about 2/3 as long as tibia. segment 1 slightly longer than 2+3, last segment slightly shorter than 1. Length 3.1 mm; breadth 1.6.

*Female*: Testaceous above, becoming slightly darker, pitchy brown on pronotum and head; antenna pitchy brown to reddish; ventral surfaces testaceous to pitchy brown; legs noticeably darker than in  $\mathcal{J}$ ; fore femur dark pitchy brown on apical 1/2, hind femur dark reddish pitchy brown over entire surface, but slightly darker apically, hind tarsus dark pitchy reddish brown, hind tarsus pitchy brown; apex of last abdominal sternite more pointed than in  $\mathcal{J}$ . Length 3.5 mm; breadth 2.0.

*Paratype*: Reddish ochraceous to slightly paler. Length 3.9-4.1 mm; breadth 2.1-2.3. DISTRIBUTION: SW China.

Holotype & (Zool. Mus. Berlin), Chao-chow-fu, 2300 m, W. Yunnan Prov., 23. VIII-21.
IX. 1914, S. Mell; allotopotype P (ZMB), same data; 3 paratypes (ZMB, BISHOP), same data.

Differs from *laevicollis* (Jac'y) in being paler, slightly larger, with hind angle of pronotum slightly produced and side weakly sinuate.



Fig. 200.  $\Im$  genitalia. a, Asiorestia laevicollis (Jacoby); b, A. minima n. sp.; c, A. resina n. sp.

# 45. Asiorestia resina Gressitt and Kimoto, n. sp. Fig. 200, c. & 201, b.

*Male*: Testaceous above, head and prothorax slightly darker pitchy brown; antenna with apical segments darker, 1–4 pitchy brown, 2–4 with apices distinctly paler, 5–11 reddish brown; ventral surfaces pitchy brown, metasternum with anterior margin dark pitchy brown, abdominal sternite 1 darker basally; legs pitchy brown, hind femur slightly darker at apex. Dorsum glabrous, but head with scattered hairs; labrum sparsely clothed with an irregular, transverse row of hairs; frontoclypeus with 2 submedian rows of subadpressed hairs, anterior area with scattered hairs; antenna moderately pubescent; ventral surfaces moderately clothed with silvery subadpressed hairs; transverse portion of prosternum with fine erect hairs medially; legs moderately pubescent, with hind tibia more heavily clothed than femur.

Head  $5/6 \times$  as long as broad, narrower than breadth of apical part of pronotum; labrum  $3/8 \times$  as long as broad, anterior margin slightly concave, with a median bidentate projection arising subapically; frontoclypeus subtriangular, convex; gena weakly excavated below antennal socket, convex laterally; interantennal space briefly concave, nearly equal to diameter of antennal socket; antennal socket with margin swollen, narrowly separated from inner margin of eye; eye subrounded; postantennal tubercles subrounded, distinctly elevated, mesally separated by a narrow groove; vertex nearly impunctate, surface slightly convex, with a small fovea sublaterally. *Antenna* about  $3/4 \times$  as long as body, slender, with apical segments slightly thickened; segment 1 twice as long as broad; 2 about  $1/2 \times$ as long as 1, distinctly longer than broad; 3 as long as 2; 4 slightly longer than 3; 5th 1/4 longer than 3, slightly thicker; 6 slightly shorter than 5; 7 nearly equal to 5; 8–10 subequal, longer and thicker than 7; 11th 1/4 longer than 10. Prothorax 9/11 as long as broad, greatest breadth at middle and narrower than elytra at basal margin; anterior margin nearly straight; anterior angle oblique; lateral margin sinuate; basal margin slightly convex at middle; disc convex, rather punctulate, ante-basal impression distinct, sinuate,

ending laterally in a short, longitudinal groove. Scutellum triangular, about as broad as long, apically pointed. Elytron  $3 \times$  as long as broad, widest at end of basal 1/3, gradually narrowing to apical 1/3, then briefly rounded to apex; epipleuron sinuate, widest near basal 1/4, then gradually narrowing and continuing nearly to apex; disc with 10 regular rows of punctures and 1 scutellar row ending before end of basal 1/3; punctures 1/2 to  $1 \times$  as large as longitudinal interspaces and 1/4 to 1/2 as large as transverse interspaces; interstices feebly swollen. Ventral surfaces largely granulate; intercoxal portion of prosternum slightly excavated; metasternum uniformly convex, basal margin acutely produced between mesocoxae; abdominal sternite 1 with anterior margin produced between metacoxae; apical abdominal sternite subtriangular, with apex evenly rounded, surface moderately convex, with anterolateral corners slightly impressed, mesal area with a faint longitudinal line extending to extreme apex. Legs with fore and mid femora slightly swollen on apical halves, hind femur moderately swollen, widest near middle, 2/5 longer than wide; hind tibia about as long as femur; hind tarsus with segment 1 about 3/10 as long as tibia, barely longer than 2+3. Length 3.1 mm; breadth 1.6 mm.

Female : Testaceous above; antenna with segments 1-4 ochraceous, 5-11 reddish brown; ventral surfaces and legs evenly testaceous; abdomen with apical sternite triangular, evenly convex, apex rounded. Length 3.4 mm; breadth 1.7.

Pale testaceous to reddish brown. Length 2.1-3.4 mm; breadth 1.0-1.6. Paratypes:

DISTRIBUTION: SE China (Fukien).

Holotype & (BISHOP 3315), Ta-chu-lan ("Ta-chu-fung"), 1000 m, Shaowu Distr., Fukien Prov., 21. IV. 1945, T. C. Maa; allotopotype 9, 17. V. 1942, Maa; 7 paratopotypes (BISHOP, CAS, US), 21. IV, 4. X. 1942, 4. V-13. VI. 1943, T. C. Maa; 1 paratype (CAS), Chung-an, Kuatun Distr., NW Fukien, 13. V. 1945, Maa.

Differs from laevicollis (Jacoby) in being slightly paler, with legs paler and with pronotum less punctured but with pre-basal depression more sharply defined and more lineately punctured.

# 46. Asiorestia sublaevis (Motschulsky), NEW COMBINATION

Crepidodera sublaevis Mots., 1859, Soc. Imp. Nat. Moscou, Bull. 32 (2): 498 (Amur; ? type lost).-Heikertinger, 1948, Kol. Rundsch. 31 (1-3): 58, fig. 8 (N. & C. Europe, Turkestan, Siberia, Kuriles, Japan).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 179 (Hokkaido, Honshu).

This species probably occurs in China, as it is recorded along the northern border.

DISTRIBUTION: N. & C. Europe, Turkestan, Siberia, Kuriles, Japan (Hokkaido, Honshu).

## Genus Xuthea Baly

Xuthea Baly, 1865, Ann. Mag. Nat. Hist. ser 3, 16: 248 (type: X. orientalis Baly; India). -Chapuis, 1875, IN Lacordaire, Gen. Col. 11: 123, 129.-Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 43; 1925, t. c. (3-4): 52.—Maulik, 1926, Fauna India, Chrys. &



Fig. 201. a, Asiorestia oculata n. sp.; b, A. resina n. sp.; c, Xuthea sinuata n. sp.

Halt., 246.—Chen, 1933, Sinensia 3 (9): 219; 1934, op. cit. 5 (3-4): 227, 228, 262; 1936, op. cit. 7 (6): 653.—Heikertinger, 1948, Kol. Rundsch. 31 (1-3): 42.

KEY TO CHINESE SPECIES OF XUTHEA

## 47. Xuthea orientalis Baly

Xuthea orientalis Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 249 (India; BM).—Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 429 (Kurseong, Assam).—Maulik, 1926, Fauna India, Chrys. & Halt., 246, fig. 89 (Sikkim, N. India, Assam, Burma).—Chen, 1934, Sinensia 5 (3-4): 262 (Yunnan: Pe-yen-tsin).—Heikertinger, 1948, Kol. Rundsch 31: 42 (Korea).

Xuthea orientalis yunnanensis Hktgr., 1948, Kol. Rundsch. 31: 42 (Yunnan, India: Sikkim, United Provinces, Assam; Burma, Korea).

Heikertinger described the above subspecies, but as we have material from Sikang which diverges very slightly but which we do not wish to name at this time, we are not dividing the species into subspecies without more adequate material.

DISTRIBUTION: N. India, Burma, SW China (Yunnan, Sikang), Korea.

YUNNAN: 1, Yunnan-sen (ZMB). SIKANG: 1, Den-shiang-uen, nr. Ning-yuen-fu, 9-10. VIII. 1928; 1, Mu-ping, 22-23. VIII. 1929, Graham (US).

48. Xuthea sinuata Gressitt and Kimoto, n. sp. Fig. 201, c.

Female: Pale, shiny testaceous; head with labrum and frontoclypeus ochraceous; an-

tenna incomplete; segments 1-3 ochraceous; 4 ochraceous basally becoming dark reddish brown apically; 5-7 dark reddish brown; 8-11 probably dark reddish brown; pronotum with margins pitchy brown; scutellum pitchy brown; elytron slightly darker along rows of punctures; ventral surfaces testaceous, apices of abdominal sternites 1-4 finely margined with yellow; fore and mid legs with femora testaceous on basal 2/3, dark reddish black at apex, tibiae uniformly dark, shiny reddish black, tarsi with first segment about as dark as tibiae, 2 becoming paler apically, 3 reddish brown, last somewhat darker than 3; hind femur reddish testaceous on basal 2/5 and abruptly becoming dark, shiny reddish black apically, hind tibia dark, shiny reddish black, hind tarsus as others. Glabrous above, except for scattered pubescence on head; labrum with a transverse row of long, pale hairs; frontoclypeus with scattered pale subadpressed hairs on anterior margin; antenna lightly clothed on segments 1-4, apical segments moderately clothed with mostly appressed, silvery hairs; pronotum with 1 long, pale, erect seta on anterior angle and 1 on posterior angle; ventral surfaces moderately clothed with suberect, pale hairs on thorax and moderately clothed with mostly subadpressed hairs on abdomen; legs subglabrous to heavily clothed with appressed, silvery hairs; hind femur subglabrous basally, lightly clothed with short hairs apically; hind tibia densely clothed, but glabrous along 1 axial surface; hind tarsus moderately clothed with fine hairs above; fore and mid legs with tibiae less densely clothed.

Head slightly wider than long, greatest breadth at eyes, much narrower than breadth of pronotum at anterior angles; labrum transverse, anterior margin barely concave and with a small, dark spot medially; frontoclypeus triangular, mostly impunctate; interantennal space rather flat, about  $2.5 \times$  as broad as transverse diameter of antennal socket; antennal socket slightly elevated and weakly swollen along upper margin; eye subrounded, but inner margin rather straight; gena slightly excavated below antennal socket, becoming convex below eye, with apical margin forming a heavy, blunt swelling near anterior corner of clypeus; postantennal swellings transverse, pointed mesally and separated by short, transverse groove ending in a fovea near inner margin of eye; vertex with surface evenly convex and moderately punctate. Antenna with segment 1 fully  $3 \times$  as long as broad; 2 nearly 1/3as long as scape, distinctly longer than wide; 3rd 2/3 as long as scape, much narrower than 2, 4 slightly longer than 3; 5 about 4/5 as long as scape, more robust than 4 and about as thick as 2; 6 nearly as long as 5; 7 as long as 6. Pronotum 9/16 as long as broad, widest at middle, distinctly narrower than basal margin of elytra; anterior margin nearly straight, anterior angle swollen and rounded, lateral margin convex, posterior angle not prominent, basal margin sinuate and rather convex; disc punctate, ante-basal impression sinuate and ending in a deeper, sublateral impression. Scutellum triangular, about as broad as long, apically pointed. Elytron about  $2/5 \times$  as broad as long, lateral margin weakly convex, with apical 1/3 obliquely rounded to briefly truncated apex; epipleuron sinuate, widest at basal 1/4, surface weakly torulose longitudinally; humerus slightly swollen, but distinctly separated from a larger, rounded swelling on basal 1/4 of disc; disc with 9 complete, regular rows of punctations, 1 indistinct row along lateral margin and a scutellar row not exceeding basal 1/3; punctures slightly larger and longitudinal interspaces 1/2 to 1/3 as large as transverse interspaces; interstices slightly elevated. Ventral surfaces with prosternum slightly globular; metasternum shiny and sparsely punctate, basal margin acutely projecting between mesocoxae; abdominal sternite 1 punctate, basal margin truncate on projection between metacoxae; last abdominal sternite swollen, with a shallow, sublateral depression, extreme apex truncate. Legs large; fore and mid femora strongly swollen; hind

femur much larger and strongly swollen, slightly less than  $2.5 \times$  as long as wide; hind tibia as long as femur; hind tarsus slightly shorter than tibia, segment 1 slightly shorter than 2+3, 3 deeply emarginate on apical margin, last segment about as long as 1. Length 5.8 mm; breadth 2.9.

DISTRIBUTION: W. China (Szechuan).

Holotype  $\mathcal{P}$  (U. S. Nat. Mus.), between Sui-fu and Yunnan Border, 600–900 m, Szechuan Prov., 10. X. 1924, D. C. Graham.

Differs from *orientalis* in being much paler and in lacking a deep groove along hind margin of postantennal swellings to upper margin of eye.

## Genus Crepidodera Chevrolat

- Crepidodera Chevrolat, 1837, IN Dejean Cat. Col. ed. 3: 415.—Maulik, 1926, Fauna India, Chrys. & Halt., 234 (type: Chrysomela nitidula Fab.).—Hincks, 1952, Soc. Brit. Ent., Jour. 4 (5): 113.
- Chalcoides Foudras, 1859, Hist. Nat. Col. France, Altisides, 312; 1861, Soc. Linn. Lyons, Ann. 7: 56.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 43; 1925, t. c. (3-4): 69.
  —Chen, 1936, Sinensia 3(9): 219; 1936, op. cit. 7 (6): 653.—Heikertinger, 1950, Kol. Rundsch. 31 (4-6): 106.—Hincks, 1952, Soc. Brit. Ent., Jour. 4 (5): 113 (synonymized).
- Foudrasia des Gozis, 1882, Soc. Ent. France, Ann. ser. 6, 1 (Bull.): CXXXIV (new name for Chalcoides Foudras).

The generic name *Chalcoides* has been used for a long time for this genus, but the type of *Crepidodera* is congeneric with the type of *Chalcoides*.

#### KEY TO CHINESE SPECIES OF CREPIDODERA

1.	Length less than 3.5 mm 2
	Length 4.0 mm; antenna entirely reddish brown; body bright metallic green above
2.	Vertex impunctate, smooth; body entirely metallic blue above
	Vertex finely punctulate; pronotum bronzy green, elytron green or blue
3.	Legs entirely piceous; length 2.4-3.2 mm 50. picipes
	Legs partially brown; length 2.8 mm 52. sinensis
4.	Antenna with segments 1-4 testaceous, 5-11 much darker; length 2.4-3.2 mm 51. pluta
	Antenna with segments 1-6 testaceous, 7-11 slightly darker; length 2.5-3.3 mm 49. aurata

#### 49. Crepidodera aurata (Marsham), NEW COMBINATION

Chalcoides aurata Marsh., 1802, Ent. Brit. 195 (England; ?BM).—1860, Foudras, Mon. Halt. 317 (Europe).—Thomson, 1866 Skand. Col. 7: 221.—Chen, 1934, Sinensia 5 (3-4): 407; 1936, t. c. (7): 653.—Heikertinger, 1950, Kol. Rundsch. 31 (4-6): 109. DISTRIBUTION: Europe, Siberia, E. China (Kiangsu).

50. Crepidodera picipes (Weise), NEW COMBINATION Figs. 202, a & 203, b.

Chalcoides picipes Weise, 1887, Archiv Naturg. 192 (Siberia; ZMB).—Jacoby, 1890, Entomologist 23: 221 (Changyang, Hupeh).—Heikertinger, 1950, Kol. Rundsch. 31 (4-6): 114.



Fig. 202. a, Crepidodera picipes (Weise); b, C. viridis n. sp.

DISTRIBUTION: E. Siberia, S. China (Kirin, Szechuan, Hupeh).

KIRIN: Mao-er-schan, 12. VI. 1944 (FREY). SZECHUAN: 1, Ta-ning-ho, V-VI. 1904, Blackwelder (US). HUPEH: many, Sui-sa-pa, 1000 m, VII-IX; 6, Hsiao-ho, 10. VIII, 14. IX; 5, Liang-ho-keu, 1-9. IX, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP).

# 51. Crepidodera pluta (Latreille) Fig. 203, a.

Altica pluta Latr., 1804, Hist. Nat. Crust. et Ins. 12: 7, no. 5 (Europe).

Chalcoides chloris Foudras, 1860, Soc. Linn. Lyon, Ann. ser 2, 7: 58, 52 (France).

Crepidodera chloris: Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 724, 754 (Japan).

Chalcoides plutus var. punctithorax Pic, 1918, Echange 34: 18 (France).

Crepidodera japonica: Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 12 (Korea).

Chalcoides Plutus: Heikertinger & Csiki, 1939, Col. Cat. 166: 323 (Siberia, Korea, Japan, Tibet).—Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 171 (Korea); 1942, op. cit. 32 (220): 35 (Keisho-Hokudo).—Heikertinger, 1950, Kol. Rundsch. 31 (4-6): 114.

DISTRIBUTION: Europe, Asia Minor, Caucasus, Siberia, China (Tibet, Yunnan, Hupeh, Hopei, Kirin), Korea.

HOPEI: 1, Pei-ping, 15. IX. 1935, S. Y. Chi (US). HUPEH: many, Sui-sa-pa, 1000 m, VII-IX; 7, Hsiao-ho, 10-16. VIII, 14. IX; 16, Liang-ho-keu, 1-10, 18. IX, Lichuan; 1, Mo-taichi to Chi-au-shan, 28. VIII, Gressitt & Djou, 1948 (CAS, BISHOP). YUNNAN: 4, Kunming, (Yunnan-fu), 1900 m, 1, 2. VII, 3. VIII. 1940, Gressitt (BISHOP). KIRIN: 2, Charbin, 20. VI. 1950 (FREY).

HOSTS: Salix spp. (Europe).

### 52. Crepidodera sinensis (Chen), NEW COMBINATION

Chalcoides sinensis Chen, 1935, Sinensia 6 (1): 777 (Kiangsu; STOCKHOLM); 1938, Arkiv Zool. 30 B (4): 2.

There is a possibility that this is the same as *picipes*. It is necessary to check the aedeagi. The redescription appeared before the "original description."

DISTRIBUTION: E. China (Kiangsu).

## 53. Crepidodera viridis Gressitt and Kimoto, n. sp. Fig. 202, b.

*Female*: Dorsum metallic green, faintly tinged with blue; labrum and mouthparts pitchy red-brown; antenna with segments 1–2 pitchy brown, 3–11 reddish brown and distinctly darker than basal segments; ventral surfaces reddish black; legs with segments rather uniformly colored; fore and mid legs pitchy testaceous; hind leg dark reddish black, but femur with a small reddish brown spot at extreme apex. Glabrous above except head; frontoclypeus with moderate pubescence of rather long, subadpressed hairs; gena moderately clothed with pale, adpressed hairs; vertex with a small, sublateral fovea bearing an erect seta near inner margin of eye; antenna with scape, pedicel, segments 1–2 lightly clothed with short pale hairs, 3–11 moderately clothed with appressed hairs, apices bearing several longer, suberect hairs; ventral surfaces moderately clothed with suberect hairs on thorax, but metasternum subglabrous on posterior 1/2, abdomen moderately clothed with pale, subadpressed hairs.

Head slightly broader than long, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum transverse, with a small dentate emargination on anterior edge; frontoclypeus subtriangular, distinctly elevated medially; interantennal space distinctly convex, slightly broader than transverse diameter of antennal socket; antennal socket with margin not distinctly elevated; eye subrounded, with inner margin rather straight; gena excavated below antennal socket, becoming convex laterally; postantennal swellings subquadrate, distinctly elevated, narrowly separated by a deep, median groove; vertex with surface rather evenly convex, but medially impressed anteriorly. Antenna 5/8 as long as body, cylindrical, apical segments distinctly thicker than pedicel; scape  $3 \times as$  long as wide; segment 2 distinctly longer than wide, almost 1/2 as long as 1; 3rd 1/3 longer and narrower than 2; 4 slightly shorter than 3; 5 subequal to 3, but more robust; 5 slightly shorter and more robust than 5; 7 about as long as 6, 8-10 subequal, slightly shorter than 7. 11th 2/7 longer than 10, apically pointed. Prothorax 7/11 as long as broad, widest from middle to posterior angles and distinctly narrower than basal portion of elytron; anterior margin rather straight, anterior angle slightly produced and nearly square, but briefly concave laterally, lateral margin convex apically and nearly straight basally, posterior angle not produced, basal margin rather oblique laterally and convex medially; disc punctate. ante-basal impression nearly parallel with basal margin and ending in a slightly deeper sublateral impression. Scutellum slightly wider than long, apex evenly rounded. Elytron fully  $3 \times$  as long as broad, lateral margin slightly convex, with apical 1/3 narrowing to apex; disc with 9 complete regular rows of punctures, 1 indistinct row along lateral margin and 1 short scutellar row ending at end of basal 1/3; punctures 1/2 to fully as large as longitudinal interspaces and 1/2 to 1/4 as large as transverse interspaces; interstices slightly swol-Ventral surfaces with prosternum punctate, metasternum mostly impunctate mesally, len. except along anterior margin, posterior 1/2 with surface faintly rugulose, anterior margin

slightly produced between mesocoxae; abdominal sternite 1 moderately punctate and transversely rugulose, 2–4 punctate, apical sternite with lateral margin oblique and apex nearly truncate, but weakly convex at extremity, medially swollen on apical 1/2, slightly impressed laterally. Legs stout and short. Length 4.0 mm; breadth 1.9.



Fig. 203.  $\Im$  genitalia. a, Crepidodera pluta (Latreille); b, C. picipes (Weise); c, Chaetocnema (Tlanoma) major manchurica Heikertinger.

*Paratype*: Metallic green, with strong tinges of blue. Length 4.0 mm; breadth 1.9. DISTRIBUTION: W. China.

Holotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 23. VIII. 1948, Gressitt; 1 paratype (BISHOP), Liang-ho-keu, Lichuan Distr., W. Hupeh, 10. IX. 1948, Gressitt & Djou.

Differs from C. pluta in being longer and in having antenna entirely reddish brown.

#### Genus Chaetocnema Stephens

- Chaetocnema Stephens, 1831, Illustr. Brit. Ent. Mandib. 4: 325 (type: Altica hortensis Geoff. 1785=Galeruca aridella Paykull, 1799).—Heikertinger, 1912, IN Reitter, Fauna Germ.
  4: 147, 162; 1924, Kol. Rundsch. 11 (1-2): 36; 1925, t. c. (3-4): 53, 69.—Maulik, 1926, Fauna India, Chrys. & Halt., 175, 202.—Chen, 1933, Sinensia 3: 215; 1934, op. cit. 5: 226, 244; 1933, Peking Nat. Hist. Bull. 8: 43; 1936, Sinensia 7 (6): 654.
  —Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355, 465; 1942, op. cit. 32: 31.
  —Heikertinger, 1951, Kol. Rundsch. 32: 31.
- Odontocnema Stephens, 1831, Illustr. Brit. Ent. Mandib. 4: 285 (in the key; error of Chaetocnema).

Plectroscelis Chevrolat, 1836, IN Dejean Cat. Col. ed. 3, p. 393.—Monrós & Bechyně, 1956, Ent. Arb. Mus. Frey 7 (3): 1134 (type designated as *P. aridula* Gyllenhal).

Tlanoma Motschulsky, 1845, Soc. Nat. Mosc., Bull. 18 (1): 108.—Heikertinger, 1912, Reitter's

Fauna Germ. 4: 162; 1924, Kol. Rundsch. 11 (1-2): 36; 1951, op. cit. 32: 38 (type designated as Chrysomela concinna Marsham). Subgenus.

Udorpes Mots., 1845, Soc. Nat. Mosc., Bull. 15 (1): 107.

Ydorpes Mots., 1845, l. c., Add.

Hydropus Mots., 1860, IN Schrenck, Reisen Amurland 2: 235 (type: Udorpes splendens Mots.).

Exorhina Weise, 1886, Naturgesch. Ins. Deutschl. Col. 6: 750, 755 (Ch. chlorophana Duft.). Carcharodis Weise, 1910, IN Voeltzkow, Reise Ostafrika 2: 434.

# KEY TO CHINESE SPECIES OF CHAETOCNEMA

1.	Interantennal space flat and strongly punctured; vertex distinctly and rather
	regularly punctured (subgenus Chaetochema)
	Interantennal space carinate or swollen medially, not punctured; vertex im-
• • • • •	punctate or with few punctures (subgenus <i>Tlanoma</i> )
2(1).	Punctation of elytron entirely in regular rows, scutellar row occasionally
	geminate
	Punctation of elytron confused mesally, somewhat regular laterally 5/. costulata
3(2).	Elytral punctures arranged in 11 rows, sometimes a short scutellar row of punc-
	tures geminate
	Elytral punctures closely arranged in 15 rows; length 2.0 mm 56. concinnipennis
4(3).	Body oval; diameter of elytral punctures, which are arranged in longitudinal
	rows, very narrow compared with their interstices
	Body subcylindrical; diameter of elytral punctures, which are arranged in
	longitudinal rows, not very narrow compared with their interstices; dorsum
	cupreous or greenish blue; antenna black with segments 1-4 reddish brown;
	legs black with a metallic green lustre, but apical halves of lower sides of
	femora, basal halves of tibiae and tarsal segments 1-2 reddish brown; length
	2.5–2.8 mm 58. cylindrica
5(4).	Elytron with interstices smooth, shiny, distinctly punctulate
	Elytron with interstices dull, minutely granulate, not punctulate 54. bella
6(5).	Pronotum with lateral margin evenly convex
	Pronotum with lateral margin unevenly convex, rather straight basally; length
	2.22.4 mm
7(6).	Length 1.8–2.0 mm; elytron with basal portion of scutellar row arranged in 3
	irregular rows
	Length 2.5–3.0 mm; elytron with basal portion of scutellar row arranged in 2
	irregular rows
8(1).	Vertex metallic
	Vertex not metallic, reddish brown; elytron with interstices strongly raised;
	length 3.0–3.7 mm 74. tristis
9(8).	Pronotum with a punctured, faintly impressed line along basal margin 10
	Pronotum without a punctured impression basally 12
10 (9).	Elytron with interstices flattened mesally and weakly swollen laterally 11
	Elytron with all interstices swollen; length 1.6-2.0 mm
11 (10).	Anterior femur entirely testaceous; length 1.9-2.3 mm 75. yaosanica

Anterior femur reddish to pitchy brown, apex paler; length 1.3-1.4 mm... 62. basalis 12 (9). Posterior angles of pronotum distinctly exceeding breadth of elytra at humeral Posterior angles of pronotum narrower or equaling breadth of elytra at humeral angles ..... 14 13 (12). Elytron with a distinct transverse depression before middle ..... 69, kwangsiensis 14 (12). Vertex finely rugulose, punctulate, or punctate, occasionally with punctures near inner margin of eye.....15 Vertex smooth and impunctate; metallic black above, antenna reddish brown; Elytral interstices with small, circular punctures,  $\varphi$  sometimes with interstices granulate; body evenly aeneous or bluish black; length 1.8-2.0 mm ... 68. koreana 16 (15). Length less than 2.5 mm; vertex with 3 or 4 large punctures near inner margin Length more than 3.0 mm; vertex without or with 1 or 2 punctures near inner Pronotum just over 1/2 as long as broad, lateral margin evenly convex;  $\varphi$ 

Subgenus Chaetocnema s. str.

# 54. Chaetocnema (Chaetocnema) bella (Baly) Fig. 204, a.

Plectroscelis bella Baly, 1876, Ent. Soc. Lond., Trans. 1876: 595 (China; BM) (Kin Kiang, probably Kiu-kiang, N. Kiangsi; BM).

Chaetocnema bella: Chen, 1934, Sinensia 5: 247 (Haut Tonkin; PARIS).—Heikertinger, 1951, Kol. Rundsch. 32: 74.

There are two color forms of this species: greenish blue and bronzy green.

DISTRIBUTION: China (Szechuan, Hupeh, Kiangsi, Fukien), N. Vietnam (Tonkin).

SZECHUAN: 1, NE of Mo-tau-chi, 1300–1450 m, Wan-hsien, 26. IX. 1948, Gressitt & Djou (CAS). HUPEH: 5, Sui-sa-pa, 1000 m, 23. VII-26. VIII; 1, Hsiao-ho, 8. VIII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). KIANGSI: 1, Sung-wu, 2. VII. 1936, Gressitt (CAS). FUKIEN: 8, Ta-chu-lan, 1000 m, Shaowu, 14. V, 4. X. 1942, 4, IX. 1943, 14. VII. 1946, Maa (BISHOP, CAS).

#### 55. Chaetocnema (Chaetocnema) concinnicollis (Baly)

Plectroscelis concinnicollis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 208 (Nagasaki; BM). Plectroscelis philoxena Baly, 1876, op. cit. 1876: 595 (Kin Kiang; BM).

Chaetocnema philoxena: Chen, 1933, Peking Nat. Hist. Bull. 8: 47 (Kwangtung) (Canton, Kin-Kiang; ZMB).

Chaetocnema concinnicollis: Chen, 1934, Sinensia 5: 248 (China: Peiping, Kiangsi, Szechuan; Formose; Tonkin).

Chaetocnema (Chaetocnema) concinnicollis concinnicollis: Heikertinger, 1951, Kol. Rundsch. 32: 68, 71, 74.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 176 (Japan; hosts).

DISTRIBUTION: Japan (Honshu, Hachijo, Shikoku, Kyushu), Ryukyu Is. (Amami-Oshima), Taiwan, China (Kirin, Hopei, Szechuan, Hupeh, Kiangsi, Fukien), N. Vietnam (Tonkin).

KIRIN: 1, Charbin (Harbin), 20. VI. 1950 (FREY). HUPEH: 6, Sui-sa-pa, 1000 m, Lichuan Distr., 6–29. VIII. 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: 5, Ta-chu-lan, 1000 m, Shaowu, 14. V, 4. X. 1942, 4. V. 1943; 1, Kienyang City, 13. VIII. 1940, Maa (BISHOP). HOPEI: 3, Peking, VII. 1913, Schoede u. Müller (ZMB).

HOST: Raphanus sativus L. var. acanthiformis Makino.

## 56. Chaetocnema (Chaetocnema) concinnipennis Baly

Chaetocnema concinnipennis Baly, 1877, Ent. Soc. Lond., Trans. 170 (India; BM).—Maulik, 1926, Fauna India, Chrys. & Halt., 207 (India, Assam, Ceylon).—Chen, 1934, Sinensia 5: 246 (Tonkin, Hainan).—Heikertinger, 1951, Kol. Rundsch. 32: 74, 76.

DISTRIBUTION: India, Ceylon, N. Vietnam (Tonkin), Hainan I.

## 57. Chaetocnema (Chaetocnema) costulata (Motschulsky)

Plectroscelis costulata Mots., 1860, Schrenck, Reisen Amurland 2: 234, pl. 11, fig. 22 (Daurie; ? type lost).

Chaetocnema costulata: Weise, 1889, Soc. Ent. Ross., Horae 23: 569 (Amdo).

Chaetocnema (Chaetocnema) costulata: Heikertinger, 1951, Kol. Rundsch. 32: 66 (N. China).

DISTRIBUTION: E. Siberia, Mongolia, N. China (Kansu, Kirin).

KIRIN: 2, Charbin (Harbin), 9. I. 1950 (FREY).

#### 58. Chaetocnema (Chaetocnema) cylindrica (Baly)

Plectroscelis cylindrica Baly, 1874, Ent. Soc. Lond., Trans. 208 (Nagasaki; BM).

Chaetocnema cylindrica: Chen, 1933, Sinensia 3: 215 (Kiangsi); 1934, op. cit. 5: 404.— Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 467, 470 (Honshu).

Chaetocnema (Chaetocnema) cylindrica: Heikertinger, 1951, Kol. Rundsch. 32: 66, 73 (Korea).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 177 (host).

Heikertinger indicated that this species had confused elytral punctures, but this is not correct.

DISTRIBUTION: Japan (Honshu, Kyushu), Korea, S. China (Kiangsi, Hupeh).

HUPEH: 1, Sui-sa-pa, 1000 m, 24. VIII; 1, Hsiao-ho, 900 m, 15. VIII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP).

HOST: Triticum aestivum L.

### 59. Chaetocnema (Chaetocnema) hortensis (Geoff. ap. Fourcr.)

Altica hortensis Geoff. ap. Fourcroy, 1785, Ent. Paris. 1: 98. (Europe).

Chaetocnema (Chaetocnema) hortensis: Heikertinger, 1951, Kol. Rundsch. 32: 54, 66 (Caucasus, C. Asia, Siberia, China: Shanghai).

This species is not included in the key.

DISTRIBUTION: Europe, Caucasus, Central Asia, Siberia, E. China (Kiangsu).

## 60. Chaetocnema (Chaetocnema) ingenua (Baly)

Plectroscelis ingenua Baly, 1876, Ent. Soc. Lond., Trans. 1876: 594 (China; BM).

Chaetocnema japonica Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 732 (Hokkaido, Honshu).
—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 467, 469.—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 177 (Kyushu; host). New Synonymy.

Chaetocnema sinuata Weise, 1889, Soc. Ent. Ross., Horae 23: 623 (Mongolia, Kansu; ZMB). New Synonymy.

Chaetocnema ingenua: Weise, 1922, Tijdschr. Ent. 65: 130 (Foochow).—Chen, 1933, Sinensia 3(9): 215 (Peiping, Tientsin).

Chaetocnema cognata: Chen, 1934, Sinensia 5 (3-4): 404 (Kiangsi).

Chaetocnema (Chaetocnema) ingenua: Heikertinger, 1951, Kol. Rundsch. 32: 68.

We are not sure whether cognata and ingenua are the same species or not, but Chen's cognata is ingenua.

DISTRIBUTION: China (Mongolia, Hopei, Hupeh, Fukien), Japan (Hokkaido, Honshu, Kyushu).

MONGOLIA: 1, Chan-heou (ZMB). HOPEI: 4, Peking, VII. 1913, Schoede u. Müller (ZMB). HUPEH: 1, Liang-ho-keu, Lichuan Distr., 9. IX. 1948, Gressitt & Djou (CAS). FUKIEN: 1, Wingan, 21. II. 1940, Maa (BISHOP).

### 61. Chaetocnema (Chaetocnema) modesta Gressitt and Kimoto, n. sp. Fig. 204, b.

*Female*: Dark bluish black, with a metallic lustre; antenna with segments 1–3 testaceous, 4 becoming darker, 5–11 dark reddish brown; ventral surfaces piceous and faintly aenescent; fore and mid legs evenly testaceous; hind femur dark pitchy reddish black, hind tibia and tarsus evenly testaceous. Glabrous above, excepting head; labrum with a transverse row of 6 long, pale hairs; frontoclypeus moderately pubescent with pale, subadpressed hairs; antenna with segment 1 subglabrous, 2 lightly clothed with scattered subadpressed hairs, 3–4 with short scattered hairs, 5–11 moderately clothed with adpressed hairs, apices with longer suberect hairs; ventral surfaces rather uniformly clothed with moderate pubescence of subadpressed pale hairs; legs slightly to moderately pubescent, hind femur with scattered short subadpressed hairs on swollen area, more densely clothed at apex, hind tibia with scattered pubescence, more densely clothed apically, apical excavation with lateral margins each with a dense row of stiff, comb-like bristles, hind tarsus subglabrous above.

Head slightly longer than broad, barely widest at eyes, slightly narrower than breadth of pronotum at anterior angles; labrum transverse, anterior margin truncate, lateral margin oblique; frontoclypeus weakly elevated mesally; interantennal space nearly flat and punctate, about as broad as transverse diameter of antennal socket, antennal socket with margin not distinctly swollen or elevated; eye suboval, inner margin rather straight; gena with



Fig. 204. a, Chaetocnema (Chaetocnema) bella (Baly); b, C. (C.) modesta n. sp.; c, C. (Tlanoma) hainanensis Chen.

surface rather evenly convex; vertex with surface evenly convex, evenly punctate and punctulate. Antenna nearly 2/3 as long as body, cylindrical; segment 1 about  $2 \times$  as long as wide: 2 about 2/3 as long as 1, distinctly longer than wide; 3 distinctly shorter than scape, much narrower than pedicel; 4 as long as 3, slightly more robust; 5 slightly longer than 4; 6 as long as 5; 7 as long as 6 and more robust; 8-10 subequal and slightly longer than 7: 11 almost 1/3 longer than 10. Prothorax 5/6 as long as wide, widest at anterior 1/3, slightly constricted basally, much narrower than anterior breadth of elytron; anterior margin narrowly straight and ending at projecting anterior angle, anterior angle briefly rounded apically and obliquely convex, lateral margin weakly convex and rather straight basally, posterior angle not produced, basal margin oblique, weakly concave laterally and broadly convex at middle; disc densely punctured, with interspaces smaller than punctures, sublateral impression indistinct. Scutellum about as wide as long, apex rounded. Elvtron 3/8 as wide as long, lateral margin moderately convex, apical 1/3 more briefly narrowed to apex; epipleuron rather broad, sinuate, surface rather swollen and with a longitudinal row of punctures ending in inner margin on apical 1/3; disc with 9 complete, regular rows of punctures, 1 distinct row on lateral margin and a rather irregular scutellar row ending before basal 1/2; punctures distinctly impressed, about 1 to  $2 \times$  as large as longitudinal interspaces and  $1/2 \times$  to nearly as large as transverse interspaces; interstices rather smooth and distinctly swollen along lateral rows. Ventral surfaces densely punctate; metasternum with posterior margin weakly emarginate at middle; abdominal sternite 1 completely fused with 2 and extremely long; 3-4 transverse and very narrow, apical sternite with lateral margin oblique and extreme apex truncate. Legs large; fore and mid femora slightly swollen; hind femur strongly swollen, about  $2 \times as$  long as wide; hind tibia 5/6 as long as femur, apical excavation with a marginal, angular dilation at apical 2/5 of segment; hind tarsus about  $2/3 \times as$  long as tibia, segment 1 distinctly longer than length of 2+3, last nearly as long as 1. Length 2.4 mm; breadth 1.3.

Paratypes: Dark bluish black, with metallic lustre. Length 2.2–2.4 mm; breadth 1.2–1.3.

# DISTRIBUTION: W. China (Hupeh, Szechuan).

Holotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 31. VIII. 1948, Gressitt & Djou; 4 paratopotypes (CAS, BISHOP, LINGNAN, US), 3. VII-23. VIII. 1948, Gressitt, 26. VIII. 1948, Gressitt & Djou; 1 paratype (CAS), Hsiao-ho, Lichuan Distr., W. Hupeh Prov., 8. VIII. 1948, Gressitt & Djou; 1 paratype ♂ (CAS), NE of Mo-tau-chi, 1250-1400 m, Wanhsien, Szechuan Prov., 26. IX. 1948, Gressitt & Djou.

Differs from C. *bella* in having pronotum with lateral margin convex anteriorly, straight basally and basal margin weakly sinuate; elytron with distinct punctures and rather smooth, shiny, slightly swollen interstices.

## Subgenus Tlanoma Motschulsky

## 62. Chaetocnema (Tlanoma) basalis (Baly)

Plectroscelis basalis Baly, 1877, Ent. Soc. Lond., Trans. 1877: 310 (India; BM).

Plectroscelis parvula Baly, 1877, l. c. (Ceylon).

Chaetocnema geniculata Jacoby, 1896, Soc. Ent. Belg., Ann. 40: 270 (Burma).

Chaetocnema basalis: Maulik, 1926, Fauna India, Chrys. & Halt., 204, 209, fig. 78 (India, Bombay, Nilgiri Hills, Assam, Burma, Tenasserim; Ceylon).—Chen, 1934, Sinensia 5: 246, 250, fig. 37 (Tonkin); 1934, Soc. Ent. France, Ann. 103: 176, 180 (Taiwan).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 86 (Iriomote).

Chaetocnema (Tlanoma) basalis: Heikertinger, 1951, Kol. Rundsch. 32: 70, 72, 74, 76 (China).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 177 (host).

DISTRIBUTION: China (Fukien), Hainan I.

FUKIEN: 21, Kien-yang City, 13. VIII. 1940; 4, Yung-an City, 15. XI. 1940, 24. III.

1941; 1, Chi-shih, Chungan, 25. X. 1939, Maa (BISHOP, CAS). HAINAN: 22, Dwa-bi, 325 m, 19–30. VII. 1935, Gressitt (CAS, BISHOP).

HOST: Oryza sativa L. var. terrestris Makino.

## 63. Chaetocnema (Tlanoma) concinna (Marsham)

Chrysomela concinna Marsh., 1802, Ent. Brit. 1: 196 (England; ?BM).

Haltica dentipes Koch, 1803, Ent. Hefte 2: 38, pl. 3, fig. la, b (Europe).

Chaetocnema concinna: Stephens, 1831, Illustr. Brit. Ent. Mandib. 4: 327.

Plectroscelis concinna: Kutschera, 1847, Käf. Eur. 9: 88 (Europe).

Plectroscelis laevicollis Thomson, 1866, Skand. Col. 8: 229 (Europe).

Chaetocnema nitidicollis Jacobson, 1902, Soc. Ent. Ross., Horae 35: 91 (W. Siberia).

Chaetocnema (Tlanoma) concinna: Heikertinger, 1912, Reitter's Fauna Germ. 4: 163, pl. 148, fig. 2 (Europe; hosts); 1951, Kol. Rundsch. 32: 40 (Japan).

Chaetocnema (Tlanoma) lewisii Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32:31, figs. 1 (Korea: Kankyo-Hokudo; Japan: Sapporo, Hokkaido).—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 178. New Synonymy.

Heikertinger (1951, Kol. Rundsch. 32: 40, 82) treated *chalceola* as a synonym of *concinna*, but cotypes of *chalceola* are a mixture of two species. We consider *chalceola* a synonym of *discreta*.

DISTRIBUTION: Europe, Siberia, China (Kirin, Hupeh, Yunnan, Fukien), Korea,

Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima).

KIRIN: 1, Harbin, 15. IX. 1930, v. Jettmar (ZMB). HUPEH: 10, Sui-sa-pa, 1000 m, 20–26. VIII, 11. IX; 3, Liang-ho-keu, 4, 9. IX; 5, Hsiao-ho, 9–10. VIII, Lichuan, 1948, Gressitt & Djou (CAS). YUNNAN: 1, Kunming (Yunnan-fu), 1900 m, 4. VII; 1, Western Hills, 2100 m, nr. Kunming, 6. VII, Gressitt, 1940 (BISHOP, LINGNAN). FUKIEN: 12, Ta-chu-lan, 1000 m, Shaowu, 9, 23. IX-4. X.1942, 4. V. 1943; 1, Upper Kuatun, 1400 m, 12. IV. 1943, Maa (BISHOP, CAS).

HOSTS: Polygonum lapathifolium L., P. aviculare L. (Europe).

## 64. Chaetocnema (Tlanoma) discreta discreta (Baly)

Plectroscelis discreta Baly, 1876, Ent. Soc. Lond., Trans. 1876: 596 (Kin Kiang; BM). Plectroscelis granulifrons Baly, 1876, l. c. (China; BM).

Chaectocnema chalceola Jacoby, 1885, Zool. Soc. Lond., Proc. 731 (Japan; BM).

Chaetocnema discreta: Chen, 1933, Sinensia 3(9): 229; 1934, op. cit. 5 (3-4): 254 (Tonkin).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 466, 469 (Hokkaido, Honshu).

Chaetocnema (Tlanoma) discreta: Heikertinger, 1951, Kol. Rundsch. 32: 70, 72, 75.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 177 (Ryukyu Is.; hosts).

DISTRIBUTION: S. China (Kiangsi, Fukien, Kwangtung, Hunan, Hupeh, Kweichow), N. Vietnam (Tonkin), Ryukyu Is. (Amami-Oshima, Okinawa), Japan (Hokkaido, Honshu, Hachijo, Shikoku, Kyushu, Tanegashima, Yakushima).

HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan Distr., 6. VIII. 1948, Gressitt & Djou (CAS). KWEICHOW: 1, Kweiyang, 1000 m, 11. VII. 1940, Gressitt (BISHOP). HUNAN: 1, Pu-shih, Luki, 26. III. 1939, Maa (BISHOP). FUKIEN: 1, Yungan City, 7. V. 1941; 1, Chungan, Bohea Hills, 30. IV. 1940; 11, Niu-ling, Changting, 21. IV. 1941; 10, Ta-chu-lan, Shaowu, 1000 m, IV, V, IX, X. 1942–43; 1, Si-men, Shaowu, VII. 1942, Maa (CAS, BISHOP). KWANG-TUNG: 3, Tai-po & 2, Lam-tsuen Valley, New Territories, Hong Kong, on *Alternanthera*, 15. VII. 1962, Gressitt.

HOSTS: Achyranthes japonica (Miq.) Nakai, Duchesnea indica (Andr.) Focke, Glycine Max Merr., Polygonum filiforme Thumb., Rubus Buergeri Miquel, R. Parvifolius L., R. Sieboldi Blume, Solanum Melongena L. var. esculentum Nees, Alternanthera sessilis R. Br.

#### 65. Chaetocnema (Tlanoma) discreta yunnanica Heikertinger

Chaetocnema discreta yunnanica Hktgr., 1951, Kol. Rundsch. 32: 73 (Yunnan: Soling-ho; ? FREY).

DISTRIBUTION: SW China (Yunnan).

# 66. Chaetocnema (Tlanoma) fortecostata Chen

Chaetocnema fortecostata Chen, 1939, Sinensia 10 (1-6): 33 (Kwangsi).—Heikertinger, 1951, Kol. Rundsch. 32: 75.

This species is not included in the key. It is possible that this is a synonym of *concinna* (9).

DISTRIBUTION: SW China (Kwangsi).

67. Chaetocnema (Tlanoma) hainanensis Chen Fig. 204, c.

Chaetocnema hainanensis Chen, 1933, Sinensia 3: 228 (Hainan: Nam-cha-chuen, SW of Nodoa; ? Ac. SIN.); 1934, op. cit. 5 (3-4): 405 (Hong Kong).

DISTRIBUTION: Hainan I., S. China (Kwangtung, Kiangsi, Fukien).

KWANGTUNG: 1, Tsin-leong-shan, 5. VI. 1936, Gressitt (CAS). KIANGSI: 1, Taiau-hong, 4. VII. 1936, Gressitt (CAS). FUKIEN: 1, Niu-ling, Changting, 21. IV. 1941, Maa (BISHOP). HAINAN I.: 2, Chung-kon to Dwa-bi, 11. VII. 1935, Gressitt (CAS, BISHOP).

68. Chaetocnema (Tlanoma) koreana Chûjô

Chaetocnema (Tlanoma) koreana Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32: 33, fig.
2 (Korea: Mt. Bazi-San, Kankyo-Kokudo; TARI).—Shirôzu & Kimoto, 1957, Sieboldia 2(1): 64 (Tsushima).—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 178.

DISTRIBUTION: Korea, Tsushima.

#### 69. Chaetocnema (Tlanoma) kwangsiensis Chen

Chaetocnema kwangsiensis Chen, 1939, Sinensia 10 (1-6): 32 (Kwangsi: Yaosan: Ac. SIN.). —Heikertinger, 1951, Kol. Rundsch. 32: 76.

DISTRIBUTION: SW China (Kwangsi).

- 70. Chaetocnema (Tlanoma) major manchurica Heikertinger Fig. 203, c.
- Chaetocnema major manchurica Hktgr., 1951, Kol. Rundsch. 32: 50 (Manchuria: Ussurigebiet; FREY).

DISTRIBUTION: NE China (Kirin).

KIRIN: 3, Charbin, 20. VI. 1950 (FREY).

## 71. Chaetocnema (Tlanoma) simplicifrons (Baly)

Plectroscelis simplicifrons Baly, 1876, Ent. Soc. Lond., Trans. 1876: 594 (Kin Kiang; BM). Chaetocnema simplicifrons: Chen, 1934, Sinensia 5 (3-4): 249 (Tonkin).—Heikertinger, 1951, Kol. Rundsch. 32: 74.

DISTRIBUTION: S. China (Kiangsi), N. Vietnam (Tonkin).

#### 72. Chaetocnema (Tlanoma) sinuata Weise

Chaetocnema sinuata Ws., 1889, Soc. Ent. Ross., Horae 23: 633 (Mongolia; Kansu; ? LENIN-GRAD).

DISTRIBUTION: NW China (Kansu).

## 73. Chaetocnema (Tlanoma) tonkinensis Chen

Chaetocnema tonkinensis Chen, 1934, Sinensia 5: 246, 250 (Tonkin; Luc-nam; PARIS).

The new material below is referred to this species with a slight question. It has been compared with the type.

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kiangsi), Hainan I.

KIANGSI: 1, Tai-au-hong, S of Sung-wu, 540 m, 5. VII. 1936, Gressitt (CAS). HAI-NAN I.: 1, Dwa-bi, 325 m, 19–30. VII. 1935, Gressitt (BISHOP).

### 74. Chaetocnema (Tlanoma) tristis Allard

Chaetocnema tristis Allard, 1889, Soc. Ent. France, Ann. ser. 6, 9: 307 (Saigon; PARIS).— Chen, 1934, Sinensia 5: 251 (Tonkin); 1939, op. cit. 10: 31 (Java; Kwangsi: Yangso).—Heikertinger, 1951, Kol. Rundsch. 32: 74.

DISTRIBUTION: Vietnam (Saigon, Tonkin), S. China (Kwangsi), Java.

# 75. Chaetocnema (Tlanoma) yaosanica Chen

Chaetocnema yaosanica Chen, 1939, Sinensia 10: 31 (Kwangsi: Yaosan; Ac. SIN.).-Heikertinger, 1951, Kol. Rundsch. 32: 75.

DISTRIBUTION: S. China (Kwangsi, Fukien).

FUKIEN: 67, Ta-chu-lan, 1000 m, Shaowu, IV-VI, VIII-X. 1942, IV-VI. 1943, 21. V. 1945, 14. VII. 1946, 27. IV. 1947, Maa (BISHOP, CAS).

# Genus Podontia Dalman

Podontia Dalm., 1824, Ephemerides Ent., 23 (type: Galleruca grandis Gröndal=lutea Dalm.).
—Chapuis, 1875, IN Lacordaire, Gen. Col. 11: 27, 29. —Chen, 1933, Sinensia 3 (9): 215; 1934, op. cit. 5 (3-4): 229, 266; 1936, op. cit. 7 (6): 655.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1935, t. c., 463.

### Key to Chinese species of Podontia

1.	Elytron not distinctly marked; body flavous to reddish testaceous above 78. lutea
	Elytron distinctly mottled or spotted 2
2.	Elytron mottled with pitchy black in 3 transverse bands 77. dalmani
	Elytron marked with distinct black spots
3.	Elytron with 5 spots 76. affinis
	Elytron with 11 spots 79. soriculata

### 76. Podontia affinis (Gröndal)

Galleruca affinis Gr., 1808, IN Schönherr, Syn. Ins. 1, 2: 289 (Java).

Podontia impressicollis Sturm, 1826, Cat. Insecten-Sammlung, 185.

Podontia affinis: Sturm, 1843, Cat. Käfer Sammlung, 286.—Jacoby, 1889, Mus. Civ. Genova, Ann. 27: 204.—Maulik, 1926, Fauna India, Chrys. & Halt., 227 (Sikkim, Assam, Burma, Tenasserim, Tonkin).—Chen, 1934, Sinensia 5: 268, fig. 42 (Kweichow).

DISTRIBUTION: Java, Sikkim, Assam, Burma, SW China (Kweichow), N. Vietnam (Tonkin).

## 77. Podontia dalmani Baly

Podontia Dalmani Baly, 1865, Ann. Mag. Nat. Hist. 16 (3): 405 (?Siam; BM).—Chen, 1934, Sinensia 5 (3-4): 269, fig. 43 (Kweichow, Kwangsi, Tonkin, Lombock, Siam); 1939,

op. cit. 10 (1-6): 55.

DISTRIBUTION: Thailand, SW China (Kweichow, Kwangsi), N. Vietnam (Tonkin), Indonesia (Lombok).

## 78. Podontia lutea (Olivier) Fig. 205.

Chrysomela lutea Oliv., 1790, Encycl. Meth. 5: 692 (E. Indies; ?PARIS).-1807, Ent. 539, pl. 1, fig. 13.

Galeruca grandis Gröndal, 1808, IN Schönherr, Syn. Ins. 1, 2: 288 (India, Orient).

Podontia lutea: Gem. & Harold, 1876, Cat. Col. 12: 3522.—Maulik, 1926, Fauna India, Chrys. & Halt., 222 (Burma, Macao, Tonkin, Formosa).—Chen, 1933, Peking Nat. Hist. Bull. 8: 47 (Canton, Chekiang, Kweichow, Indomalayan Islands, New Guinea, Australia); 1934, Sinensia 5: 268, 407 (Kweichow, Szechuan, Yunnan).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 463 (*Rhus succedanea* L.).

Some of the Yunnan specimens are quite dark in color, but are hardly otherwise distinguishable from the rest of the material.

DISTRIBUTION: Burma, China (Shensi, Sikang, Szechuan, Kweichow, Yunnan, Hupeh, Kiangsi, Chekiang, Fukien, Kwangtung), Taiwan, Vietnam, SE Asia.



Fig. 205. Podontia lutea (Olivier).

SHENSI: 4, Chin-ling Mts., IV-V. 1904, Blackwelder (US). SIKANG: 1, betw. Ya-chow & Mupin, 1500-3000 m, IX. 1930, Graham; many, nr. Muping, VI-VII. 1929, IX. 1930, Graham (US). SZE-CHUAN: 2, NE of Mo-tau-chi, 1260-1440 m, Wan Distr., 27. IX. 1948, Gressitt & Djou; 1, W of Wanhsien city, 3. X. 1948, Gressitt & Djou (CAS); 2, nr. Kuan-hsien, 600-1200 m. VIII, 1933 ; 2. nr. Sui-fu, V. 1924; 1, S of Sui-fu, Yunnan bord., IV-VI. 1929; 1, nr. Wen-Chuan, 1200-1800 m, VII-VIII. 1933; 1, Shui-gien-su, S of Sui-fu, 360 m, 10. V. 1924; 7, Wen-tang, 20 km S of Chungking, 28. VI. 1933, 2, Beh-lu-din, 50 km N of Chengtu, VIII. 1933, 1, Chengtu, I-III. 1933; 1, nr. Yueh-shi, 21. VII. 1928, Graham (US). YUNNAN: 3, Tche-ping-tcheou, S. Yunnan; 2, Ma-chang, 1000 m (US); 2, ? Kunming, 1. VIII. 1944, C. L. Liu (US). HUPEH: 3, SE of Lung-chü-pa, VIII-IX; 1, Lung-chü-pa to Sui-sapa, 23. VIII; many, Sui-sa-pa, 1000 m, VII-IX; 2, Liang-ho-keu, 7. IX; 4, Hsiao-ho (Sui-ho), 11. VIII; 14. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). CHEKIANG: 8, Hang-chow, 5. VI. 1924, Illingworth (BISHOP). FUKIEN: 1, Ta-chu-lan, 1000 m, 7. VI. 1943; 1, Shui-pei-kai, 2. IX. 1941, Shao-

wu; 3, Tsing-shan-pu, Changting, 18. VI. 1940; 5, Sien-feng-ling, 27. IV. 1942; 1, Bo-hea Hills, 30. IV. 1940, Chungan, Maa (CAS, BISHOP); 4, Foochow, Gardner (US); 6, Foochow, VII. 1928, Kellogg (US); 1, 28. X. 1910, Siemssen (ZMB); (ZSBS). KWANGTUNG: 2, Mei-hsien City, 9. VI. 1936, Gressitt (CAS); 1, Ting-wu Shan, 7–12. VII. 1949, Gressitt (BI-

786

sHOP); 1, Tin-tong, Lochang Distr., 18. VIII. 1947, Gressitt (CAS). HONGKONG: 3, VIII-IX. 1931, Hadden (CAS); 4, Hong Kong Peak, on *Rhus succedanea*, 17. VII. 1962, Gressitt (BISHOP).

HOST: Rhus succedanea.

## 79. Podontia soriculata (Swartz)

Chrysomela soriculata Swartz, 1808, IN Schönherr, Syn. Ins. 1(2): 246, note (S. China). Podontia soriculata: Heikertinger, 1940, Col. Cat. 169: 415.

We are not sure whether this belongs to this genus or not.

DISTRIBUTION: China (probably Fukien).

HOST: Thea Boheae (after Swartz).

### Genus Ophrida

*Ophrida* Chapuis, 1875, IN Lacordaire, Gen. Col. **11**: 31 (type: *O. guttata* Chap.; Malaya). —Maulik, 1926, Fauna India, Chrys. & Halt., 228.—Chen, 1934, Sinensia **5** (3–4): 269; 1936, *op. cit.* **7** (6): 655.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. **25**: 355; 1935, *t. c.*, 464.

#### KEY TO CHINESE SPECIES OF OPHRIDA

80. Ophrida scaphoides (Baly) Fig. 206, a.

Podontia scaphoides Baly, 1865, Ent. Soc. Lond., Trans. ser. 3, 2: 430 (N. China; ?BM).
Ophrida scaphoides: Chen, 1934, Sinensia 5 (3-4): 271, fig. 46 (Chekiang, Kiangsi, Kiangsu, Kweichow, Yunnan, Formose).

One specimen from Yunnan (ZMB) lacks the yellowish spots on elytron.

DISTRIBUTION: China (S. Kansu, Sikang, Szechuan, Yunnan, Kweichow, Hupeh, Fukien, Kiangsu, Chekiang), N. Vietnam (Tonkin), Taiwan.

SZECHUAN: 1, Beh-lu-din, 50 km N. Chengtu, 1800 m, VII-VIII. 1933, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, VII-VIII; 3, Liang-ho-keu, IX; 1, Hsiao-ho, 10. VIII; 1, Gau-ya-tai to Wang-chia-ying, 1140 m, 20. IX; 2, Chung-lo, 4. VIII, Lichuan Distr., 1948, Gressitt & Djou (Cas, BISHOP). YUNNAN: 4, 1. VIII. 1944, C. L. Liu (US); 1, Yunnan (ZMB). KWANGTUNG: 1, Yam-na (Yim-na) Shan, Mei-hsien Distr., 19–21. IX. 1933, To (LINGNAN).

#### 81. Ophrida spectabilis (Baly)

Podontia spectabilis Baly, 1862, Jour. Ent. 1: 452 ("N. China"; BM).

Podontia rufoflava Fairmaire, 1889, Soc. Ent. France, Ann. ser. 6, 9: 73 (Koui-Tcheou; ? PARIS). New Synonymy.

Ophrida spectabilis: Chen, 1934, Sinensia 5 (3-4): 270, fig. 44 (Chekiang, Kiangsi, Kiangsu, Yunnan, Formose).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 465.

DISTRIBUTION: China (Chekiang, Kiangsi, Kiangsu, Fukien, Hupeh, Kweichow, Szechuan, Yunnan, Sikang); Formosa.

SIKANG: 2, nr. Ya-chow, 1350–1800 m, 9–11. VII. 1930, Graham (US). SZECHUAN: many, Mt. Omei, 16. VII. 1932, Hadden (CAS); 1, Ching-cheng-shan, 11. V. 1932, G. Liu (MCZ). HUPEH: 8, Sui-sa-pa, 1000 m, VII–IX; 2, Liang-ho-keu, IX; 4, Gan-yu-tai to Wang-chia-ying, 840 m, 20. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS). CHEKIANG: 1, Hang-chow, 29. VI. 1927, Wong (US); 5, Mokan Shan, 18. VII. 1924, Illingworth (BISHOP).

#### 82. Ophrida xanthospilota (Baly)

Blepharida xanthospilota Baly, 1881, Ent. Soc. Lond., Trans. 1881: 54 (China; BM). Ophrida (Blepharida) xanthospilota: Chen, 1934, Sinensia 5 (3-4): 272.

Of our 4 specimens, 3 are 2 and 1 is  $3^{\circ}$ . The  $3^{\circ}$  is smaller and has a different elytral pattern, being more reddish and less spotted.

DISTRIBUTION: China (Szechuan, Hopei).

SZECHUAN: 1, nr. Wen-chuan, 20. VII. 1933, Graham (US). HOPEI: 1, Pei-ping, G. Liu (MCZ); 2, Hsiao-wu, Tai Shan, Meyer (US).

### Genus Throscoryssa Maulik

Throscoryssa Maulik, 1928, Zool. Soc. Lond., Proc. 1928: 159 (type: T. citri Maulik, 1928; Assam).—Chen, 1936, Sinensia 7 (6): 657.

## 83. Throscoryssa citri Maulik

Throscoryssa citri Maulik, 1928, Zool. Soc. Lond., Proc. 1928: 160, fig. 5 (Assam; BM).— Clausen, 1931, U. S. D. A. Tech. Bull. 252: 1–13, figs. (biol.).—Hoffmann, 1935, Lingnan Sci. Jour. 14: 509, figs. (Canton; biol.).—Chen, 1936, Sinensia 7: 383.

Shiny brown with head and pronotum shiny black; length 3 mm; breadth 2. We do not have this species now, although Gressitt collected this species nr. Canton.

DISTRIBUTION: NE India (Assam), S. China (Kwangtung).

HOSTS: Citrus spp. particularly pomelo.

#### Genus Podagricomela Heikertinger

Podagricomela Hktgr., 1924, Kol. Rundsch. 11 (1-2): 36 (type: P. Weisei Hktgr.; China).— Chen, 1933, Sinensia 3(9): 220; 1934, op. cit. 5 (3-4): 229, 282; 1936, op. cit. 7(3): 377; 1936, t. c. (6): 657.

### KEY TO CHINESE SPECIES OF PODAGRICOMELA

1. Elytron not metallic ...... 2



Fig, 206. a, Ophrida scaphoides (Baly); b, Podagricomela nigricollis Chen.

	Elytron metallic
2.	Dorsum entirely dark reddish; elytral interstices strongly raised; length 3.5 mm
	(Chen, 1934; N. Vietnam: Tonkin) costipennis*
	Head, pronotum and elytral humerus usually black, but sometimes varying from
	brown to pitchy black; elytron brown or red brown with interstices slightly
	raised; length 3.0-3.5 mm 85. nigricollis
3.	Elytron unicolorous, not red apically; pronotum and elytron concolorous 4
	Elytron violaceous blue with apex reddish; head and pronotum reddish brown;
	length 3.8-4.5 mm (Jacoby, 1905, Notomela; Malaya, Thailand, N. Vietnam)
	apicipennis*
4.	Legs pale testaceous; pronotum and elytron green; length 2.8-3.5 mm 86. weisei
	Legs black, somewhat metallic; pronotum and elytron blue, slightly violaceous;
	length 4 mm

# 84. Podagricomela cyanea Chen

Podagricomela cyanea Chen, 1939, Sinensia 10 (1-6): 58 (Kiangsu; Ac. SIN.). DISTRIBUTION: E. China (Kiangsu).

# 85. Podagricomela nigricollis Chen Fig. 206, b.

Podagricomela nigricollis Chen, 1934, Peking Nat. Hist. Bull. 8: 58, fig. 3 (Kwangtung: Tsha-jiu-san; Chekiang; Ningpo; BERLIN).—1934, Sinensia 5 (3-4): 282; 1936, op. cit. 7(3): 381, figs. 7-8, 25-30 (biol., imm. stages).

DISTRIBUTION: China (Kwangtung, Chekiang, Szechuan).

SZECHUAN: 3, Wan-hsien, W of city, 3. X. 1948, Gressitt & Djou (CAS); Chungking, 6. V. 1930, Graham (US). KWANGTUNG: 1, Tsin-leong San, 6. VI. 1936, Gressitt (CAS); 3, Canton, III. 1937, To & Chen; IV. 1933, Hoffmann (LINGNAN, BISHOP); 7, Canton, V. 1940, Mell; 5, Schaufusz (ZMB).

HOSTS: Citrus spp.

#### 86. Podagricomela weisei Heikertinger

Podagricomela Weisei Hktgr., 1924, Kol. Rundsch. 11 (1-2): 36 (Kiautschau; ?WIEN).— Chen, 1935, Arkiv Zool. 27A (5): 8 (N. Szechuan).—1934, Sinensia 5 (3-4): 283 (Shangtung); 1936, op. cit. 7 (3): 379, 393, figs. 18-24.

DISTRIBUTION: China (Shantung, Kiangsu, Kiangsi, Hunan, Szechuan).

HUNAN: 2, Pu-shih, Luki, 18. III. 1939, Maa (BISHOP). KIANGSI: 6, Shang-jao, 1934, Maa (BISHOP, CAS); 1, Ping-hsiang, 21. V. 1948, Gressitt & Djou (CAS).

HOST: Citrus spp.

## Genus Clitea Baly

Clitea Baly, 1877, Ent. Soc. Lond., Trans. 1877: 287 (type: C. picta Baly; India).—Maulik, 1926, Fauna India, Chrys. & Halt., 176, 252.—Chen, 1934, Sinensia 5 (3-4): 229, 284; 1936, op. cit. 7(3): 372; 1936, t. c. (6): 658.

The following 3 species are apparently closely related; all 3 have a transverse impression between eyes.

#### KEY TO CHINESE SPECIES OF CLITEA

### 87. Clitea fulva Chen

Clitea fulva Chen, 1933, Mus. Paris, Bull. **1933**: 383 (Tonkin; PARIS); 1934, Sinensia **5** (3–4): 285, fig. 53; 1936, op. cit. **7**(3): 375; 1939, op. cit. **10** (1–6): 24, 38. DISTRIBUTION: N. Vietnam (Tonkin).

#### 88. Clitea metallica Chen

- Clitea metallica Chen, 1933, Mus. Paris, Bull. 1933: 383 (Tonkin; PARIS); 1934, Sinensia 5 (3-4): 285 (Tonkin); 1936, Sinensia 7 (3): 373, 385, figs. 1-2, 9-14? (Chekiang, Canton, Tonkin); 1939, Sinensia 10 (1-6): 20, 24, 37.
- The green citrus flea-beetle, Hoffmann, 1935, Lingnan Sci. Jour. 14 (3): 513-15, pls. 27, 30 (biol.; Kwangtung).

The larva of this species feeds on undersides of new citrus leaves, covering its back with greenish excrement. The adult also feeds on citrus leaves.

DISTRIBUTION: N. Vietnam (Tonkin), China (Szechuan, Hunan, Kiangsi, Kwangtung), Hainan I. SZECHUAN: 5, Wan-hsien, W of city, VIII, X. 1948, Gressitt & Djou (CAS); 2, Kintung, Chau-chia-tu, 24. IV. 1949, Djou (CAS); 1, nr. Sui-fu, 1–5. VI. 1929, Graham (US); 1, Cheng-tu, 1933, Chen (US). HUNAN: 1, Pu-shih, Luki, 18. III. 1939, Maa (BISHOP). KIANGSI: 1, Shang-jao, 1939, Maa (CAS). KWANGTUNG: Lo-kong-tong, nr. Canton, XII. 1947, Gressitt; Sun-wui, Sin-hwai Distr., with larvae, on citrus, 10–11. X. 1947, Gressitt & K. S. Fu (CAS). HAINAN I.: Man-cheong, Wen-ch'ang Distr., 18. IV. 1932, Hoffmann & K. Lau (LINGNAN); 3, Ta-chow, IV. 1934, Pong.

HOSTS: Citrus spp.

### 89. Clitea shirahatai Chûjô

Clitea shirahatai Chûjô, 1957, Kagawa Univ., Fac. Liberal Arts & Educ., Mem. 2 (47): 4, fig. 2 (Shansi; CHUJO).

DISTRIBUTION: N. China (Shansi).

HOST: Xanthoxylum sp.

## Genus Mantura Stephens

Mantura Steph., 1831, Illustr. Brit. Ent. Mandib. 4: 285, 322 (type: Chrysomela rustica L.; Europe).—Heikertinger, 1912, IN Reitter, Fauna Germ. 4: 146, 161; 1924, Kol. Rundsch. 11 (1-2): 48, fig. 15; 1924, t. c. (3-4): 53, 69.—Chen, 1934, Sinensia 5 (3-4): 229, 276.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355, 474; 1935, t. c., 474.—Chen, 1936, Sinensia 7 (6): 658.—Heikertinger, 1951, Kol. Rundsch. 32: 147.

Cardiapus Curtis, 1833, Brit. Ent. 10: pl. 435.

Balanomorpha Chevrolat, 1837, IN Dejean, Cat. Col. ed. 3, 394.—Foudras, 1860, Soc. Linn. Lyon, Ann. n. ser. 6: 146, 381.

Stenomantura Heikertinger, 1909, Zool. Bot. Ges. Wien, Verh. 59: 370 (subg.).

KEY TO CHINESE SPECIES OF MANTURA

### 90. Mantura bicoloripes Chen

Mantura bicoloripes Chen, 1939, Sinensia 10 (1-6): 37 (Kwangsi: Yangso; Ac. SIN.).-Heikertinger, 1951, Kol. Rundsch. 32: 160, 162.

DISTRIBUTION: SW China (Kwangsi).

91. Mantura rustica (Linnaeus)

Chrysomela rustica L., 1766, Syst. Nat. ed. 12, p. 595 (Europe; ? UPPSALA).

Altica rustica: Gmelin, 1790, IN L., Syst. Nat. ed. 13, p. 1695.

Galleruca semiaenea Fabr., 1792, Ent. Syst. 1, 2: 30 (Europe; ?K $\phi$ BENHAVN).

Mantura rustica: Stephens, 1831, Illustr. Brit. Ent. Mandib. 4: 322.—Heikertinger, 1912, IN Reitter, Fauna Germ. 4: 162, pl. 162, fig. 23.—Chen, 1935, Sinensia 6 (6): 772 (Nanking, E. Siberia).

DISTRIBUTION: Europe, Siberia, China (Kiangsu),

### Pac. Ins. Mon.

#### Genus Podagricella Chen

Podagricella Chen, 1933, Sinensia 3 (9): 220, 234 (type: P. cyanipennis Chen; China); 1934, op. cit. 5 (3-4): 229, 279; 1936, op. cit. 7 (6): 660.

## 92. Podagricella cyanipennis Chen

Podagricella cyanipennis Chen, 1933, Sinensia 3 (9): 235 (Yunnan; ?BRUXELLES); 1934, Sinensia 5 (3-4): 279.

Head bluish black, prothorax brown, elytron bluish violaceous, antenna black except extreme base, legs bluish black, venter bluish black and brown. Length 3.5 mm.

DISTRIBUTION: SW China (Yunnan).

## Genus Neorthaea Maulik

Orthaea Jac., 1889 (nec Dallas), Mus. Civ. Genova, Ann. 27: 201.

Neorthaea Maulik, 1926, Fauna India, Chrys. & Halt., 176, 259 (type: Orthaea viridipennis Jac.; Tenasserim).—Chen, 1933, Soc. Ent. France, Bull. 38: 88; 1933, Sinensia 3 (9): 219; 1934, op. cit. 5(3-4): 229, 273; 1936, op. cit. 7 (6): 661.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1935, t. c., 472.

### KEY TO CHINESE SPECIES OF NEORTHAEA

1.	Length exceeding 4.5 mm	2
	Length less than 4.0 mm	4
2.	Bicolorous above, pronotum reddish testaceous, elytron dark metallic green 94. flavig	es
	Nearly unicolorous above	3
3.	Evenly deep metallic blue to violaceous above	ea
	Reddish testaceous to dark brown above, occasionally with a brassy or dull greenish	
	lustre	ns
4.	Piceous above, elytron with a blue lustre	lis
	Reddish testaceous above, disc of elytron paler than margins	lis

### 93. Neorthaea coerulea Chen

Neorthaea coerulea Chen, 1933, Soc. Ent. France, Bull. 38: 95 (Canton, Tsha-jiu-san, Siam, Tonkin); 1933, Peking Nat. Hist. Bull. 8: 54 (Kwangtung) (PARIS); 1934, Sinensia 5(3-4): 274, fig. 50.

DISTRIBUTION: S. China (Kwangtung), N. Vietnam (Tonkin), Thailand.

KWANGTUNG: 4, Ting-wu shan, 7–12, 23–26. VII. 1950, Gressitt (CAS, BISHOP); 1, Canton, Mell; Tsha-jiu San, VII-IX. 1910, Mell; Yuh-sa-tam, V–VI. 1910, Mell (ZMB).

#### 94. Neorthaea flavipes Chen

Neorthaea flavipes Chen, 1933, Soc. Ent. France, Bull. 38: 95 (Canton: Tsha-jiu-san; ZMB); 1933, Peking Nat. Hist. Bull. 8(1): 53.

DISTRIBUTION: S. China (Kwangtung, Fukien, Hupeh).

HUPEH: 5, Sui-sa-pa, 1000 m, VIII-IX; 1, Liang-ho-keu, 1. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: 1, Chi-li-chiao, 1000 m, Chungan, 28. IV. 1945, Maa (BISHOP).

## 95. Neorthaea micans (Baly) Fig. 207, a.

Euphitrea micans Baly, 1875, Ent. Soc. Lond., Trans. 28 (Java, Sumatra, Malacca; BM). Euphitrea Assamensis Baly, 1879, Cist. Ent. 2: 443 (The Plains, Assam; BM).

Neorthaea micans: Maulik, 1926, Fauna India, Chrys. & Halt., 263 (India, Burma, Tonkin, Borneo).—Chen, 1933, Soc. Ent. France, Bull. 1933: 90; 1933, Peking Nat. Hist. Bull. 8(1): 53 (Kwangtung) (Canton, Kweichow, Indochina).—1934, Sinensia 5 (3-4): 276, fig. 48.

DISTRIBUTION: Java, Sumatra, Malaya, Borneo, N. Vietnam (Tonkin), S. China (Kweichow, Hupeh, Kwangsi, Kwangtung), Burma, India.

HUPEH: many, Sui-sa-pa, 1000 m, VII-IX; many, Liang-ho-keu, IX; 8, Hsiao-ho (Shaoho), 8-13. VIII, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). KWANGSI: 1, Jao-chan, Prof. Sin G. (ZM). KWANGTUNG: 4, Canton, Mell (ZM).

### 96. Neorthaea piceicollis Chen

Neorthaea piceicollis Chen, 1934, Peking Nat. Hist. Bull. 8 (1): 54 (Canton; ZMB).

DISTRIBUTION: S. China (Kwangtung, Szechuan, Hupeh, Fukien).

SZECHUAN: 2, Mt. Omei, 16. VII. 1932, Franck (CAS); 2, Shin-kai-sze, 1,500 m, Mt. Omei, 9. VIII. 1940, Gressitt (BISHOP); 1, betw. Cheng-tu & Kuan-hsien, 2–5. VII. 1924, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, VII–IX; many, Liang-ho-keu, IX; 4, Hsiao-ho (Suiho), 11. VIII–14. IX; 1, Wang-chia-ying to Sui-sa-pa, 1050–1410 m, 21. VII, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP, LINGNAN). FUKIEN: 3, Ta-chu-lan, 1000 m, Shaowu, V; 1, Sien-feng-ling, 27. IV, Maa, 1942 (BISHOP). KWANGTUNG: 1, Yim-na Shan, 10–15. VI. 1936, Gressitt (CAS); 1, Tsha-jiu-san, V–VI. 1912, Mell (ZMB).

## 97. Neorthaea suturalis Chen

Neorthaea suturalis Chen, 1933, Soc. Ent. France, Bull. 38: 92 (Haut Tonkin: Lamey; PARIS); 1934, Sinensia 5 (3-4): 276, fig. 52.

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kwangtung), Thailand.

### Genus Nisotra Baly

Nisotra Baly, 1864, Ann. Mag. Nat. Hist. ser. 3, 14: 437 (type: Haltica gemella Erichson; Manila).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 48.—Chen, 1933, Sinensia 3 (9): 220; 1934, op. cit. 5 (3-4): 229, 278.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1935, t. c., 474.

## 98. Nisotra orbiculata (Motschulsky)

Sphaeroderma orbiculata Mots., 1866, Soc. Nat. Mosc., Bull. 39, 1 (2): 421 (India; ?type lost). Nisotra Bowringi Baly, 1876, Ent. Soc. Lond., Trans. 584 (Hong Kong; BM).-Jacoby,

1889, Mus. Civ. Genova, Ann. 27: 196.

Podagrica bowringi: Maulik, 1926, Fauna India, Chrys. & Halt., 278 (Assam, Burma, Andaman Is., Nicobar Is., S. India).

Nisotra orbiculata: Ogloblin, 1930, Eos 6: 106.—Chen, 1933, Peking Nat. Hist. Bull. 8 (1):
55 (Kwangtung, Kweichow, Hong Kong, Tonkin, Saigon); 1934, Soc. Ent. France,
Ann. 103: 177, 181 (Formose); 1934, Sinensia 5 (3-4): 278 (Tonkin, Java).—Chûjô,
1935, Nat. Hist. Soc. Formosa, Trans. 25: 355, 474.

DISTRIBUTION: India, Burma, Andamans, Nicobars, Java, S. China (Szechuan, Kiangsi, Fukien, Kwangsi, Kwangtung), Hainan I., Taiwan, Vietnam, Thailand.

SZECHUAN: 1, Pe-pei, N of Chungking, 300 m, 27. VII. 1940, Gressitt (BISHOP); 1, Kuan-hsien, 900 m, 1–7. VII. 1934, Graham (US); 1, Chang-tau-ching, 240–300 m, 18. VII. 1948, Djou (CAS); 1, Sui-fu, 18–25. IV. 1930, Graham (US). KIANGSI: 1, Sung-wu, 2. VII; 3, Tai-au-hong, S of Sung-wu, 540 m, 5. VII, Gressitt, 1936 (CAS). FUKIEN: 1, She-chao Shan, Shaowu, 1. VII. 1942, Maa (BISHOP). KWANGSI: 2, Chin-sing-chiang, 28. VI. 1948, Djou (CAS). KWANGTUNG: 21, Yim-na Shan, 10–15. VI. 1936, Gressitt (CAS); 6, Ting-wu Shan, 7–12, 23–26. VII. 1950, Gressitt & Djou; 1, Tin-tong, Lochang, 18. VIII. 1947; 1, Lui-chow Peninsula, 1. IX. 1950, for Gressitt; 1, Mei-hsien, 9. VI. 1936; 1, Fei-ha to Fei-loi, 1. VII. 1950, Gressitt (LINGNAN). HAINAN I.: 4, Ta-hau, 3–6. VII; 1, Chung-kon, 18. VII; 1, Lia-mui, 350 m, 2. VIII; 2, Chung-kon to Dwa-bi, 11. VII; 1, Dwa-bi, 325 m, 19–30. VII; all 1935, Gressitt (CAS).



Fig. 207. a, Neorthaea micans (Baly); b, Colpodes convexa n. sp.

#### Genus Tebalia Fairmaire

Tebalia Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9:83 (type: T. coeruleata Fairm.; China).—Chen, 1936, Sinensia 7(6):663.

Elytral punctures confused; abdominal segment 1 not longer than 2.

### 99. Tebalia coeruleata Fairmaire

Tebalia coeruleata Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 83 (Moupin; ? PARIS). Shiny blue, head slightly bronzy; length 6 mm.

DISTRIBUTION: W. China (Sikang).

## Genus Colpodes Chevrolat

Colpodes Chevrolat, 1837, IN Dejean, Col. Cat. ed. 3, 394.—Monrós & Bechyně, 1956, Ent. Arb. Mus. Frey 7 (3): 1134 (type: C. rotundata Olivier).

Acrocrypta Baly, 1862, Jour. Ent. 1: 457 (type: A. Mouhoti; Cambodia).—Maulik, 1926, Fauna India, Chrys. & Halt., 174, 180.—Chen, 1934, Sinensia 5 (3-4): 229, 279; 1936, op. cit. 7 (6): 663.—Monrós & Bechyně, 1956, Ent. Arb. Mus. Frey 7 (3): 1134 (Synonymized).

Imolia Jacoby, 1884, Leyden Mus., Notes 6: 32 (type: I. nigrofasciata Jac.; Sumatra).

100. Colpodes convexa Gressitt and Kimoto, n. sp. Fig. 207, b.

*Female* (?): Ochraceous and reddish brown above; head and pronotum ochraceous; scutellum brown; elytron reddish brown with 2 broad ochraceous bands; 1st area in 2nd 1/4, rounded and not quite reaching suture, but broader than dark areas, 2nd in apical 1/4, laterally rounded and not touching external margin or apex, reaching to suture, which is slightly pigmented; antenna with scape, pedicel and segment 3 pale ochraceous; legs pale testaceous with femora slightly duller apically. Glabrous above, except for scattered hairs on anterior portion of head; labrum with a transverse row of 12, long, pale, sub-adpressed hairs; frontoclypeus with scattered hairs along anterior margin; antenna with scape and pedicel slightly clothed, flagellar segments moderately clothed with subadpressed hairs; test moderately clothed with long, pale, suberect hairs; legs with femora moderately clothed with appressed hairs, tarsi moderately clothed with appressed hairs.

Body subrounded and head barely visible from above. Head slightly broader than long, widest at eyes, distinctly narrower than breadth of pronotum at anterior angles; labrum steeply deflexed anteriorly, with apical margin truncate and finely serrate; frontoclypeus subtriangular, lateral corner somewhat swollen; interantennal space slightly convex, broad, about  $2 \times$  as broad as transverse diameter of an antennal socket; antennal socket with margin rounded and not distinctly swollen or elevated; eye suboval, posterior margin rather straight and touching anterior margin of pronotum; gena with surface evenly convex below eye, anterior less than 1/10 as deep as eye; frontal tubercles subtriangular, outline acute internally; slightly separated; distinctly limited behind by a groove extending to dorsal margin of eye; occiput with a narrow medial groove, surface sparsely punctate and with a small, lateral, seta-bearing fovea near inner margin of eye. Antenna nearly  $1/2 \times$  as long as body, flagellar segments slightly flattened; scape 2  $\times$  as long as wide; pedicel small, about  $3/8 \times$  as long as scape, about as wide as long; segment 3 small, slightly longer than pedicel and flattened, 4th  $2/5 \times$  longer than 3, 5-9 subequal, about as long as 4, 10 slightly shorter than 9, 11 as long as 9 and rounded apically. Prothorax

about 5/11 as long as broad, widest basally, longest in middle, slightly narrower than elvtron at basal margin; anterior margin nearly straight and ending at slightly produced anterior margin; anterior angle swollen and rounded, upper surface with a small setabearing fovea; lateral margin convex; posterior angle not produced; basal margin convex and weakly sinuate, partly hidden by elytral bases; disc with surface evenly convex and sparsely and subminutely punctate. Scutellum triangular, with sides subequal and corners acutely pointed. Elytron  $4/9 \times$  as broad as long, widest at middle, lateral margin strongly convex with apical 1/3 somewhat briefly rounded to apex; epipleuron vertical, but with free margin somewhat flexed horizontally, widest basally and gradually narrowed apically; disc confusedly but distinctly punctate, with punctures in middle about as large as inter-Ventral surfaces sparsely punctate on metasternum, more closely and evenly puncspaces. tulate on metepisternum and abdomen; metasternum with anterior margin angularly projecting between mesocoxae, surface with a narrow, median groove; abdomen with sternites somewhat swollen mesally, last sternite short, apical margin blunt, rounded at side and truncate in middle. Legs large; hind femur greatly swollen, about  $3/5 \times as$  broad as long. surface moderately punctate, hind tibia slightly shorter than femur with a short stout apical spine; hind tarsus about 9/11 as long as tibia, segment 1 distinctly longer than 2+3, nearly as long as remainder, and fairly broad. Length 3.0 mm; breadth 2.85.

# DISTRIBUTION: Hainan Island.

Holotype (9?) (CAS), Dwa-bi (Tai-pin), 325 m, Hainan, 19-30. VII. 1935, Gressitt.

Differs from *ornata* Baly in having interocular groove shallow, and obtuse instead of transverse, with postantennal "frontal" tubercles not broadly separated, antennal segment 1 fairly stout and 2 more than 1/2 as long as 3, and in having a somewhat different color pattern, with wider dark bands.

### Genus Aphthonoides Jacoby

Aphthonoides Jac., 1885, Mus. Civ. Genova, Ann. ser 2, 2: 59 (type: A. beccarii Jac.; Java); 1885, Zool. Soc. Lond., Proc. 1885: 741.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 29; 1925, t. c. (3-4): 53; 1940, Ent. Blätter 36 (6): 175.—Maulik, 1929, Ins. Samoa 4 (3): 208, fig. 14 C.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 84.—Chen, 1936, Sinensia 7 (6): 626.

#### KEY TO CHINESE SPECIES OF APHTHONOIDES

Piceous above; hind tibia with spur nearly straight ...... 101. beccarii Reddish testaceous above; hind tibia with spur weakly sinuate, about  $6 \times$  as long as tibia; length 2.15 mm ...... 102. sagaris

### 101. Aphthonoides beccarii Jacoby

Aphthonoides beccarii Jac., 1885, Mus. Civ. Genova, Ann. ser. 2, 2: 59 (Java; GENOVA); 1885, Zool. Soc. Lond., Proc. 1885: 741, pl. 46, fig. 2 (Japan).—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 85 (Kyushu, Taiwan).—Heikertinger, 1940, Ent. Blätter 36 (6): 178, 179. DISTRIBUTION: Sumatra, Java, China (Hupeh, Fukien, Hainan I.), Taiwan, Japan (Kyushu).

HUPEH: 1, Sui-sa-pa, 1000 m, 25. VII; Hsiao-ho, 8. VIII, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: 1, Niu-ling, Changting, 21. IV. 1941, Maa (BI-SHOP).

## 102. Aphthonoides sagaris Gressitt and Kimoto, n. sp. Fig. 209, a.

Reddish testaceous above; antenna pale yellow; ventral surfaces reddish testaceous; legs pale pitchy brown, tibiae and tarsi pale yellow, but hind tibia and spur reddish brown. Glabrous above, except for anterior portion of head; labrum with a transverse row of 4 long, pale subadpressed hairs; frontoclypeus sparsely clothed along sides and anterior margin, with pale, subadpressed hairs; antenna moderately clothed with mostly yellowish, subadpressed hairs; ventral surfaces moderately pubescent; hind femur subglabrous on swollen surface, but margins moderately clothed with pale, subadpressed hairs, hind tibia sparsely pubescent with fine, suberect hairs, tibial spur glabrous, hind tarsus moderately clothed above. Head slightly longer than broad, widest at eyes and nearly as broad as breadth of pronotum at anterior angles; labrum with anterior margin convex; frontoclypeus transversely depressed along anterior margin, broadly and weakly swollen on upper 2/3; interantennal space convex, about as wide as transverse diameter of antennal socket; eye subrounded, greatest transverse diameter about 5/7 as broad as interocular space; gena weakly excavated near inner margin of eye; frontal tubercles subtriangular and rounded, not distinctly elevated and medially separated by a narrow groove, basal margin rather indistinct; vertex sparsely punctate, with surface weakly convex. Antenna  $3/4 \times$  as long as body, cylindrical; segment 1,  $2 \times$  as long as broad; 2 about  $2/3 \times$  as long as 1, distinctly longer than broad; 3 slightly shorter than pedicel; 4 as long as pedicel; 5 distinctly longer than 4; 6 slightly shorter than 5; 7-9 subequal, about as long as 1; 10 slightly shorter than 9; 11 th 1.25  $\times$  as long as 10, apex briefly rounded. Prothorax 5/7 as long as broad, widest at middle and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle oblique and weakly swollen, lateral margin nearly straight, posterior angle oblique, basal margin convex and strongly sinuate; disc moderately punctate. Elytron 2/5 as broad as long, lateral margin convex, briefly rounded subapically and subtruncate apically; epipleuron sinuate, gradually narrowed and continuing to apex; disc with 9 regular striate rows of punctures, 1 complete lateral row and a scutellar row ending at basal 1/3, rows 5 and 6 converging at basal 1/4, punctures mostly as large as longitudinal interspaces and 1/2 as large as transverse interspaces. Ventral surfaces sparsely punctate; abdominal sternites moderately convex, last sternite broadly rounded apically, with surface evenly and strongly convex. Legs large; hind femur strongly swollen, 3/5 as broad as long; hind tibia quite short, about 1/4 as long as femur; tibial spur long, 4/5 as long as femur, narrow, weakly sinuate and flattened, with 1 margin finely serrate; hind tarsus 5/8 as long as femur, 1st 1/3 longer than 2+3, 4 minute. Length 1.9 mm; breadth 1.1.

DISTRIBUTION: Hainan I.

Holotype (CAS), Dwa-Bi, 22. VII. 1935, Gressitt.

Differs from *beccarii* Jac. chiefly in the following characters: greater size and robustness, paler color and elytron more evenly striate, with slightly smaller punctures.

### Genus Dibolia Latreille

Dibolia Latr., 1829, IN Cuvier, Regne Anim., ed. 2, 5:155 (type: Haltica occultana Koch; Europe).—Heikertinger, 1912, IN Reitter, Fauna Germ. 4: 147, pl. 201, fig. 5; 1924, Kol. Rundsch. 11 (1-2): 30; 1925, t. c. (3-4): 53, 70.—Maulik, 1926, Fauna India, Chrys. & Halt., 209; 1929, Ins. Samoa 4 (3): 207, 209.—Chen, 1933, Sinensia 3 (9): 214, fig. 2.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 84.—Chen, 1936, Sinensia 7 (6): 627.

### Key to Chinese species of Dibolia

- 1. Antenna with segments 1-4 reddish brown, 5-11 piceous ...... 2 Antenna entirely reddish brown; body steel blue above ...... 103. ordosana
- 2. Elytron moderately to strongly punctate; body dark bronzy aenescent above ...... 3 Elytron finely and sparsely punctate; body dark greenish blue above ..... 105. sinensis
- 3. Elytron with irregular rows of punctures; antennal segment 1 pale ...... 106. velox Elytron confusedly punctate; antennal segment 1 black ...... 104. potanini

## 103. Dibolia ordosana Chen

Dibolia ordosana Chen, 1939, Sinensia 10 (1-6): 59 (China: Ordos; HOANGHO-PAIHO). DISTRIBUTION: NW China (Inner Mongolia).



Fig. 208. ♂ genitalia. Dibolia velox Weise. 104. Dibolia potanini Weise

Dibolia Potanini Ws., 1889, Ent. Soc. Ross., Horae 23: 643 (Amdo; ?Moscow).

DISTRIBUTION: Mongolia.

105. Dibolia sinensis Chen

Dibolia sinensis Chen, 1939, Sinensia 10 (1-6): 59 (Shansi: Ta-ping-ti; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Shansi).

106. Dibolia velox Weise Fig. 208.

Dibolia velox Ws., 1889, Soc. Ent. Ross., Horae 23: 643 (Szechuan; ZMB).

DISTRIBUTION: China (Szechuan, Kirin).

KIRIN: 5, Charbin, VII. 1946, VII. 1948, VII. 1950 (FREY). This material is placed here with some question.

## Genus Philopona Weise

Philopona Ws., 1903, Archiv Naturg. ser. 69, 1: 216 (type: P. tibialis Ws.; Africa).—
Heikertinger, 1922, Wiener Ent. Ztg. 39: 45; 1924, Kol. Rundsch. 11 (1-2): 31, 38; 1925, t c. (3-4): 53 (part).—Maulik, 1926, Fauna India, Chrys. & Halt., 145, 148.

1**B** 



Fig. 209. a, Aphthonoides sagaris n. sp.; b, Philopona vibex (Erichson); c, Hyphasis inconstans Jacoby.

-Chen, 1934, Sinensia 5 (3-4): 229, 285.-Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355; 1936, op. cit. 26: 15.-Chen, 1936, Sinensia 7 (6): 627.

## Key to Chinese species of Philopona

Reddish testaceous above; elytron with 3 black subrounded spots ...... 107. mouhoti Mostly ochraceous above; elytron with 2 longitudinal black lines ............ 108. vibex

### 107. Philopona mouhoti (Baly)

Oedionychis Mouhoti Baly, 1878, Ann. Mag. Nat. Hist. ser. 5, 1: 316 (Siam; BM).

Philopona mouhoti: Maulik, 1926, Fauna India, Chrys. & Halt., 149, 153, fig. 62 (Perak, Burma).

DISTRIBUTION: Thailand, Burma, Perak, Hainan I.

HAINAN: 1, Hau-ying-tsuen, 6 mi. SE of No-doa, Lin-kao Distr., 27–28. VII. 1932, To (LINGNAN).

108. Philopona vibex (Erichson) Fig. 209, b.

Haltica vibex Erich., 1834, Nov. Acta. 16 Suppl. 1: 273 (China; ?ZMB).

Hyphasis signata Duvivier, 1892 (nec Jacoby), Soc. Ent. Belg., Ann. 36: 429 (Konbir; BRUXELLES).

Philopona signata: Maulik, 1926, Fauna India, Chrys. & Halt., 155 (India, Assam).

Philopona vibex: Heikertinger, 1922, Wiener Ent. Ztg. 39: 45.—Chen, 1934, Sinensia 5: 286, fig. 54 (Tonkin); 1939, op. cit. 10 (1-6): 40 (Kwangsi).—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 15 (Taiwan).

DISTRIBUTION: China (Inner Mongolia, Szechuan, Hupeh, Fukien, Kwangsi, Kwang-

tung), Taiwan. Vietnam, Assam, India.

SZECHUAN: 6, betw. Kia-ting & Sui-fu, 300–390 m, 15–19. VI. 1929, Graham (US); 1, Szechuan-Hupeh bord., 22. IX. 1948, Gressitt & Djou (CAS). HUPEH: 2, Sui-sa-pa, 1000 m, Lichuan Distr., 4, 21. VIII. 1948, Gressitt & Djou (CAS, LINGNAN). FUKIEN: 4, Shui-pei-kai, Shaowu, 13. I. 1942, K. S. Lin (BISHOP). KWANGTUNG: 1, Kau-lin-San, 700–900 m, Lien-p'ing Distr., 19. IV. 1940, Gressitt & To (CAS).

## Genus Hyphasis Harold

- Hyphasis Harold, 1877, Deuts. Ent. Ztschr. 21: 434 (type: Oedionychis magica Har.; India).—Heikertinger, 1924, Kol. Rundsch. 11: 32.—Maulik, 1926, Fauna India, Chrys. & Halt., 145.—Chen, 1934, Sinensia 5 (3-4): 289; 1936, Sinensia 7(6): 627.
- Hyphasoma Jacoby, 1903, Soc. Ent. Belg., Ann. 47: 110 (type: *H. inconspicua* Jac.).—
  Heikertinger., 1922, Wien. Ent. Ztg. 39: 49, 51; 1924, Kol. Rundsch. 11 (1-2) 32.
  —Maulik, 1926, Fauna India, Chrys. & Halt., 145, 156.—Chen, 1933, Sinensia 3 (9):
  222; 1933, Soc. Ent. France, Bull. 38: 273.—Chûjô, 1935, Nat. Hist. Soc. Formosa,
  Trans. 25: 336; 1936, op. cit. 26: 85.—Chen, 1936, 7 (6): 627 (Synonymized).

#### KEY TO CHINESE SPECIES OF HYPHASIS

1.	Length exceeding 5.0 mm 2
	Length less than 4.0 mm 3
2.	Pronotum and elytron very finely punctured; antenna blackish with segments 1-3
	or 1-4 yellowish brown; length 5.2 mm 109. flava
	Pronotum and elytron strongly punctured as compared with preceding species; an-
	tenna almost entirely yellowish brown in some cases, 3 or 4 apical segments in-
	fuscate; length 5.5-6.5 mm 110. fulvicornis
3.	Dorsum yellowish or reddish or dark brown 4
	Dorsum entirely blackish; punctation of elytron strong; length 3.5 mm 114. tristis
4.	Antenna black beyond segment 2; length generally 2.8-4.0 mm 5
	Antennae black or brown on last 6 or 7 segments; antennal segment 2 as long as
	3; elytral punctures rather strong and close; length 2.0-2.8 mm 112. inconstans
5.	Prothorax $3 \times$ as broad as long; head and prothorax reddish; elytron moderately
	closely and weakly punctured; length 2.7-3.5 mm 111. fuscifrons
	Prothorax 2.3 $\times$ as broad as long; dorsum dull yellow; antennal segment 2 shorter
	than 3; elytral punctures finer than in inconstans; length 3.0-4.0 mm 113. moseri

#### 109. \*Hyphasis flava (Chen)

Hyphasoma flavum Chen, 1933, Soc. Ent. France, Bull. 38: 275 (C. Tonkin: NE de Tuyen-Quan, Qim-Quam-Thuong; PARIS).

Hyphasis flava: Chen, 1934, Sinensia 5 (3-4): 296.

DISTRIBUTION: N. Vietnam (Tonkin).

## 110. Hyphasis fulvicornis Jacoby

Hyphasis fulvicornis Jac., 1905, Fascic. Malay. App. 2: 4 (Malay Pen.; BM).-Chen, 1934,

Sinensia 5 (3-4): 294 (Tonkin, Siam, Cochinchina, Hainan).

Hyphasoma fulvicornis: Chen, 1933, Soc. Ent. France, Bull. 38: 274.

DISTRIBUTION: Malay Pen., Thailand, Vietnam, Hainan I.

HAINAN I.: 1, No-doa, 10. VII. 1935, Gressitt (CAS).

## 111. Hyphasis fuscifrons (Weise)

Hyphasoma fuscifrons Ws., 1922, Tijdschr. Ent. 65: 125 (Fokien, Tonkin: Mts. Mauson; ?STOCKHOLM).—Chen, 1933, Soc. Ent. France, Bull. 38: 275.

Hyphasis fuscifrons: Chen, 1934, Sinensia 5 (3-4): 297.

DISTRIBUTION: SE China (Fukien), N. Vietnam (Tonkin).

## 112. Hyphasis inconstans Jacoby Fig. 209, c.

Hyphasis inconstans Jac., 1885, Zool. Soc. Lond., Proc. 1885: 733, pl. 46, fig. 1 (Japan; Yuyama, Hitoyoshi; BM).

Hyphasoma inconstans: Chen, 1933, Soc. Ent. France, Bull. 276 (Tonkin: Mts. Mauson);
1933, Sinensia 3 (9): 222, fig. 8; 1934, op. cit. 5 (3-4): 292.—Chûjô, 1936, Nat.
Hist. Soc. Formosa, Trans. 26 (149): 85 (Kyushu).—Chûjô & Kimoto, 1961, Pacific
Ins. 3 (1): 181.

DISTRIBUTION: Japan, China (Kiangsi), N. Vietnam (Tonkin).

HUNAN: 4, Pu-shih, Luki, 2. V. 1939, Maa (BISHOP). KIANGSI: 1, Hong-shan, 1000 m, 25. VI. 1935; 1, Wong-sa-shue, 8–11. VII. 1936, Gressitt (CAS). KWANGTUNG: 1, Yao Shan (Mt. range), Linhsien Distr., 24–26. IV. 1934, To (LINGNAN). FUKIEN: 3, Shui-pei-kai, Shaowu, V. 1942, V. 1944; 1, Bohea Hills, Chungan, 24. IV. 1940, Maa (BISHOP). HAI-NAN I.: 2, Ta-hian, 13. VI; 1, Fan-heang, 7. VI; 1, Lia-mui, 350 m, 2. VIII; 1, Chung-kon to Dwa-bi, 11. VII, Gressitt, 1935 (CAS).

# 113. Hyphasis moseri (Weise)

Hyphasoma Moseri Ws., 1922, Tijdschr. Ent. 65: 124 (Tonkin: Mts. Mauson; ? Stockноlм).—Chen, 1933, Soc. Ent. France, Bull. 38: 275 (Hoa-binh).

Hyphasis moseri: Chen, 1934, Sinensia 5 (3-4): 291, 295.

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kiangsi, Fukien, Kwangtung), Hainan I.

KIANGSI: 2, Ten-gan (ZMB); many, Tai-au-hong, 4. VII; 6, Tai-au-hong, S. of Sungwu, 540 m, 5. VII; Wong-sa-shue, 8–11. VII; 3, Sung-wu, 2. VII, Gressitt, 1936 (CAS). FUKIEN: many, Shui-pei-kai, 8. VIII. 1941, 3. V. 1942; 2, Ta-chu-lan, 24. IV. 1942, Shaowu; 2, Chi-shih, Chungan, 11. VIII. 1939, 24. IV. 1940; 1, Kwang-keng, Kienyang, Maa (CAS, BISHOP). KWANGTUNG: 1, Canton, Mell (ZMB); many, Yim-na Shan, 10–15. VI. 1936; 7, Mei-hsien, 9. VI. 1935, Gressitt (CAS); 11, Tin-tong, Lochang, 18. VIII. 1947, Gressitt (BISHOP); 2, Hau-leng, Tin-tong, Lochang Distr., 18. VIII. 1947, Tseng & Lam (CAS). HAINAN I.: 3, Ta-hau, 3, 6. VII. 1935, Gressitt (CAS).

## 114. Hyphasis tristis Chen

Hyphasis tristis Chen, 1934, Sinensia 5: 295 (Kweichow: Gan-Chouen-Fou; PARIS). DISTRIBUTION: SW China (Kweichow).

## Genus Hespera Weise

- Hespera Ws., 1889, Soc. Ent. Ross., Horae 23: 638 (type: H. sericea Ws.).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 32.—Maulik, 1926, Fauna India, Chrys. & Halt., 130, 137.—Chen, 1933, Sinensia 3 (9): 227; 1934, op. cit. 5 (3-4): 233, 241.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 86.—Chen, 1936, Sinensia 7 (6): 628.—Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 149.
- Allomorpha Jacoby, 1892, Mus. Civ. Genova, Ann. 37: 934 (type: A. sericea Jac.; hom. of sericea Ws.).

## KEY TO CHINESE SPECIES OF HESPERA

1.	Upper surface metallic blue, green or violaceous 2
	Upper surface differently colored
2 (1).	Pronotum very closely punctate, transversely depressed below middle; length 2.7-3.2 mm
	Pronotum more or less sparingly punctate, without transverse depression; length
	3.0-3.5 mm (Maulik, 1926; Burma, Sikkim, Assam, Vietnam) cyanea*
3 (1).	Antenna distinctly longer than body 4
	Antenna not longer than body
4 (3).	Upper surface black; vertex granulose; length 3.0 mm (Chûjô, 1936; Taiwan)
	antennalis*
	Head and pronotum black, elytron reddish brown; vertex strongly and rugose-
	ly punctate; length 2.5 mm 122. longicornis
5 (3).	Elytral hairs undulatory, arranged in several directions
	Elytral hairs not undulatory, usually directed uniformly caudad 10
6 (5).	Length of body 3.5-4.5 mm7



Fig. 210.  $\Im$  genitalia. a, *Hespera aterrima* Kung & Chen; b, *H. byrsa* n. sp.; c, *H. oculata* n. sp.; d, *H. tenebrosa* n. sp.; e, *H. sericea* Weise.

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Length of body 2.0–3.0 mm; coloration varying from brown to brownish black; pubescence dense, adpressed, usually golden-yellow, rarely silvery..... 121. lomasa Length of body 4.0-4.5 mm; antenna and legs entirely black; body broad, subquadrate, color entirely black above and densely clothed with goldenyellow pubescence; antenna slender; pronotum and elytra granulose (Kung & Chen, 1954; Vietnam: Tonkin) ..... obesula\* Antenna reddish brown; fore and mid legs reddish brown (hind femur dark red-brown) ..... 123. oculata 9 (8). Antenna, fore and mid legs yellowish brown; hind leg black (Chûjô, 1936; Pescadores Is.)....insulana\* Antenna partly black; femora black, with tibiae and tarsi reddish brown; (Chújô, 1936; Taiwan) ..... rufotibialis\* Antenna with segment 3 distinctly longer than 2 ..... 14 11 (10). Head, pronotum and elytron concolorous, black or deep brown; pubescence Head and prothorax yellowish brown, elytron black; pubescence short and sparse, only visible under high magnification, antenna fairly robust; elytron alutaceous, impunctate, with short whitish hairs;  $\mathcal{J}$  with abdomen entirely black or brownish black;  $\varphi$  with abdomen yellowish brown, apical segment black; length 2.3-2.5 mm ..... 116. brevipilosa 12 (11). Pronotum nearly impunctate and finely granulate; body deep brown to black Pronotum strongly and closely punctured, testaceous to pubescent and darkened anteriorly; elytron ochraceous, with dark sutural lines; length 2.5-3.0 mm... 13 (12). Dark brown above; antenna with intermediate segments thickened, with each segment less than  $2 \times as$  long as greatest breadth; length 2.2–2.5 mm ..... Black above; antenna more slender than preceding species, with each intermediate segment more than  $2 \times as$  long as greatest breadth; length 3.3-3.7 14 (10). Antenna entirely fulvous, sometimes apical segments slightly darkened ...... 15 Antenna entirely black or pitchy, or with segments 1-3 or 1-4 paler...... 16 15 (14). Legs brownish black; pubescence sparse, whitish gray; elytron rather strongly punctured; antenna entirely fulvous; length 3.0 mm ...... 120. fulvicornis Legs reddish brown; pubescence dense, golden yellow; elytron granulose, not distinctly punctate; length 3.5-4.0 mm (Chen, 1954; N. Vietnam) ... fulvimembris\* 17 (16). Vertex impunctate, finely reticulate, sparsely pubescent; length 3.0 mm... 125. sinensis Vertex rugosely punctate, densely pubescent; length 2.8-3.2 mm ..... 115. aterrima 18 (16). Vertex and occiput closely covered by fine hairs; body black, shining above; length 3.0–3.5 mm (Chûjô, 1936; Taiwan) ..... montana\*

115. Hespera aterrima Kung and Chen Fig. 210, a.

Hespera aterrima Kung & Chen, 1954, Acta Ent. Sinica 4 (2) : 155, 162 (Szechuan; Ac. SIN.). DISTRIBUTION : China (Szechuan, Hupeh, Chekiang).

SZECHUAN: 1, Pe-pei, 300 m, N of Chung-king, 27. VII. 1940, Gressitt (BISHOP). HUPEH: 1, Wang-chia-ying to Sui-sa-pa, 1050-1400 m, 21. VII. 1948, Gressitt & Djou (CAS). CHEKIANG: 1, Hang-chow, 19. V. 1923, Van Dyke (CAS).

#### 116. Hespera brevipilosa Kung and Chen

Hespera brevipilosa Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 155, 161, fig. 1 (Szechuan; Ac. SIN.).

DISTRIBUTION: SW China (Szechuan, Kweichow). KWEICHOW: 2, Kwei-yang, 1000 m, 11. VII. 1940, Gressitt (LINGNAN, BISHOP).

117. Hespera byrsa Gressitt and Kimoto, n. sp. Figs. 210, b & 211, a.

Male: Brownish above: pronotum largely testaceous, medially marked with a subtriangular blackish area near anterior margin; scutellum dark, pitchy reddish brown; elytron ochraceous, sutural line dark brown; head pitchy brown; antenna with segment 1 pitchy brown, 2–4 becoming darker, 5–11 reddish brown; ventral surfaces dark reddish brown on metasternum and abdominal sternites; legs evenly testaceous. Dorsum moderately pubescent with pale, somewhat yellowish hairs; elytron with mostly adpressed hairs, but apical 1/3with many longer, erect hairs; labrum with a transverse row of about 6 long hairs; frontoclypeus moderately pubescent; vertex sparsely pubescent medially; antenna moderately clothed with subadpressed hairs; ventral surfaces more densely pubescent medially, thorax clothed with fine suberect hairs, and abdomen with longer, pale, adpressed hairs; legs moderately pubescent, hind femur rather evenly pubescent with long adpressed, pale hairs, hind tibia moderately pubescent with pale, subadpressed hairs in apical portion with stouter, yellowish hairs, hind tarsus thickly pubescent above with short, pale hairs on segment 1, 2–4 less densely clothed.

*Head* as wide as long, widest at eyes and slightly narrower than breadth of pronotum at anterior angles; labrum weakly bilobed, with anterior edge emarginate; frontoclypeus distinctly swollen medially and along anterior margin; interantennal space strongly convex, nearly as broad as transverse diameter of antennal socket; antennal socket subrounded, with margin weakly swollen; eye large, suboval; gena weakly excavated above and convex
laterally; postantennal swellings suboval, distinctly elevated and separated medially by a narrow groove; vertex with surface evenly convex and somewhat granulate. Antenna nearly 7/10 as long as body; segments 6-10 more robust than 1st; 1st 5/8 again as long as wide; 2nd 1/2 as long as 1, distinctly longer than wide; 3 distinctly longer than 2; 4-5 subequal, slightly longer than 3; 6-10 subequal, as long as 5 and more robust, 11th 2/7longer than 10, apically pointed. Prothorax about 3/4 as long as wide, widest at anterior 1/3, distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle weakly swollen and briefly rounded, lateral margin convex, posterior angle oblique, basal margin nearly straight at middle; disc indistinctly depressed sublaterally near basal margin, surface densely punctate and somewhat granulate. Scutellum distinctly broader than long, apex briefly rounded. Elytron  $3 \times$  longer than wide, lateral margin rather straight, with apical 1/3 narrowing to broadly rounded apex; epipleuron widest basally, briefly concave before middle and continuing nearly to apex; disc confusedly punctate and granulate. Ventral surfaces moderately punctate and strongly swollen medially; last abdominal sternite subtriangular, surface with a moderate depression medially. Legs large; hind femur nearly  $3 \times$  as long as wide; hind tibia weakly sinuate, 6/7 as long as femur; hind tarsus 3/4 as long as tibia, segment 1 barely longer than 2+3 and distinctly longer than last. Length 2.5 mm; breadth 1.2.

*Female*: Brownish above; pronotum entirely testaceous; scutellum dark, pitchy reddish brown; elytron ochraceous, sutural line dark brown; antenna pitchy brown to segment 5, 6–11 pitchy reddish brown; ventral surfaces dark reddish brown; legs evenly testaceous. Antenna about 4/7 as long as body; segments 7–11 distinctly more robust than 1. Ventral surfaces swollen; last abdominal sternite subtriangular, with apex more briefly rounded than in  $3^{\circ}$ . Length 2.8 mm; breadth 1.3.

Paratypes: Brownish above; pronotum testaceous to rufescent with darkened anterior



Fig. 211. a, Hespera byrsa n. sp.; b, H. cavaleriei Chen.

areas, elytron ochraceous, with dark sutural line. Length 2.7-3.0 mm; breadth 1.2-1.4.

DISTRIBUTION: W. China (Sikang).

Holotype  $\mathcal{F}$  (Mus. FREY), Se-long, 4000 m, San-kiang-kou, Wassuland, Sikang, 8. VII. 1934, Friedrich; allotopotype  $\mathcal{P}$  (FREY), same data; 3 paratopotypes (FREY, BISHOP), same data.

Differs from *crassicornis* Chen in having pronotum closely punctured instead of nearly punctate and finely granulate, and in being paler above and slightly larger.

118. Hespera cavaleriei Chen Fig. 211, b.

Hespera cavaleriei Chen, 1932, Soc. Ent. France, Bull. 37: 194 (Kouy-Tcheou, Yunnan, Tonkin; PARIS); 1934, Sinensia 5 (3-4): 345.—Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 150, 162.

DISTRIBUTION : SW China (Kweichow, Szechuan, Hupeh, Yunnan, Fukien), N. Vietnam (Tonkin).

SZECHUAN: 1, Wa-shan, 1500 m, 31. VII. 1925, Graham (US). HUPEH: Many, Sui-sa-pa, 1000 m, VII-IX; 15, Liang-ho-keu, 1, 5. IX; 19, Hsiao-ho, 8-10, 15. VIII; 1, Wang-chia-ying, 19. IX; Gau-yu-tai to Wang-chia-ying, 1140 m, 20. IX; 1, Liang-ho-keu to Wang-chia-ying, 1344 m, 18. IX, Lichuan, 1948, Gressitt & Djou (CAS, LINGNAN, BISHOP). FU-KIEN: 1, Ta-chu-lan, Shaowu, 25. VI. 1942, Maa (BISHOP).

# 119. Hespera crassicornis Chen

Hespera crassicornis Chen, 1932, Soc. Ent. France, Bull. 37: 194 (Yunnan; ZMB); 1934, Sinensia 5 (3-4): 342, fig. 69.—Kung & Chen, 1954, Acta Ent. Sinica 4(2): 150, 161.
DISTRIBUTION: SW China (Yunnan).

# 120. Hespera fulvicornis Kung and Chen

Hespera fulvicornis Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 157, 162 (Shansi, Szechuan; Ac. SIN.).

DISTRIBUTION: NW. China (Shansi, Shensi, Szechuan).

SHENSI: 1, Chin-ling Mts., IV-V. 1904, Blackwelder (US).

# 121. Hespera lomasa Maulik

- Allomorpha sericea Jacoby, 1892 (nec Weise, 1889), Mus. Civ. Genova, Ann. 37: 934 (India; GENOVA; BM; homonym).
- Hespera lomasa Maulik, 1926, Fauna India, Chrys. & Halt., 142 (Burma, India, Ceylon; GENOVA, BM).—Chen, 1932, Soc. Ent. France, Bull. 37: 197; 1933, Peking Nat. Hist. Bull. 8: 52 (Kwangtung, Kweichow, Tonkin); 1934, Sinensia 5 (3-4): 343 (Canton).
  —Kung & Chen, 1954, Acta Ent. Sinica 4(2): 151, 163.

DISTRIBUTION: Burma, India, Ceylon, China (Sikang, Szechuan, Kweichow, Hupeh, Kiangsi, Fukien, Kwangtung, Hainan I.), N. Vietnam (Tonkin).

SIKANG: 1, Mu-ping, 1500–1800 m, 19. VII. 1929 (US). SZECHUAN: 7, Lung-chuepa to Hupeh border, 28. VIII; 1, Wan-hsien, 22. VIII. 1948, Gressitt & Djou (CAS); 1, Shinkai-sze, 1500 m, Omei Shan, 9. VIII. 1940, Gressitt (BISHOP). HUPEH: 1, Hsiao-ho (Suiho), 14. IX; many, Sui-sa-pa, 1000 m, 23. VIII; Liang-hou-keu, 10. IX; 1, San-hou-keu, Hupeh-Szechuan Bord., 19. VII, Lichuan Distr., 1948, Gressitt & Djou (CAS). KIANGSI: 2, Sung-wu, 2. VII; Tai-au-hong, S of Sung-wu, 540 m, 5. VII, 1936, Gressitt (CAS). FU-KIEN: 1, Yung-an City, 17. V. 1941, Maa (BISHOP). KWANGTUNG: 3, Yim-na Shan, 10–15. VI; 2, Tsin-leong Shan, 5. VI, Gressitt, 1936 (CAS); 1, Sin-fung to Lung-kai, Sin-fung & Lien-p'ing Distrs., 12. IV. 1940, Gressitt & To; 1, Ting-wu Shan, 7–12. VII. 1949, Gressitt (BISHOP). HAINAN: 2, Lia-mui (Ling-mon) 350 m, 2. VIII; 1, No-doa, 28. VI, Gressitt, 1935 (CAS).

# 122. Hespera longicornis Chen

Hespera longicornis Chen, 1932, Soc. Ent. France, Bull. 37: 196 (Yunnan; ZMB); 1934, Sinensia 5 (3-4): 343, fig. 70.—Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 151, 161.
DISTRIBUTION: SW China (Yunnan).

#### 123. Hespera oculata Gressitt and Kimoto, n. sp. Figs. 210, c & 212, a.

*Male*: Dull black, with a dense pubescence of pale yellowish hairs above; eye pale reddish; antenna reddish brown; ventral surfaces dark brown; legs reddish brown; hind femur dark reddish brown; hind tibia and tarsus slightly paler. Dorsum pubescent; labrum with a transverse row of about 6 hairs; frontoclypeus sparsely clothed with fine, pale hairs; vertex clothed with pale yellowish hairs; antenna moderately clothed with adpressed hairs; pronotum and elytron with hairs in several directions; ventral surfaces mostly with moderate pubescence of fine, suberect hairs; legs moderately clothed with pale adpressed hairs.

*Head* slightly wider than long, widest at eyes and about as broad as prothorax at anterior angles; labrum weakly bilobed, with anterior margin slightly emarginate; frontoclypeus triangular, distinctly elevated medially and along anterior margin; interantennal space strongly elevated, 2/7 broader than transverse diameter of antennal sockets; antennal sockets with margin slightly elevated; eye large, suboval; gena weakly swollen and finely granulate; postantennal swellings transverse, distinctly elevated and separated by a median groove; vertex with surface convex, somewhat punctate and granulate. Antenna incomplete on holotype; segment 1 nearly  $4 \times$  as long as wide; 2 small, slightly longer than wide, about 1/3 as long as 1; 3 twice as long as 2; 4 slightly shorter than 1; 5–7 slightly longer than 4, subequal; 8 slightly shorter than 7. Prothorax 3/4 as long as wide, widest at middle and much narrower than breadth of elytron at basal margin; anterior margin nearly straight, anterior angle slightly swollen and rounded, lateral margin weakly convex, posterior angle oblique and weakly swollen, basal margin nearly straight; disc unevenly convex, slightly impressed sublaterally at middle, densely punctate and punctulate. Scutellum about as broad as long, apically pointed. Elytron nearly  $3 \times as$  long as wide, widest at apical 1/3, lateral margin nearly straight, with apical 1/4 rounded to apex; epipleuron slightly convex, widest below apical 1/3, briefly narrowed at middle and ending before apex; disc with punctures densely confused and somewhat granulate. Ventral surfaces moderately punctate on thorax and abdomen; apical abdominal sternite subtriangular and somewhat rounded at extreme apex, surface weakly swollen medially and with a shallow, transverse depression. Legs large; hind femur greatly swollen, nearly 1/2 as broad as long, widest at middle; hind tibia as long as femur; hind tarsus fully 2/3 as long as tibia, segment 1 distinctly longer than 2+3. Length 3.8 mm; breadth 2.0.

*Female*: Dull blackish brown, with dense pale yellowish pubescence above; antenna with segment 1 pitchy brown, 2–11 dark reddish brown; ventral surfaces dark reddish brown; legs mostly dark reddish brown. Antenna slightly shorter than length of body. Abdomen with last abdominal sternite subtriangular and extreme apex more pointed than in  $3^\circ$ . Length 3.5 mm; breadth 2.0.

*Paratype*: Dull brownish black, with dense pubescence of pale, yellowish hairs. Length 3.7 mm; breadth 2.0.

DISTRIBUTION: S. China (Fukien, Hupeh).

Holotype & (BISHOP 3316), Chi-li-chiao, 1000 m, Chungan Distr., Fukien Prov., 23. X. 1942, T. C. Maa; allotype ♀ (CAS), Hsiao-ho, Lichuan Distr., W. Hupeh Prov., 8. VIII. 1948, Gressitt & Djou; 1 paratype (CAS), Ta-chu-lan, Shaowu, Distr., 1–9. X. 1943, T. C. Maa.

Differs from *insulana* Chûjô in having antenna and fore and mid legs reddish brown instead of yellow-brown, and hind femur red-brown instead of black.



Fig. 212. a, Hespera oculata n. sp.; b, H. tenebrosa n. sp.

# 124. Hespera sericea Weise Fig. 210, e.

Hespera sericea Weise, 1889, Soc. Ent. Ross., Horae 23: 639 (Szechuan; ? LENINGRAD).—
Maulik, 1926, Fauna India, Chrys. & Halt., 138, 139 (India; China: Hupeh).—Kung
& Chen, 1954, Acta Ent. Sinica 4 (2): 151, 162, fig. 5.

DISTRIBUTION: S. China (Szechuan, Sikang, Hupeh, Yunnan), N. India.

SIKANG: 4, nr. Mu-ping, 2100–3900 m, 6–24. VII. 1929, Graham (US). SZECHUAN: 1, Omei Shan, 1, Ching-cheng-shan, VII. 1932, G. Liu (MCZ); 1, Omei Shan, 16. VIII. 1940, Gressitt (CAS); 1, nr. Lu-ding-chiao, 1500–2400 m, 11–13. VII. 1930; 2, betw. Yueh-shi & Bao-ngan, 1800–2400 m, 12. VII. 1928; 1, betw. Fu-lin & Yueh-shi, 1200–2400 m, 20–21. VII.

1928, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, Lichuan Distr., 24–25, 30–31, VII, 6. VIII; 15, Wang-chia-ying to Sui-sa-pa, 1050–1410 m, 21. VII; 2, Sang-hou-keu, Hupeh-Szechuan Bord., 19. VII; 1, Chi-au-shan to Wang-chia-ying, 20. VII; 2, Mo-tai-chi to Chi-au-shan, 28. VII; 2, Hsiao-ho, Lichuan Distr., 11. VIII; 1, Liang-ho-keu, Lichuan Distr., 10. IX, Gressitt & Djou, 1948 (CAS). YUNNAN: 1, Kun-ming (Yunnan-fu), 1900 m, 2. VII. 1940, Gressitt (BISHOP).

# 125. Hespera sinensis Chen

Hespera sinensis Chen, 1935, Arkiv Zool. 27 A (5): 12 (NE Szechuan; STOCKHOLM).—
Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 152, 160, 162.
DISTRIBUTION: W. China (NE Szechuan).

### 126. Hespera tenebrosa Gressitt and Kimoto, n. sp. Figs. 210, d & 212, b.

*Male*: Dull black, with pale reddish brown pubescence above; antenna dark reddish brown; ventral surfaces piceous; legs with segments rather uniformly dark reddish black. Dorsal surfaces with pronotum and elytra densely clothed with short, adpressed hairs; head with vertex subglabrous and shiny; frontoclypeus with sparse pubescence of long, pale hairs along apical and lateral margins; antenna with segments moderately clothed with pale, subadpressed hairs; ventral surfaces moderately pubescent; metasternum with stouter hairs on lateral areas; abdominal sternites with mostly fine hairs; legs with femora slightly clothed with adpressed hairs, tibiae moderately clothed with pale, adpressed hairs, tarsi moderately clothed above.

Head nearly as long as broad, widest at eyes and somewhat constricted behind, distinctly narrower than breadth of pronotum at anterior angle; labrum transverse, weakly bilobed, with anterior margin weakly emarginate; frontoclypeus triangular, distinctly elevated mesally and along anterior margin, surface punctulate; interantennal space slightly convex, 1/4 broader than transverse diameter of antennal socket; antennal sockets subrounded with margin not distinctly swollen or elevated; eye large, suboyal; gena with surface slightly convex and largely impunctate; postantennal swellings somewhat transverse-rounded, slightly swollen and separated by a narrow depression medially; vertex slightly impressed behind postantennal swellings, surface evenly convex and densely punctulate. Antenna nearly 5/6 as long as body, intermediate segments slightly flattened and fully  $2 \times as$  long as wide; scape 3/8 as wide as long; segment 2 small, nearly 1/2 as long as 1, slightly longer than wide; 3 small, slightly longer than 2; 4 large,  $2 \times$  as long as, and more robust than 3, 5-6 slightly longer than 4, subequal; 7 slightly longer than 6; 8-9 slightly shorter than 7, subequal; 10 slightly shorter than 9; 11 nearly 1/4 longer than 10, apically pointed. Prothorax 2/3 as long as broad, widest at posterior angles, distinctly narrower than breadth of elytra at bases; anterior margin straight, anterior angle slightly produced and rounded; lateral margin weakly convex to weakly produced at posterior angle; basal margin oblique laterally and rather straight medially; disc densely punctured and granulate. Scutellum slightly wider than long, pointed apically. Elytron fully  $2 \times$  as long as broad, widest at apical 1/3, lateral margin rather straight and briefly rounded at apical 1/4; epipleuron sinuate, widest at apical 1/5, briefly narrowed before middle and ending subapically; disc faintly rugulose and confusedly punctulate. Ventral surfaces punctate to punctulate; metasternum with anterior margin acutely projecting between mesocoxae; apical abdominal

sternite strongly swollen and with a large subquadrate depression medially, broadly rounded apically. Legs large, but fore pair somewhat reduced; mid femur slightly swollen; hind femur strongly swollen, about 1/2 as wide as long; hind tibia nearly as long as femur; hind tarsus about 1/2 as long as tibia, segment 1 distinctly longer than 2+3. Length 3.3 mm; breadth 1.8.

*Female*: Dull black, with dense pubescence of dull reddish brown, adpressed hairs on dorsum; antenna with scape and pedicel dark pitchy brown, flagellar segments black. Antenna nearly 3/4 as long as body, cylindrical and not as robust as in  $\Im$ ; abdomen with apical sternite subtriangular, extreme apex rounded. Length 3.3 mm; breadth 2.0.

*Paratypes*: Dull black, with moderate to dense pubescence of short, adpressed pale reddish brown hairs. Length 3.3–3.7 mm; breadth 2.0–2.2.

DISTRIBUTION: SW China.

Holotype  $\mathcal{J}$  (U. S. Nat. Mus.), Yunnan (probably Kunming), 1. VIII. 1944, C. L. Liu; allotype  $\mathcal{Q}$  (USNM), same data; 9 paratopotypes (US, BISHOP, AC. SIN.), same data.

Differs from *crassicornis* Chen in being considerably larger, in being black instead of dark brown above, with more slender antenna.

### 127. Hespera viridis Chen

Hespera viridis Chen, 1936, Sinensia 7 (6): 597 (Darjeeling; ?PARIS).—Kung & Chen, 1954, Acta Ent. Sinica 4 (2): 152, 160, 161 (Sikang).

DISTRIBUTION: N. India, W. China (Sikang, Szechuan).

SIKANG: many, Wo-lung, 2000 m, Wassuland, 10. VII. 1934, Friedrich (FREY); 1, Yao-gi nr. Mu-pin, 2400 m, 14–18. VII. 1929, Graham (US). SZECHUAN; 1, Wa-shan, 23. VII. 1935; 1, betw. Yueh-shi & Bao-ngan, 1800–2400 m, 12. VIII. 1948, Graham (US).

# Genus Letzuella Chen

Letzuella Chen, 1933, Sinensia 3 (9): 227, 247 (type: L. yonyonae Chen); 1934 op. cit. 5(3-4): 233, 339; 1936, op. cit. 7 (6): 629.

#### KEY TO CHINESE SPECIES OF LETZUELLA

Antenna with segments 1-3 reddish, 4-11 piceous; body dark, greenish aenescent; length

# 128. Letzuella viridis Chen

Letzuella viridis Chen, 1933, Sinensia 3 (9) : 248 (Yunnan; PARIS); 1934, Sinensia 5 (3-4) : 340. DISTRIBUTION : SW China (Yunnan).

# 129. Letzuella yonyonae Chen

Letzuella yonyonae Chen, 1933, Sinensia 3 (9) : 248 (Kweichow : Pinfa; PARIS). DISTRIBUTION : SW China (Kweichow).

# Genus Laotzeus Chen

Laotzeus Chen, 1933, Sinensia 3 (9): 228, 249 (type: L. gracilicornis Chen; China; monobasic); 1936, op. cit. 7 (6): 629.

# 130. Laotzeus gracilicornis Chen

Laotzeus gracilicornis Chen, 1933, Sinensia 3 (9): 250 (Kweichow: Kweiyang; PARIS).Brown or reddish brown with slight cupreous sheen. Length 4 mm.DISTRIBUTION: SW China (Kweichow).

# Genus Argopistes Motschulsky

Argopistes Mots., 1860, IN Schrenck, Reisen Amurland 2: 236 (type: A. biplagiata Mots.; Siberia).—Heikertinger, 1924, Kol. Rundsch. 11 (1–2): 34; 1925, op. cit. 11 (3–4): 53, 70.—Maulik, 1926, Fauna India, Chrys. & Halt., 284, 296.—Chen, 1933, Sinensia 3 (9): 223; 1934, op. cit. 5 (3–4): 231, 314; 1934, Stylops 3: 72.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 108.—Chen, 1936, Sinensia 7 (6): 630.

# KEY TO CHINESE SPECIES OF ARGOPISTES

1.	Body not entirely black above 2
	Body entirely black above; length 3.0 mm 136. unicolor
2.	Length 2.2–2.5 mm
	Length exceeding 3.0 mm 4
3.	Antenna reddish brown, apical 6 or 7 segments darker; elytron with a reddish
	area before middle, sometimes almost entirely reddish above 135. tsekooni
	Antenna brown with last 4 segments; elytron entirely brown 133. hoenei
4.	Elytral punctures equal or more finely impressed than on pronotum; prosternal process
	not distinctly widened near apex 5
	Elytral punctures more strongly impressed than on pronotum; prosternal process
	narrowed at middle, as long as broad at apex; yellowish brown above, with sides
	of pronotum and elytra sometimes darkened; length 4.0 mm
5.	Elytral punctures much finer than punctures of pronotum; elytron black, with a
	reddish area, occasionally almost entirely reddish brown; length 3.2-4.0 mm
	Elytral punctures nearly equal in size to those of pronotum; elytron largely black
	with a reddish area near middle or testaceous with a variable number of dark
	markings; length 3.2-3.8 mm 131. biplagiatus

# 131. Argopistes biplagiatus Motschulsky

Argopistes biplagiatus Mots., 1860, Schrenck, Reisen Amurland 2: 236 (Daourie, Amour; ? LENINGRAD).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 174 (hosts).

This species has been misrecorded from China, and may not occur there.

DISTRIBUTION: E. Siberia, Japan.

HOSTS : Fraxinus mandshurica Rupr. var. japonica Maxim., Osmanthus ilicifolius (Hassk.) Mouille.

#### 132. Argopistes coccinelliformis Csiki

Argopistes coccinelloides Baly, 1874 (nec Suffrian, 1868), Ent. Soc. Lond., Trans. 1874: 202 (Japan; BM).—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 108 (Okinawa).

Argopistes coccinelliformis Csiki, 1940, Col. Cat. 169: 524 (new name for coccinelloides Baly). --Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 174 (hosts).

Argopistes biplagiatus: Chen, 1934 (nec Mots.), Sinensia 5(3-4): 315 (Japan, China, Ton-kin).—Chûjô, 1936 (nec Mots.), Nat. Hist. Soc. Formosa, Trans. 26: 110 (Ryukyu, Formosa); 1942, Mushi 14(2): 63 (Kwangtung, Korea, Taiwan).—Gressitt, 1955, Ins. Micronesia 17 (1): 41 (Bonin Is.: Chichi Jima).

What was probably this species was reared by Gressitt at Canton, from privet, in the leaves of which it mines.

DISTRIBUTION: Japan (Kyushu, Shikoku, Hachijo), Korea, Ryukyu Is. (Amami-Oshima, Okinawa), Bonin Is., Taiwan, S. China, Vietnam.

HOST: Ligustrum japonicum Thunb.

### 133. Argopistes hoenei Maulik

Argopistes hoenei Maulik, 1934, Deuts. Ent. Ges., Mitt. 5: 25 (Shanghai; BM). DISTRIBUTION: E. China (Kiangsu).

HOST: Ligustrum ovalifolium Hassk.

### 134. Argopistes sinensis Chen

Argopistes sinensis Chen, 1939, Sinensia 10 (1-6): 51 (Kwangsi: Yangso; Ac. SIN.). DISTRIBUTION: SW China (Kwangsi).

#### 135. Argopistes tsekooni Chen

Argopistes Tsekooni Chen, 1934, Sinensia 5 (3-4): 316, fig. 16 (Shanghai, Hangchow; ? Ac. SIN.).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 174 (Japan; host).
DISTRIBUTION: E. China (Kiangsu, Chekiang), Japan (Honshu, Kyushu).
KIANGSU: 5, Soochow, N. Gist. Gee (US).
HOST: Ligustrum obtusifolium Sieb. & Zucc.

#### 136. Argopistes unicolor Jacoby

Argopistes unicolor Jac., 1885, Zool. Soc. Lond., Proc. 1885: 738 (Yuyama, Japan; BM).—
Heikertinger, 1930, Winkler's Cat. Col. Reg. Pal., 1347 (Ussuri, Corea).—Chûjô, 1936,
Nat. Hist. Soc. Formosa, Trans. 26: 108, 109 (Kyushu).—Chûjô & Kimoto, 1961,
Pacific Ins. 3 (1): 174 (host).

DISTRIBUTION: Japan (Kyushu), Korea, E. Siberia.

HOST: Osmanthus ilicifolius (Hassk.) Mouille.

#### Genus Pentamesa Harold

Pentamesa Harold, 1876, Col. Hefte 15: 124 (type: P. duodecimmaculata Harold; India, Burma).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 35; 1925, t. c. (3-4): 53.—Maulik, 1926, Fauna India, Chrys. & Halt., 283, 288.—Chen, 1933, Sinensia 3 (9): 233; 1934 op. cit. 5 (3-4): 231, 311; 1935, op. cit. 6 (6): 774; 1936, op. cit. 7 (6): 631.

### KEY TO CHINESE SPECIES OF PENTAMESA

# 137. Pentamesa nigrofasciata Chen

Pentamesa nigrofasciata Chen, 1933, Sinensia 3 (9): 238, figs. (Yunnan, Tonkin: Chapa; PARIS); 1934, Sinensia 5 (3-4): 312, fig. 58; 1955, op. cit. 6 (6): 774.
DISTRIBUTION: SW China (Yunnan), N. Vietnam (Tonkin).

# 138. Pentamesa trifasciata Chen Fig. 213, a.

Pentamesa trifasciata Chen, 1935, Sinensia 6 (6): 773, fig. 3 (Yunnan: Yen-tsin; Ac. SIN.). DISTRIBUTION: SW China (Yunnan, Hupeh).

HUPEH: 3, Sui-sa-pa, 1000 m, Lichuan Distr., 6, 20. VIII. 1948, Gressitt & Djou (CAS, BISHOP).

# Genus Chilocoristes Weise

Chilocoristes Ws., 1895, Deuts. Ent. Ztschr. 1895: 336 (type: C. punctatus Ws.).—Chen, 1933, Sinensia 3 (9): 224; 1934, op. cit. 5 (3-4): 232, 320; 1936, op. cit. 7 (6): 631.

#### KEY TO CHINESE SPECIES OF CHILOCORISTES

### 139. Chilocoristes funestus Weise

Chilocoristes funestus Ws., 1910, Ver. Brünn., Verh. 48: (? Pegu; ?ZMB).—Chen, 1934, Sinensia 5 (3-4): 320, fig. 63 (Yunnan, Tonkin, Pegu).

DISTRIBUTION: SW China (Yunnan), N. Vietnam (Tonkin), Burma.

#### 140. Chilocoristes pallidus (Baly)

Acrocrypta pallidus Baly, 1876, Ent. Monthly Mag. 13: 224 (Sumatra; BM).

Chilocoristes pallidus?: Chen, 1933, Sinensia 3 (9): 240 (E of Nodoa, Hainan). DISTRIBUTION: Sumatra, Hainan I.

HAINAN: 1, Ta-hian, 15. VI. 1935, Gressitt (CAS).



Fig. 213. a, Pentamesa trifasciata Chen; b, Argopus frontoclypeatus n. sp

# 141. Chilocoristes smilacis Gressitt and Kimoto, n. sp.

*Female*: Strongly convex, body deeper than 1/2 of width. Dorsum deep reddish brown to nearly pitchy on upper portions of elytron, becoming rich reddish brown on pronotum and median portion of elytron and quite pale reddish brown on outer borders of pronotum and elytron; antenna and legs fairly pale testaceous; head and ventral surfaces ochraceous, paler towards apex of abdomen. Dorsum glabrous; antenna, mouthparts, ventral surfaces and legs thinly clothed with short oblique golden buff hairs.

Head about 1/2 as wide as prothorax, shiny and largely impunctate; occiput moderately convex and smooth; postantennal swellings weakly raised, fairly large and triangular; interantennal space slightly wider than antennal insertion, moderately raised medially, frontoclypeus short and triangular, transversely depressed near apex. Antenna not quite reaching to apex of pronotum, moderately flattened; segment 1 nearly  $4 \times$  as long as broad, hardly swollen; 2 nearly  $2 \times$  as long as broad, weakly swollen; 3 much smaller and shorter; 3-6 increasing very slightly in size; 7 longer and wider than 6; 8 slightly wider than 7; 8-10 increasing slightly in width; 11 nearly as long as 9+10 and quite wide near base. *Pronotum* about 3/4 as long as broad, deeply emarginate apically with emargination slightly sinuate but nearly truncate in central portion; external margin fairly short and roundedtruncate; posterior margin strongly sinuate posteriorly; disc quite finely but in part subdensely punctured with interspaces as little as  $2 \times$  diameters of punctures. *Scutellum* small, slightly longer than broad and subtriangular. *Elytron* nearly 5/6 as wide as long; epipleuron very large, vertical in lower 1/2, narrowing posteriorly but continuing almost to sutural angle; disc subevenly convex, impressed with 5 or 6 irregular rows of punctures near suture and then about 12 subregular rows which are somewhat unevenly spaced and in part with interspaces minutely punctured; beyond last regular row at level of lower part of humeral swelling an area of sparse minute punctures and then larger shallow punctures partly appearing as very large punctures because of transparent spots in cuticle, which are probably variable. *Ventral surfaces* fairly smooth, with small to minute punctures. *Legs* with femora very strongly flattened and finely punctured; hind tibia somewhat arched and bicarinate posteriorly; hind tarsal segment 1 about  $2 \times$  as long as 2 and barely as long as 3 which is extremely broad. Length 4.3 mm; breadth 3.8.

DISTRIBUTION: S. China (Hong Kong).

Holotype  $\mathcal{Q}$  (BISHOP 3317), Tai-po-kau, 150 m, near Tai-po, New Territories, Hong Kong, on *Smilax*, 15. VII. 1962, Gressitt and P. Y. So; paratopotype  $\mathcal{Q}$  (BISHOP), same data.

HOST: Smilax China L.

Differs from *pallidus* Baly in being smaller, much darker, but pale along lateral margins, and with elytral disc much more regularly punctured and pronotum more closely punctured.

#### Genus Argopus Fischer von Waldheim

Argopus Fisch. Waldh., 1824, Entomogr. Imp. Ross. 2: 184, pl. 47, fig. 3, 4 (type: A. bicolor Fisch.; SW Russia).—Heikertinger, 1912, Reitter's Fauna Germ. 4: 148, 200; 1924, Kol. Rundsch. 11 (1-2): 36; 1925, t. c. (3-4): 53.—Maulik, 1926, Fauna India, Chrys. & Halt., 429.—Chen, 1933, Sinensia 3 (9): 222; 1934, op. cit. 5 (3-4): 232, 318.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit 26: 110.—Chen, 1936, Sinensia 7 (6); 631.

# KEY TO CHINESE SPECIES OF ARGOPUS

1.	Head, and sometimes part, or entire, pronotum blackish2
	Head and pronotum reddish or yellowish brown
2 (1).	Length 5.8 mm; head, sometimes anterior 1/2 of pronotum blackish; legs entirely yellowish brown; anterior portion of frons with a feebly concave impression
	Length 3.0-4.0 mm; head and most of pronotum blackish; legs almost entirely
	black; anterior portion of frons with a triangular impression 146. nigrifrons
3 (1).	Elytron bicolorous 4
	Elytron uniformly reddish or yellowish brown
4 (3).	Elytron reddish brown with middle portion yellowish; anterior margin of frons slightly emarginate; length 5.1 mm
	Elytron blackish brown with a large yellowish oblong-oval marking in middle;
	anterior margin of frons triangularly emarginate; length 6.4 mm 150. splendens
5 (3).	Legs largely black 6
	Femora entirely reddish 7
6 (5)	. Pronotum closely impressed by fine punctures; anterior margin of frontoclypeus
	with a rounded notch: length 4.6-5.4 mm

1B

### 142. Argopus fortunei Baly

Argopus fortunei Baly, 1877, Ent. Soc. London, Trans. 1877: 181 ("N. China"; BM).—
Chen, 1933, Sinensia 3 (9): 238 (Chekiang, Yunnan, Canton, Tonkin); 1934, op. cit.
5 (3-4): 319, fig. 62.

DISTRIBUTION: S. China (Chekiang, Kiangsi, Kwangtung, Yunnan), N. Vietnam (Tonkin).

KIANGSI: 1, T'engan (ZMB). CHEKIANG: 1, Tsche-Kiang (ZMB).

143. Argopus frontoclypeatus Gressitt and Kimoto, n. sp. Figs. 213, b & 214.

Male: Evenly reddish testaceous above; anterior portion of head pitchy brown; antenna with segments 1–3 pale brown; 4–11 dark pitchy brown, with apices of segments faintly becoming paler; ventral surfaces testaceous on thorax and pale brown on abdomen; legs with fore and mid femora pitchy reddish brown, hind femur shiny, piceous, tibiae nearly piceous, tarsi dark reddish brown. Glabrous above, with anterior portion of head moderately pubescent; labrum with transverse row of about 4 pale, subadpressed hairs; frontoclypeus with long, subadpressed hairs laterally and shorter hairs medially; antenna moderately clothed with mostly pale, subadpressed hairs; ventral surfaces moderately pubescent with adpressed hairs; legs moderately pubescent with adpressed silvery hairs.

Head slightly broader than long, widest at eyes and distinctly narrower than breadth of pronotum at anterior angle; labrum weakly bilobed, with anterior margin briefly convex at middle; frontoclypeus with anterior 1/2 deeply and broadly excavated medially, with a prominent conical projection laterally, upper 1/2 swollen medially; interantennal space convex, distinctly broader than transverse diameter of antennal socket; eye subrounded, greatest transverse diameter about  $3/5 \times$  as broad as interocular space; gena deeply excavated near eye; postantennal swellings somewhat transverse, weakly swollen and medially

separated by a narrow projection of vertex, basal margin well impressed, weakly oblique and sinuate as laterally directed from middle; vertex impunctate, surface evenly convex. Antenna nearly 2/3 as long as body, cylindrical; scape  $3 \times$  as long as wide; segment 2 small, 1/3 as long as 1, slightly longer than wide and apically swollen; 3 small, slightly longer than 2 and apically swollen; 4–10 subequal and each nearly  $2 \times$  as long as 3; 11th 1/3 longer than 10. Prothorax 4/7 as long as broad, broadest basally and distinctly narrower than breadth of pronotum at basal margin; anterior margin nearly straight, anterior angle rounded, broadly projecting cephalad, lateral margin convex, posterior angle rounded, basal margin convex and weakly sinuate; disc moderately punctate. Scutellum about as long as broad, apex acutely pointed. Elytron fully  $2 \times as$  long as broad, lateral margin convex, with apical 1/3 rounded to apex; epipleuron sinuate, gradually narrowed and continuing nearly to apex; disc confusedly and moderately punctate, with 1 rather irregular row



Fig. 214. ♂ genitalia. Argopus frontoclypeatus n. sp.

of punctures sublaterally, punctures mostly 1/3 to  $1 \times$  as large as interspaces. Ventral surfaces moderately punctate; abdominal sternites weakly swollen medially; last sternite broad, apically sinuate with extreme apex weakly convex, surface with median elevation barely concave, surface strongly impressed sublaterally. Legs large; hind femur strongly swollen, 1/2 as broad as long; hind tibia sinuate and strongly arched basally, nearly as long as femur; hind tarsus 5/7 as long as tibia, segment 1 slightly longer than 2+3 and nearly equal to last. Aedeagus moderately arched, fully  $3 \times$  as long as wide, apex acute and briefly rounded. Length 5.4 mm; breadth 4.2.

*Female*: Evenly testaceous above; antenna with segments 1-3 pale brown, 4 reddish brown, with apex brown, 5-11 nearly black; ventral surfaces mostly testaceous; legs uniformly dark, shiny reddish black. Antenna 2/3 as long as body, cylindrical; last abdominal sternite rather broad, with extreme apex briefly truncate, surface strongly and evenly swollen medially. Length 5.8 mm; breadth 4.3.

*Paratypes*: Evenly testaceous to reddish testaceous above; ventral surfaces testaceous, legs uniformly shiny reddish black. Length 4.6 mm; breadth 4.4.

DISTRIBUTION: W. China (Szechuan).

Holotype & (U. S. Nat. Mus.), Beh-luh-din, 50 km N of Chengtu, 1900 m, Szechwan Prov., VII–VIII. 1933, D. C. Graham; allotopotype & (US), same data; 1 paratype (BISHOP), same data; 1 paratype (US), Kuan-shien, 625–1250 m, Szechwan Prov., 8. VIII. 1933, Graham.

Differs from *nigripes* Ws. in having pronotum impressed with close fine punctures, and frontoclypeus with an arcuate apical emargination.

### 144. Argopus koreanus Chûjô

Argopus koreanus Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. **31** (211) : 168, fig. 10 (Korea : Mt. Kongo, Kogen-Do).

This species is very close to *balyi* Harold from Japan, or might be the same.

DISTRIBUTION: Korea.

#### 145. Argopus melanocephalus Gressitt and Kimoto, n. sp. Figs. 215, a & 216, a.

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*Male*: Dorsum testaceous, with pronotum evenly reddish brown; head entirely dull piceous; antenna with scape piceous, marked with pitchy brown along one side, segments 1 and 3 dark brown with apices brown, 4–11 piceous; ventral surfaces testaceous; legs pitchy brown; with tibiae slightly darker than femora. Glabrous above, except for scattered pubescence on anterior portion of head; labrum with a row of short, pale suberect hairs along anterior margin; frontoclypeus sparsely clothed with long, silvery subadpressed hairs; ventral surfaces moderately pubescent with pale, subadpressed hairs; legs sparsely to moderately clothed with yellowish, adpressed hairs.



Fig. 215. a, Argopus melanocephalus n. sp.; b, A. splendens n. sp.

Head 5/6 as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum weakly bilobed, with anterior margin briefly concave at middle; frontoclypeus with a deeply impressed transverse, weakly sinuate excavation above anterior margin, upper 2/3 convex and strongly elevated medially; interantennal space strongly convex, as broad as transverse diameter of antennal socket; eye subrounded, greatest transverse diameter about 4/5 as broad as interocular space; gena deeply excavated along lower, inner margin of eye; postantennal swellings subquadrate, weakly elevated and medially separated by a narrow groove, basal margin well impressed and transverse; vertex impunctate, with surface evenly convex. Antenna nearly 7/8 as long as body, cylindrical; scape  $3 \times$  as long as wide; segments 2–3 subequal, 1/3 as long as 1, barely longer than wide; 4 nearly  $2 \times$  as long as 3; 5–9 subequal, distinctly longer than 4; 10 slightly shorter than 9; 11th  $1.25 \times$  as long as 10, apically pointed. *Prothorax* 8/13 as long as broad, widest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight at middle, laterally produced cephalad, anterior angle broadly rounded, lateral margin weakly convex, posterior angle obtuse, basal margin convex and strongly sinuate; disc punctuate. Scutellum as long as broad, apex briefly rounded. Elytron  $2.5 \times$ as long as broad, lateral margin sinuate, with apical 1/3 rounded to apex; epipleuron

sinuate, gradually narrowed and continuing nearly to apex; disc confusedly punctate and with 1 rather irregular row of punctures sublaterally, punctures mostly 1/4 to 1/2 as large as interspaces. *Ventral surfaces* moderately punctate; abdominal sternites feebly swollen medially; last sternite broad, apically sinuate, with extreme apex briefly truncated, surface rather evenly convex and with a faint, narrow line medially. *Legs* large; hind femur strongly swollen, 1/2 as broad as long; hind tibia sinuate and moderately arched basally, nearly as long as femur; hind tarsus about 3/4 as long as tibia, segment 1 distinctly shorter than 2+3 and equal to last. *Aedeagus* weakly arched, fully  $4 \times$  longer than broad, apex acute and briefly rounded. Length 5.4 mm; breadth 4.3.

*Female*: Dorsum testaceous, with pronotum reddish brown basally and piceous anteriorly; head entirely piceous; antenna with segment 1 piceous, with margin pitchy brown, 2 and 3 piceous, with apices more brownish, 4–11 piceous; ventral surfaces testaceous; legs pitchy reddish brown, with tibiae slightly darker than femora. Antenna about 4/5 as long as body. Abdomen with last sternite broadly rounded, surface feebly swollen medially. Length 5.8 mm; breadth 4.0.

DISTRIBUTION: SE China (Fukien, Chekiang).

Holotype 3' (U. S. Nat. Mus.), nr. Foochow, Fukien Prov., 1921–1924, C. R. Kellog; allotype 2 (CAS), Mokansan (Mo-kan Shan), Chekiang Prov., 28. VIII. 1927, Mrs. D. E. Wright.

Differs from *nigrifrons* Chen in being 1/2 again as large, in having legs entirely pale instead of largely black, and anterior margin of frons feebly concave instead of angularly notched.

#### 146. Argopus nigrifrons Chen

Argopus nigrifrons Chen, 1933, Sinensia 3 (9): 237 (Chekiang: Hangchow; PARIS); 1934, op. cit. 5 (3-4): 318.

DISTRIBUTION: S. China (Chekiang, Fukien, Hupeh, Kwangtung).

FUKIEN: 1, Ta-chu-lan, Shaowu, 24. IV. 1942; 1, San-chiang, Chungan, 1. V. 1943, Maa (BISHOP). HUPEH: 1, Liang-ho-keu, Lichuan Distr., 5. IX. 1948, Gressitt & Djou (CAS). KWANGTUNG: 2, San-tin, Tin-tong, Lochang Distr., 23. VIII. 1947, Tsang & Lam (CAS).

147. Argopus nigripes Weise Fig. 216, b.

Argopus nigripes Ws., 1889, Soc. Ent. Ross., Horae 23: 642 (Kanssu; ?ZMB).—Chen, 1934, Sinensia 5 (3-4): 320 (Szechuan).

DISTRIBUTION: W. China (Kansu, Szechuan).

148. Argopus nigritarsis (Gebler) Fig. 216, c.

Chrysomela nigritarsis Gebl., 1823, Soc. Nat. Hist. Mosc., Mem. 6: 125 (Barnaul; ?Moscow). Dicherosis nigritarsis: Foudras, 1860, Mon. Halt., 350.

Argopus nigritarsis: Chen, 1934, Sinensia 5 (3-4): 319 (Peiping, Hangchow, Lushan).— Chûjô, 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 170 (Keiki-Do, Korea); 1957,

Kagawa Univ. Fac. Lib. Arts & Ed., Mem. 47: 4 (host; Shansi, Korea). Argopus clypeatus: Chûjô, 1936, Umeno Ent. Lab., Bull 3: 12 (Hokusammen, Korea).



Fig. 216. ♂ genitalia. a, Argopus melanocephalus n. sp.; b, A. nigripes Weise; c, A. nigritarsis (Gebler).

DISTRIBUTION: E. Europe, Turkestan, Siberia, China (Hopei, Chekiang, Kiangsi, Fukien, Hupeh, Szechuan, Shansi, Shensi), Korea, Japan.

SHENSI: 3, Chin-ling Mts., IV-V. 1904, Blackwelder (US). SZECHUAN: 1, Luding-chiao, 1500 m, 13. VII. 1930, Graham (US). HUPEH: 1, Wu-chang, IV. 1932, G. Liu (MCZ). FUKIEN: many, Ta-chu-lan, 1000 m, IV-V. 1942, IV-VI. 1943, Maa (BISHOP); 2, Ta-chu-lan, 21. V. 1945, K. S. Lin (CAS); many, Shui-pei-kai, IV-V. 1942, IV-V. 1943, Shaowu; 1, Sien-feng-ling, Chungan, 27. IV. 1942, Maa (CAS, BISHOP).

HOST: Phytolacca sp.

#### 149. Argopus similis Chen

Argopus similis Chen, 1939, Sinensia 10 (1-6): 64 (Chekiang: Hangchow; Kiangsi; HOANG-HO-PAIHO).

DISTRIBUTION: SE China (Checkiang, Kiangsi).

# 150. Argopus splendens Gressitt and Kimoto, n. sp. Fig. 215, b.

*Female*: Largely ochraceous and testaceous above : head and pronotum evenly reddish testaceous and elytron with a large ochraceous area completely margined by dark reddish chestnut brown; antenna with segments 1-2 reddish testaceous, 3 dark brown, 4-11 dark reddish brown; ventral surfaces testaceous; legs with femora reddish testaceous, tibiae and tarsi dark reddish brown. Glabrous above, except on anterior portion of head; labrum with anterior margin clothed with a row of short, pale yellowish hairs; frontoclypeus moderately pubescent on anterior 1/2, with fine, pale subadpressed hairs; antenna moderately clothed with mostly short, adpressed hairs; ventral surfaces and legs moderately clothed with mostly pale, adpressed hairs.

Head as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum moderately bilobed, with anterior margin emarginate at middle; frontoclypeus with surface rather flat along anterior margin, upper 2/3 broadly

elevated mesally, with surface at sides distinctly convex; interantennal space weakly convex, slightly broader than transverse diameter of antennal socket; antennal socket with margin subrounded, weakly swollen and elevated; eye suboval, greatest transverse diameter 1/2 as broad as interocular space; gena moderately excavated near lower margin of eye; postantennal swellings rhomboidal and rounded, weakly elevated and mesally separated by a narrow groove, basal margin distinct and strongly sinuate from middle; vertex impunctate. with surface evenly convex. Antenna 6/7 as long as body, cylindrical; segment 1 fully  $3 \times$  as long as wide; 2 small, about 1/3 as long as scape; 3 small, as long as, but narrower than, 2; 4–8 subequal, almost  $3 \times$  as long as 2; 9–10 subequal, slightly shorter than 8; 11 nearly  $1.25 \times$  as long as 10. Prothorax 6/11 as long as broad, widest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight at middle and laterally produced obliquely cephalad, anterior angle broadly rounded, lateral margin convex, posterior angle obtuse, basal margin convex and moderately sinuate; disc moderately punctate. Scutellum nearly as long as broad, apex briefly rounded. Elytron 2.25 x as long as broad, lateral margin barely convex at middle, apical 1/3 evenly rounded to apex; epipleuron sinuate, gradually narrowed and continuing nearly to apex; disc confusedly punctate, with 1 rather irregular row of punctures sublaterally, punctures 1/2 to  $1 \times$  as large as interspaces. Ventral surfaces moderately punctate; abdominal sternites weakly swollen medially, last sternite broad, with extreme apex broadly truncated, surface impressed sublaterally. Legs large; hind femur strongly swollen, widest near middle, nearly  $2 \times$  longer than broad; hind tibia slightly shorter than femur; hind tarsus about  $5/6 \times$ as long as tibia, segment 1 about as long as 2+3 and subequal to last. Length 7.0 mm; breadth 5.3.

DISTRIBUTION: SW China (Yunnan).

Holotype Q (Mus. FREY), Soling-ho (Vallis flumin.), Yunnan Prov., no date.

Differs from *fortunei* Baly in being larger, in having elytra blackish brown (instead of reddish brown) with yellow spot, and anterior margin of frons triangularly emarginate.

#### 151. Argopus subfurcatus Chen

Argopus subfurcatus Chen, 1939, Sinensia 10 (1-6): 52 (Kwangsi: Yangso; Ac. SIN.).

DISTRIBUTION: China (Kwangsi, Kwangtung).

KWANGTUNG: 1, Kau-lin-san, 700–900 m, Lien-p'ing Distr., 20. IV. 1940, Gressitt & To (LINGNAN).

### 152. Argopus unicolor Motschulsky

Argopus unicolor Motsch., 1860 (nec Jacoby 1885), Shrenck, Reisen Amurland 2: 235, pl. 11, fig. 24 (Amur; ? Moscow).—Weise, 1887, Archiv Naturg. 53 (1): 207 (Korea).

DISTRIBUTION: E. Siberia, Korea

KOREA: 10, Chemulpo (ZMB).

#### Genus Sphaeroderma Stephens

Sphaeroderma Stephens, 1831, Illustr. Brit. Ent. Mandib. 4: 328 (first species listed: Altica testacea Fabricius.).—Chapuis, 1875, Gen. Col. 11: 130, 135.—Heikertinger, 1924,

Kol. Rundsch. 11 (1–2): 35; 1925, t. c. (3–4): 53, 69.—Maulik, 1926, Fauna India, Chrys. & Halt., 316 (type: *A. testacea* F.).—Chen, 1933, Sinensia 3 (9): 225; 1934, *op. cit.* 5 (3–4): 321.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 632.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 35.

# KEY TO CHINESE SPECIES OF SPHAERODERMA

1.	Body entirely metallic above
2 (1).	Length 2.8–3.0 mm; body oval; blue with a greenish lustre above
3 (1).	Pronotum reddish brown, elytron black with or without a yellowish apical area 4 Dorsal surface not as above
4 (3).	Hind margin of postantennal swellings not distinctly limited : head, antenna and
. (-).	most of prothorax black, elytron black with a vellowish apical area: length
	2.0–2.3 mm
	Hind margin of postantennal swellings distinctly limited : head, antenna and prothorax
	reddish brown, elvtron black
5 (3).	Length exceeding 2.0 mm
	Length about 1.7–1.8 mm; body subrounded; reddish brown above; antenna
	black, with segments 1-4 yellowish, occasionally all segments yellowish brown;
	postantennal swellings rounded, distinctly elevated and distinct from vertex
6 (5).	Length 2.0–3.0 mm
	Length 4.0 mm; body oblong oval; brownish yellow; antenna black with seg-
	ments 1-3 brownish; lateral and sutural margins of elytron blackish 153. alienum
7 (6).	Postantennal swellings distinctly elevated and delimited posteriorly by a deep
	transverse furrow
	Postantennal swellings feebly elevated and not distinctly delimited posteriorly;
	punctation of pronotum fairly strong, elytral punctures strong, arranged in 5
	or 6 longitudinal rows, with interstices feebly raised; color of dorsum variable;
	elytron generally reddish 160. fraternale
8 (7).	Legs partly black
	Legs entirely yellowish or reddish brown; body reddish brown above, antenna
	black with segments 1-4 or 1-5 pale, occasionally all segments pale; length
	2.2–2.8 mm
9 (8).	Body piceous above, with pronotum and elytron laterally margined with reddish
	brown; elytral punctures arranged in 5 or 6 longitudinal rows laterally, mesal
	punctation irregular; length 2.8 mm
10(0)	Not as above $10$
10(9).	Elytron reddish brown with posterior 1/3 blackish
11/10)	Elytron entirely readism of yellowish brown
11(10).	reaular longitudinal rouge longth 20 mm
	regular longitudinal rows, length 5.0 mm
	meau and pronotum sniny reduisit, civital punctures somewhat confused; rows

cannot be counted; length 3.0 mm
12 (10). Antenna shorter than $1/2$ length of body
Antenna longer than 1/2 length of body
13 (12). Body reddish above; length 2.2–2.5 mm
Head and pronotum black, elytron reddish brown; elytral punctation arranged
in irregularly paired rows; length 2.5 mm
14 (12). Apex of aedeagus lacking a projection; dorsum generally unicolorous, or pro-
notum only partly dark
Apex of aedeagus with a projection; head and pronotum dark fulvous or
piceous; elytra pale to deep red-brown; punctures of elytron irregular and
crowded in middle but arranged in fairly regular rows at side; postantennal
swellings fairly large, transverse, not oblique, separated from each other by
a longitudinal furrow and limited behind by a transverse one; length 2.8
mm
15 (14). Underside of aedeagus almost straight or feebly rounded in apical $1/2$ ; elytral
punctures in fairly regular, equally spaced rows
Underside of aedeagus irregular in apical $1/2$ ; elytral punctation rather coarser
and partly arranged in paired rows especially on lateral portion; length 2.7
-3.0 mm
16 (15). Aedeagus relatively slender in dorsal view and rather feebly curved in lateral view 17
Aedeagus relatively robust in dorsal view and rather strongly curved in lateral
view; elytral punctures very closely and confusedly impressed; dorsum yel-
lowish brown, in some cases anterior portion of pronotum blackish or pi-
ceous; length 2.7–3.1 mm 172. sinuatum
17 (16). In $\mathcal{J}$ genitalia median orifice occupying almost 1/3 of length, and apex show-
ing more sharp angle as compared with next species and some small scler-
otized structures visible situated in basal area of orifice; punctures of ely-
tron in 11 longitudinal rows which are modified by some additional punc-
tures; length 2.3–3.0 mm167. rubi
In $\mathcal{J}$ genitalia median orifice occupying less than $1/4$ of whole length, apex
showing slightly narrower angle than right angle; elytral punctures finer
and more irregularly impressed than in <i>rubi</i> ; length 2.3–2.5 mm 166. resinulum
153. Sphaeroderma alienum Weise
Sphaeroderma alienum Ws., 1922, Tijdschr. Ent. 65: 116 (Fokien; ? HAMBURG or STOCK-

HOLM).

DISTRIBUTION: SE China (Fukien).

# 154. Sphaeroderma alternatum Chen

Sphaeroderma alternatum Chen, 1939, Sinensia 10 (1-6): 66 (Cheu-menn, SE Kansu; HOANG-HO-PAIHO).

DISTRIBUTION: NW China (Kansu).

# 155. Sphaeroderma apicale Baly

Sphaeroderma apicalis Baly, 1874, Ent, Soc. Lond., Trans. 1874: 205 (Nagasaki; BM).-

1963



Fig. 217.  $\Im$  genitalia. a, Sphaeroderma atrithorax Chen; b, S. fraternale Chen; c, S. nilum n. sp.

Weise, 1922, Tijdschr. Ent. 65: 116 (C. Tonkin; *apicale*).—Chen, 1934, Sinensia 5 (3-4): 325 (Tonkin).

DISTRIBUTION: Japan (Honshu, Shikoku, Kyushu, Tsushima, Yakushima), Taiwan, SE China (Fukien, Kiangsi, Kwangtung), N. Vietnam (Tonkin).

KIANGSI: 1, Hong Shan, 15–29. VI. 1935, Gressitt (CAS). FUKIEN: 22, Ta-chulan, Shaowu Distr., IV–V. 1942, II, IV–V. 1943, IV. 1945, Maa (CAS, BISHOP). KWANG-TUNG: 1, Siu-ping-shek, Tin-tong, 8. IX; 1, Hau-leng, Tin-tong, 1. VIII, Lochang Distr., 1947, Tseng & Lam (CAS).

156. Sphaeroderma atrithorax Chen Fig. 217, a.

Sphaeroderma atrithorax Chen, 1934, Sinensia 5(3-4); 326 (Tonkin; PARIS).

DISTRIBUTION: N. Vietnam (Tonkin), China (Yunnan).

YUNNAN: 1, ? Kunming, 1. VIII. 1944, C. L. Liu (US).

157. Sphaeroderma balyi hupehensis Gressitt and Kimoto, n. subsp.

*Female*: Bright orange ochraceous and shiny black : head and pronotum bright orange, antenna slightly duller ochraceous, scutellum slightly duller than pronotum, elytron shiny black, becoming slightly pitchy on humerus, external margin and suture; ventral surfaces pale reddish ochraceous, partly paler on legs. Dorsum glabrous; antenna, mouth parts, ventral surfaces and legs thinly clothed with short oblique silvery buff hairs.

Head not quite 2/3 as broad as prothorax, largely smooth and impunctate; occiput moderately convex and smooth; postantennal swellings weakly convex, transverse behind; interantennal space slightly wider than an antennal insertion, moderately raised. Frontoclypeus short and transversely depressed in middle, obliquely grooved at side; gena about 1/7as deep as eye. Antenna nearly 2/3 as long as body, moderately stout; segment 1 slightly arched and moderately thickened; 2 about 3/4 as long as 1; 3 slightly more than 1/2 as long as 2; 4 about as long as 2; 5 somewhat longer than 4; 5 subequal to 6; 7 longer, subequal to 8-10; 11 slightly longer than 1. *Prothorax* about  $2 \times$  as broad as long; anterior margin slightly sinuate; lateral margin deeply arcuate, thickened and rounded in anterior angle; lateral margin slightly sinuate, convex at middle; disc subevenly convex and rather sparsely and irregularly punctured. *Elytron* not quite 1/2 as broad as long with about 12 subregular rows of punctures, those near suture less regular, punctures mostly larger than interspaces longitudinally on basal 1/2 and about 1/2 as wide as interspaces transversely. *Ventral surfaces* rather closely punctured. *Legs* fairly stout; hind femur strongly swollen; hind tibia slightly arched; hind tarsal segment 1 slightly longer than 2 and about as long as 3. Length 2.1 mm; breadth 1.65.

*Paratype*: Pronotum pale ochraceous; elytron pitchy reddish. Length 1.75 mm; breadth 1.4.

DISTRIBUTION: W. China (W. Hupeh).

Holotype ♀ (CAS), Liang-ho-keu, 700 m, Lichuan Distr., W. Hupeh Prov., 4. IX. 1948, Gressitt & Djou; paratype ♀ (BISHOP), Hsiao-ho (Suiho), 900 m, Lichuan, 14. IX. 1948, Gressitt & Djou.

Differs from *balyi* Jac. in being entirely pale beneath and on legs, and in having elytron with puncture-rows somewhat unequally spaced. This may prove to be a separate species.

#### 158. Sphaeroderma chongi Chen

Sphaeroderma chongi Chen, 1935, Sinensia 6(1): 772 (Yunnan; Ac. SIN.).

We cannot detect differences in the description to separate this from *fuscicorne* Baly. This species is not included in the key.

DISTRIBUTION: SW China (Yunnan).

#### 159. Sphaeroderma confine Chen

Sphaeroderma luteipenne: Chen, 1934 (nec Weise), Sinensia 5 (3-4): 332 (Tonkin). Sphaeroderma confine Chen, 1939, op. cit. 10 (1-6): 53 (Yangso, Kwangsi: Ac. SIN.).

DISTRIBUTION: SW China (Kwangsi), N. Vietnam (Tonkin).

160. Sphaeroderma fraternale Chen Fig. 217, b.

Sphaeroderma fraternale Chen, 1939, Sinensia 10 (1-6): 53 (Yangsi, Kwangsi; Ac. SIN.).

DISTRIBUTION: S. China (Kwangsi, Hupeh, Kiangsi).

SZECHUAN: 1, Hua-yin Shan, 110 km N of Chung-king, 750 m, 5. VII. 1933, Graham (US). HUPEH: 3, Sui-sa-pa, 1000 m, 26–27. VIII, 27. VII; 2, Liang-ho-keu to Wang-chiaying, 1340 m, 18. IX; Liang-ho-keu, 9. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS). KIANGSI: 5, Hong Shan, 1000 m, 25–29. VI; 1, Sung-wu, 12. VII, Gressitt, 1936, (CAS).

### 161. Sphaeroderma fuscicorne Baly

Sphaeroderma fuscicornis Baly, 1864, Ent. Monthly Mag. 1: 134 (China; BM); 1874, Ent.
Soc. Lond., Trans. 1874: 202 (Nagasaki, Tsushima).—Chûjô & Kimoto, 1961, Pacific
Ins. 3 (1): 192 (Honshu, Sado, Shikoku; hosts).

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We have no material from China, although this is the most abundant species in Japan. DISTRIBUTION: China, Japan (Honshu, Sado, Shikoku, Kyushu, Tsushima). HOSTS: Akebia quinata (Thunb.) Decaisne, A. trifoliata (Thunb.) Koidz.

# 162. Sphaeroderma melli Chen

Sphaeroderma melli Chen, 1933, Peiping Nat. Hist. Bull. 8 (1): 56 (Tsha-jiu-san; ZMB).

DISTRIBUTION: S. China (Canton).

# 163. Sphaeroderma nilum Gressitt and Kimoto, n. sp. Figs. 217, c & 218, a.

Male: Dark, metallic blue, with a faint tinge of green above; antenna with segments 1–3 pitchy brown, 4 pitchy reddish brown, and 5–11 dark reddish black; ventral surfaces reddish black on thorax and reddish brown on abdomen; legs dark reddish brown, with apices of tibiae and tarsi pitchy brown. Glabrous above; head with labrum moderately clothed with short, pale hairs along anterior margin, frontoclypeus with several long, pale suberect hairs laterally. Antenna moderately clothed with mostly pale, suberect hairs; ventral surfaces mesally clothed on thorax with fine, suberect hairs and moderately clothed on abdomen with short, subadpressed hairs; legs slightly to moderately pubescent, hind femur with swollen surface, apex, margin with a row of short, stiff bristles; hind tarsus sparsely clothed with long, pale hairs above.



Fig. 218. Sphaeroderma nilum n. sp.; b, S. resinulum n. sp.

*Head* slightly broader than long, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin nearly straight; frontoclypeus transversely impressed at middle, convexly swollen medially on upper 1/3, surface mostly rugose, with grooves transverse and sinuate; interantennal space strongly convex, slightly broader than transverse diameter of antennal socket; eye suboval, greatest transverse diameter 3/5 as broad as interocular space; frontal tubercles subtriangular, distinctly elevated and medially separated by a narrow groove; vertex with surface evenly convex and nearly impunctate. Antenna about 2/3 as long as body, segments 7-11 distinctly dilated; segment 1 is  $3 \times$  longer than wide; 2 nearly 1/2 as long as 1, distinctly longer than wide; 3 distinctly shorter than 2; 4 slightly longer than 3; 5 slightly longer than 4; 6=2; 7–10 subequal, distinctly longer than 2; 11th 1/3 longer than 10. Prothorax nearly 2/3 as long as broad, broadest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight at middle, sides strongly and obliquely produced cephalad, anterior angle acute, lateral margin weakly convex, posterior angle obtuse, basal margin strongly sinuate; disc sparsely punctate, surface evenly convex. Scutellum slightly wider than long, broadly rounded apically. Elytron 3/8 as broad as long, lateral margin strongly convex, posterior 1/3 evenly rounded to apex; epipleuron sinuate, gradually narrowing and continuing nearly to apex; disc with punctures forming about 10 irregular rows, with lateral rows more distinct; punctures slightly larger than longitudinal interspaces and 1/3to  $1 \times$  as large as transverse interspaces; punctures becoming smaller apically. Ventral surfaces sparsely punctate to granulate; abdominal sternites weakly swollen medially; last sternite oblique and rounded at side, extreme apex slightly produced and truncate, surface with a faint longitudinal line medially and distinctly impressed laterally. Legs large; hind femur strongly swollen, 1/2 as broad as long; hind tibia strongly arched basally and slightly shorter than femur; hind tarsus about 3/4 as long as tibia, 1st segment 2/3 as long as 2+3 and about as long as last. Aedeagus moderately arched, fully  $4 \times$  as long as wide, subacute, with extreme apex briefly rounded. Length 3.1 mm; breadth 1.8.

*Female*: Dark, metallic blue, with a faint tinge of green; antenna with segments 1-3 pitchy brown, 4 darker, 5-11 dark reddish brown; legs with femora dark reddish black, tibiae pitchy reddish brown, but fore tibia slightly paler at apex, tarsi pale brown. Antenna about 2/3 as long as body. Last abdominal sternite broadly rounded apically, surface sparsely punctate and evenly convex. Length 3.1 mm; breadth 2.2.

DISTRIBUTION: W. China (Hupeh).

Holotype & (CAS), Suisapa, 1000 m, Lichuan Distr., W. Hupeh Prov., 6. VIII. 1948, Gressitt & Djou; allotype ♀ (BISHOP), Liang-ho-keu, Lichuan Distr., 5. IX. 1948, Gressitt & Djou.

Differs from separatum Baly in being larger, narrower and more greenish.

### 164. Sphaeroderma piceum Baly Fig. 219, b.

Sphaeroderma picea Baly, 1876, Ent. Soc. Lond., Trans. 582 (Shanghai; BM).

? Sphaeroderma minuta: Chen, 1935, Sinensia 6 (6): 772 (Chusan Is., Chekiang; Ac. SIN.).
 DISTRIBUTION: S. China (Kiangsu, Chekiang, Szechuan, Hupeh).

KIANGSU: 1, Nanking, 14. IX. 1923, Van Dyke (CAS). SZECHUAN: 2, Changtau-ching, 240–300 m, Wan, 18. VII. 1948, Gressitt & Djou (CAS). HUPEH: 1, Liang-hokeu, 4. IX; 1, Sui-sa-pa, 1000 m, 11. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS).

### 165. Sphaeroderma postfasciatum Chen

Sphaeroderma postfasciatum Chen, 1939, Sinensia 10 (1-6): 67 (Cheu-menn, SE Kansu; HOANGHO-PAIHO).

### DISTRIBUTION: NW China (Kansu).

#### 166. Sphaeroderma resinulum Gressitt and Kimoto, n. sp. Fig. 218, b.

*Male*: Pitchy reddish brown, head and pronotum slightly darker; antenna with segments 1–3 pitchy brown, 4–11 nearly black; ventral surfaces reddish brown; legs pitchy, reddish brown, with tibiae and tarsi slightly darker reddish brown. Glabrous above, except for moderate pubescence on anterior portion of head; labrum with anterior margin bordered with a row of short, pale hairs; frontoclypeus moderately pubescent with long, pale subadpressed hairs; antenna moderately pubescent with mostly short, adpressed hairs; ventral surfaces moderately pubescent with fine, pale subadpressed hairs; legs slightly to moderately pubescent; hind femur subglabrous on swollen portion, hind tarsus moderately pubescent with silvery, adpressed hairs; hind tarsus with fine, adpressed hairs above.



Fig. 219.  $\Im$  genitalia. a, Sphaeroderma resinulum n. sp.; b, S. piceum Baly; c, S. rubi Chûjô.

Head slightly wider than long, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin nearly straight; frontoclypeus granulate, medially carinate near middle, becoming more swollen and convex above; interantennal space convex, about as broad as transverse diameter of antennal socket; eye subrounded, greatest transverse diameter of eye about 2/3 as broad as interocular space; gena moderately excavated below lower margin of eye; postantennal tubercles transverse, weakly elevated and medially separated by a shallow groove, upper margin well impressed and nearly straight; vertex finely granulate, with surface evenly convex. Antenna 3/4 as long as body, cylindrical, segments 7-11 distinctly dilated; 1 fully  $2 \times as$  long as wide; 2nd 1/2 as long as 1, distinctly longer than wide; 3 small, distinctly shorter and narrower than 2; 4 distinctly longer than 3, as broad as 2; 5 slightly longer than 4; 6 slightly longer than 5; 7 slightly longer and more dilated than 6; 8-10 subequal, slightly longer than 7; 11th 1/3 longer than 10. Prothorax 3/5 as long as broad, widest basally and distinctly narrower than elytra at basal margin; anterior margin nearly straight at middle, strongly and obliquely projecting cephalad laterally, anterior angle acute and rounded, lateral margin weakly convex, posterior angle obtuse, basal margin strongly sinuate; disc moderately

punctate. Scutellum much broader than long, apex acutely pointed. Elytron about  $2 \times 10$  longer than broad, lateral margin convex, with apical 1/3 narrowing to briefly rounded apex; epipleuron sinuate, gradually narrowing and continuing nearly to apex; disc with several irregular rows of punctures sublaterally, but submedial rows becoming less distinct, interspaces mostly 2 to  $3 \times as$  large as punctures. Ventral surfaces moderately punctate; abdomen with sternites weakly swollen medially; last sternite broadly rounded apically, sinuate, with extreme apex weakly convex, surface weakly impressed laterally. Legs large; hind femur strongly swollen, about 1/2 as broad as long; hind tibia weakly arched, about as long as femur; hind tarsus about 3/5 as long as tibia, segment 1 about as long as 2+3 and slightly longer than last. Aedeagus weakly arched,  $5 \times as$  long as wide, apex acute and briefly rounded. Length 2.5 mm; breadth 1.8.

*Paratype*: Pitchy, reddish brown above; antenna with segments 1-3 pitchy brown, 4-11 dark reddish black; legs pitchy brown, with tibiae slightly darker than femora. Length 2.3 mm; breadth 1.7.

DISTRIBUTION: S. China (Hupeh, Kwangtung).

Holotype & (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 25. VII. 1948, Gressitt; 1 paratype (BISHOP), Yim-na San, E. Kwangtung Prov., 13. VI. 1936, Gressitt.

Differs from *rubi* Chûjô in averaging somewhat smaller, in having elytral punctures finer and more regular, and aedeagus with median orifice shorter.

# 167. Sphaeroderma rubi Chûjô Fig. 219, c.

Sphaeroderma rubi Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27 (161–164): 42 (Taiheizan, Taiwan; TARI).

The following are referred to this species with some doubt, as direct comparison was not made with the type series.

DISTRIBUTION: Taiwan, S. China (Hupeh).

HUPEH: 15, Sui-sa-pa, 1000 m, Lichuan Distr., 23. VII-IX. 1948, Gressitt & Djou (CAS, BISHOP).

#### 168. Sphaeroderma rufotestaceum Gressitt and Kimoto, n. sp. Figs. 220, a & 221, a.

*Male*: Pitchy reddish brown above; antenna with segments 1–6 pitchy brown, 3 slightly darker, 3–11 dark reddish brown; ventral surfaces reddish brown on thorax and testaceous on abdomen; fore and mid legs largely pitchy brown, hind legs dark reddish black. Glabrous above but head with anterior portion moderately pubescent; labrum bordered with a row of short, pale hairs on anterior margin and with a transverse row of longer, subadpressed hairs; antenna moderately clothed with mostly short, pale adpressed hairs; ventral surfaces moderately pubescent with pale hairs; legs with mostly pale, adpressed hairs.

Head nearly as long as broad, widest at eyes and distinctly narrower than breadth of pronotum and anterior angles; labrum with anterior margin nearly straight; frontoclypeus rather flat and subtriangular anteriorly, becoming narrowed and medially swollen behind; interantennal space convex, about as wide as transverse diameter of antennal socket; antennal socket with margin somewhat swollen above; eye suboval, greatest transverse diameter of eye 3/5 as broad as interocular space; gena deeply excavated below eye; postan-



Fig. 220. a, Sphaeroderma rufotestaceum n. sp.; b, S. sinuatum n. sp.

tennal swellings somewhat transverse, weakly elevated, separated by a narrow median groove, hind margins impressed and oblique; vertex impunctate, surface evenly convex and with a foveum near upper margin of eye. Antenna about 2/3 as long as body, segments 7-11 distinctly dilated; segment 1 fully  $2 \times$  as long as wide; 2nd 1/2 as long as 1, slightly longer than wide; 3 equal and much narrower than 2; 4 slightly longer and broader than 3; 5 distinctly longer than 4; 6 slightly shorter than 5; 7=5, distinctly dilated; 8 slightly longer and more dilated than 7; 9–10 subequal, slightly shorter than 8; 11th 3/7 as long as 10. Prothorax 2/3 as long as broad, widest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin rather straight at middle, strongly and obliquely produced cephalad laterally, anterior angle acutely rounded, lateral margin weakly convex, posterior angle obtuse, basal margin strongly sinuate; disc moderately punctate and rather evenly convex. Scutellum small, about as long as broad, briefly rounded at apex. Elytron  $2.5 \times$  as long as broad, lateral margin convex, with apical 1/3 narrowing to briefly rounded apex; epipleuron sinuate, gradually narrowing to apex; disc confusedly punctate and with 1 sublateral row of punctures, interspaces 1 to  $3 \times$  as large as punctures, humerus and interspace along lateral margin weakly swollen. Ventral surfaces moderately punctate; abdominal sternites weakly swollen mesally; last sternite subtriangular with extreme apex weakly and convexly produced, surface with a faint transverse and sinuate line subapically, sides weakly impressed. Legs large; hind femur strongly swollen, 1/2 as broad as long; hind tibia strongly arched basally and weakly sinuate, nearly as long as femur; hind tarsus 3/4 as long as tibia, segment 1 as long as 2+3 and much longer than last. Aedeagus not strongly arched, fully  $4 \times as$  long as wide, apex acute and briefly rounded. Length 2.9 mm; breadth 2.1.

*Female*: Pitchy, reddish brown above; antenna with segments 1-3 pitchy brown, 4 slightly darker, 5-11 dark reddish black; ventral surfaces pitchy brown; legs pitchy brown, tibiae somewhat darker than femora. Antenna 5/6 as long as body, cylindrical, with segments 5-11 slightly dilated. Abdominal sternites weakly swollen medially, last sternite broadly rounded apically. Length 2.7 mm; breadth 1.9.

*Paratypes*: Pitchy reddish brown to dark pitchy reddish brown; pronotum and head becoming shiny, dark reddish black in some specimens; legs pitchy reddish brown to dark,

pitchy reddish brown. Length 2.7-3.0 mm; breadth 1.8-2.0.

DISTRIBUTION: S. China (Fukien, Hupeh).

Holotype & (BISHOP 3318), Upper Kuatun, 1400 m, Chungan, Fukien Prov., 12. IV. 1943, Maa; allotopotype & (BISHOP), 6. VIII. 1945, Maa; 1 paratype (CAS), Ta-chu-lan, 1000 m, Shaowu, Fukien Prov., 2. VI. 1942, Maa; 2 paratypes (CAS, LINGNAN), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 30. VII, 27. VIII. 1948, Gressitt & Djou.

Differs from *rubi* Chûjô in averaging slightly larger, in being paler, and in having elytral punctures coarser and arranged in paired rows.

# 169. Sphaeroderma seminigrum Jacoby

Sphaeroderma seminigrum Jac., 1899, Stett. Ent. Ztg. 60: 275 (Sumatra).—Chen, 1934, Sinensia 5 (3-4): 336 (Tonkin); 1939, op. cit. 10 (1-6): 53 (Kwangsi).
DISTRIBUTION: Sumatra, Vietnam (Tonkin), SW China (Kwangsi).

170. Sphaeroderma separatum Baly Fig. 221, b.

Sphaeroderma separata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 205 (Nagasaki; BM).

DISTRIBUTION: Japan (Kyushu), S. China (Hupeh, Fukien).

HUPEH: 6, Liang-ho-keu (Leong-ho-kow), Lichuan Distr., 1–12. IX. 1948, Gressitt & Djou (CAS). FUKIEN: 5, Ta-chu-lan, 1000 m, Shaowu, 14. V. 1942, 17, 21. IV, 14. V, Maa, 1943 (CAS, BISHOP).

# 171. Sphaeroderma seriatum Baly

Sphaeroderma seriata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 203 (Nagasaki; BM). — Weise, 1922, Tijdschr. Ent. 65: 116 (Tonkin: Mts. Mauson; seriatum).—Chen, 1934, Sinensia 5 (3-4): 331.

We question the Tonkin record.

DISTRIBUTION: Japan (Kyushu, Tsushima), ?N. Vietnam (Tonkin). HOST: *Panicum bisulcatum* Thunb.

172. Sphaeroderma sinuatum Gressitt and Kimoto, n. sp. Figs. 220, b & 221, c.

*Male*: Testaceous, with pronotum becoming pitchy brown; head dark pitchy brown; antenna with scape, pedicel and segment 3 pale brown, 4 slightly darker, 5–11 dark reddish black; ventral surfaces mostly testaceous on thorax and pale brown on abdomen; legs testaceous to deep pitchy brown; hind femur deep pitchy brown, much darker than other femora, hind tibia and tarsus dark, pitchy brown. Glabrous above, except for moderate pubescence on anterior portion of head; labrum with a transverse row of about 6 fine, pale, suberect hairs at middle; frontoclypeus moderately clothed with long, pale subadpressed hairs; antenna moderately pubescent with mostly short, pale subadpressed hairs; legs subglabrous to moderately clothed; hind femur mostly glabrous on swollen portion, hind tibia with long, pale adpressed hairs, hind tarsus sparsely clothed above.

*Head* about as long as wide, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior edge nearly straight; frontoclypeus slightly

elevated medially, becoming more swollen above, anterior 1/4 with surface transversely convex and not medially carinate; interantennal space convex, about as wide as breadth of antennal socket; eye suboval, greatest transverse diameter 5/6 as broad as interocular space; gena moderately excavated below eye; postantennal tubercles subquadrate, weakly swollen and medially separated by a shallow excavation, basal margin well impressed and weakly oblique to sides from middle; vertex nearly impuncate, surface convex and with a small fovea near upper margin of eye. Antenna 9/13 as long as body, cylindrical, segments 5-11 slightly dilated; segment 1 almost 2  $\times$  as long as wide, strongly arched; 2nd  $1/2 \times$  as long as scape, slightly longer than broad; 3 small, slightly shorter and narrower than 2; 4 distinctly longer than 2; 5 distinctly longer than 4; 6 slightly longer than 5; 7 slightly longer than 6; 8 slightly shorter than 7; 9–10 subequal, as long as 7; 11th 2/7 longer than 10. Prothorax 4/7 as long as broad, broadest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight at middle, strongly and obliquely projecting cephalad laterally, anterior angle broadly rounded, lateral margin weakly convex, posterior angle obtuse, basal margin strongly sinuate; disc moderately punctate. Scutellum nearly as long as broad, sides convex, apex acutely pointed. Elytron 3/7 as broad as long, lateral margin convex, with apical 1/4 narrowing to apex; epipleuron sinuate, gradually narrowing and continuing nearly to apex; disc mostly confusedly punctate, but with one rather irregular row sublaterally, interspaces usually 1 to  $2 \times$  larger than punctures; humerus and sublateral impunctate space weakly swollen. Ventral surfaces moderately punctate; surface of abdominal sternites weakly convex; last sternite apically sinuate, surface with a lateral impression. Legs moderately large; hind femur strongly swollen, 1/2 as broad as long; hind tibia weakly arched basally, about as long as femur; hind tarsus fully 2/3 as long as tibia, segment 1 slightly longer than 2+3 and distinctly longer than last. Aedeagus moderately arched, fully  $3 \times$  longer than broad, apex acute and briefly rounded. Length 3.3 mm; breadth 2.4.

*Female*: Testaceous, with pronotum darkening to a deep chestnut brown; head pitchy brown anteriorly and chestnut brown on vertex; antenna with segments 1-3 pale brown,



Fig. 221.  $\Im$  genitalia. a, Sphaeroderma rufotestaceum n. sp.; b, S. separatum Baly; c, S. sinuatum n. sp.

4-11 nearly black; ventral surfaces mostly pale brown; legs with femora and tibiae dark, pitchy reddish brown, tarsi with segments 1-2 dark reddish brown, 3-4 much paler. Antenna about 2/3 as long as body, cylindrical; segments 5-11 weakly dilated. Last abdominal sternite broadly rounded, surface weakly swollen medially and shallowly impressed laterally. Length 2.8 mm; breadth 2.1.

*Paratypes*: Mostly testaceous to pitchy brown above; pronotum evenly testaceous to dark reddish chestnut brown. Length 2.7-3.1 mm; breadth 2.0-2.3.

DISTRIBUTION: SE China (Fukien).

Holotype & (BISHOP 3319), Ta-chu-lan, 1000 m, Shaowu Distr., Fukien Prov., 26. IV. 1942, Maa; allotopotype  $\mathcal{P}$  (BISHOP), 31. V. 1942, Maa; 6 paratopotypes (CAS, BISHOP, TARI), 24. IV to 2. VI, 1942–43, Maa.

Differs from *rubi* Chûjô in averaging slightly larger in size, in having pronotum partly dark anteriorly, and elytron less regularly punctured.

# 173. Sphaeroderma subfurcatum Chen

Sphaeroderma subfurcatus Chen, 1939, Sinensia 10 (1-6): 52 (Yangsi, Kwangsi; Ac. SIN.). DISTRIBUTION: SW China (Kwangsi).

# Genus Lesneana Chen

Lesneana Chen, 1933, Sinensia 3 (9): 241 (type: L. rufopicea Chen; China; monobasic); 1934, op. cit. 5 (3-4): 232, 335; 1936, op. cit. 7 (6): 632.

#### 174. Lesneana rufopicea Chen

Lesneana rufopicea Chen, 1933, Sinensia 3 (9): 242, fig. 13 (Yunnan, Tonkin: Hoa-Binh; PARIS); 1934, op. cit. 5 (3-4): 335, fig. 65.

Red, slightly pitchy; antenna pale basally. Length 4.4 mm.

DISTRIBUTION: SW China (Yunnan).

#### Genus Parargopus Chen

Parargopus Chen, 1939, Sinensia 10 (1-6): 65 (type: P. sphaerodermoides Chen; China; monobasic).

### 175. Parargopus sphaerodermoides Chen

Parargopus sphaerodermoides Chen, 1939, Sinensia 10 (1-6): 66 (Hopeh: Tchao-yang-koan; HOANGHO-PAIHO).

Reddish, abdomen darker. Length 4.8 mm. DISTRIBUTION: N. China (Hopei).

#### Genus Schenklingia Csiki & Heikertinger

*Eucycla* Baly, 1876, Ent. Soc. Lond., Trans. **1876**: 439.—Maulik, 1926, Fauna Brit. Ind. Col. Chrys. & Halt., 284, 286.—Chen 1933, Sinensia **3**: 225; 1934, *op. cit.* **5**: 232, 337.—

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Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25 : 357.—Chen, 1936, Sinensia 7 (6) : 633.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27 : 52.

Schenklingia Csiki & Heikertinger, 1940, Cot. Cat. 169: 519 (new name for Eucycla Baly, nec. Bonap. 1854).

#### 176. Schenklingia ornatipennis (Chen)

*Eucycla ornatipennis* Chen, 1933, Sinensia 3 (9): 243 (Yunnan Fu; PARIS); 1934, Sinensia 5 (3-4): 337.

Schenklingia ornatipennis: Csiki & Heikertinger, 1940, Col. Cat. 169: 519.

Deep red with last 5 antennal segments brown; pronotum with 2 spots and elytron with 5 dark spots and 2 pale spots. Length 4 mm.

DISTRIBUTION: SW China (Yunnan).

# Genus Parathrylea Duvivier

Parathrylea Duv., 1892, Soc. Ent. Belg., Ann. 36: 420 (type: P. apicipennis Duv.).—Maulik, 1926, Fauna India, Chrys. & Halt., 311.—Chen, 1933, Sinensia 3 (9): 225; 1934, op. cit. 5 (3-4): 338; 1936, op. cit. 7(6): 635.

Argopistoides Jacoby, 1892, Mus. Civ. Genova, Ann. 32: 931 (type: A. septempunctata Jac.).
 —Maulik, 1926, Fauna India, Chrys. & Halt., 301.

## Key to Chinese species of Parathrylea

Shiny black, with pronotum and apex of elytron yellow; length 3.5 mm ..... 177. apicipennis Ochraceous above, elytron with 7 small black spots; length 4.7 mm ..... 178. septempunctata

### 177. Parathrylea apicipennis Duvivier

Parathrylea apicipennis Duviv., 1892, Soc. Ent. Belg., Ann. 36: 421 (Kurseong; ? BRUXELLES).
—Maulik, 1926, Fauna India, Chrys. & Halt., 311 (Darjeeling, United Provinces).—
Chen, 1933, Peking Nat. Hist. Bull. 8 (1): 57 (Kwangtung: Tsha-jiu-san).
DISTRIBUTION: N. India, S. China (Kwangtung).

### 178. Parathrylea septempunctata (Jacoby)

Argopistoides septempunctata Jac., 1892, Mus. Civ. Genova, Ann. 32: 932 (Burma: Karen Cheba; GENOVA).—Maulik, 1926, Fauna India, Chrys. & Halt., 302.

Parathrylea septempunctata: Chen, 1934, Sinensia 5 (3-4): 338, fig. 67 (Canton; Tonkin: Hoa-Binh).

DISTRIBUTION: Burma, S. China (Kwangtung, Fukien), N. Vietnam (Tonkin).

FUKIEN: 1, Bo-hea Hills, Chungan, 16. II. 1939, Maa (BISHOP).

### Genus Taizonia Chen

Taizonia Chen, 1934, Soc. Ent. France, Ann. 103: 182 (type: T. bella Chen; Taiwan; monobasic).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 634.-Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 54.

# KEY TO CHINESE SPECIES OF TAIZONIA

Elytron with 1 or 2 dark maculations; medial projection of abdominal sternite 1 nar-

## 179. Taizonia maculata Gressitt and Kimoto, n. sp. Fig. 222, a.

Dorsum pale pitchy brown, head slightly darker; elytron with an elongate chestnut brown area sublaterally; antenna with segments 1–5 pitchy brown, 6–10 dark brown, 11 pitchy brown; ventral surfaces and legs pitchy brown. Glabrous above, except for sparse pubescence on anterior portion of head; labrum with a transverse row of about 6 silvery, subadpressed hairs; frontoclypeus sparsely clothed along anterior portion with longer, subadpressed hairs; antenna moderately clothed with pale subadpressed hairs; ventral surfaces and legs sparsely to moderately pubescent; hind femur mostly glabrous on swollen surface, but with short, adpressed hairs basally and apically, hind tibia and tarsus moderately clothed with mostly adpressed hairs.

*Head* slightly broader than long, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum strongly bilobed, with anterior margin deeply emarginate at middle; frontoclypeus with surface rather evenly convex; interantennal space broad, weakly convex, about  $3 \times$  as broad as transverse diameter of antennal socket; eve subrounded, greatest transverse diameter about 1/2 as broad as interantennal space; gena moderately excavated near lower margin of eye; postantennal tubercles subtriangular, weakly elevated and medially separated by a feeble excavation, basal margin not distinctly delimited; vertex impunctate, with surface evenly convex. Antenna nearly 2/3 as long as body, weakly clavate, with segments 3-11 gradually becoming more dilated; segment 1 with apex 2/3 as wide as long; 2nd 2/3 as long as 1, slightly longer than broad; 3-5 subequal, distinctly shorter than 2; 6 as long as 2; 7-10 subequal, distinctly longer than 6; 11th 4/9longer than 10, apex briefly rounded. Prothorax 1/2 as long as broad, widest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin straight at middle and weakly produced cephalad laterally, anterior angle broadly rounded and continuing to nearly to middle of lateral margin, lateral margin somewhat convex, posterior angle oblique, basal margin convex; disc impunctate. Scutellum distinctly broader than long. apex acute. Elytron nearly  $2 \times$  as long as broad, lateral margin strongly convex, with apical 1/3 narrowing to apex; epipleuron sinuate, quite broad basally, briefly narrowed at middle and continuing nearly to apex; disc impunctate, but an orbicular pattern is evident in integument. Ventral surfaces sparsely punctate; metasternum strongly elevated between mesocoxae, broadly and deeply excavated, with margins acute anteriorly, angular laterally and absent posteriorly; abdominal sternite 1 medially elevated with a narrow, strongly elevated projection between metacoxae; sternites 2-3 strongly swollen medially, last sternite with extreme apex broad and somewhat truncate. Legs large; hind femur strongly swollen, 7/12 as broad as long; hind tibia nearly as long as femur, weakly arched basally; hind tarsus 1/2 as long as tibia, segment 1 slightly longer than 2+3 and distinctly longer than last. Length 1.9 mm; breadth 1.5,

1963

*Paratypes*: Pale pitchy brown, elytron with a small subrounded chestnut brown maculation at anterior 1/3 and with a smaller, fainter one posteriorly. Length 1.7–2.0 mm; breadth 1.3–1.4.

# DISTRIBUTION: SE China (Fukien).

Holotype (BISHOP 3320), Ta-chu-lan, 1000 m, Shaowu Distr., Fukien Prov., 28. XI. 1942, Maa; 2 paratopotypes (BISHOP, CAS), 28. XI. 1942, 16. II. 1943, Maa.

Differs from *bella* Chen in being smaller, in having elytron with a single chestnut brown spot instead of with borders and 3 discal spots dark, and in having process of abdominal segment 1 not excavated.



Fig. 222. a, Taizonia maculata n. sp.; b, T. ochracea n. sp.

#### 180. Taizonia ochracea Gressitt and Kimoto, n. sp. Fig. 222, b.

Evenly pale ochraceous above, except anterior portion of head; labrum and anterior portion of frontoclypeus chestnut brown; antenna with segments 1–3 pale ochraceous, 4–5 slightly tinged with brown, 6–10 pale brown, 11 brown, with apex slightly paler; ventral surfaces ochraceous; legs evenly pale ochraceous. Glabrous above, except for anterior portion of head; labrum and anterior portion of frontoclypeus sparsely clothed with long, fine, pale suberect hairs; antenna moderately clothed with fairly long, bristle-like subadpressed hairs; ventral surfaces nearly glabrous; legs sparsely to moderately pubescent; hind femur slightly clothed with pale, adpressed hairs, hind tibia and tarsus moderately clothed with short, pale subadpressed hairs.

Head 4/5 as long as broad, broadest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum strongly bilobed, with anterior margin deeply emarginate at middle; frontoclypeus subtriangular, with surface nearly flat; interantennal space rather flat, fully  $2.5 \times$  as broad as transverse diameter of antennal socket; eye subrounded, greatest transverse diameter about 1/2 as broad as interocular space; gena moderately excavated near inner margin of eye; postantennal tubercles subtriangular, feebly elevated and moderately separated medially; vertex indistinctly punctate, with surface rather evenly con-

vex. Antenna nearly 1/2 as long as body, weakly clavate, with segments 3-11 gradually becoming more dilated; segment 1 twice as long as broad; 2nd 1/2 as long as 1, slightly longer than broad; 3 slightly longer than 2; 4 slightly shorter than 3; 5 slightly longer than 4; 6-10 subequal, distinctly longer than 5; 11 about 1/4 longer than 10, apex briefly rounded. *Prothorax* about 3/5 as long as broad, broadest basally and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight at middle and briefly produced cephalad laterally, anterior angle broadly rounded and continuing to apical 1/3 of lateral margin, lateral margin briefly convex, posterior angle obtuse, basal margin strongly convex; disc finely punctate. Scutellum distinctly broader than long, apex briefly rounded. Elytron fully  $2 \times$  as long as broad, lateral margin convex, with apical 1/3 narrowed to briefly truncated apex; epipleuron sinuate, rather broad basally, slightly narrowed at middle and continuing nearly to apex; disc confusedly and finely punctate, punctures mostly 1/2 as large as interspaces. Ventral surfaces sparsely punctate; metasternum strongly elevated between mesocoxae, broadly excavated, with margins rounded anteriorly, convex laterally and absent posteriorly; abdominal sternite 1 similarly produced between metacoxae; abdominal sternites 2-5 strongly swollen medially, last sternite with apical margin subtruncate and feebly sinuate. Legs large; hind femur strongly swollen, 3/5 as broad as long; hind tibia weakly sinuate, slightly shorter than femur; hind tarsus 2/3 as long as tibia, segment 1 slightly longer than 2+3 and much longer than last. Length 3.0 mm; breadth 2.2.

DISTRIBUTION: E. China (Kiangsi).

Holotype (U. S. Nat. Mus.), Yellow Dragon Temple, nr. Ku-ling, nr. Kiu-kiang, N. Kiangsi Prov., 16. X. 1919, H. F. Loomis.

Differs from *bella* Chen in being larger, in being almost uniformly colored, and in having elytron more closely punctured.

### Genus Hemipyxis Dejean

Hemipyxis Dej., 1837, Cat. Col., ed. 3, 387 (type: Altica troglodytes Oliv.; India; monobasic).—Monrós & Bechyně, 1956, Ent. Arb. Mus. Frey 7 (3): 1134.

Sebaethe Baly, 1864, Ann. Mag. Nat. Hist. ser. 3, 14: 438 (type: Haltica badia Erichson; Philippines).—Chapuis, 1875, Gen. Col. 11: 79.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 35.—Maulik, 1926, Fauna India, Chrys. & Halt., 382.—Chen, 1933, Sinensia 3 (9): 226; 1934, op. cit. 5 (3-4): 299.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, op. cit. 7 (6): 637.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 43.

#### KEY TO CHINESE SPECIES OF HEMIPYXIS

1.	Elytron not distinctly marked	2
	Elytron distinctly marked	14
2(1).	Elytron metallic or submetallic	. 3
	Elytron not metallic	. 6
3(2).	Elytron greenish brown; head and pronotum orange to reddish testaceous;	
	length 5.3 mm	tus
	Elytron blue	. 4
4(3).	Pronotum blue	des

	Pronotum testaceous
5(4).	Head with vertex nearly piceous 182. chinensis
	Head with vertex testaceous 192. moseri
6(2).	Pronotum and elytron differing in color7
	Pronotum and elytron nearly alike in color
7(6).	Pronotum pitchy brown to piceous
0(7)	Pronotum dark reddish testaceous; elytron shiny black
8(7).	Pronotum inely punctate; elytron punctate along lateral margin 199. troglodytes
	Fionotum moderatery punctate, crytron impunctate along lateral margin
9(6).	Dark brown above
, ( ).	Testaceous to reddish testaceous above
10 (9).	Lateral margin of prothorax distinctly explanate
	Lateral margin of prothorax barely explanate; elytron moderately punctate
11 (10).	Length less than 5 mm; elytron minutely punctulate 193. nigricornis
	Length more than 6 mm; elytron finely punctulate 198. tendomarginalis
12 ( 9 ).	Antenna entirely yellow 181. caenotes
12 (10)	Antenna partially dark brown or piceous
13 (12).	Sides of frontoclypeus deeply excavated; elytron finely punctate 186. toveitrons
	lateral margin disc finely punctate 190 limbatus
14(1)	Elytron transversely constricted subapically and appearing swollen: disc ochra-
	ceous, margined basally with reddish testaceous
	Elytron not swollen subapically 15
15 (14).	Basal margin of elytron not bordered with dark brown; disc ochraceous, sutural
	and lateral margins dark brown 200. variabilis (part)
	Basal margin of elytron completely bordered with dark brown 16
16 (15).	Elytron with a single pale area near middle 17
17 (1()	Elytron with coloration more complex
1/(10).	Lateral subiliarginal swelling of eighton barely evident; 6, with apex of aedeagus
	Lateral submarginal swelling of elytron distinct: $\mathcal{A}$ with apex of aedeagus
	subtruncate. weakly tridentate
18 (16).	Elytron with 2 pale, subrounded areas 196. quadrimaculata
	Elytron with a pale testaceous transverse area near middle and at extreme
	apex
101 **	

# 181. Hemipyxis caenotes (Maulik), NEW COMBINATION

Sebaethe caenotes Maul., 1926, Fauna India, Chrys. & Halt., 401 (Tenasserim: Mergui; BM).
—Chen, 1939, Sinensia 10 (1-6): 41 (Kwangsi: Yaosan).
DISTRIBUTION: S. Burma, SW China (Kwangsi).

# 182. Hemipyxis chinensis (Weise), NEW COMBINATION

Sebaethe chinensis Ws., 1921, Archiv Naturg. 78A(2): 95 (Yunnan; ?ZMB).—Chen, 1934, Sinensia 5 (3-4): 303,

# DISTRIBUTION: SW China (Yunnan, Szechuan).

SZECHUAN: 2, San-kiang, VIII. 1934; 1, Wo-lung, 2000 m, VII-X. 1934, Friedrich (FREY). YUNNAN: 1, Kunming (Yunnan-fu), 1900 m, 1. VII. 1940, Gressitt (BISHOP); 4, ? Kunming, 1. VIII. 1944, C. L. Liu (US).

### 183, Hemipyxis dichroa (Weise), NEW COMBINATION

Sebaethe dichroa Ws., 1922, Tijdschr. Ent. 65: 133 (Fokien; ? STOCKHOLM).

DISTRIBUTION: SE China (Fukien, Kiangsi, Kwangtung), Hainan I.

FUKIEN: 2, nr. Foochow, 1921–1924, Kellogg (US). KIANGSI: 1, Hong Shan, 1000 m, 25. VI; Wong-sa-shue, 8–11. VII, Gressitt, 1936 (CAS). KWANGTUNG: 2, Tsinleong Shan, 5. VI. 1936, Gressitt (CAS); 1, Kau-lin San, 700–900 m, Lien-p'ing Distr., 24. IV. 1940, Gressitt & To. HAINAN I.: 1, Chung-kon to Dwa-bi, 11. VII. 1935, Gressitt (CAS).

#### 184. Hemipyxis facetus Gressitt and Kimoto, n. sp. Fig. 223.

*Male*: Bicolored above, pronotum and scutellum pitchy testaceous, elytron dark metallic green, with lateral margin narrowly tinged with reddish brown; head testaceous, but pitchy brown on vertex; antenna with scape, pedicel and segment 3 pitchy brown, 4 reddish brown, 5–7 dark reddish brown; 8–11 nearly black; ventral surfaces mostly brown, last abdominal sternite reddish brown; legs brown, becoming pitchy; hind femur brown, dark pitchy reddish brown at apex, hind tibia pitchy brown, hind tarsus dull brownish red. Mostly glabrous above, elytron sparsely pubescent with short, erect hairs apically and along lateral margin; head with labrum sparsely pubescent, side of frontoclypeus and gena with moderate pubescence of pale, adpressed hairs and near lower margin of eye; antenna moderately pubescent, with mostly short, pale adpressed hairs; ventral surfaces moderately pubescent,

last abdominal sternite clothed with fairly stout, adpressed hairs; legs moderately pubescent, with excavated surface glabrous, but with marginal, erect bristles along apical 1/3.

Head as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin weakly convex; frontoclypeus with median carina strongly elevated, sides weakly swollen but briefly impressed along anterior margin; interantennal space strongly convex, nearly  $1/2 \times$  as broad as transverse diameter of antennal socket; antennal socket subrounded, with margin distinctly elevated mesally; eye suboval, greatest transverse diameter about 2/3as broad as interocular space; gena with a shallow impression near ventral margin of eye; postantennal tubercles subquadrate; distinctly elevated and mesally separated by a dark, narrow groove; vertex faintly



Fig. 223. Hemipyxis facetus n. sp.

impressed medially on anterior portion, surface somewhat granulose. Antenna fully 5/6 as long as body, cylindrical, segments 3-4 weakly dilated apically, 5 barely dilated; 1st 5/8 longer than wide; 2nd 1/2 as long as scape, distinctly longer than wide; 3 nearly  $2 \times as$ 

long as 2; 4 distinctly longer than 3; 5 slightly longer than 4; 6 as long as 4; 7-9 subequal, as long as 3; 10 slightly shorter than 9; 11th 1/4 longer than 10. Prothorax 1/2 as long as wide, widest at basal 1/3 and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle swollen, rounded and briefly emarginate laterally, lateral margin convex, posterior angle obtuse, basal margin convex and weakly sinuate; disc weakly punctate, surface unevenly convex and narrowly impressed along lateral margin. Scutellum slightly broader than long, briefly rounded apically. Elytron nearly  $3 \times$  as long as broad, lateral margin convex, with apical 1/3 rounded to apex; epipleuron gradually narrowing and nearly reaching apex, anterior portion with surface concave; disc confusedly punctate, interspaces finely granulate and  $1-2 \times$  as large as punctures, surface mostly evenly convex, but briefly and weakly impressed at suture near scutellum; humerus moderately swollen; lateral margin briefly flexed horizontally. Ventral surfaces punctulate to moderately punctate; last abdominal sternite apically sinuate with extreme apex convexly produced, surface swollen at middle, with a dark, median line terminating in a subrounded depression at apex. Legs large; hind femur strongly swollen, about  $2 \times$  as long as wide; hind tibia weakly arched, slightly shorter than femur, axially excavated along one margin; hind tarsus nearly 2/3 as long as tibia, segment 1 as long as remainder. Length 5.4 mm; breadth 3.2.

DISTRIBUTION: N. Vietnam (Tonkin).

Holotype & (FREY), Hoa-Binh, W. Tonkin, N. Vietnam, no date, A. de Cooman.

Differs from *jeanneli* (Chen) in having elytron bordered with yellowish brown instead of violaceous.

#### 185. Hemipyxis flavipennis (Baly)

Sebaethe flavipennis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 194 (Nagasaki, Hiogo; BM).
—Chen, 1934, Sinensia 5 (3–4): 306, 409 ("China; Bowring").—Chûjô, 1937, Nat.
Hist. Soc. Formosa, Trans. 27 (161–64): 43, 45.

Hemipyxis flavipennis: Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 180 (host).

DISTRIBUTION: Japan (Honshu, Sado, Shikoku, Kyushu, Yakushima), S. China (? Hong Kong).

HOST: Alnus hirsuta Turcz. var. sibirica (Fischer) C. K. Schn.

# 186. Hemipyxis foveifrons (Chen), NEW COMBINATION

Sebaethe foveifrons Chen, 1933, Sinensia 3 (9): 245 (Kweichow: Gan-Chouen-Fu; PARIS).

DISTRIBUTION: SW China (Kweichow).

#### 187. Hemipyxis gibbosulus Gressitt and Kimoto, n. sp. Fig. 224, a.

*Female*: Pitchy brown and ochraceous above; head pitchy brown; vertex somewhat paler; pronotum shiny ochraceous; scutellum pitchy brown; elytron ochraceous, but pitchy brown along basal margin and partially along lateral and sutural margins, punctures dark brown; antenna with segments 1–2 pitchy brown, 1 darker than 2, 3–11 reddish black; ventral surfaces testaceous to pitchy brown; legs pitchy brown, with tibiae distinctly darker than femora. Mostly glabrous above, frontoclypeus with a group of conspicuous, suberect hairs near inner margin of eye, elytron sparsely pubescent along lateral margin; antenna
moderately clothed with mostly short, pale, adpressed hairs; ventral surfaces and legs moderately clothed with mostly pale, subadpressed hairs, apices of tibiae margined with short, stout bristles.

Head nearly as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin convex, surface evenly swollen; frontoclypeus carinate medially, sides rather flat; interantennal space convexly swollen, breadth slightly less than transverse diameter of antennal socket; antennal socket with margin weakly swollen; eye suboval, greatest transverse diameter 13/16 as broad as interocular space; postantennal tubercles subquadrate, distinctly elevated and separated medially by a narrow groove; vertex with a small, lateral fovea near dorsal margin of eye, surface rather evenly convex and impunctate. Antenna about 7/10 as long as body, cylindrical; segment 1 nearly  $3 \times$  as long as wide; 2nd 1/2 as long and nearly as wide as 1; 3rd 1/4 longer and distinctly narrower than 2; 4-5 subequal, slightly shorter than 3; 6-7 subequal, slightly shorter than 5; 8 slightly shorter than 7; 9–10 subequal, distinctly longer than 8; 11th 1/5 longer than 10. Prothorax 1/2 as long as wide, widest at basal 1/3 and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle strongly projecting obliquely cephalad, rounded and briefly concave laterally, lateral margin strongly convex, posterior angle obtuse, basal margin convex and weakly sinuate; disc punctulate, surface rather evenly convex, but briefly impressed along lateral margin. Scutellum distinctly broader than long, sides sinuate and apically pointed. Elytron  $3 \times 10^{10}$  longer than broad, lateral margin weakly convex, with apical 1/3 rounded to apex; epipleuron sinuate, rather wide and continuing nearly to apex, basal 1/2 with surface weakly concave; disc confusedly punctate, punctures  $1-2 \times as$  large as interspaces, surface transversely constricted before apex, causing elytron to appear swollen subapically, lateral margin moderately flexed horizontally. Ventral surfaces finely to moderately punctate; prosternum with intercoxal piece dilated before truncated apex, surface barely excavated, metasternum moderately swollen and somewhat punctate; abdominal sternites sparsely punctate and sublaterally impressed; last sternite broadly rounded apically. Legs large; hind femur greatly swollen, nearly  $2 \times as$  long as broad; hind tibia distinctly shorter than femur, somewhat sinuate and axially excavated along one surface; hind tarsus fully 1/2 as long as tibia, segment 1 distinctly longer than 2+3 and much longer than last. Length 4.5 mm; breadth 2.7.

*Paratype*: Ochraceous and pitchy brown above; pronotum entirely ochraceous, scutellum pitchy brown, elytron ochraceous, but pitchy brown along basal margin and partially along lateral and scutellar margins. Length 4.0 mm; breadth 2.4.

DISTRIBUTION: W. China (Hupeh).

Holotype ♀ (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 1. VIII. 1948, Gressitt & Djou; 1 paratopotype, 21. VIII. 1948.

Differs from other Chinese and Japanese species in having elytron constricted preapically and appearing swollen near apex; differs from *variabilis* (Jac.) in having elytron margined basally with pale pitchy brown and not margined with dark brown at suture and side.

188. Hemipyxis jeanneli (Chen), NEW COMBINATION

Sebaethe jeanneli Chen, 1933, Soc. Ent. France, Bull. 38: 277 (Tonkin; PARIS); 1934, Sinensia 5 (3-4): 304; 1939, op. cit. 10 (1-6): 40 (Yaosan, Kwangsi).

DISTRIBUTION: N. Vietnam (Tonkin), SW China (Kwangsi).

## 189. Hemipyxis kiangsuana (Chen), NEW COMBINATION

Sebaethe Kiangsuana Chen, 1934, Sinensia 5 (3-4): 308 (Kiangsu: Nanking, Soochow; Chekiang: Hangchow); 1938, Arkiv Zool. 30 B (4): 3, fig. 1 (Kiangsu; STOCKHOLM; original description published after re-description).

DISTRIBUTION: S. China (Kiangsu, Chekiang, Szechuan, Hupeh).

KIANGSU: 1, Soo-chow, Gee (US). CHEKIANG: 1, Tsche-Kiang (ZMB). SZE-CHUAN: 5, Sui-fu, IV-VI. 1930; 1, S of Kuan-shien, 630 m, 5. VII. 1924; 1, 15 mi, Shinkai-si, Mt. Omei, 900 m, III. 1925, Graham (US). HUPEH: 3, Sui-sa-pa, 1000 m, Lichuan Distr., 20-29. VII. 1948, Gressitt & Djou (CAS).



Fig. 224. a, Hemipyxis gibbosulus n. sp.; b, H. limbatus n. sp.

190. Hemipyxis limbatus Gressitt and Kimoto, n. sp. Fig. 224, b.

*Female*: Shiny, testaceous above; basal margin of pronotum and sutural margin of elytron narrowly pitchy brown; antenna with segment 1 testaceous; 2 slightly darker, 3–11 dark reddish brown; ventral surfaces testaceous; legs with femora testaceous, darkened at apices; tibiae and tarsi dark reddish brown. Mostly glabrous above; labrum with a transverse row of 4 fine, subadpressed hairs, frontoclypeus sparsely pubescent on anterior portion; anterior and posterior angles of pronotum with a single, erect hair; elytron sparsely clothed with short, erect hairs along lateral margin; antenna moderately clothed with mostly short, adpressed hairs; ventral surfaces moderately clothed with an apical row of short, yellowish bristles, excavated margin glabrous.

*Head* as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin convex and laterally bordered with a row of small, dark spots, surface rather evenly swollen; frontoclypeus carinate medially on upper 2/3, anterior 1/3 slightly swollen and flexed outwards, sides nearly flat; interantennal

space convex, about 1/2 as broad as transverse diameter of antennal socket; eye suboval, inner margin nearly straight, greatest transverse diameter of eye slightly less than breadth of interocular space; frontal tubercles rhomboid, elevated and medially separated by a narrow groove; vertex with a seta-bearing fovea near upper margin of eye, surface evenly convex and nearly impunctate. Antenna about 9/11 as long as body, cylindrical; segment 1 nearly 3  $\times$  as long as wide; 2 slightly less than  $1/2 \times$  as long as 1, distinctly longer than broad;  $3rd 2 \times as$  long as 2; 4 distinctly longer than 3; 5 slightly shorter than 4; 6-7 subequal, slightly longer than 5; 8-9 subequal, slightly shorter than 7; 10 distinctly shorter than 9; 11 about 1/3 longer than 10. Prothorax 1/2 as long as broad, widest at middle and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle weakly directed cephalad, rounded and briefly concave laterally, lateral margin strongly convex, posterior angle weakly swollen, basal margin convex and sinuate; disc nearly impunctate, surface flat mesally, convex sublaterally and moderately concave before lateral margin. Scutellum slightly broader than long, apex acute. *Elytron* nearly  $3 \times as$  long as broad, lateral margin slightly convex, with apical 1/4 curving to briefly rounded apex; epipleuron sinuate, briefly concave before middle and continuing nearly to apex, surface concave basally; disc confusedly punctate, with punctures closely placed and becoming slightly larger near lateral margin, interspaces  $1-3 \times as$  large as punctures; humerus swollen and distinctly elevated; disc with surface broadly convex medially, becoming more abrupt sublaterally, and area along lateral margin briefly concave along entire length. Ventral surfaces granulate to weakly punctate; prosternum with intercoxal piece broadly excavated and truncate at apex; mesosternum broadly channeled medially, somewhat granulate; metasternum shiny, weakly punctate; abdominal sternites moderately punctate, surface unevenly convex; last sternite with sides oblique and apical margin nearly straight, surface swollen, medially and distinctly impressed laterally. Legs large; hind femur fully  $2 \times$  as long as wide, widest at basal 1/3, surface finely punctate; hind tibia distinctly shorter than femur, broadly excavated along hind surface; hind tarsus about 2/3 as long as tibia, segment 1 longer than 2+3 and much longer than last. Length 5.6 mm; breadth 3.2.

*Paratypes*: Shiny testaceous to darker reddish brown above. Length 4.5-5.6 mm; breadth 2.7-3.2.

DISTRIBUTION: SE China (Fukien, Kwangtung, Kiangsi).

Holotype Q (BISHOP 3321), Ta-chu-lan, 1000 m, Shaowu, NW Fukien Prov., 2. VI. 1943, Maa; 4 paratopotypes (BISHOP, CAS, US, TARI), 17. V-6. VI. 1942–43, Maa; 1 paratype (CAS), Cheung-nga San, Tin-tong, Lochang Distr., N. Kwangtung, 10. VIII. 1947, Tsang; 1 paratype (CAS), Hong Shan, 1000 m, SE Kiangsi, 15–29. VI. 1936, Gressitt.

Differs from *nigricornis* (Baly) in lacking subquadrate depression at side of vertex; differs from *tendomarginalis* n. sp. in being smaller and in having narrower lateral deflection of pronotum.

191. Hemipyxis lusca (Fabricius), NEW COMBINATION Fig. 227, b.

Crioceris lusca F., 1801, Syst. Eleuth. 1: 456 (Sumatra; ?København).

Sebaethe lusca Duvivier, 1885, Soc. R. Sci. Liege, Mem. ser. 2, 11: 34 (Java).—Maulik, 1926, Fauna India, Chrys. & Halt., 393 (Malaya, Borneo, Burma).—Chen, 1933, Soc. Ent. France, Bull. 38: 277 (Tonkin); 1934, Sinensia 5 (3-4): 308, fig. 57; 1939, op. cit. 10 (1-6): 41.

DISTRIBUTION: Sumatra, Java, Borneo, Malay Pen., Burma, S. China (Kwangtung), Hainan I.

KWANGTUNG: 5, Tsha-jiu-san, 1400 m, V-VI. 1912, Mell (ZMB). HAINAN I.: 3, Ta-hau, 3. VII; 2, No-doa, 10. VII; 2, Ta-hian, 13. VI; 2, Dwa-bi, 325 m, 19–30. VII, Gressitt, 1935 (CAS).

### 192. Hemipyxis moseri (Weise), NEW COMBINATION

Sebaethe Moseri Ws., 1922, Tijdschr. Ent. 65: 114 (Tonkin: Mts. Mauson; ? HAMBURG).—
Chen, 1933, Soc. Ent. France, Bull. 38: 277 (Canton; Kouy-Tcheou: reg. Pin-Fa);
1933, Peking Nat. Hist. Bull. 8 (1): 57 (Kwangtung: Tsha-jiu-san); 1934, Sinensia 5(3-4): 305.

DISTRIBUTION: N. Vietnam (Tonkin), China (Szechuan, Kweichow, Hupeh, Kiangsi, Fukien, Kwangtung).

SZECHUAN: 1, Mt. Omei, 16. VII. 1932, Franck (CAS). HUPEH: 9, Hsiao-ho, 10, 24. VIII; 3, Sui-sa-pa, 1000 m, 22, 25. VII, 6. VIII, Lichuan Distr., 1948, Gressitt & Djou (CAS, BISHOP). KIANGSI: 1, An-yuen, 23. V. 1948, Gressitt & Djou (CAS). FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, V–VI. 1942, V–VI. 1943; 4, Tsing-shan-pu, 12–15. VI. 1940; 1, Niu-ling, 21. IV. 1941, Changting; 1, Sien-feng-ling, Chungan, 27. IV. 1942; 2, Changting City, 12. VI. 1940, 27. IV. 1941; 1, Kua-tun, Chungan, 3. VI. 1945; Chi-shih, Chungan, 24. IV. 1940; 4, Ta-chu-lan, Shaowu, 17. V. 1942, 6–9. VI. 1943, 8–14. V, 26. IV. 1945, Maa (BISHOP, CAS). KWANGTUNG: 1, Kau-lin San, 700–900, Lien-p'ing Distr., 23. IV. 1940, Gressitt & To.

### 193. Hemipyxis nigricornis (Baly), NEW COMBINATION

Sebaethe nigricornis Baly, 1877, Ent. Soc. Lond., Trans. 1877 : 164 (Cambodia; BM).—Weise, 1922, Tijdschr. Ent. 65 : 112 (Fokien).—Maulik, 1926, Fauna India, Chrys. & Halt., 386, 403 (India, Mentawei Is.).

Sebaethe sulphurea: Chen, 1933 (nec Jacoby, 1898), Peking Nat. Hist. Bull. 8(1): 56 (Kwangtung: Tsha-jiu-san).

DISTRIBUTION : Cambodia, India, Mentawei Is., S. China (Kiangsi, Fukien, Kwangtung).

KIANGSI: 3, Sung-wu, 2. VII. 1936, Gressitt (CAS). FUKIEN: 2, Shui-pei-kai, Shaowu Distr., 21. V. 1943, 24. V. 1944, Maa (BISHOP); 4, Fukien Chr. Univ., nr. Foochow, 1. VIII. 1934, Gressitt (CAS); 1, nr. Foochow, 1921–24, Kellogg (US). KWANGTUNG: 12, Yim-na Shan, 10–15. VI; many, Mei-hsien, 29. V, 9. VI; 3, Tsin-leong-shan, 5. VI, Gressitt, 1936 (CAS); Wai-chow, Hwei-yang Distr., 4. IV. 1940, Gressitt & To; 2, Fei-ha to Fei-loi, 1. VII. 1950, Gressitt (BISHOP).

### 194. Hemipyxis plagioderoides (Motschulsky)

Oedionychis? plagioderoides Mots., 1850, Etudes Ent. 9: 27 (Amur; ?type lost).

- Sebaethe amurensis Weise, 1887, Archiv Naturg. 53: 196 (Amur; ?ZMB); 1889, Soc. Ent. Ross., Horae 23: 570 (Kanssu).—Ogloblin, 1930, Eos 6: 103.
- Sebaethe plagioderoides: Ogloblin, 1930, Eos 6: 103 (Japan).—Chen, 1933, Sinensia 3 (9): 226 (Kiangsu, Kiangsi); 1934, Soc. Ent. France, Ann. 103: 178, 183 (Taiwan); 1935,

Arkiv Zool. 27 A(5): 8 (S. Kansu, N. Szechuan); 1938, *op. cit.* 20 B (4): 4 (Kiangsu). —Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 12 (Korea); 1937, Nat. Hist. Soc. Formosa, Trans. 27 (161–164): 44 (Taiwan); 1938, Mushi 11 (2): 166 (Tsingtao); 1941, Nat. Hist. Soc. Formosa, Trans. 31 (211): 174 (Korea); 1942, Mushi 14 (2): 63 (Liaoning: Kwangtung).

Sebaethe nila: Chen, 1933, (?nec Maulik), Soc. Ent. France, Bull. 38: 276 (Tonkin, Kouy-Tcheou); 1934, Sinensia 5(3-4): 301.

Sebaethe yunnanica Chen, 1933, Mus. Hist. Nat. Bull. ser. 2, 5: 455 (Yunnan: Pe-yen-tsin; PARIS). New Synonymy.

Hemipyxis plagioderoides: Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 180 (Japan; hosts).

Probably nila Maulik may also be a synonym of this species.

DISTRIBUTION: Burma, China (Manchuria, Shensi, Kansu, Kiangsu, Kiangsi, Szechuan, Hupeh, Yunnan, Kweichow, Hunan, Fukien, Chekiang), N. Vietnam (Tonkin).

MANCHURIA: 2, Tchien-shan Mts., 4–8. VI. 1906, Blackwelder (US). KIRIN: 3, Charbin, 9. VII. 1950; 2, Erzendjanzsy, 18. VI. 1948; 1, Maoerschan, 12. VI. 1944; 1, Gaolinzsy, 10. VII. 1948 (FREY). KIANGSU: 1, Nan-king, 17. VI. 1923, Van Dyke (CAS). SI-KANG: 8, Wo-lung, 2000 m, Wassuland, VII–X. 1934, Friedrich (FREY); 2, Se-long, 4000 m, VII–VIII. 1934; 1, Lungai, VII. 1934, Friedrich (FREY); 1, Yao-gi, nr. Mupin, 2400 m, 14–18. VII. 1929; W of Ya-chow, 600–2400 m, 16–20. VI. 1923, Graham; many, nr. Mu-ping, 600–3900 m, VII. 1929, Graham (US). SZECHUAN: 1, Beh-luh-din, 30 mi. N of Chengtu, 1800 m, VII–VIII. 1933; 1, Hua-Yin Shan 70 mi. N of Chungking, 750 m, 5. VII. 1933; 2, Sui-fu, 6–9. IV. 1930; 1, nr. Wen-Chuan, 1200–1800 m, V–VIII. 1933; 1, Long-Tsi, 1200 m, 14–17. VII. 1925; 1, nr. Yue-shi, 1200–2400 m, 21. VII. 1928; 1, Chunking, 600 m, 6–27. V. 1930, Graham (US). HUPEH: 1, Liang-ho-keu, Lichuan Distr., 9. IX. 1948, Gressitt & Djou (CAS). YUNNAN: 6, Yunnan-sen (ZMB); 2, Yunnan-fu (FREY). KWEICHOW: 5, Shihmen-kan, VII. 1934, Graham (US). HUNAN: 3, Pu-shih, Luki, 2. V. 1939, Maa (BISHOP).

FUKIEN : many, Ta-chu-lan, 1000 m, Shaowu, IV-VI. 1942, IV-VI. 1943, 8. V. 1945, Maa (BISHOP); 1, 17. V. 1945, K. S. Lin (CAS); 2, nr. Foochow, 1921–1924, Kellogg (US); 4, Sien-feng-ling, 27. IV. 1942; 1, Chi-shih, 24. IV. 1940; 1, San-chiang, 1. V. 1943, Chungan; 10, Shui-pei-kai, 14. IV. 1942, 3. V. 1942; 1, Kuh-sieh-kai, 1. V. 1944, Shaowu, Maa (BISHOP). KIANGSI: 1, Yao-chou (ZSBS). CHEKIANG: 2, Tung-lu, 23–24. IV. 1925, Wright (CAS); 1, Kang-chow, VI. 1924, Illingworth (BI-SHOP). SHENSI: 1, S. Shensi, V. 1904, Blackwelder (US). E. SIBERIA: 1, Preobrageniya Bay, VII. 1923, Cockerell (US).



Fig. 225. ♂ genitalia. a, *Hemipyxis privignus* n. sp.; b, *H. similis* n. sp.

HOSTS: Clerodendron trichotomum Thunb., Lamium album L. var. barbatum (Sieb. & Zucc.) Franch. & Savat., Plantago asiatica L.

195. Hemipyxis privignus Gressitt and Kimoto, n. sp. Figs. 225, a & 226, a.

Male: Dark reddish chestnut and testaceous above; head largely testaceous, vertex

pitchy brown, prothorax and scutellum pitchy testaceous, elytron dark shiny reddish chestnut with a single, subrounded pitchy brown area behind middle; antenna with segments 1–2 pitchy brown, 3 slightly darker, 4–11 dark reddish brown; ventral surfaces and legs testaceous to pitchy brown. Nearly glabrous above; head with labrum and frontoclypeus sparsely pubescent, with pale suberect hairs, lower margin of eye bordered with a row of pale hairs; elytron sparsely clothed with short pale hairs along lateral margin; antenna moderately pubescent with mostly short pale adpressed hairs; ventral surfaces and legs moderately pubescent with pale adpressed hairs; hind tibia with a marginal row of stout, erect bristles at apex.

Head nearly as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin strongly convex; frontoclypeus strongly carinate medially on upper 1/2, anterior portion broadly swollen at middle, sides weakly concave; interantennal space strongly convex, about 1/2 as broad as transverse diameter of antennal socket; antennal socket subrounded, with margins weakly elevated; eye suboval, greatest transverse diameter about 11/15 as broad as interocular space; gena shallowly impressed below lower margin of eye; frontal tubercles subquadrate, distinctly swollen and separated medially by a narrow groove; vertex nearly impunctate, surface with a deep fovea near inner margin of eye. Antenna fully 3/4 as long as body, cylindrical; segment 1 twice as long as wide; 2 about 1/2 as long as 1, distinctly longer than wide; 3rd 3/8longer than 2; 4-5 subequal, distinctly longer than 3; 6 slightly shorter than 5; 7-9 subequal, slightly shorter than 6; 10 distinctly shorter than 9; 11 about 1/3 longer than 10. *Prothorax* 1/2 as long as broad, widest at middle and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle acute, strongly and obliquely projecting cephalad, lateral margin convex, posterior angle obtuse, basal margin concave and slightly sinuate; disc sparsely punctate, surface evenly convex, but narrowly impressed along lateral margin. Scutellum distinctly broader than long, apex briefly rounded. Elytron about 4/7 longer than broad, lateral margin weakly convex, apical 1/4 rounded to apex; epipleuron rather wide and continuing nearly to apex, surface moderately concave; disc confusedly punctate, interspaces  $1.0-1.5 \times$  as large as punctures, surface somewhat swollen and weakly flexed subhorizontally along lateral margin. Ventral surfaces punctulate to moderately punctate, abdomen moderately swollen mesally; last sternite rather sinuate, with extreme apex strongly produced and evenly rounded, surface with a dark, narrow line extending into subrounded concavity of apical projection. Legs large; hind femur strongly swollen, about 1/2 as broad as long; hind tibia slightly shorter than femur, broadly excavated along hind surface; hind tarsus about 2/3 as long as tibia, segment 1 slightly longer than 2+3 and distinctly longer than last. Aedeagus apically subtruncate, with a small, briefly convex, median projection and rounded lateral swellings. Length 3.5 mm; breadth 2.4.

*Female*: Dark, shiny, reddish chestnut brown and pitchy reddish brown above; head, prothorax and scutellum reddish pitchy brown; elytron dark, reddish chestnut brown, with a large, subrectangular, pitchy brown area extending from basal 1/4 to apical 1/5; antenna with segments 1–3 reddish pitchy brown, 4–11 nearly black; ventral surfaces and legs mostly pitchy brown. Antenna cylindrical, about 7/10 as long as body. Apical abdominal sternite subtriangular, with apex evenly rounded. Length 4.3 mm; breadth 2.7.

*Paratypes*: Color variable; pronotum ranging from testaceous to pitchy reddish brown; elytron dark, reddish chestnut brown, with basal portion becoming testaceous in some specimens; size and color of elytral spot variable, ranging from subrounded to rectangular and

from pale ochraceous to reddish pitchy brown; antenna consistently with segments 1-3 brownish, 4-11 much darker. Length 3.5-4.6 mm; breadth 2.4-2.9.

DISTRIBUTION: S. China (Kiangsi, Kwangtung, Hupeh, Szechuan, Sikang, Fukien, Chekiang).

Holotype ♂ (CAS), Tai-au-hong, 540 m, S of Sungwu, SE Kiangsi, 4. VII. 1936, Gressitt; allotopotype ♀ (CAS), same data; 3 paratopotypes (CAS, BISHOP), 5. VII. 1936, Gressitt; 3 paratypes (CAS, Ac. SIN.), Hong Shan (Hong San), 15–29. VI. 1936, 30. VI. 1936, Gressitt; 2 paratypes (CAS), Wong-sa-shue, 8–11. VII. 1936, Gressitt. KWANGTUNG: 2 paratypes (CAS), Tin-tong, Lochang, 18. VIII. 1947, Gressitt; 3 paratypes (BM, TARI), Tai-yong, 3. VIII. 1936, Gressitt; 1 paratype (ZMB), Tsha-jiu San, 1400 m, bamboo forest, V–VI. 1912, Mell. HUPEH: 2 paratypes (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., 23, 30. VII. 1948, Gressitt & Djou; 1 paratype (CAS), Hsiao-ho, Lichuan Distr., 3. VIII. 1948, Gressitt. SI-KANG: 1 paratype (US), bet. Yachow and Mupin, 1500–3000 m, 12. IX. 1930, Graham. SZECHUAN: 1 paratype (CAS), Mt. Omei, 16. VII. 1932, Franck. FUKIEN: 1 paratype (CAS), Gang-keu, 28. VII. 1936, Gressitt. CHEKIANG: 1 paratype (BISHOP), Mokanshan, 1000 m, 18. VII. 1924, Illingworth.

Differs from *lusca* (Fabr.) in having apex of aedeagus subtruncate rather than subtriangular, and elytron with slightly deeper punctures.



Fig. 226. a, Hemipyxis privignus n. sp.; b. H. tendomarginalis n. sp.

196. Hemipyxis quadrimaculata (Jacoby), NEW COMBINATION Fig. 227, a.

Sebaethe quadrimaculata Jac., 1892, Mus. Civ. Genova, Ann. 32: 922 (Burma; GENOVA).—
Maulik, 1925, Fauna India, Chrys. & Halt., 394 (Sikkim).—Chen, 1933, Soc. Ent.
France, Ann. 103: 178, 183 (Formose, S. China); 1934, Sinensia 5 (3-4): 410 (Kweichow).—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27 (161-64): 45.

Sebaethe lusca quadrimaculata: Chen, 1939, Sinensia 10 (1-6): 41 (Kwangsi: Yangso, Yaosan). DISTRIBUTION: Burma, Sikkim, SW China (Kweichow), Hainan I., Taiwan.

# HAINAN I.: 2, Ta-hau, 3. VII. 1935, Gressitt (CAS).

### 197. Hemipyxis similis Gressitt and Kimoto, n. sp. Fig. 225, b.

*Male*: Pale ochraceous, antenna dark pitchy brown beyond segment 3; elytron pitchy black, with a fairly large subrectangular testaceous spot at middle; tibiae slightly pitchy externally and tarsi reddish brown. Dorsum largely glabrous, a few pale hairs on anterior portion of head; antenna, ventral surfaces and legs thinly clothed with adpressed pale to reddish hairs and a few long erect hairs on apices of antennal segments.

Head 3/5 as broad as prothorax; occiput smooth and slightly swollen, shallowly depressed along median line; postantennal swellings broad and slightly raised, separated by a median groove and bounded behind by a subtransverse groove which bends obliquely backward parallel to upper margin of eye; interantennal space narrower than an antennal insertion; frontoclypeus rather depressed and smooth, narrowly raised along median line; gena fully 1/3 as deep as eye. Antenna 3/4 as long as body; segment 1 moderately stout and weakly arched; 2 just over 1/2 as long as 1; 3 nearly as long as 1; 4 slightly longer than 3; 4-10 decreasing very slightly in length; 11 slightly longer than 10. Prothorax nearly  $2 \times as$  broad as long; anterior margin subevenly concave; lateral margin evenly rounded; basal margin weakly and subevenly convex; anterior angle produced forward and bluntly rounded; basal angle slightly obtuse; disc subevenly convex, sparsely and minutely punctured. Scutellum subequal laterally, triangular and smooth. Elytron 2.6  $\times$  as long as broad; epipleuron quite broad basally and gradually narrowing to near apex; margins slightly narrowed just behind middle; disc with about 18 largely irregular rows of punctures which are mostly about 1/2 to 1/3 as large as interspaces, but somewhat larger and closer on middle of pale spot, very much finer and sparser posteriorly. Ventral surfaces distinctly but not very closely punctured; last abdominal sternite large, with a median pigmented line and apex rounded-truncate in center and deeply and somewhat rectangularly emarginate at each side. Legs stout; hind femur  $2 \times as$  long as broad; hind tibia arched and broadly grooved behind; hind tarsal segment 1 about as long as remainder combined. Length 4.5 mm; breadth 2.9.

*Female*: Elytral spot smaller and more rounded, pale testaceous. Last abdominal sternite broadly and briefly rounded apically. Length 4.7 mm; breadth 3.0.

*Paratypes*: Elytral spot larger, occupying 3/5 to 3/4 length of central portion of disc but not very closely approaching suture or external margin. Length 4.1–4.3 mm; breadth 2.5–2.7.

DISTRIBUTION: S. China (Kwangtung).

Holotype  $\mathcal{F}$  (CAS), Ting-wu Shan, 250 m, West River, central Kwangtung Prov., 7–12. VII. 1950, Gressitt *et al.*; allotopotype  $\mathcal{P}$  (CAS), same data; 2  $\mathcal{P}$  paratypes (BISHOP), same data.

Differs from *lusca* (F.) in having 1/2 width of interocular space wider than diameter of an eye, elytral punctures much stronger, particularly in middle of pale spot, and impunctate strip parallel to lateral margin of elytron more distinct and more convex.

198. Hemipyxis tendomarginalis Gressitt and Kimoto, n. sp. Fig. 226, b.

*Male*: Shiny, chestnut brown; antenna with scape brown, pedicel darker, segments 3-11 nearly black; ventral surfaces brown; legs with femora pitchy brown, apices darkened,

tibiae and tarsi dark reddish brown. Mostly glabrous above, lateral margin of elytron sparsely clothed with short, pale hairs; labrum and frontoclypeus sparsely clothed; antenna moderately pubescent with short, adpressed hairs and occasional longer, erect hairs; ventral surfaces and legs moderately pubescent; hind femur with fine, pale, adpressed hairs; hind tibia with stouter, yellowish hairs, excavated surface glabrous; hind tarsus moderately clothed with pale yellowish hairs.

*Head* nearly as long as wide, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; labrum with anterior margin rather evenly rounded; surface convex; frontoclypeus trapezoid, carinate medially on upper 2/3, sides rather flat, anterior 1/3 with surface evenly convex; interantennal space convex, narrow, about 1/2 as broad as transverse diameter of antennal socket; antennal socket large, subrounded; eye large, subrounded, inner margin weakly concave; frontal tubercles quadrate, swollen, separated medially by a narrow groove; vertex with a large, shallow fovea medially. Antenna cylindrical, about 5/6 as long as body; segment 1 nearly  $3 \times$  as long as wide; 2 small, slightly longer than wide, about 1/3 as long as 1; 3 about as long as 1; 4 slightly shorter than 3; 5-6 subequal, slightly longer than 4; 7-9 subequal, slightly shorter than 6; 10 slightly shorter than 9; 11 about 1/4 longer than 10. Prothorax 1/2 as long as broad, broadest at basal 1/3 and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle acute, obliquely directed cephalad, briefly concave laterally, lateral margin convex, posterior angle rounded, basal margin convex and weakly sinuate; disc finely punctate, surface weakly convex medially and broadly concave at side along lateral margin. Scutellum slightly broader than long, apex briefly rounded. Elytron nearly  $3 \times$  as long as broad, lateral margin weakly convex and evenly rounded to apex in apical 1/3; epipleuron broad and continuing nearly to apex, surface somewhat concave; disc confusedly punctate, briefly and shallowly impressed along sutural margin on basal 1/5. Ventral surfaces with intercoxal piece of prosternum broadly excavated, apex weakly rounded, metasternum nearly impunctate mesally; abdominal sternites punctate; last abdominal sternite with apical margin briefly emarginate sublaterally, extreme apex produced and truncate, surface marked with a dark median line, swollen medially, with a broad, triangular excavation before apex, sides briefly impressed at basal margin. Legs large; hind femur swollen, about 3/7 as wide as long, widest at basal 1/3; hind tibia slightly shorter than femur, with a broad excavation running along entire hind edge, margins of excavation weakly produced near apex; hind tarsus nearly 4/7 as long as tibia, segment 1 slightly longer than 2+3 and much longer than last. Length 6.4 mm; breadth 3.8.

*Female*: Shiny dark chestnut brown above; antenna with segment 1 dark brown, 2–11 nearly black; ventral surfaces brown, metasternum somewhat testaceous; legs with femora mostly pitchy brown, apices darkened, tibiae and tarsi nearly black. Antenna about 4/5 as long as body. Apical abdominal sternite broadly rounded, extreme apex weakly concave. Length 7.2 mm; breadth 4.5.

*Paratypes*: Testaceous to dark chestnut brown; in some specimens areas on dorsum may become gradually paler or darker and a few specimens are darkened along basal margin of pronotum. Length 6.2-8.2 mm; breadth 3.5-4.8.

# DISTRIBUTION: SE China (Fukien).

Holotype ♂ (BISHOP 3322), Ta-chu-lan, 1000 m, Shaowu, Fukien Prov., 2. VI. 1943, T. C. Maa; allotopotype ♀ (BISHOP), same data; 35 paratopotypes (BISHOP, CAS, US, BMNH, TARI), 26. IV-11. VI. 1942-43, Maa; 1 paratype (CAS), Sin-fung-ling, Sankang, Chungan, Fukien Prov., 10-11. VI. 1953, Maa; 1 paratype (BISHOP), Kua-tun, Chungan, 3. VI. 1942, Maa.

Differs from *nigricornis* Baly in lacking subquadrate depression at side of vertex, and in being much larger and darker.

# 199. Hemipyxis troglodytes (Olivier), NEW COMBINATION

Altica troglodytes Oliv., 1808, Entomologie 6: 700, pl. 3, fig. 58 (Bengal; PARIS).

Sebaethe fulvipennis Baly, 1877, Ent. Soc. Lond., Trans. 1877: 164 (Birmah; BM).

Sebaethe pallidipennis Baly, 1879, Cist. Ent. 2: 442 (Assam; BM).—Jacoby, 1889, Mus. Civ. Genova, Ann. 27: 203.

Sebaethe bicolor Weise, 1922, Tijdschr. Ent. 65: 114 (Tonkin: Chiem-Hoa; ? HAMBURG).

Sebaethe troglodytes: Maulik, 1926, Fauna India, Chrys. & Halt., 390 (Bengal, Bihar, Assam, Burma, United Provinces, China).—Chen, 1933, Soc. Ent. France, Bull. 38: 277 (Tonkin); 1934, Sinensia 5 (3-4): 306.

We cannot find any specific record for China, other than the simple statement China by Maulik, repeated by Chen.

DISTRIBUTION: India, Burma, N. Vietnam (Tonkin), S. China.



Fig. 227. & genitalia. a, *Hemipyxis quadrimaculata* (Jacoby); b, *H. lusca* (Fabricius); c, *H. variabilis* (Jacoby).

# 200. Hemipyxis variabilis (Jacoby), NEW COMBINATION Fig. 227, c.

Sebaethe variabilis Jac., 1885, Mus. Civ. Genova, Ann. 22: 48 (Sumatra; GENOVA). Sebaethe lusca var. variabilis: Maulik, 1926, Fauna India, Chrys. & Halt., 394 (Burma). Sebaethe lusca variabilis: Chen, 1939, Sinensia 10 (1-6): 41 (Yaosan, Kwangsi).

We suspect that this represents a species and not a subspecies of *lusca*, although genitalic studies of the types are necessary.

DISTRIBUTION: Sumatra, Burma, S. China (Szechuan, Hupeh, Kwangsi, Kiangsi, Fukien, Yunnan).

SZECHUAN: 2, Pe-pei, N of Chungking, 300 m, 28. VII. 1940, Gressitt (BISHOP).

HUPEH: 2, Sui-sa-pa, 1000 m, Lichuan Distr., 23. VII; 25. VIII; Gressitt & Djou, 1948 (CAS). KIANGSI: 1, Wong-sa-shue, 8–11. VII. 1936, Gressitt (CAS). FUKIEN: 1, Tachu-lan, Shaowu Distr., 31. V. 1942; 1, Tung-men, Sungchi, 19. V. 1946, Maa (BISHOP). YUNNAN: 1, ?Kunming, 1. VIII. 1944, C. L. Liu (US).

# Genus Longitarsus Latreille ap. Berthold

Longitarsus Berthold, 1827, Latreille's Nat. Fam. Thierreichs, 410.—Latreille, 1829, Cuvier's Regn. Anim. ed 2, 5: 155.—Chapuis, 1875, Gen. Col. 11: 69.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 30.—Maulik, 1926, Fauna India, Chrys. & Halt., 333 (type: Chrysomela atricilla L.).—Chen, 1933, Sinensia 3 (9): 270; 1934, op. cit. 5(3-4): 349. —Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 638.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 95.

We have not been able to thoroughly assess our material because of lack of access to many of the type specimens for needed genitalic study. The following key is largely patterned after Chen's key (1939).

### KEY TO CHINESE SPECIES OF LONGITARSUS

1.	Elytra metallic
	Elytra not metallic, rarely with a slight metallic gloss 5
2(1).	Legs black or blackish, knees, tarsi and apices of tibiae sometimes rufous or
	fulvous
	Legs brown or brownish, except hind femur; dorsum varying from dark ae-
	neous to blue-black; length 1.5-2.0 mm 230. tsinicus
3(2).	Small species 2.0-2.2 mm in length 4
	Larger species, 2.5-3.0 mm in length; elytron blue or greenish blue, strongly
	punctate
4(3).	Head and pronotum blue-black, elytron deep blue 213. hsienweni
	Dorsum obscure aeneous 231. violentus
5(1).	Upper side largely black or blackish
	Elytron pale yellow to deep red-brown, sometimes rufo-piceous or entirely red11
6(5).	Dorsum entirely black or blackish7
	Blackish; dorsum with bluish lustre; apical 1/3 of elytron reddish; antenna
	black with segments 1-3 or 1-4 reddish brown; legs reddish brown with
	apex of hind femur piceous; length 2.0-2.1 mm 210. haemorrhoidalis
7(6).	Blackish or rufo-piceous, sometimes red-brown; body narrowed in front and
	behind; pronotum and elytron strongly punctate; antenna and hind femur
	usually unicolorous; length 1.7-1.9 mm (see also bract 27) 208. fusus
	No such combination of characters
8(7).	Postantennal tubercles well-developed
	Postantennal tubercles obsolete or absent 10
9(8).	Pronotum strongly punctate; length 2.4 mm (=frontalis) 212. hopeianus
	Pronotum impunctate; length 1.3 mm (Chen, 1934; Tonkin) metzei*
10(8).	Black mixed with a certain amount of rufo-piceous; basal antennal segments
	fulvous; length 2.1 mm 227. subniger

	Shining black; basal antennal segments piceo-fulvous; length 2.3 mm 209. godmani
11 (5).	Dorsum with a slight metallic sheen but usually deeper on head and prono-
	tum which are sometimes almost entirely aeneous; ground color of pronotum
	rufo-piceous; elytron dirty yellow brown, suture more or less broadly black;
	length 2.0–2.3 mm
	Dorsum not so colored
12 (11).	Apterous : pronotum red or reddish : elytron testaceous, suture and lateral margins
	narrowly blackish; surface distinctly punctate; length 2.0 mm 229, szechuanicus
	Not with this combination of characters
13 (12).	Hind wing rudimentary: apex of elvtron with a pair of long erect hairs: pro-
	notum and elytron dirty vellow-brown, often with a slight metallic gloss.
	suture either entirely or partly broadly black or narrowly fuscous: pronotum
	and elytron strongly nunctate: length 2.0–2.3 mm 214 kwangsiensis
	No such combination of characters
14(13)	Hind femur entirely black or blackish
11(10).	Hind femur either entirely brown or at least with anterior 1/2 brown 16
15(14)	Dorsum red slightly brownish suture and tarsi piceous: pronotum subquadrate
15 (14).	almost impunctate: length 23 mm
	Dorsum dirty reddish brown suture darkened i pronotum strongly transverse
	distinctly nunctate: length 22 mm 207 femoratus
16(14)	Dorsum usually strongly alutaceous: vertey distinctly shareened: rather varia.
10 (14).	ble in color: 1) blackish elytra reddish brown with anical 1/3 of suture
	transverse hand at middle and hasal 2/3 of eninleuron blackish; antenna
	blackish brown with segments $1-2$ or $1-3$ much paler: legs reddish brown
	with hind femur niceous: 2) reddish brown: each elytron with a pair of
	black markings: 3) entirely reddish brown; length 17-20 mm (description
	based on Japanese and Ryukyu specimens) $(?=nuncticans)$ 202 himsculatus
	No such combination of characters
17 (1()	Avial martian of hind formum black on blackish at locat above
17 (10).	Apical portion of find femure of red brown, aper comparison derivated but not black of
	hind femilie blown of fed-blown, apex sometimes darkened but not black of
10 (17)	Uldckisli
10 (17).	hlack or piecews: longth 20, 25 mm (Jacoby 1802; Burma Tonkin) rangeomore's
	Intercouler space without such punctures
10 (10)	There are a source without such punctures
19 (10).	Elytion blood-red, latery slightly brownish, such hind formula langth 2.5.28 mm
	(Char, 1022), Vistners, Burnes)
	(Chen, 1955; vieinam, Burma)
	Body not so colored, elytron yenow to red-brown
20 (19).	Antenna entirely flavous (except sometimes terminal segment); small apterous
	species, 1.5–1.8 mm in length
	No such combination of characters; antenna usually with several of apical
	segments darkened or black; elytral suture darkened; length 2.0–2.5 mm 22
21 (20).	Deep red-brown; elytron finely but distinctly punctate; apical segment of an-
	tenna darkened
	Pale dirty brown; elytron obsoletely punctate; apical segment of antenna not
	darkened

22 (20).	Pronotum finely punctate; dark color on suture narrow, not broadened in middle 23 Pronotum moderately strongly punctate; dark color on suture distinctly broader in middle than at base and apex (?= stramineus: see also 31) 215 lewisii
23 (22).	Antenna long, extending back to near apex of elytron
24 (23).	Elytron finely but distinctly punctate; hind wing absent or well developed
	(Jacoby, 1896; India, Ceylon, Vietnam) belgaumensis*
	Elytron obsoletely punctate; hind wing well-developed 211. hedini
25 (17).	Pronotum and elytron deep red, finely or obsoletely punctate; length 2.8 mm
	No such combination of characters
26 (25).	Deep rufous with a metallic gloss; elytron mixed with a certain amount of
	fuscous, with strong punctures which are distinctly arranged in close irregular
	longitudinal rows, apex broadly rounded; antenna short, about 1/2 length
	of body, entirely fulvous; length 2.0 mm
27 (26)	No such combination of characters
27 (20).	hind: elytron very convey and broadened in middle where it is more than
	$2 \times as broad as at anex: length 1.7-1.9 mm (see also bract 6) 208 fusus$
	No such combination of characters
28 (27)	Yellow-brown to deep red-brown, suture sometimes darkened: postantennal
	tubercles distinct: pronotum deeply and very closely punctate: apex of ely-
	tron subtruncate; pygidium usually almost entirely visible from above; length
	1.7–2.0 mm
	No such combination of characters
29 (28).	Dorsum pale yellow to deep red brown
	Dorsum shining piceo-rufous; length 1.5 mm 219. piceorufus
30 (29).	Antenna about 2/3 as long as body 31
	Antenna more than $3/4$ as long as body
31 (30).	Pronotum usually closely punctate; sutural stripe moderately broad, but nar-
	rowed or diluted towards base and apex; length 2.0-2.5 mm (?=stramineus;
	see also 22)
	Pronotum usually sparingly punctate; sutural stripe not narrowed or diluted at
22 (20)	base; length 1./mm
32 (30).	Hind wing well developed
22 (22)	Antennal segment 2 agual to ar shorter than 2: length z.2 lin 225. rughnorax
<b>33</b> ( <b>3</b> 2).	Antennal segment 2 segment 2 segment longer than 3; rength more than 1.7 min 54
	hrown : proportion sparingly punctate : length 15 mm 204 consolution
34 (33)	Unper side deep red brown : length 1.7-2.0 mm (Chen 1934 : Tonkin) consobrings*
57 (55).	Unper side vellow-brown : length 2.3 mm (Cheff, 1954, 101Kin) Consolitions
	opper side jenew brown, rengen 2.5 min

# 201. Longitarsus arakii Chûjô

Longitarsus arakii Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32 (220): 39 (Korea; TARI). This may prove to be the same as *amiculus* Baly.



Fig. 228. S genitalia. a, Longitarsus bimaculatus (Baly).; b, L. godmani (Baly); c, L. piceorufus Chen; d. L. lewisii (Baly).

DISTRIBUTION : Korea.

202. Longitarsus bimaculatus (Baly) Fig. 228, a.

Thyamis bimaculata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 200 (Nagasaki; BM).
Longitarsus bimaculatus: Gemminger & Harold, 1876, Cat. Col. 12: 3503.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 182 (host).

Longitarsus lewisiellus Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27 (163): 97, 102 (Nagasaki; TARI).

It is possible that *puncticeps* Chen may represent the unspotted form of *bimaculatus*.

DISTRIBUTION: Japan (Honshu, Shikoku, Kyushu, Tsushima, Tanegashima, Yakushima), S. China (Hupeh, Fukien, Kwangtung).

HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan Distr., 30. VII. 1948, Gressitt & Djou (CAS). FUKIEN: 2, Ta-chu-lan, 1000 m, Shaowu, 17. IV. 1943, Maa (BISHOP). KWANGTUNG: 2, Tsin-leong Shan, 600 m, 5. VI. 1936, Gressitt (CAS).

HOST: Callicarpa japonica Thunb.

#### 203. Longitarsus brevicornis Chen

Longitarsus brevicornis Chen, 1939, Sinensia 10 (1-6): 82, 89 (N. China; Ac. SIN.). DISTRIBUTION: N. China.

# 204. Longitarsus consobrinellus Chen

Longitarsus consobrinellus Chen, 1939, Sinensia 10 (1-6): 46(Kwangsi: Yangso; Ac. SIN.); 1939, t. c., 90.

DISTRIBUTION: SW China (Kwangsi).

#### 205. Longitarsus cyanipennis Bryant

Longitarsus cyanipennis Bry., 1924, Ann. Mag. Nat. Hist. ser. 9, 14: 249 (Punjab; BM).-Maulik, 1926, Fauna India, Chrys. & Halt., 337 (India).-Chen, 1934, Sinensia 5(3-4): 351 (Yunnan); 1939, op. cit. 10 (1-6): 86.

DISTRIBUTION: India, SW China (Yunnan).

YUNNAN: 3, Kun-ming (Yunnan-fu), 1900 m, 5. VII; 1, Western Hills, nr. Kun-ming, 2000 m, 5. VII, Gressitt, 1940 (BISHOP).

## 206. Longitarsus dorsopictus Chen

Longitarsus dorsopictus Chen, 1939, Sinensia 10 (1-6): 45 (Kwangsi: Yangso; Ac. SIN.); 1939, t. c., 87.

DISTRIBUTION: SW China (Kwangsi).

#### 207. Longitarsus femoratus Chen

Longitarsus femoratus Chen, 1939, Sinensia 10 (1-6): 80, 88 (Chahar: Kin-peng; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Chahar).

#### 208. Longitarsus fusus Chen

Longitarsus fusus Chen, 1939, Sinensia 10 (1-6): 83, 87 (Kansu, Ningsia, N. Shansi; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Kansu, Ningsia, Shansi).

# 209. Longitarsus godmani (Baly) Fig. 228, b.

Thyamis godmani Baly, 1876, Ent. Soc. Lond., Trans. 1876: 583 (Shanghai; BM).

Longitarsus godmani: Chen, 1935, Arkiv Zool. 27 A(5): 8 (N. Szechuan, S. Kansu); 1939, Sinensia 10(1-6): 87.

DISTRIBUTION: China (Kiangsu, S. Kansu, Szechuan, Hupeh, Fukien).

HUPEH: 3, Sui-sa-pa, 1000 m, Lichuan Distr., 25. VII, 6. VIII. 1948, Gressitt & Djou (CAS). FUKIEN: many, Ta-chu-lan, 1000 m, 10. V. 1942, 4. V. 1943, Shaowu; 1, Yungan City, 15. XI. 1940, Maa (BISHOP).

#### 210. Longitarsus haemorrhoidalis Jacoby

Longitarsus haemorrhoidalis Jac., 1885, Zool. Soc. Lond., Proc. 1885: 728 (Yokohama; BM).
 —Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27 (161–64): 96, 99.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 182 (host).

Longitarsus tsii Chen, 1941, Sinensia 12 (1-6): 195 (Szechuan; Ac. SIN.). New Synonymy.
DISTRIBUTION: Japan (Honshu, Hachijo, Shikoku, Kyushu), SE China (Fukien).
FUKIEN: 1, Ta-chu-lan, Shaowu, 4. V. 1948, Maa (BISHOP).
HOST: Veronica arvensis L,



Fig. 229.  $\eth$  genitalia. a, Longitarsus hedini Chen; b, L. hsienweni Chen; c, L. pulexoides Chen.

# 211. Longitarsus hedini Chen Fig. 229, a.

Longitarsus hedini Chen, 1935, Arkiv Zool. 27 A (5): 10 (NE Szechuan; ?Ac. SIN.); 1939, Sinensia 10 (1-6): 89.

DISTRIBUTION: W. China (Szechuan, Hupeh, Kiangsi).

SZECHUAN: 1, Wan-hsien, 22. VIII; 1, Lung-chue-pa to Sui-sa-pa, 28. VIII, Gressitt & Djou, 1948 (CAS); 1, Cheng-tu, 16. V. 1932, Hadden (CAS). HUPEH: 20, Sui-sa-pa, 1000 m, VII–IX; many, Liang-ho-keu, IX; 1, Chung-lo, 4. VIII; 3, Hsiao-ho, 11. VIII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP); 2, Sang-hou-keu, Hupeh–Sze. Bord., 19. VII. 1948, Gressitt & Djou (CAS). KIANGSI: 3, Tai-au-hong, S of Sung-wu, 540 m, 4–5. VII. 1936, Gressitt (CAS).

## 212. Longitarsus hopeianus Chen

Longitarsus frontalis Chen, 1939 (nec Pic), Sinensia 10 (1-6): 78, 87 (Hopeh; HOANGHO-PAIHO).

Longitarsus hopeianus Chen, 1941, Sinensia 12(1-6): 195 (new name for frontalis Chen). DISTRIBUTION: NE China (Hopei).

# 213. Longitarsus hsienweni Chen Fig. 229, b.

Longitarsus hsienweni Chen, 1939, Sinensia 10 (1-6): 44 (Kwangsi: Yangso; Ac. SIN.).

DISTRIBUTION: SW China (Kwangsi, Hupeh).

HUPEH: 8, Sui-sa-pa, 1000 m, VII-IX (1 on Pinus); 3, Hsiao-ho, 9-11. VIII; 1, Liang-

ho-keu, 7. IX; 1, Hsiao-ho (Suiho), 14. IX; 1, Wang-chia-ying to Sui-sa-pa, 1050–1410 m, 21. VII, Lichuan, 1948 (CAS).

## 214. Longitarsus kwangsiensis Chen

Longitarsus kwangsiensis Chen, 1939, Sinensia 10 (1-6): 45 (Kwangsi: Yangso; Ac. SIN.); 1939, t. c., 88.

DISTRIBUTION: SW China (Kwangsi).

215. Longitarsus lewisii (Baly) Fig. 228, d.

Thyamis lewisii Baly, 1874, Ent. Soc. Lond., Trans. 1874: 199 (Nagasaki; BM).

Longitarsus lewisii: Gemminger & Harold, 1876, Cat. Col. 12: 3505.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 183 (Japan; host).

Longitarsus lycopi: Jacoby, 1885 (nec Foudras), Zool. Soc. Lond., Proc. 1885: 729 (Japan).

Longitarsus ganglbaueri Heikertinger=? lewisii: Hktgr. & Csiki, 1939, Col. Cat. 166: 128 (Japan, S. Sachalin).

It is possible that stramineus Ws. is a synonym of this species.

DISTRIBUTION: Japan (Hokkaido, Honshu, Hachijo, Shikoku, Kyushu, Tsushima), Sachalin, SE China (Fukien).

FUKIEN: many, Ta-chu-lan, 1000 m, Shaowu, VII-IX. 1942, IV-VI. 1943; 2, Tsi-lichiao, 1000 m, Chungan, 17. X. 1941, 12. IV. 1943, Maa (BISHOP).

HOST: Plantago asiatica L.

### 216. Longitarsus muralis Chen

Longitarsus muralis Chen, 1939, Sinensia 10(1-6): 85, 90 (N. Shansi; HOANGHO-PAIHO). DISTRIBUTION: N. China (Shansi).

# 217. Longitarsus nasturtii (Fabricius)

Galleruca nasturtii F., 1792, Ent. Syst. ser. 1, 2: 31 (Europe; ?København).

Longitarsus nasturtii: Redtenbacher, 1849, Fauna Austriaca, 533.—Reitter, 1912, Fauna Germ. 4: 194, pl. 149, fig. 18.—Heikertinger, 1940, Col. Cat. 166: 146 (Tibet).

DISTRIBUTION: Europe, Siberia, Tibet.

# 218. Longitarsus paitanus Chen

Longitarsus paitanus Chen, 1939, Sinensia 10 (1-6): 84, 90 (Hopeh: Paita; HOANGHO-PAIHO). DISTRIBUTION: NE China (Hopei).

219. Longitarsus piceorufus Chen Figs. 228, c & 230, a.

Longitarsus piceorufus Chen, 1939, Sinensia 10 (1-6): 84, 90 (Kiangsi; Ac. SIN.).

DISTRIBUTION: SE China (Kiangsi, Fukien, Hupeh).

FUKIEN: 14, Ta-chu-lan, 1000 m, V-VI, VIII, X. 1942, IV. 1943; 3, Shui-pei-kai, 21. V-1. VI, Shaowu, 1943, Maa (CAS). HUPEH: 3, Sui-sa-pa, 1000 m, 23–24. VII, 6. VIII; 1, Hsiao-ho, 900 m, 8. VIII, Lichuan Distr., 1948, Gressitt & Djou (CAS).



Fig. 230. a, Longitarsus piceorufus Chen; b, Luperomorpha boja n. sp.

## 220. Longitarsus pinfanus Chen

Longitarsus pinfanus Chen, 1934, Sinensia 5 (3-4): 352 (Kweichow: Pin-fa; PARIS); 1939, op. cit. 10 (1-6): 89.

DISTRIBUTION: SW China (Kweichow, Sikang, Yunnan).

SIKANG: 1, betw. Ning-yuen-fu & Den-shiang-uin, 900–2400 m, 6-8. VIII; 1, nr. Fulin, 1200–2400 m, 19–20. VII; 1, betw. Yueh-shi & Bao-ngan, 1800–2400 m, 12. VIII, Graham, 1928 (US). YUNNAN: 1, Kun-ming (Yunnan-fu), 1900 m, 5. VII. 1940, Gressitt (BISHOP).

221. Longitarsus pulexoides Chen Fig. 229, c.

Longtarsus pulexoides Chen, 1939, Sinensia 10 (1-6): 47 (Yaosan: Yangso; Ac. Sin.); 1939, t. c., 89.

DISTRIBUTION: S. China (Kwangsi, Fukien).

FUKIEN: many, Ta-chu-lan, 1000 m, 12. VI. 1941, V, X. 1942, IV-V. 1943; 1, Shui-peikai, 21. V. 1943, Shaowu; 3, Yungan City, IX. 1940, IV.1941; 1, Bo-hea Hills, Chungan, IV. 20. 1940, Maa (BISHOP, CAS).

### 222. Longitarsus puncticeps Chen

Longitarsus puncticeps Chen, 1939, Sinensia 10 (1-6): 81, 88 (Kansu, Ningsia, Suiyuan, Chahar, Shansi, Hopeh; HOANGHO-PAIHO).

This may prove to be a synonym of bimaculatus (Baly).

DISTRIBUTION: N. China (Kansu, Ningsia, Suiyuan, Chahar, Shansi, Hopei).

#### 223. Longitarsus rugithorax Chen

Longitarsus rugithorax Chen, 1939, Sinensia 10 (1-6): 86, 91 (Hopeh: Yati; HOANGHO-PAIHO).

DISTRIBUTION: NE China (Hopei).

# 224. Longitarsus sinensis Chen

Longitarsus sinensis Chen, 1935, Arkiv Zool. 27 A (5): 11 (S. Kansu; ?Ac. SIN.); 1939, Sinensia 10 (1-6): 90. DISTRIBUTION: NW China (S. Kansu).

225. Longitarsus sjoestedti Chen

Longitarsus Sjöstedti Chen, 1935, Arkiv Zool. 27 A (5): 10 (S. Kansu; ?Ac. SIN.); 1939, Sinensia 10 (1-6): 89. DISTRIBUTION: NW China (S. Kansu).

### 226. Longitarsus stramineus Weise

Longitarsus stramineus Ws., 1887, Archiv Naturg. 53: 205 (E. Siberia; ?ZMB).—Chen, 1934, Sinensia 5 (3-4): 413 (Tientsin); 1939, op. cit. 10 (1-6): 89, 90.
It is possible that this is a synonym of *lewisii* (Baly).
DISTRIBUTION: E. Siberia, NE China (Hopei).

### 227. Longitarsus subniger Chen

Longitarsus subniger Chen, 1939, Sinensia 10 (1-6): 79, 87 (Kiangsi; Ac. SIN.). DISTRIBUTION: SE China (Kiangsi).

# 228. Longitarsus subruber Chen

Longitarsus subruber Chen, 1939, Sinensia 10(1-6): 79, 88 (Shantung: Pao-chan; HOANGHO-PAIHO).

DISTRIBUTION: NE China (Shantung).

### 229. Longitarsus szechuanicus Chen

Longitarsus szechuanicus Chen, 1935, Arkiv Zool. 27 A (5): 9 (N. Szechuan; ?Ac. SIN.); 1939, Sinensia 10 (1-6): 87. DISTRIBUTION: W. China (Szechuan).

#### 230. Longitarsus tsinicus Chen

Longitarsus tsinicus Chen, 1939, Sinensia 10 (1-6): 77, 87 (Shensi, Shansi; HOANGHO-PAIHO). DISTRIBUTION: N. China (Shensi, Shansi).

#### 231. Longitarsus violentus Weise

Longitarsus violentus Ws., 1893, Ins. Deutschl. 6 (6): 1016 (S. Russia; ?ZMB).-Heikertinger,

1914, Ent. Blätter 10: 259, fig. 19 (Mongolia). DISTRIBUTION: SE Europe, Turkestan, Mongolia.

# 232. Longitarsus yangsoensis Chen

Longitarsus yangsoensis Chen, 1939, Sinensia 10 (1-6): 47 (Kwangsi; Ac. SIN.); 1939, t. c., 89. DISTRIBUTION: SW China (Kwangsi).

### Genus Luperomorpha Weise

Luperomorpha Ws., 1887, Archiv Naturg. 53 (1): 202 (type: L. trivialis Ws.).—Jacoby, 1890, Entomologist 23: 161.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 32; 1925, t. c. (3-4): 51.—Maulik, 1926, Fauna India, Chrys. & Halt., 285, 361.—Chen, 1933, Sinensia 3 (9): 227; 1934, op. cit. 5 (3-4): 233, 345.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 637.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 113.—Kung & Chen, 1954, Acta Ent. Sinica 4 (1): 83.
Luperocnemus Fairmaire, 1888, Soc. Ent. Belg., Ann. 32: 43 (type: L. xanthoderus Fairm.).

# Key to Chinese species of Luperomorpha

Surface of pronotum smooth but not shagreened
Surface of pronotum distinctly shagreened 4
Elytron entirely black
Head and pronotum reddish brown; elytron reddish brown or largely black with a reddish marking behind middle; length 2.3-2.8 mm 238. rubra
General color blackish piceous; head smooth, postantennal tubercles transverse, slightly produced anteriorly; pronotum with a few extremely fine punctures, latero-posterior angles widely rounded; elytron closely, finely and confusedly punctate; length 2.7–3.4 mm
Elytron dark metallic blue, finely and obsoletely punctate; head and pronotum red-brown, legs rufous, posterior pair more or less black; length 2.8–3.5 mm
237. <b>NODILIS</b>
Male: antenna with segment 3 smaller than 2; 4–7 each strongly dilated at apex; elytron purplish black, surface smooth, closely covered with small but very distinct punctures; head black or brownish black; pronotum yellow-brown, legs rufous, hind leg more or less darkened; length 2.8–3.0 mm 233. antennata
Male: antenna normal
Pronotum without any depression laterally; antenna rather robust, segment 4 of $\mathcal{J}$ shorter than, or subequal to, 2+3
Lateral margin of pronotum feebly rounded anteriorly and posteriorly; surface of pronotum rather weakly shagreened; elytral punctures rather strongly im- pressed; head yellowish brown with vertex pitchy brown; pronotum yellowish brown; elytron yellowish brown with basal, lateral, apical and sutural mar- gins black; length 2.6-3.0 mm

- - Segment 1 of fore tarsus of 3 distinctly dilated, heart-shaped; coloration variable: 1) head black, pronotum reddish brown; elytron yellowish brown with marginal area black, in some cases black color expands and testaceous area becomes smaller and spot-like; venter reddish brown with metathorax blackish; legs reddish brown with hind femur blackish; 2) head reddish brown; elytron black with a broad transverse pale band in middle; pronotum reddish brown; 3) entirely yellowish brown; length 3.1-3.6 mm ... 234. birmanica

## 233. Luperomorpha antennata Chen

Luperomorpha antennata Chen, 1941, Sinensia 12 (1-6): 192 (Szechuan; Ac. SIN.).—Kung & Chen, 1954, Acta Ent. Sinica 4 (1): 91, 96 (Szechuan).
DISTRIBUTION: W. China (Szechuan).

234. Luperomorpha birmanica (Jacoby) Fig. 231, a.

Aphthona birmanica Jac., 1892, Mus. Civ. Genova, Ann. 32: 920 (Burma; GENOVA).

Luperomorpha birmanica: Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, 12: 141.—Maulik, 1926, Fauna India, Chrys. & Halt., 363.—Chen, 1934, Sinensia 5 (3-4): 348, fig. 71 (Yunnan, Tonkin); 1939, op. cit. 10(1-6): 55 (Kwangsi).

Luperomorpha albofasciata var. bipustulata Chen, 1933, Peking Nat. Hist. Bull. 8 (1): 52 (Hainan).

Luperomorpha discoidea birmanica: Kung & Chen, 1954, Acta Ent. Sinica 4 (1): 97.

Luperomorpha discoidea albofasciata: Kung & Chen, 1954, l. c., 91, 97.

DISTRIBUTION: Burma, S. China (Yunnan, Kwangsi, Hupeh), Hainan I., N. Vietnam (Tonkin).

HUPEH: 3, Hsiao-ho, Lichuan Distr., 10, 15. VIII. 1948, Gressitt and Djou (CAS).



Fig. 231. d' genitalia. a, Luperomorpha birmanica (Jacoby); b, L. boja n. sp.; c, L. suturalis Chen; d, L. xanthodera (Fairmaire); e, L. yunnanensis Chen & Kung.

HAINAN I.: 2, No-doa, 28. VI. 1935, Gressitt (CAS). VIETNAM: Hoa-binh, Tonkin, Cooman (FREY).

235. Luperomorpha boja Gressitt and Kimoto, n. sp. Figs. 230, b & 231, b.

*Male*: Dorsum bicolorous; pronotum testaceous, elytron ochraceous; head yellowish on anterior portion, vertex shiny, dark brown; antenna with segments 1–4 testaceous, 5–11 reddish brown; ventral surfaces testaceous to dark reddish brown; legs rather uniformly testaceous. Dorsum mostly glabrous, apical margin and area of elytron with sparse pubescence of erect, yellowish brown hairs; labrum with a transverse row of about 8 long, subadpressed hairs; frontoclypeus with scattered hairs along anterior margin; antenna moderately clothed with mostly subadpressed hairs; lateral margin of prothorax sparsely pubescent; ventral surfaces with moderate pubescence of pale, adpressed hairs; legs moderately pubescent with pale subadpressed hairs.

*Head* as long as broad, widest at eyes and distinctly wider than breadth of pronotum at anterior angles; labrum with anterior margin truncate medially and oblique laterally; frontoclypeus subtriangular and swollen medially; interantennal space slightly convex, slightly narrower than transverse diameter of antennal socket; antennal socket with margin weakly elevated and narrowly circular; eye large, subrounded; gena narrow, evenly convex beneath eye; postantennal tubercles transverse, medially separated by a narrow groove, posterior margin rather distinct from occiput; occiput with surface evenly convex and faintly punctulate. *Antenna* about 7/10 as long as body, cylindrical, segments 5–11 distinctly more robust than 1, which is 5/8 longer than wide; 2 about 1/2 as long as 1, barely longer than wide; 3 slightly smaller than 2; 4 slightly longer than 2; 5–6 subequal, as long as 4; but more robust; 7 slightly longer than 6; 8–10 subequal, slightly shorter than 7; 11th 3/8 longer than 10. *Prothorax* 9/14 broader than long, widest at middle and distinctly narrower than elytra at basal margin; anterior margin nearly straight, anterior angle swollen and somewhat oblique, surface with a small, seta-bearing fovea, lateral margin convex, posterior angle swollen, but not produced, upper surface with a seta-bearing fovea, basal margin convex at sides and rather straight at middle; disc unevenly convex and faintly rugulose. Scutellum slightly broader than long, apically pointed. Elytron nearly  $3 \times as$  long as broad, lateral margin rather straight and apical 1/3 rounded to apex; epipleuron weakly sinuate, widest at basal 1/4, gradually narrowing and ending before apex; disc granulate and confusedly punctate with rather shallow depressions. Ventral surfaces mostly granulate; apical abdominal sternite oblique at sides and truncate at apex, surface slightly swollen medially and with a small transverse depression. Legs large; hind femur greatly swollen, about 1/2 as wide as long; hind tibia about as long as femur, somewhat sinuate; hind tarsus nearly 2/3 as long as tibia, segment 1 distinctly longer than segments 2+3 and much longer than last. Length 2.6 mm; breadth 1.4.

*Paratype*: Dorsum bicolorous; pronotum pale testaceous, elytra ochraceous; head with anterior portion pitchy reddish brown; occiput nearly black. Length 3.0 mm; breadth 1.4.

# DISTRIBUTION: W. China (Hupeh).

Holotype 3<sup>(CAS)</sup>, Hsiao-ho, 900 m, Lichuan Distr., W. Hupeh Prov., 10. VIII. 1948, Gressitt & Djou; 1 paratopotype (BISHOP), 15. VIII. 1948, Gressitt & Djou.

Differs from *xanthodera* (Fairm.) in being smaller, in having head and most of elytron brown instead of black, and elytron more strongly punctured.

#### 236. Luperomorpha nigra Chen

Luperomorpha collaris var. nigra Chen, 1933, Sinensia 3 (9): 246 (Kiangsi; Ac. SIN.); 1939, op. cit. 10 (1-6): 39.

Luperomorpha nigra: Kung & Chen, 1954, Acta Ent. Sinica 4 (1): 89, 95 (Kwangsi). DISTRIBUTION: SE China (Kiangsi, Kwangsi).

#### 237. Luperomorpha nobilis Weise

Luperomorpha nobilis Ws., 1889, Soc. Ent. Ross., Horae 23: 640 (Szechuan; ? ZMB).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25 (142): 207 (Ishigaki); 1937, op. cit. 27 (161–64): 114 (Taiwan).—Kung & Chen, 1954, Acta Ent. Sinica 4 (1): 93, 96.
DISTRIBUTION: W. China (Szechuan), Taiwan, Ryukyu Is. (Ishigaki).

#### 238. Luperomorpha rubra Chen

Luperomorpha rubra Chen, 1933, Sinensia 3 (9): 246 (Hoa-binh; ? BRUXELLES); 1934, Sinensia 5 (3-4): 347 (Canton, Hongkong).—Kung & Chen, 1954, Acta Ent. Sinica 4 (1): 93, 96 ("Tokyo" = translation error for Tonkin, same in Chinese).

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kwangtung, Hong Kong), Hainan I.

HAINAN I.: 2, Dwa-bi, 325m, 19–30. VII; 1, Lia-mui, 350m, 2. VIII; 1, Dome Mt., 12. VII, Gressitt, 1935 (CAS).

#### 239. Luperomorpha suturalis Chen Fig. 231, c.

Luperomorpha suturalis Chen, 1938, Arkiv Zool. 30 B (4): 4 (Kiangsu; ? STOCKHOLM).

Luperomorpha suturalis similis: Chen & Kung, 1954 (nec Chûjô), Acta Ent. Sinica 4 (1): 94, 96.

DISTRIBUTION: China (Kirin, Kiangsu).

KIRIN: 6, Charbin (Harbin), VII. 1946, VI–VIII. 1950 (FREY). KIANGSU: 1, Nanking, 2. VI. 1923, Van Dyke (CAS).

240. Luperomorpha xanthodera (Fairmaire), NEW COMBINATION Figs. 231, d & 232, a.

Luperocnemus xanthoderus Fairm., 1888, Soc. Ent. Belg., Ann. 32: 43 (Kiangsi; ? PARIS). Luperomorpha collaris: Chen, 1933 (nec Baly), Sinensia 3 (9): 245 (Kiangsi).

Luperomorpha similis Chûjô, 1938, Mushi 11 (2): 166, fig. 2 (Laoshan, nr. Tsingtau; TARI). New Synonymy.

Luperomorpha funesta funesta Chen & Kung, 1954, Acta Ent. Sinica 4 (1): 92, 96. Luperomorpha funesta collaris: Chen & Kung, 1954, l. c.

DISTRIBUTION: China (S. Manchuria, Shantung, Szechuan, Hupeh, Chekiang, Fukien, Kiangsi, Kwangtung).

MANCHURIA: 4, Mukden, 8. VIII. 1927, Loukashkin (CAS). SZECHUAN: 6, Chauchia-tu, Kintung, 24. IV. 1949, Djou; 1, Szechuan-Hupeh bord., 22. IX. 1948, Gressitt & Djou (CAS). HUPEH: 4, Sui-sa-pa, 1000 m, VII; 1, Liang-ho-keu, 7. IX, Lichuan Distr., 1948, Gressitt & Djou (CAS). CHEKIANG: 4, Hangchow, 18–19, 21–24. V. 1923, Van Dyke; 2, Tung-lu, 23. IV. 1926, Wright (CAS). FUKIEN: 5, Ting-chow, V–VI. 1937, Hoyer (FREY); 2, Chi-shih, Chungan, 24. VI. 1939, Maa (BISHOP); 2, Cha-po-hui, Kienyang Distr., 10–18. V. 1933, Ngu (LINGNAN); 1, Foochow, VII. 1926, Kellogg (US); 2, Fukien Chr. Univ., Foochow, 1. VIII. 1934, Gressitt (CAS); many, Ta-chu-lan, 1000 m, IV–VI. 1942, IV–VI. 1943; 18, Shui-pei-kai, 3. V. 1942, 29. IV–21. V. 1943, 24. V. 1944; Shaowu; 1, Shaowu City, 15. IX. 1942; 1, Tsi-li-chiao, 1000 m, 28. V. 1945; 1, Kua-tun, 30. IV. 1942, Maa (BISHOP). KWANG-TUNG: 2, Yim-na Shan, 10–15. VI. 1936; Tin-tong, Lochang Distr., 18. VIII. 1947, Gressitt



Fig. 232. Luperomorpha xanthodera (Fairmaire); b, Aphthona splendida Weise.

(BISHOP).

# 241. Luperomorpha yunnanensis Chen and Kung Fig. 231, e.

Luperomorpha yunnanensis Chen & Kung, 1954, Acta Ent. Sinica 4 (1): 94, 95 (Yunnan; Ac. SIN.).

DISTRIBUTION: China (Yunnan).

YUNNAN: 8, Kunming (Yunnan-fu), 1900 m, 1-2. VII. 1940, Gressitt (BISHOP).

#### Genus Aphthona Chevrolat

Aphthona Chevr., 1842, d'Orbigny's Dic. d'Hist. Nat. 2: 5 (Altica cyparissiae; first species mentioned).—Chapuis, 1875, Gen. Col. 11: 72.—Heikertinger, 1924, Kol. Rundsch. 11: 30.—Maulik, 1926, Fauna India, Chrys. & Halt., 366.—Chen, 1933, Sinensia 3: 226; 1934, op. cit. 5: 233, 349.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 638.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 95.—Chen, 1939, Sinensia 10 (1-6): 74.—Heikertinger, 1944, Kol. Rundsch. 30 (1-3): 123; 1948, op. cit. 31: 128.

KEY TO CHINESE SPECIES OF APHTHONA (Largely after Chen, 1939)

1.	Elytron metallic
	Elytron not metallic, rarely with a slight metallic lustre
2(1).	Pronotum usually colored similarly to elytron, sometimes black with a metallic
	gloss
	Pronotum flavous, elytron metallic blue; terminal segment of antenna broadened
	and truncate at apex; length 2.0 mm (Weise, 1922; Tonkin) laeta*
3(2).	Legs entirely yellow-red 4
	Legs with at least hind femur much darkened, often blackish or metallic 6
4(3).	Pronotum subquadrate, slightly broader than long; length 2.3-2.8 mm 5
	Pronotum $2 \times$ as broad as long; dark green above, slightly cupreous; length
	1.8 mm 247. erythropoda
5(4).	Pronotum black with a metallic gloss; elytron blue or greenish blue, distinctly
	and rather regularly punctate-striate
	Deep blue; elytron finely and very irregularly punctate; postantennal tubercle
	distinct but not distinctly raised and showing resemblance to that of Psyl-
	liodes angusticollis; pronotum hardly punctate; elytra widest at middle;
	length ca. 2.5 mm 245. chinensis
6(3).	Body robust, 3-4 mm long; pronotum blue-black, elytron deep blue, very finely
	punctate; legs black except knees and claws rufous 254. melanopoda
	Not with above combination of characters
7(6).	Upper side with at least elytron more or less distinctly punctate
	Upper side finely granulose, scarcely perceptibly punctate; color subopaque
	metallic green, sometimes slightly aeneous or bluish; length 2.0–2.4 mm (=
0 ( 7 )	wallacei)
8(7).	Shining metallic green, sometimes golden green; antenna and legs flavous,

<ul> <li>9 ( 8 ). Interspaces between irregular elytral rows of punctures rather strongly raised above middle; pronotum with a transverse depression at base; length 2.4-2.8 mm</li></ul>		former with terminal segments sometimes fusco-fulvous, hind femur metallic green; length 1.6–2.0 mm
<ul> <li>Elytron not costate</li></ul>	9(8).	Interspaces between irregular elytral rows of punctures rather strongly raised above middle; pronotum with a transverse depression at base; length 2.4–2.8 mm
<ul> <li>10 (9). Upper side shining aeneous; pronotum smooth, with some remotely placed fine punctures and a transverse depression at base; apical antennal segments long and slender, black; legs fulvous, fore femur at base and hind femur obscure metallic; length 2.0–2.6 mm</li></ul>	]	Elytron not costate 10
metallic; length 2.0-2.6 mm       267. yaosanica         No such combination of characters; dorsum blue or bluish       11         11 (10). Length longer than 2.5 mm       12         Length shorter than 2.5 mm       13         12 (11). Legs piceous, knees rufous; pronotum very finely and sparingly punctate; length       2.6 mm (Chen, 1934; Tonkin)	10(9).1	Upper side shining aeneous; pronotum smooth, with some remotely placed fine punctures and a transverse depression at base; apical antennal segments long and slender, black; legs fulvous, fore femur at base and hind femur obscure
No such combination of characters; dorsum blue or bluish       11         111       110. Length longer than 2.5 mm       12         Length shorter than 2.5 mm       13         12 (11). Legs piceous, knees rufous; pronotum very finely and sparingly punctat; length       2.6 mm (Chen, 1934; Tonkin)		metallic: length 2.0–2.6 mm
<ul> <li>11 (10). Length longer than 2.5 mm</li></ul>	1	No such combination of characters: dorsum blue or bluish
<ul> <li>11 (1), Legs notice than 2.5 mm</li></ul>	11 (10)	Length longer than 2.5 mm 12
<ul> <li>12 (11). Legs piccous, knees rufous; pronotum very finely and sparingly punctate; length 2.6 mm (Chen, 1934; Tonkin)</li></ul>	11 (10), 1	Length shorter than 2.5 mm
<ul> <li>2.6 mm (Chen, 1934; Tonkin)tonkinea "to be the theorem to be the the</li></ul>	12 (11). I	Legs piceous, knees rufous; pronotum very finely and sparingly punctate; length
<ul> <li>Legs rufous or flavo-rufous, hind femur blackish; pronotum distinctly, some-what rugosely and fairly closely punctate; length 2.6–2.9 mm</li></ul>		2.6 mm (Chen. 1934: Tonkin)tonkinea*
<ul> <li>what rugosely and fairly closely punctate; length 2.6–2.9 mm</li></ul>	1	Legs rufous or flavo-rufous, hind femur blackish: pronotum distinctly, some-
<ul> <li>13 (11). Shiny blue or greenish blue above, sometimes mixed with a certain amount of red-brown; antenna fulvous, apical segments slightly but distinctly thickened, varying from dark fulvous to black; pronotum finely and sparingly or closely and coarsely punctate; length 1.8–2.3 mm</li></ul>	_	what rugosely and fairly closely nunctate: length 2.6–2.9 mm
<ul> <li>red-brown; antenna fulvous, apical segments slightly but distinctly thickened, varying from dark fulvous to black; pronotum finely and sparingly or closely and coarsely punctate; length 1.8–2.3 mm</li></ul>	13 (11). §	Shiny blue or greenish blue above sometimes mixed with a certain amount of
<ul> <li>varying from dark fulvous to black; pronotum finely and sparingly or closely and coarsely punctate; length 1.8–2.3 mm</li></ul>		red-brown: antenna fulyous, apical segments slightly but distinctly thickened.
<ul> <li>and coarsely punctate; length 1.8-2.3 mm</li></ul>		varying from dark fulvous to black: pronotum finely and sparingly or closely
Not with above combination of characters		and coarsely nunctate' length 1.8-2.3 mm 265, varines
<ul> <li>14 (13). Pronotum shiny black with a metallic gloss; elytra subopaque dark blue, finely rugulose and feebly punctate; apical antennal segments fuscous or blackish; length 1.7 mm</li></ul>	ז	Not with above combination of characters
<ul> <li>rugulose and feebly punctate; apical antennal segments fuscous or blackish; length 1.7 mm</li></ul>	14 (13). H	Pronotum shiny black with a metallic gloss: elytra subonague dark blue, finely
length 1.7 mm       266. yangsoensis         Shiny blue above ; antenna fulvous ; elytron distinctly and rather closely punctate ; length 1.6 mm (Chen, 1934 ; Tonkin)       indochinensis*         15 (1). Dirty brown to piceous, with a purplish gloss ; postantennal tubercles not prominent ; interantennal space broad, scarcely convex ; length 2.0–2.5 mm (Weise, 1922 ; Tonkin)       nubila*         Not with above combination of characters       16         16 (15). Shining blood-red ; pronotum and elytron smooth, extremely minutely and sparingly punctate ; length 1.8–2.0 mm       258. rufosanguinea         Body usually yellow brown, sometimes red-brown or piceous       17         17 (16). Pale brown ; each elytron with a rather large roundish spot in middle, another smaller one near apex and sometimes a third one at base; length 2.3 mm       242. binotata         Elytron without such markings       .18         18 (17). Hind femur either entirely fulvous or with apical 1/2 black       19         Scutellum and hind femur entirely black or blackish; length 2.5–3.0 mm (Duvivier, 1892; India, Ceylon, Tonkin)		rugulose and feebly punctate: anical antennal segments fuscous or blackish:
Shiny blue above; antenna fulvous; elytron distinctly and rather closely punctate; length 1.6 mm (Chen, 1934; Tonkin)       indochinensis*         15 (1). Dirty brown to piceous, with a purplish gloss; postantennal tubercles not prominent; interantennal space broad, scarcely convex; length 2.0–2.5 mm (Weise, 1922; Tonkin)       nubila*         Not with above combination of characters       nubila*         Not with above combination of characters       16         16 (15). Shining blood-red; pronotum and elytron smooth, extremely minutely and sparingly punctate; length 1.8–2.0 mm       258. rufosanguinea         Body usually yellow brown, sometimes red-brown or piceous       17         17 (16). Pale brown; each elytron with a rather large roundish spot in middle, another smaller one near apex and sometimes a third one at base; length 2.3 mm       242. binotata         Elytron without such markings       18         18 (17). Hind femur either entirely fulvous or with apical 1/2 black		lenoth 1.7 mm 266 vangsoensis
<ul> <li>tate; length 1.6 mm (Chen, 1934; Tonkin)indochinensis*</li> <li>15 (1). Dirty brown to piceous, with a purplish gloss; postantennal tubercles not prominent; interantennal space broad, scarcely convex; length 2.0–2.5 mm (Weise, 1922; Tonkin)</li></ul>	S	Shiny hlue above : antenna fulvous : elvtron distinctly and rather closely nunc-
<ul> <li>15 (1). Dirty brown to piceous, with a purplish gloss; postantennal tubercles not prominent; interantennal space broad, scarcely convex; length 2.0–2.5 mm (Weise, 1922; Tonkin)</li></ul>	~	tate: length 1.6 mm (Chen 1934: Tonkin) indochinensis*
<ul> <li>In the probability of our top proceeds, with a purphenergy possible process possible of the properties in the probability of the probability of the properties in the probability of the probabili</li></ul>	15(1) I	Dirty brown to niceous with a nurnlish gloss: postantennal tubercles not pro-
<ul> <li>(Weise, 1922; Tonkin)</li></ul>	10 (1). 1	minent; interantennal space broad, scarcely convex; length 2.0–2.5 mm
Not with above combination of characters		(Weise, 1922: Tonkin)
<ul> <li>16 (15). Shining blood-red; pronotum and elytron smooth, extremely minutely and sparingly punctate; length 1.8–2.0 mm</li></ul>	١	Not with above combination of characters 16
<ul> <li>ingly punctate; length 1.8–2.0 mm</li></ul>	16 (15). §	Shining blood-red: pronotum and elytron smooth, extremely minutely and spar-
Body usually yellow brown, sometimes red-brown or piceous		ingly punctate : length 1.8–2.0 mm
<ul> <li>17 (16). Pale brown; each elytron with a rather large roundish spot in middle, another smaller one near apex and sometimes a third one at base; length 2.3 mm</li></ul>	F	Body usually vellow brown, sometimes red-brown or piceous 17
<ul> <li>smaller one near apex and sometimes a third one at base; length 2.3 mm</li></ul>		Pale brown: each elytron with a rather large roundish spot in middle another
242. binotata Elytron without such markings		smaller one near apex and sometimes a third one at base: length 2.3 mm
Elytron without such markings.       18         18 (17). Hind femur either entirely fulvous or with apical 1/2 black.       19         Scutellum and hind femur entirely black or blackish; length 2.5–3.0 mm (Duvivier, 1892; India, Ceylon, Tonkin)       18         19 (18). Elytron opaque, pale yellow brown; length 2.0–2.2 mm       255. opaca         Elytron shiny       20		242. binotata
<ul> <li>18 (17). Hind femur either entirely fulvous or with apical 1/2 black</li></ul>	F	Elytron without such markings
<ul> <li>Scutellum and hind femur entirely black or blackish; length 2.5–3.0 mm (Duvivier, 1892; India, Ceylon, Tonkin)</li></ul>	18 (17). F	Hind femur either entirely fulyous or with anical 1/2 black 19
vier, 1892; India, Ceylon, Tonkin)		Scutellum and hind femur entirely black or blackish · length 2 5-30 mm (Duvi-
19 (18). Elytron opaque, pale yellow brown; length 2.0–2.2 mm	~	vier. 1892: India Cevlon Tonkin)
Elytron shiny	19 (18). F	Elvtron opaque nale vellow brown · length 20–22 mm 255 opaga
	Η	Elytron shiny

21 (20) Venter and hind femur brownish vellow or rufous 22
Venter black or blackish 25
22 (21) Length 3 5-38 mm and width about 20 mm; above brownish vellow; pronotum
22 (21). Eingin 5.5 5.6 min and what about 2.6 min, above brownen years, pronotain $2 \times as$ broad as long: elytron obsoletely punctate $244$ chinchini
$2 \times as broad as rong, drynon bosonerry punctate$
23 (22) Elongate suborlindrical: vallow-ochraceous suture not blackish: pronotum and
25 (22). Elongate, subcylindrical, yenow-oenraceous, suture not blackish, pronotum and
Tertin)
Ionkin)
No such combination of characters
24 (23). Pronotum brownish red; elytron usually brownish or reddish yellow, suture
broadly black; length 2.5–2.8 mm
Pronotum colored similarly to elytron or slightly darker, brownish or reddish
yellow; suture narrowly black or piceous; length 1.8–2.2 mm 253. licentana
25 (21). Pronotum slightly more than $2 \times as$ broad as long, closely and distinctly punc-
tate; elytron closely and very irregularly punctate; color pale yellow to
yellow-brown, suture black (except base and apex); length 2.3-2.5 mm
No such combination of characters
26 (25). Posterior femur entirely yellow-brown; dorsum pale yellow-brown, elytron paler
with suture black and interstices between irregular rows of pronotum finely
punctate; pronotum subquadrate, length 2.5 mm
No such combination of characters
27 (26). Flavous; head and scutellum flavo-piceous; suture narrowly piceous; pronotum
$1.4 \times$ as broad as long; elytron fairly strongly punctate anterior to middle;
length 2.0 mm 259. sajanica
No such combination of characters
28 (27). Antenna with apical 4-5 segments brownish fuscous; head dark red-brown or
rufo-piceous; pronotum and elytron pale brownish yellow, former usually
more or less reddish; suture narrowly piceous or deep red-brown; length
1.7–2.0 mm
Antenna with apical 7 segments piceous or black; form broadly subovate;
color pale brown with head and pronotum slightly darkened; length 1.8 mm
243. brevis

# 242. Aphthona binotata Baly

Thyamis binotata Baly, 1876, Ent. Soc. Lond., Trans. 1876: 583 (Shanghai; BM).
Aphthona binotata: Chen, 1934, Sinensia 5 (3-4): 368, fig. 76 (Tonkin: Hoa-binh); 1939, op. cit. 10 (1-6): 76.

DISTRIBUTION: E. China (Kiangsu), N. Vietnam (Tonkin).

# 243. Aphthona brevis Chen

Aphthona brevis Chen, 1939, Sinensia 10 (1-6): 73, 77 (Szechuan: Pehpei; Ac. SIN.). DISTRIBUTION: W. China (Szechuan).

### 244. Aphthona chinchihi Chen

Aphthona chinchihi Chen, 1939, Sinensia 10 (1-6): 49 (Kwangsi: Yangso; Ac. SIN.); 1939, t. c., 76.

DISTRIBUTION: SW China (Kwangsi).

# 245. Aphthona chinensis Baly

Aphthona chinensis Baly, 1877, Ent. Soc. Lond., Trans. 1877: 295 (China, prob. E. China; BM).—Ogloblin, 1926, Mus. Zool. Ac. Sci. USSR, Ann. 27: 287.—Chen, 1939, Sinensia 10 (1-6): 74.

DISTRIBUTION: E. China.

## 246. Aphthona coreana Heikertinger

Aphthona coreana Hktgr., 1944, Kol. Rundsch. 30: 99 (Korea: Seishin; ?ZSBS or FREY). This species is not included in the key. DISTRIBUTION: Korea.

# 247. Aphthona erythropoda Chen

Aphthona erythropoda Chen, 1939, Sinensia 10 (1-6): 68, 74 (Shansi: Ho-ye-ping-chan; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Shansi).

# 248. Aphthona foudrasi Jacoby

Aphthona Foudrasi Jac., 1885, Zool. Soc. Lond., Proc. 1885: 729 (Oyama; BM).—Chen, 1934, Sinensia 5(3-4): 369 (Tientsin, Kiangsi, Tonkin); 1939, op. cit. 10(1-6): 77.—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 172 (hosts).

DISTRIBUTION: Japan (Honshu, Kyushu), E. China (Hopei, Kiangsi), N. Vietnam (Tonkin).

HOSTS: Euphorbia pseudochamaesyce Fisch., Mey. & Lallem., E. supina Rafin., Phyllanthus Urinaria L.

# 249. Aphthona hananoi Chûjô

Aphthona hananoi Chûjô, 1942, Mushi 14 (2): 61, fig. 2 (Kwangtung: Ryosuizi; TARI).

This species is not included in the key.

DISTRIBUTION: NE China (Liaoning).

# 250. Aphthona howenchuni (Chen)

Aphthonaltica howenchuni Chen, 1934, Sci. Soc. China, Trans. 8: 63 (Szechuan: Mt. Omei; Ac. SIN.); 1939, Sinensia 10 (1-6): 75.

Aphthona howenchuni: Heikertinger, 1948, Kol. Rundsch. 31: 143 (129).

DISTRIBUTION: W. China (Szechuan).

# 251. Aphthona interstitialis Weise

Aphthona interstitialis Ws., 1887, Archiv Naturg. 53 (1): 202 (Chabarofka;? ZMB).-Heiker-

tinger, 1911, Zool.-Bot. Ges. Wien, Verh. 61: (4).

Aphthona interstitialis var. tibetana, Heikertinger, 1911, l. c. (Kuku-Nor).

DISTRIBUTION: Siberia, W. China (Tsinghai).

# 252. Aphthona laeta (Weise)

- *Ectonia laeta* Ws., 1922, Tijdschr. Ent. **65**: 120 (Tonkin: Mts. Mauson; ZMB).—Chen, 1934, Sinensia **5** (3-4): 361, fig. 75.
- Aphthona laeta: Chen, 1939, Sinensia 10 (1-6): 76.—Heikertinger, 1948, Kol. Rundsch. 31: 143 (129).

DISTRIBUTION: N. Vietnam (Tonkin); S. China.

# 253. Aphthona licentana Chen

Aphthona licentana Chen, 1939, Sinensia 10 (1-6): 71, 76 (Shensi: Sinn-tsai; Shansi: Kiaocheu; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Shensi, Shansi).

#### 254. Aphthona melanopoda Chen

Aphthona melanopoda Chen, 1939, Sinensia 10 (1-6): 69, 74 (Szechuan: Pehpei; Ac. SIN.). DISTRIBUTION: W. China (Szechuan).

# 255. Aphthona opaca Allard

Aphthona opaca All., 1889, Soc. Ent. France, Ann. ser. 6, 9: 305 (Pnomh-penh; PARIS). —Chen, 1939, Sinensia 10 (1-6): 49 (Kwangsi: Yangso); 1939, t. c., 76.

DISTRIBUTION: Cambodia, SW China (Kwangsi).

#### 256. Aphthona piciventris Chen

Aphthona piciventris Chen, 1939, Sinensia 10 (1-6): 72, 77 (Chahar; HOANGHO-PAIHO). DISTRIBUTION: N. China (Chahar).

# 257. Aphthona renhwai Chen

Aphthona renhwai Chen, 1939, Sinensia 10 (1-6): 50 (? N. China: type data omitted; ? HOANGHO-PAIHO); 1939, t. c., 76.

DISTRIBUTION: ? N. China.

#### 258. Aphthona rufosanguinea Chen

Aphthona rufosanguinea Chen, 1939, Sinensia 10 (1-6): 49 (Kwangsi: Yangso; Ac. SIN.); 1939, t. c., 76.

DISTRIBUTION: SW China (Kwangsi).

#### 259. Aphthona sajanica Ogloblin

Aphthona sajanica Ogl., 1926, Mus. Zool. Ac. Sci. USSR, Ann. 27: 302 (NW Mongolia; ? Moscow).—Chen, 1935, Arkiv Zool. 27 A (5): 12 (NE Szechuan); 1939, Sinensia **10** (1–6) : 77. DISTRIBUTION : Mongolia, Szechuan.

### 260. Aphthona seriata Chen

Aphthona seriata Chen, 1939, Sinensia 10 (1-6): 68, 74 (Suiyuan, Hopeh, Shansi; HOANGHO-PAIHO).

DISTRIBUTION: N. China (Suiyuan, Shansi, Hopei).

### 261. Aphthona silinica Chen

Aphthona silinica Chen, 1939, Sinensia 10 (1-6): 70, 74 (Hopeh: Siling; HOANGHO-PAIHO). DISTRIBUTION: NE China (Hopei).

### 262. Aphthona splendida Weise Fig. 232, b.

DISTRIBUTION: China (Kansu, Szechuan, Hupeh, Fukien).

SZECHUAN: 4, Omei Shan, S. side, 1000–2000m, 12. VIII. 1940, Gressitt (BISHOP).

# 263. Aphthona strigosa Baly

- Aphthona strigosa Baly, 1874, Ent. Soc. Lond., Trans. 1874: 197 (Nagasaki; BM).—Heikertinger, 1948, Kol. Rundsch. 31: 142 (128) footnote.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 173 (host).
- Aphthona Wallacei Baly, 1877, op. cit. 1877: 178 (Flores; BM).—Chen, 1933, Sinensia 3(9): 253 (Kwangsi, Hong Kong, Tonkin); 1934, op. cit. 5 (3-4): 364 (Kiangsi); 1939, op. cit. 10 (1-6): 48 (Kwangsi); 1939, t. c., 74.
- Allomorpha glabrata Jacoby, 1895, Mus. Civ. Genova, Ann. ser 2, 16 (36): 457 (Sumatra; GENOVA).

DISTRIBUTION: Japan (Honshu, Hachijo, Shikoku, Kyushu, Tsushima), China (Kiangsi, Fukien, Kwangtung, Kwangsi, Szechuan), Hainan I., N. Vietnam (Tonkin), Sumatra, Flores.

SZECHUAN: 3, Pe-pei, 300 m, N of Chungking, 27–28. VII. 1940, Gressitt (CAS); 1, betw. Kia-ting & Ya-chow, 8–11. VII. 1928, Graham (US). FUKIEN: 6, Niu-ling, Chang-ting, 21. IV; 1, Ta-chu-lan, Shaowu, 20. V, Maa, 1941 (BISHOP). KWANGTUNG: 1, Ting-wu Shan, 23–26. VII. 1950, Gressitt (BISHOP); 1, Yim-na Shan, 10–15. VI. 1936, Gressitt (CAS).

HOST: Mallotus japonicus (Thunb.) Muell.-Arg.

# 264. Aphthona suturanigra Chen

Aphthona sutura-nigra Chen, 1939, Sinensia 10 (1-6): 71, 76 (Hopeh, Ningsia, Shansi; HOANGHO-PAIHO).

DISTRIBUTION : N. China (Hopei, Shansi, Ningsia).

HUPEH: 9, Sui-sa-pa, 1000 m, Lichuan Distr., 25. VII, 2, 6, VIII. 1948, Gressitt & Djou (CAS). FUKIEN: 2, Ta-chu-lan, Shaowu, 14. XI. 1942, 1–9. X. 1943, Maa (BISHOP).

# 265. Aphthona varipes Jacoby

Aphthona varipes Jac., 1890, Entomologist 23: 161 (Hupeh: Changyang; MCZ).-Chen, 1934, Sinensia 5 (9): 365 (Tonkin: Mts. Mauson, Hoa-binh); 1939, op. cit. 10 (1-6): 75.

The type seems to represent a teneral specimen.

DISTRIBUTION: S. China (Hupeh, Sikang, Fukien), N. Vietnam (Tonkin).

SIKANG: 1, nr. Mu-ping, 2100-2900 m, 6-8. VII. 1929, Graham (US). HUPEH: many, Sui-sa-pa, 1000 m, VII-VIII; 13, Liang-ho-keu, 4, 9. IX; 1, Hsiao-ho, 10. VIII; 1, Liang-hokeu to Wang-chia-ying, 1350 m, 18. VII; 1, Wang-chia-ying to Sui-sa-pa, 1050-1400 m, 21. VII; 1, Lung-chue-pa, Szechuan-Hupeh border, 19. VII, Lichuan Distr., 1948, Gressitt & Djou (CAS, LINGNAN, BISHOP). FUKIEN: 10, Ta-chu-lan, III-IV, VI. 1942, IV, V. 1943; 1, Simen, 14-16. XII. 1942, Maa (BISHOP).

### 266. Aphthona yangsoensis Chen

Aphthona yangsoensis Chen, 1939, Sinensia 10 (1-6): 48 (Kwangsi: Yangso; Ac. SIN.); 1939, t. c., 75.

DISTRIBUTION: SW China (Kwangsi).

## 267. Aphthona yaosanica (Chen)

Aphthonaltica yaosanica Chen, 1939, Sinensia 10: 42 (Kwangsi: Yaosan; Ac. SIN.). Aphthona yaosanica: Chen, 1939, t. c., 75.—Heikertinger, 1948, Kol. Rundsch. 31: 143 (129). DISTRIBUTION: SW China (Kwangsi).

# Genus Trachyaphthona Heikertinger

- Trachyaphthona Hktgr., 1924, Kol. Rundsch. 11(1-2): 34; 1925, t. c. (3-4): 52 (type: Aphthona sordida Baly; Japan).-Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357; 1936, op. cit. 26: 124.—Ohno, 1961, Toyo Univ., Bull. Dept. Lib. Arts, 2: 73 (Zipangia synonymized).
- Zipangia Hktgr., 1924, Kol. Rundsch. 11 (1-2): 39; 1925, t. c. (3-4): 52 (type: Haltica obscura Jacoby, 1885; Japan).-Chen, 1933, Sinensia 3: 221 (err. Jipangia); 1934, op. cit. 5: 388.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 30.-Chen, 1936, Sinensia 7 (6): 644.

#### KEY TO CHINESE SPECIES OF TRACHYAPHTHONA

1.	Pronotum with an ante-basal transverse furrow
	Pronotum without ante-basal transverse furrow; dorsum piceous or dull brown;
	length 2.0–2.2 mm
2.	Dorsum unicolorous 3
	Dorsum flavous; vertex, scutellum and sutural band pitchy black; length 3.0 mm
3.	Dorsum unicolorous, varying from red-brown to piceous 4
	Dorsum metallic greenish blue, pronotum sometimes with a brassy tinge; length
	2.5-3.0 mm

### 268. Trachyaphthona cyanea (Chen), NEW COMBINATION

Zipangia cyanea Chen, 1939, Sinensia 10 (1-6): 41 (Kwangsi: Yangso; Ac. SIN.). DISTRIBUTION: SW China (Kwangsi).

# 269. Trachyaphthona lewisi (Jacoby)

Haltica lewisi Jacoby, 1885, Zool. Soc. Lond., Proc. 1885: 197 (Honshu; BM).

Zipangia lewisi: Chûjô, 1958, Kagawa Univ., Mem. Fac. Lib. Arts & Educ. 2 (64): 18 (Okinawa).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 193.

Trachyaphthona lewisi: Ohno, 1961, Toyo Univ., Bull. Dept. Lib. Arts 2: 81 (hosts).

DISTRIBUTION: Japan (Honshu, Shikoku, Kyushu), Ryukyu Is. (Okinawa), S. China (Hupeh, Kiangsi, Fukien, Kwangtung).

HUPEH: 9, Sui-sa-pa, 1000 m, VII-VIII; 2, Wang-chia-ying to Sui-sa-pa, 1050–1400 m, 21. VII; 1, Mo-tai-chi to Chi-au Shan, 28. VII, Lichuan, 1948, Gressitt & Djou (CAS, BI-shop). KIANGSI: 4, Hong Shan, 1000 m, 25. VI. 1936, Gressitt (CAS). FUKIEN: 7, Ta-chu-lan, IV-VI. 1942, IV-VI. 1943, Maa (BISHOP). KWANGTUNG: 2, Kau-lin-San, 700–900 m, Lien-p'ing Distr., 22–23. IV. 1940, Gressitt & To (LINGNAN).

HOSTS: Viburnum furcatum Blume, V. dilatatum Thunb. (Japan).

### 270. Trachyaphthona obscura (Jacoby)

Haltica obscura Jac., 1885, Zool. Soc. Lond., Proc. 1885: 726 (Yuyama; BM).

Zipangia obscura: Heikertinger, 1924, Kol. Rundsch. 11(1-2): 39.—Chen, 1933, Sinensia 3 (9): 221 (Kiangsi); 1934, op. cit. 5 (3-4): 388 (Tonkin).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 193 (hosts).

Trachyaphthona obscura: Ohno, 1961, Toyo Univ., Bull. Dept. Lib. Arts 2: 79 (hosts).

DISTRIBUTION : Japan (Honshu, Shikoku, Kyushu, Iki, Tsushima), S. China (Kiangsi), N. Vietnam (Tonkin).

HOSTS: Lonicera japonica Thunb., L. gracilipes Miq., Weigela japonica Thunb., Viburnum dilatatum Thunb., V. luzonica Rolfe var. formosanum Rehd., Edgeworthia papyrifera Sieb. & Zucc.

# 271. Trachyaphthona sordida (Baly)

Aphthona sordida Baly, 1874, Ent. Soc. Lond., Trans. 1874: 197 (Nagasaki; BM).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 193 (host).

Trachyaphthona sordida: Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 34.—Ohno, 1961, Toyo Univ., Bull. Dept. Lib. Arts 2: 75 (host).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 193.

There is a possibility that the following may differ slightly from Japanese material.

DISTRIBUTION: Japan (Hokkaido, Honshu, Shikoku, Kyushu, Iki, Tsushima), S. China (Fukien, Hupeh).

FUKIEN: 2, Ta-chu-lan, 1000 m, Shaowu, V-VI. 1943, Maa (BISHOP). HUPEH: 3, Sui-sa-pa, 1000 m, Lichuan Distr., 25, 29. VII. 1948, Gressitt (CAS).

HOST: Paederia scandens (Lour.) Merr. (Japan).

## 272. Trachyaphthona suturalis (Chen)

Zipangia suturalis Chen, 1934, Sinensia 5(3-4): 389, fig. 84 (Frontier Chine-Tonkin: reg. de Lao-Kay et Ho-Kheou; PARIS).

Trachyaphthona suturalis: Ohno, 1961, Toyo Univ., Bull. Dept. Lib. Arts 2: 83.

DISTRIBUTION: Sino-Vietnam border, Yunnan.

YUNNAN: 14, Yunnan-Sen, no date (ZMB).

# Genus Phyllotreta Stephens

Phyllotreta Stephens, 1839, Man. Brit. Col. 291 (type: Chrysomela nemorum L.; Europe).— Chapuis, 1875, Gen. Col. 11: 73.—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 33, 59, fig. 5, 6.—Maulik, 1926, Fauna India, Chrys. & Halt., 377.—Chen, 1933, Sinensia 3: 228; 1934, op. cit. 5: 234, 371.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 638.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27: 115.—Heikertinger, 1941 Kol. Rundsch. 27: 25; 1942, Ent. Blatt 38: 138; 1950, Kol. Rundsch. 31 (4/6): 140.

### Key to Chinese species of Phyllotreta

1. Hea	ad impunctate	2
Hea	ad distinctly punctate	3
2(1). Hea	ad, prothorax, antenna and fore and mid legs red, sometimes testaceous;	
h	nind femur black; elytron brassy green; scutellum piceous; length 2.2 mm	
(	(Chen, 1933; N. Vietnam) rufothoracica	*
Hea	ad, pronotum and elytron concolorous, dark metallic bronzy with greenish	
re	eflections; venter darker, also metallic; antenna black; tibiae and tarsi	
b	prownish black; length 2.0 mm (Duvivier, 1892; India, ? Tonkin) chotanica	*
3(1). Elyt	rtron with a flavous sinuate longitudinal stripe	4
Ely	rtron without a flavous stripe	7
4(3). Yell	llowish stripe of elytron narrow and generally straight	5
Yel	llowish stripe of elytron fairly broad and distinctly curved	5
5(4). Hea	ad and pronotum without distinct bluish or greenish lustre; none of antennal	
se	egments expanded in 3; tibiae and tarsi pitchy brown; length 2.2-2.6 mm	
( :	(=chinensis)	ı
Hea	ad and pronotum with distinct bluish or greenish lustre; in 3 antennal	
se	egment 4 strongly, and 5 feebly, expanded; tibiae and tarsi usually yellowish;	
le	ength 2.5–3.0 mm 273. nemorum	L
6(4). For	re and mid legs almost entirely reddish brown; length 2.0-2.5 mm 274. ochripes	3
Fore	e and mid legs largely pitchy black; length 2.0-2.2 mm	i.

#### Pac. Ins. Mon.

### 273. Phyllotreta nemorum (Linnaeus)

Chrysomela nemorum L., 1758, Syst. Nat. ed. 10, 373 (Europe; ? UPSSALA).

 Phyllotreta nemorum: Foudras, 1860, Soc. Linn. Lyon, Ann. n. s. 6: 344, 352.—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 12 (Korea).—Heikertinger, 1941, Kol. Rundsch. 27 (1/3): 31.

DISTRIBUTION: Europe, Caucasus, Asia Minor, W. Siberia, Korea.

## 274. Phyllotreta ochripes (Curtis)

Altica ochripes Curt., 1837, British Ent. 2: 630, figs. (Europe; ?BM).

Phyllotreta ochripes: Yuasa, 1934, Kontyû 8 (2): 109 (Japan).—Heikertinger, 1941, Kol.
 Rundsch. 27 (1/3): 52.—Chûjô & Kimoto, 1961, Pacific Ins. 3(1): 188 (hosts).

DISTRIBUTION: Europe, Caucasus, Siberia, Japan (Honshu).

HOSTS: Alliaria officinalis Andrz, Cardamine amara L., Sisymbrium alliaria Scop., Rorippa amphibia Bess. (Europe).

## 275. Phyllotreta rectilineata Chen

Phyllotreta rectilineata Chen, 1939, Sinensia 10 (1-6): 50 (Kwangsi: Yangso; Ac. SIN.).-Heikertinger, 1950, Kol. Rundsch. 31 (4/6): 140.

Phyllotreta chinensis Heikertinger, 1941, Kol. Rundsch. 27: 28 (Kiangsi, Tonkin; ?WIEN); 1950, op. cit. 31 (4/6): 140 (Synonymized).

DISTRIBUTION: Japan, S. China (Kwangsi, Kiangsi, Hupeh, Fukien), N. Vietnam (Tonkin).

HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan Distr., 23. VII. 1948, Gressitt (CAS). FUKIEN: 3, Shui-pei-kai, 17. IX. 1941, 3. V. 1942; 6, Ta-chu-lan, 1000 m, V, VIII. 1942, V. 1943, Shaowu; 3, Shaowu City, IX, XII. 1942; 4, Yungan City, 24–25, 29. IX. 1940, Maa (BISHOP).

### 276. Phyllotreta striolata (Fabricius)

Crioceris striolata Fab., 1801, Index Syst. Eleuth. 38 (Europe).

Phyllotreta sinuata: Baly, 1874, Ent. Soc. Lond., Trans. 1874: 196 (Japan, China, E. Siberia).—Weise, 1889, Soc. Ent. Ross., Horae 23: 570 (Kansu).

- Phyllotreta vittata: Heikertinger, 1912, Reitter's Fauna Germ. 4: 175 (N. Europe, N. Asia, N. America).—Chen, 1935, Arkiv Zool. 27 A (5): 11 (S. Kansu); 1934, Sinensia 5 (3-4): 373, fig. 78 (S. China, Tonkin, Formosa).—Chûjô, 1936, Umeno Ent. Lab., Bull. 3: 13 (Korea); 1938, Mushi 11 (2): 167 (Tsingtau); 1940, op. cit. 13 (1): 7 (N. Korea).—Chen, 1939, Sinensia 10 (1-6): 50 (Kwangsi).—Heikertinger, 1941, Kol. Rundsch. 27 (1/3): 50.
- Phyllotreta striolata: Yuasa, 1950, Iconogr. Ins. Japon., 1207, fig. 3473 (Japan).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 189 (hosts).

DISTRIBUTION: Holarctica, China (Kansu, Kiangsu, Hupeh, Anhwei, Fukien, Kwang-

tung, Kwangsi), Hainan I., Korea, Ryukyu Is., Taiwan, Vietnam.

KIRIN: 2, Harbin, 15. IX. 1930, Jettmar (ZMB). KIANGSU: 2, Nan-king, VIII. 1919, Loomis (US). HUPEH: 1, Sui-sa-pa, 1000 m, 6. VIII; 3, Hsiao-ho, 10. VIII; 1, Chi-au Shan to Wang-chia-ying, 20. VII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). ANHWEI: 1, Kiu-hua Shan, IX. 1932, G. Liu (MCZ). FUKIEN: 7, Shui-pei-kai, X. 1941, V. 1942; Ta-chu-lan, 1000 m, IV-V, XI. 1942, III, V. 1943, Shaowu; 8, Ho-tien, 16. IV. 1941; 2, Tsing-shan-pu, 15. VI. 1940; 9, Niu-ling, 21. IV. 1941, Changting; many, Yungan City, VII, IX-XI. 1940, I-III, V, XI. 1941; 9, Ying-ting, 10. VIII. 1940, Maa (BISHOP). KWANGTUNG: 1, Wai-chow, Hweiyang Distr., 4. IV. 1940; 1, Canton, Honan I., P'an-yu Distr., IV. 1927, Gressitt & To (LINGNAN); 1, Lam-tsuen Valley, New Territories, Hong Kong, 15. VII. 1962, on Chinese cabbage, Gressitt; 1, Pak-wan San, Canton, XII. 1910–IV. 1911, Mell (ZMB). HAINAN I.: 1, Fan-heang, 7. VI. 1935, Gressitt (CAS).

HOSTS: Various Cruciferae incl. Brassica campestris L. subsp. Rapa Hook. fil. & Andres., B. cernua Hemsl., B. oleracea L. var. capitata L., Raphanus sativus L. var. acanthiformis Makino.

## 277. Phyllotreta vittula (Redtenbacher)

Haltica vittula Redt., 1849, Fauna Austriaca, 531 (Europe; ? WIEN).

 Phyllotreta vittula: Foudras, 1861, Soc. Linn. Lyon, Ann. n. s. 6: 344, 349.—Chûjô, 1940, Mushi 13 (1): 7 (N. Korea).—Heikertinger, 1941, Kol. Rundsch. 27 (1/3): 33.

DISTRIBUTION : Europe, N. Africa, Caucasus, C. Asia, Siberia, Korea.

#### 278. Phyllotreta yunnanica Chen

Phyllotreta yunnanica Chen, 1933, Sinensia 3 (9): 251 (Yunnan-fu; PARIS).—Chen, 1934, Sinensia 5 (3-4): 374; 1935, Arkiv Zool. 27 A (5): 12 (S. Kansu).—Heikertinger, 1941, Kol. Rundsch, 27 (4/6): 88, footnote.

DISTRIBUTION: W. China (Yunnan, S. Kansu).

YUNNAN: 1, Western Hills, nr. Kunming, 2100 m, 6. VII. 1940, Gressitt (BISHOP).

### Genus Batophila Foudras

Batophila Foud., 1860, Soc. Linn. Lyon, Ann. n. s. 6: 146, 378 (type: Galeruca rubi Paykull; Europe).—Heikertinger, 1921, Kol. Rundsch. 9: 87; 1924, loc. cit. 11 (1-2): 37; 1925, t. c. (3-4): 52.—Chen, 1933, Sinensia 3: 228.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357.—Chen, 1936, Sinensia 7 (6): 639.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 7: 54.—Heikertinger, 1948, Kol. Rundsch. 31 (1/3): 50; 1960, t. c. (4/6): 125.

#### KEY TO CHINESE SPECIES OF BATOPHILA

875

### 279. Batophila acutangula Heikertinger

Batophila acutangula Hktgr., 1921, Kol. Rundsch. 9: 91, 96 (Ussuri, Amur; ?WIEN); 1948, op. cit. 31: 127 (113) (yangweii a synonym).

Batophila yangweii Chen, 1933, Sinensia 3 (9): 250 (Kiangsi: Kuling; Ac. SIN.).

Batophila acutangula acutangula: Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 175 (Japan).

DISTRIBUTION: E. Siberia, E. China (Kiangsi, Fukien, Hupeh), Taiwan, Japan (Honshu, Shikoku, Kyushu).

FUKIEN: 4, Ta-chu-lan, 1000 m, Shaowu, V, X. 1942, V. 1943, Maa (BISHOP). HUPEH: 1, Sui-sa-pa, 1000 m, Lichuan Distr., 25. VIII. 1948, Gressitt & Djou (CAS).

#### 280. Batophila sinensis Chen

Batophila sinensis Chen, 1939, Sinensia 10 (1-6): 62 (W. Kansu: Ma-ho-chan; Shansi: Kiao-cheu; HOANGHO-PAIHO).—Heikertinger, 1948, Kol. Rundsch. 31: 125 (111).
DISTRIBUTION: N. China (Kansu, Shansi).

### 281. Batophila subcostata Chen

Batophila subcostata Chen, 1939, Sinensia 10(1-6): 63 (SE Kansu: Cheu-menn; HOANGHO-РАІНО).—Heikertinger, 1948, Kol. Rundsch. 31: 125 (111).

DISTRIBUTION: N. China (SE Kansu).

### 282. Batophila subplana Chen

Batophila subplana Chen, 1939, Sinensia 10 (1-6): 63 (Kansu; Hopeh: Mao-chan; HOANGHO-PAIHO).—Heikertinger, 1948, Kol. Rundsch. 31: 126 (112).

DISTRIBUTION: N. China (Kansu, Hopei).

### Genus Sinaltica Chen

Sinaltica Chen, 1939, Sinensia 10 (1-6): 60 (type: S. exigua Chen).

# 283. Sinaltica exigua Chen

Sinaltica exigua Chen, 1939, Sinensia 10 (1-6): 61 (Kansu; Ma-ho-chan; S. Shansi: Kiaocheu; HOANGHO-PAIHO).

Color shiny black, mixed with rufous; antenna and legs flavous; femora fuscous to piceous. Length 1.4-1.7 mm.

DISTRIBUTION: N. China (Kansu, S. Shansi).
#### Gressitt & Kimoto: Chrysomelidae of China

#### Genus Aphthonomorpha Chen

Aphthonomorpha Chen, 1934, Sinensia 5 (3-4): 357 (type: Crepidodera collaris Baly); 1936, op. cit. 7(6): 639.

#### KEY TO CHINESE SPECIES OF APHTHONOMORPHA

..... minuta \*

#### 284. Aphthonomorpha collaris (Baly)

Crepidodera collaris Baly, 1877, Ent. Soc. Lond., Trans. 1877: 161 (Shanghai; BM). Aphthona? collaris: Chen, 1933, Sinensia 3 (9): 252 (Kiangsi, Tonkin).

Aphthonomorpha collaris: Chen, 1934, Sinensia 5(3-4): 357 (Formosa; PARIS); 1934, Soc. Ent. France, Ann. 103: 179, 185.—Chûjô, 1937, Nat. Hist. Soc. Formosa, Trans. 27 (161-64): 123.

DISTRIBUTION: S. China (Kiangsu, Kiangsi, Fukien, Kwangtung, Hunan, Hupeh); N. Vietnam (Tonkin), Taiwan, Japan.

FUKIEN: 2, Niu-ling, Changting, 21. IV. 1941; 1, Wingan, 4. IV. 1940; 1, Chi-shih, Chungan, 16. II. 1939; 1, Wen-heng, Liencheng, 9. VI. 1939; 1, Ta-chu-lan, Shaowu, 4–9. VI. 1943, Maa (BISHOP, CAS). HUNAN: 3, Pu-shih, Luki, 26. IV. 1939, Maa (BISHOP). HU-PEH: 1, Hsiao-ho, Lichuan Distr., 15. VIII. 1948, Gressitt & Djou (CAS). KWANGTUNG: 1, Taam-Yuen-tung, Lin Distr., 4–6. VI. 1934, F. K. To (LINGNAN).

## Genus Manobidia Chen

Manobidia Chen, 1934, Sinensia 5 (3-4): 233, 358 (type: M. antennata Chen; Tonkin); 1936, op. cit. 7(6): 639.

#### Key to Chinese species of Manobidia

#### 285. Manobidia intermedia Chen

Manobidia intermedia Chen, 1934, Sinensia 5 (3-4): 360 (Hong Kong; Tonkin: reg. de Luc Nam; PARIS).

DISTRIBUTION: S. China (Hong Kong), N. Vietnam (Tonkin).

## 286. Manobidia nipponica Chûjô Fig. 234, a.

Manobidia nipponica Chûjô, 1959, Kagawa Univ., Mem. Fac. Lib. Arts & Educ. 2 (81): 11 (Kyushu, Shikoku; CHUJO).

DISTRIBUTION: Japan (Kyushu, Shikoku), China (Hupeh, Kiangsi, Fukien).

HUPEH: 10, Sui-sa-pa, 1000 m, VII-IX; 1, Hsiao-ho, 8. VIII, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). KIANGSI: 1, Tai-au-hong, 540 m, S of Sungwu, 5. VII. 1936, Gressitt (CAS). FUKIEN: 1, Ta-chu-lan, Shaowu, 1–3. V. 1943; 1, Niu-ling, Changting, 21. IV. 1941, Maa (BISHOP).

## 287. Manobidia simplicithorax Chen

Manobidia simplicithorax Chen, 1934, Sinensia 5 (3-4): 350, 360 (Tonkin; PARIS).

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kwangtung), Hainan.

KWANGTUNG: 1, Kau-lin San, 700–900 m, Lien-p'ing Distr., 16. IV. 1940, Gressitt & To. HAINAN: 2, Lia-mui, 350 m, 2. VIII; 1, Ta-hian, 13. VI, Gressitt, 1935 (CAS).

## Genus Liprus Motschulsky

- Liprus Motsch., 1860, Etudes Ent. 9: 26 (type: L. punctatostriatus Mots.; Japan;=Diabrotica rufotestacea Mots.,=Crepidodera (Crepidomorpha) carinulata Fleisch.).—Chûjô & Kimoto, 1960, Niponius 1 (4): 8.
- Crepidomorpha Fleischer, 1916, Wien. Ent. Ztg. 35: 222 (type: Crepidodera (Crepidomorpha) carinulata Fleischer; as a subgenus of Crepidodera).—Heikertinger, 1923, Wien. Ent. Ztg. 40: 136, 139; 1924, Kol. Rundsch. 11 (1-2): 40; 1925, t. c. (3-4): 52.— Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 357; 1936, loc. cit. 26: 19.—Heikertinger, 1948, Kol. Rundsch. 31 (1/3): 44.

## Key to Chinese species of Liprus

288. Liprus nuchalis Gressitt and Kimoto, n. sp. Fig. 234, b.

*Male*: Testaceous above; vertex pitchy brown, pronotum slightly darker than elytra; antenna with segments 1-2 brown, 3-11 dark reddish brown; venter testaceous; legs with femora largely testaceous, tibiae and tarsi dark red-brown. Mostly glabrous above; labrum and frontoclypeus sparsely clothed with pale subadpressed hairs; prothorax with anterior and basal margins fringed with a row of short pale hairs; antenna moderately clothed with

mostly pale yellow, subadpressed hairs; ventral surfaces moderately clothed with pale adpressed hairs, but metasternum partially glabrous; legs moderately pubescent with pale subadpressed hairs.

*Head* about as long as broad, widest at eyes and slightly broader than breadth of pronotum at anterior angles; labrum with anterior margin nearly straight; frontoclypeus strongly elevated behind anterior margin; interantennal space strongly elevated and feebly convex medially, slightly broader than transverse diameter of antennal socket; eye subrounded, greatest transverse diameter 3/5 as broad as interocular space; gena weakly convex; postantennal tubercles elongate and extending to interantennal space, weakly swollen and medially separated by a narrow groove, basal margin distinct and transversely rounded to a deep, sublateral fovea; vertex finely punctate, with surface evenly convex. *Antenna* nearly 2/3 as long as body,



Fig. 233. *S* genitalia. *Liprus punctatostriatus* Motschulsky.

cylindrical; segment 1 fully  $2 \times$  as long as wide; 2nd 3/7 as long as 1, slightly longer than wide; 3-5 subequal,  $2 \times as$  long as 2; 6-7 subequal, distinctly longer than 5; 8 slightly shorter than 7; 9 slightly longer than 8; 10 distinctly shorter than 9; 11th 1/4 longer than 10, apex briefly rounded. Prothorax 4/5 as long as broad, widest in anterior 1/3, distinctly constricted basally and much narrower than breadth of elytra at basal margin; anterior margin feebly concave at middle, anterior angle nearly obtuse and weakly swollen, lateral margin sinuate, posterior angle barely obtuse, basal margin nearly straight; disc sparsely punctate, ante-basal impression distinct, laterally ending in a short, longitudinal impression attaining basal margin. Scutellum broadly rounded apically. Elytron fully  $3.5 \times as$  long as broad, lateral margin rather straight, with apical 1/3 rounded to apex; epipleuron gradually narrowed and continuing nearly to apex; disc with 9 regular rows of punctures and a scutellar row ending in basal 1/4, punctures mostly 1/3 to 1/2 as large as transverse interspaces and 0.5 to  $1 \times$  as large as longitudinal interspaces. Ventral surfaces mostly granulate; abdominal sternites moderately convex, last sternite sinuate apically, surface with a narrow line medially. Legs moderately large; hind femur not strongly swollen, about  $2.5 \times$  as long as wide; hind tibia as long as femur; hind tarsus 3/4 as long as tibia, segment 1 nearly as long as 2 + 3 and distinctly longer than last. Aedeagus strongly arched, about  $5 \times$  as long as broad, apically acute, with extreme apex weakly and acutely produced. Length 4.0 mm; breadth 1.8.

*Female*: Pitchy reddish brown and testaceous above; head and pronotum pitchy reddish brown, elytron testaceous; antenna with segments 1-2 pitchy brown, 3-11 reddish brown; ventral surfaces reddish brown on thorax and testaceous on abdomen; legs uniformly dark, reddish brown. Antenna about 2/3 as long as body, cylindrical. Last abdominal sternite broadly rounded apically. Length 3.5 mm; breadth 1.6.

*Paratypes*: Mostly testaceous above; head and pronotum testaceous to pitchy reddish brown; antenna with segments 1-2 brown to red-brown, 3-11 dark reddish brown; legs with femora testaceous, slightly darkened apically, tibiae and tarsi reddish brown. Length 3.7-4.2 mm; breadth 1.6-1.9

DISTRIBUTION: SE China (Fukien).

Holotype ♂ (BISHOP 3323), Ta-chu-lan, 1000 m, Shaowu, NW Fukien Prov., 6. V. 1943, T. C. Maa; allotopotype ♀ (BISHOP), 1–3. VI. 1943, Maa; 2 paratopotypes (CAS, US), 10– 14. IV, 6. V. 1943, Maa; 1 paratype (BISHOP), Lin-ling, Changting, 24. IV. 1941, Maa.

Differs from *punctatostriatus* Mots. in being smaller and in having subbasal pronotal impression almost impunctate medially.

289. Liprus punctatostriatus Motschulsky Fig. 233.

- Liprus punctato-striatus Mots., 1860, Etudes Ent. 9: 26 (Japan; ?type lost).—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25 (145): 396.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 181 (hosts).
- Diabrotica rufotestaceus Mots., 1866, Soc. Nat. Moscou, Bull. **39** (1): 175 (Japan; ?type destroyed).
- Crepidodera japonica Jacoby, 1885 (nec Baly, 1877), Zool. Soc. Lond., Proc. 1885: 723, 754 (Nikko, Japan).—Heikertinger, 1924, Kol. Rundsch. 11 (1–2): 40 (syn.).
- Crepidodera japanensis Schönfeldt, 1887, Cat. Col. Japan, 152 (Nikko; new name for C. japonica Jac.).

Crepidodera (Crepidomorpha) carinulata Fleischer, 1916, Wien. Ent. Ztg. 35: 222 (Japan).

Crepidomorpha japonica: Chen, 1935, Arkiv Zool. 27 A (5): 8 (S. Kansu).

- Crepidomorpha rufotestacea: Chûjô, 1942, Nat. Hist. Soc. Formosa, Trans. 32 (220): 36 (Kankyo-Hokudo, Korea).—Heikertinger, 1948, Kol. Rundsch. 31 (1/3): 44 (Japan, Kansu).
  - DISTRIBUTION: Japan (Honshu, Kyushu), Korea, N. China (Kansu, Kirin).

KIRIN: 1, Er-sen-tien-tze, 23. VI. 1940, Weymarn (CAS).

HOSTS: Equisetum arvense L., Hosta spp. (Japan).



Fig. 234. a, Manobidia nipponica Chûjô; b, Liprus nuchalis n. sp.; c, Manobia sinensis n. sp.

#### Genus Ogloblinia Csiki

- Ochrosoma Ogloblin, 1930 (nec Herr.-Schaeff., 1854), Eos 6: 104 (type: Crepidodera nigripennis Motsch.; Ceylon, Burma).—Chen, 1934, Sinensia 5 (3-4): 234, 380; 1936, op. cit. 7 (6): 642.
- Ogloblinia Csiki, 1940, IN Heikertinger & Csiki, Col. Cat. 166: 280 (new name for Ochrosoma Ogloblin).

## 290. Ogloblinia affinis (Chen), NEW COMBINATION

Ochrosoma affinis Chen, 1939, Sinensia 10: 43 (Kwangsi: Yangso; Ac. SIN.). DISTRIBUTION: SW China (Kwangsi).

## Genus Manobia Jacoby

Manobia Jac., 1885, Mus. Civ. Genova, Ann. ser. 2, 2 (22): 73 (type: *M. nigripennis* Jac., first species described).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 46.—Maulik, 1926, Fauna India, Chrys. & Halt., 285, 407.—Chen, 1934, Sinensia 5 (3-4): 234, 381.
—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 20.—Chen, 1936, Sinensia 7 (6): 642.—Heikertinger, 1948, Kol. Rundsch. 31 (1/3): 48.

#### KEY TO CHINESE SPECIES OF MANOBIA

291. Manobia sinensis Gressitt and Kimoto, n. sp. Figs. 234, c & 235, a.

Shiny piceous above; antenna entirely pale pitchy brown; ventral surfaces dark reddish brown to piceous; legs pale pitchy brown, but hind femur distinctly darker, reddish brown. Glabrous above, except for sparse pubescence on anterior portion of head; antenna moderately pubescent with mostly short, pale subadpressed hairs; ventral surfaces moderately clothed with pale, adpressed hairs; legs sparsely to moderately pubescent, hind femur mostly glabrous on swollen surface, but moderately clothed with short, pale adpressed hairs apically, hind tibia moderately clothed with longer, adpressed hairs and hind tarsus moderately clothed above.

Head nearly  $1/8 \times 1000$  means than broad, broadest at eyes and slightly narrower than breadth of pronotum and anterior angles; labrum with anterior edge weakly convex; frontoclypeus carinate medially on upper 4/5, anterior 1/3 weakly convex transversely and sides shallowly depressed behind; interantennal space convex, about as broad as transverse diameter of antennal socket; eye subrounded, greatest transverse diameter 1/2 as broad as interocular space; gena weakly convex near lower margin of eye; postantennal tubercles subtriangular and extending to interantennal space, weakly swollen and medially separated by a narrow groove, basal margin distinct and laterally oblique from middle; vertex impunctate, with surface rather evenly convex. Antenna about 2/3 as long as body, segments 3–11 slightly increasing in thickness; 1st segment 2 × as long as wide; 2nd 5/8 as long as

1, distinctly longer than wide; 3-4 subequal, slightly shorter than 2; 5 distinctly longer than 4; 6 distinctly shorter than 5; 7–10 subequal, 1/3 longer than 6; 11th 1/3 longer than 10, apex briefly rounded. Prothorax 4/5 as long as broad, broadest at anterior angles and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle oblique and slightly swollen, lateral margin nearly straight, posterior angle oblique, basal margin strongly convex and sinuate; disc moderately punctate, surface with



Fig. 235. & genitalia. a, Manobia sinensis n. sp.; b, M. piceipennis Chen.

Length 2.0 mm; breadth 1.1.

Paratypes: Pitchy brown to piceous above. Length 1.8-2.0 mm; breadth 1.0-1.1.

DISTRIBUTION: W. China (W. Hupeh).

Holotype (CAS), Sui-sa-pa, 1000 m, Lichuan Distr., W. Hupeh Prov., 17. IX. 1948, Gressitt & Djou; 8 paratopotypes (CAS, BISHOP, LINGNAN, BMNH), 22. VII-12. IX. 1948, Gressitt & Djou; 2 paratypes (CAS), Liang-ho-keu, Lichuan Distr., W. Hupeh Prov., 4, 9. IX. 1948, Gressitt & Djou.

Differs from piceipennis Chen in being slightly darker and in having pronotum more elongate and pronotal disc moderately punctured instead of nearly impunctate.

#### 292. Manobia piceipennis Chen Fig. 235, b.

Manobia piceipennis Chen, 1934, Sinensia 5 (3-4): 383, 384 (Tonkin; ? PARIS).

DISTRIBUTION: N. Vietnam (Tonkin), S. China (Kiangsi, Kwangtung).

KIANGSI: 1, Hong Shan, 1000 m, 25. VI. 1936, Gressitt (CAS). KWANGTUNG: 3, Yim-na Shan, 650 m, 10-15. VI. 1936, Gressitt (CAS).

## Genus Phygasia Dejean

Phygasia Dejean, 1837, Cat. Col. ed. 3, 387 (type: Altica unicolor Olivier).-Baly, 1876, Ent.

anterior 2/3 more strongly convex than posterior 1/3; ante-basal impression distinct and slightly wider at middle. Scutellum nearly as long as broad, *Elytron* fully  $3 \times$  as long as broad, apex acute. lateral margin convex, with apical 1/3 narrowed to apex; epipleuron sinuate, moderately narrowed at middle and continuing nearly to apex; disc with 9 irregular rows of punctures and a scutellar row ending at basal 1/3, punctures mostly 1/3 as large as interspaces transversely and 1/2 as large as interspaces longitudinally; surface transversely impressed in basal 1/4; humerus and sublateral interstices moderately swollen. Ventral surfaces sparsely and weakly punctate; metasternum mostly impunctate laterally; abdominal sternites weakly convex, last sternite slightly swollen medially and rounded apically. Legs large; hind femur strongly

femur; hind tarsus 4/7 as long as tibia, segment

1 as long as 2+3 and distinctly longer than last.

Soc. Lond., Trans. 1876: 445.—Maulik, 1926, Fauna India, Chrys. & Halt., 286, 412.
—Chen, 1933, Sinensia 3 (9): 221, 236; 1934, op. cit. 5 (3-4): 234, 376.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 355.—Chen, 1936, Sinensia 7 (6): 643.—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 17.—Heikertinger, 1948, Kol. Rundsch. 31 (1/3): 45.

Scallodera Harold, 1877, Deutsche Ent. Zeitschr. 21: 365 (type: Graptodera fulvipennis Baly; Japan).—Heikertinger, 1924, Kol. Rundsch. 11 (1-2): 38; 1925, op. cit. (3-4): 52.

Aldrisma Fairm., 1888, Rev. d'Ent. 7: 156 (type: A. externecostata Fairm. = P. fulvipennis Baly).

#### KEY TO CHINESE SPECIES OF PHYGASIA

1.	Pronotum piceous 2
	Pronotum yellow or reddish brown
2.	Elytron entirely reddish testaceous with 1 costa; length 5-6 mm 295. fulvipennis
	Elytron ochraceous and piceous with 3 costae; length 6.0-7.5 mm 293. dorsata
3.	Elytron ochraceous, finely margined with dark brown, with 1 lateral costa; length
	5.0–5.8 mm
	Elytron dark brown, with a large ochraceous area at middle, and without costae;

#### 293. Phygasia dorsata Baly

Phygasia dorsata Baly, 1878, Ann. Mag. Nat. Hist. ser. 5, 2: 231 (India; BM).—Maulik, 1926, Fauna India, Chrys. & Halt., 414.—Chen, 1934, Sinensia 5 (3-4): 377 (Tonkin: Hoa-Binh; Sikkim; India; Sumatra).

Phygasia dorsata var. subfasciata Chen, 1933, Sinensia 3 (9): 236 (Szechuan: Chunking; Yunnan: Djou-kou-la; ? BRUXELLES); 1934, op. cit. 5 (3-4): 377.

DISTRIBUTION: Tonkin, Sikkim, India, Sumatra, W. China (Szechuan, Yunnan). YUNNAN: 1, Yunnan-sen (ZMB).

## 294. Phygasia eschatia Gressitt and Kimoto, n. sp. Fig. 236.

Mostly yellow and ochraceous above; head pale yellow, with vertex a little darker, pronotum pale yellow, scutellum chestnut brown, elytron pale ochraceous, with epipleuron and upper margins narrowly bordered with dark chestnut brown; antenna with segments 1–2 pale yellow, 3–4 tinged with brown, 5–11 reddish brown; ventral surfaces and legs evenly pale yellow. Glabrous above except for anterior portion of head; labrum with a transverse row of about 4 fine, long subadpressed hairs; frontoclypeus sparsely pubescent along anterior margin; antenna moderately pubescent with mostly short, pale subadpressed hairs; legs moderately clothed with pale subadpressed hairs.

Head about as long as broad, widest at eyes and distinctly narrower than breadth of pronotum at anterior angles; clypeus with anterior margin nearly straight; frontoclypeus carinate medially and along anterior margin, sides moderately excavated; interantennal space convex, about 4/5 as broad as transverse diameter of antennal socket; eye subrounded, greatest transverse diameter about 4/9 as broad as interocular space; gena barely exca-



Fig. 236. Phygasia eschatia n. sp.

vated near lower margin of eye; frontal tubercles subtriangular and extending to interantennal space. distinctly elevated and narrowly separated medially by a narrow groove, basal margin well impressed and transversely sinuate; vertex impunctate, with surface evenly convex. Antenna 2/3 as long as body, cylindrical; 1st segment  $2 \times as$  long as wide; 2 about 1/3 as long as 1, fully as wide as long; 3 fully  $2 \times$  as long as 2; 4–7 subequal, distinctly longer than 3; 8 slightly shorter than 7; 9–10 subequal, slightly shorter than 8; 11th 1/4 longer than 10. Prothorax 9/16 as long as broad, widest at middle and distinctly narrower than breadth of elytra at basal margin; anterior margin nearly straight, anterior angle moderately produced and broadly rounded, lateral margin strongly convex, posterior angle acutely produced, basal margin weakly convex and sinuate; disc nearly impunctate, weakly and unevenly convex; ante-basal impression gradually concave, but distinct. Scutellum slightly broader than long, apex briefly rounded. Elytron fully  $3 \times$  as long as broad, lateral margin weakly

convex, with apical 1/3 briefly rounded to apex; epipleuron weakly sinuate, gradually narrowing at middle and ending subapically; disc profusely punctate, punctures rather small, mostly 1/2 to 1/4 as large as interspaces; surface laterally with a narrow, sublateral, long-itudinal swelling extending from humerus to nearly to apex. *Ventral surfaces* sparsely and weakly punctate on thorax and moderately punctate on abdomen; abominal sternites moderately swollen medially, last sternite with apical margin convex and weakly sinuate. *Legs* large; hind femur moderately swollen, fully  $3 \times as$  long as broad; hind tibia weakly sinuate, as long as femur; hind tarsus about 4/7 as long as tibia, segment 1 as long as 2+3 and slightly longer than last. Length 5.8 mm; breadth 3.2.

*Paratype*: Ochraceous and chestnut brown above; head and pronotum ochraceous, elytron dull ochraceous and margins moderately bordered with dark chestnut brown; antenna with segments 1–2 pitchy brown, 3–4 reddish brown, 5–10 dark reddish brown, 11 distinctly paler than 10; ventral surfaces pale ochraceous; legs with femora ochraceous, tibiae and tarsi reddish brown. Length 5.0 mm; breadth 2.6.

DISTRIBUTION: W. China (Szechuan, Sikang).

Holotype (U. S. Nat. Mus.), Ta-ning-ho, Szechuan, V–VI. 1904, Eliot Blackwelder; 1 paratype (US), nr. Mu-ping, 1000–1500 m, Sikang, 1–2. VII. 1929, D. C. Graham.

Differs from ornata Baly in having a lateral costa on elytron and dorsum smooth and not shagreened.

#### 295. Phygasia fulvipennis (Baly)

Graptodera fulvipennis Baly, 1874, Ent. Soc. Lond., Trans. 1874: 193 (Nagasaki; China; BM). Scallodera fulvipennis: Harold, 1877, Deuts. Ent. Ztschr. 1877: 365 (Hagi).

Aldrisma externecostata Fairmaire, 1888, Rev. d'Ent. 7: 156 (Peking; PARIS).

Phygasia fulvipennis: Chen, 1934, Sinensia 5 (3-4): 376 (Kiangsu, Kiangsi, Chekiang).— Heikertinger, 1948, Kol. Rundsch. 31 (1/3): 46 (Japan, Korea, China).—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 188 (hosts).

DISTRIBUTION: Japan (Honshu, Sado, Shikoku, Kyushu, Tsushima), China (Kirin, Hopei, Kiangsu, Kiangsi, Chekiang).

KIRIN: 1, Er-sen-tien-tze, 23. VI. 1940, Weymarn (CAS). KIANGSU: 1, Nanking, 21. IV. 1923, Van Dyke (CAS); 1, Chin-kiang, Reitter (FREY).

HOSTS: Cynanchum macranthum (Maxim.) Nakai var. Dickinsii (Franch. & Savat.) Ohwi, Metaplexis japonica (Thunb.) Makino, Paederia scandens (Lour.) Merr.

#### 296. Phygasia ornata

Phygasia ornata Baly, 1876, Ent. Soc. Lond., Trans. 1876: 445 (Hong Kong; BM).—Maulik, 1926, Fauna India, Chrys. & Halt., 413 (India, Burma, Andamans, Formosa).—Chen, 1933, Peking Nat. Hist. Bull. 8 (1): 48 (Kwangtung: Tscha-jiu-san; Kiangsi); 1934, Sinensia 5 (3-4): 376, fig. 79 (Kweichow, "Java").

DISTRIBUTION: S. China (Kwangtung, Kiangsi, Fukien, Kweichow), Taiwan, Andamans, S. Burma.

KIANGSI: 2, Ku-ling (Mt.), Kiukiang Distr., 23–26. VII. 1933, Djou (LINGNAN); 1, Hong San, 28. VI. 1936, Gressitt (CAS). FUKIEN: 1, Yen-ping, 1. VIII. 1917 (AMNH); 12, Ta-chu-lan, 1000 m, Shaowu, VI. 1942, VI–VIII. 1943, Maa (BISHOP); 1, Chin-Shan-fu, Changting, 18. VI. 1940; 1, San-king, Chungan, 11–12. VIII. 1945, Maa; 1, Chuen-chow, 30. V. 1935, S. W. Ling (CAS, BISHOP). KWANGTUNG: 3, Tsha-jiu-san, V–IX. 1910, Mell (ZMB).

#### Genus Lactica Erichson

Lactica Er., 1847, Archiv Naturg. 13 (1): 173 (type: L. melaleuca Er.; Peru).—Chapuis, 1875, Gen. Col. 11: 124.—Maulik, 1926, Fauna India, Chrys. & Halt., 426.—Chen, 1933, Sinensia 3 (9): 221; 1934, op. cit. 5 (3-4): 234, 378; 1936, op. cit. 7 (6): 644.

## Key to Chinese species of Lactica

Testaceous; antenna with apical 7 segments fuscous; elytron generally greenish blue, rarely blue; scutellum black; mesosternum, metasternum and abdomen blackish; ver-

#### 297. Lactica hanoiensis Chen

Lactica hanoiensis Chen, 1934, Sinensia 5(3-4): 379, fig. 81 (Tonkin: Hanoi; PARIS); 1939, op. cit. 19 (1-6): 35(Kwangsi: Yangso).

DISTRIBUTION: N. Vietnam (Tonkin), SW China (Kwangsi).

#### 298. Lactica perraudieri Allard

Lactica Perraudieri All., 1889, Soc. Ent. France, Ann. ser. 6, 9: 304 (Pnomh-Penh; PARIS).

--Chen, 1934, Sinensia 5 (3-4): 378 (Hainan; Tonkin: Hoa-Binh).

DISTRIBUTION: Cambodia, N. Vietnam, Hainan I.

HAINAN: 2, Hoi-how, K'iung-shan Distr., 28-31. III. 1932, To (LINGNAN); 1, Dwa-bi, 325 m, 19-30. VII; 1, Ta-hian, 15. VI, Gressitt, 1935 (CAS).

## Genus Altica Fabricius

Altica Geoffroy, 1762, Hist. Ins. 1: 244 (nomen nudum).-Fabricius, 1775, Syst. Ent. 112 (type: Chrysomela oleracea L.).

Graptodera Chevrolat, 1845, IN d'Orbigny, Dict. Univ. Hist. Nat. 6: 307.

Haltica: Chapuis, 1875, Gen. Col. 11: 59.-Heikertinger, 1912, Reitter's Fauna Germ. 4: 167; 1915, Wien. Ent. Ztg. 34: 377; 1924, Kol. Rundsch. 11 (1-2): 39, fig. 7;1924, t. c. 11 (3-4): 69.—Maulik, 1926, Fauna India, Chrys. & Halt., 418. —Chen, 1933, Sinensia 3: 214, 217, 221, fig. 3, 6c; 1934, op. cit. 5: 235, 390; 1934, Peking, Nat. Hist., Bull. 8: 44.—Chûjô, 1935, Nat. Hist. Soc. Formosa, Trans. 25: 356; 1936, op. cit. 26: 24.-Chen, 1936, Sinensia 7: 645.

## KEY TO CHINESE SPECIES OF ALTICA

1.	Elytron with a sharp longitudinal ridge situated in same level with humerus
	along lateral margin
	Elytron without a sharp longitudinal ridge, but in some cases feebly costate 3
2(1).	Dorsal surfaces smooth and elytron distinctly and strongly punctured; length
	5–6 mm
	Dorsal surfaces finely shagreened and elytron obsoletely punctured; length
	4–5 mm 307. latericosta
3(1).	Elytral punctation distinctly impressed 4
	Elytral punctation obsoletely impressed and interstices very finely shagreened;
	length 5.0-5.5 mm 305. deserticola
4(3).	Dorsal surface finely or weakly shagreened or granulate 5
	Dorsal surface smooth
5(4).	Smaller than 4.0 mm
	Larger than 4.3 mm; dorsal surface entirely finely and closely granulate; pro-
	notum rather strongly punctured; ventral surface of aedeagus with a pair
	of longitudinal ridges laterally, and the ridges almost subparallel in apical
	1/2, in most cases ventral surface longitudinally sulcate in apical $1/2$
6(5).	Aedeagus with apex triangularly produced; body more stout than in oleracea7
	Aedeagus with apex rounded, not triangularly produced, postantennal tubercles
	transverse; body rather slender; length 2.8-3.5 mm (Linnaeus, 1758; Europe,
	N. Asia) oleracea*
7(6).	Ventral surface of aedeagus with a pair of very sharp ridges which gradually
	separate from middle to apex; subbasal transverse furrow of pronotum rather
	deep and always distinct laterally; humerus distinctly raised; length 3.2-4.3
	mm
	Ventral surfaces of aedeagus with a pair of feebly raised costae and their

with hind femur shiny blue-black; length 3.5-4.0 mm ...... 301. caerulescens

## 299. Altica ampelophaga koreana Ogloblin

Haltica koreana Ogl., 1925, Rev. Russe d'Ent. 19(2): 93, fig. 2 (Korea: Sei-shin; ? Moscow). —Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 27 (Corea).

Haltica lythri Aube var. koreana: Heikertinger, 1930, Winkler's Cat. Col. Reg. Pal. 2: 1932. Haltica ampelophaga var. koreana: Hktgr. & Csiki, 1939, Col. Cat. 166: 220 (Korea).

DISTRIBUTION : Korea.



Fig. 237. & genitalia. a, Altica brevicosta Weise; b, A. cyanea (Weber).

*† A. kozlovi* seems to be referable here, but we are not including it in the key, because we are not certain of its status.

300. Altica brevicosta Weise Fig. 237, a.

Haltica brevicosta Ws., 1922, Tijdschr. Ent. 65: 110 (Luzon, Java, Canton, Darjeeling; ?HAMBURG).—Chen, 1933, Peking Nat. Hist. Bull. 8 (1): 51; 1934, Soc. Ent. France, Ann. 103: 176, 180; 1934, Sinensia 5 (3-4): 393.—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 25.

DISTRIBUTION: Philippines, Taiwan, S. China (Kwangtung, Chekiang), Hainan I., Vietnam (Tonkin), Java, India.

KWANGTUNG: 1, Canton, Honam I., Hoffmann; 1, Canton, IV, Hoffmann; 9, Canton, u. Pak-wan San, XII. 1910–IV. 1911, Mell (ZMB); 1, Paak-wan-sha-ts'uen, Sheung-shuiheung, I.in Distr., 24. VIII. 1934, To. HAINAN: 1, Hoihow, K'iung-shan Distr., 16. V. 1932, To. CHEKIANG: 1, Ningpo, Clermount (FREY). N. VIETNAM: 1, Chapa, Tonkin (FREY); 14, Hoa-Binh, W. Tonkin, Cooman (FREY).

301. Altica caerulescens (Baly) Fig. 238, b.

Graptodera caerulescens B., 1874, Ent. Soc. Lond., Trans. 1874: 190 (Japan, China: Chusan; BM).

Haltica caerulescens: Maulik, 1926, Fauna India, Chrys. & Halt., 421 (India, Japan, China).
—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 27 (Loochoo, Formosa); 1936, Umeno Ent. Lab., Bull. 3: 12 (Korea); 1941, Nat. Hist. Soc. Formosa, Trans. 31: 171 (Korea).

Altica caerulescens: Ohno, 1960, Toyo Univ., Bull. Dept. Lib. Arts 1: 91, 2 figs. (hosts). —Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 170 (coerulescens).

DISTRIBUTION: Japan, S. China (Szechuan, Hupeh, Kiangsu, Chekiang, Fukien, Kiangsi, Kwangtung), Korea, Ryukyu Is., Taiwan, India.

SZECHUAN: 1, Chungking, 1948, Gressitt & Djou (CAS, BISHOP); 1, nr. Fu-lin, Graham (US); 1, Sui-fu, Graham (US). HUPEH: 17, Sui-sa-pa, Lichuan Distr., Gressitt & Djou, VIII. 1948 (CAS, BISHOP); 2, Si-tau-taz & Wu-tsu-tsu (mts.), Hwang-mei Distr., 25–29. VIII. 1933, Djou (LINGNAN). KIANGSU: 2, Nanking, Loomis (US); 2, Nanking, Van Dyke (CAS); 1, Soo-chow (US). CHEKIANG: 2, Tung-lu, D. E. Wright (CAS); 4, Ning-po (ZMB). FUKIEN: 1, Yun-ling-shan, Koateng; 14, Ta-chu-lan, Shaowu, Maa (BI-SHOP, CAS). KIANGSI: 1, Shang-jao, Maa (BISHOP); 1, T'en-gan (ZMB). KWANG-TUNG: 1, Canton, Honam I., X. 1939, Gressitt. KOREA: 4, Chemulpo (ZMB).

HOSTS: Acalypha australis Linn., Fatuoa villosa (Thunb.) Nakai.

302. Altica cirsicola Ohno Fig. 241, a.

Altica cirsicola Ohno, 1960, Toyo Univ., Bull. Dept. Lib. Arts 1: 81, pl. 1, fig. 7, pl. 2, fig. 5-6 (Japan; Ohno).

DISTRIBUTION: Japan, China (Kirin, Shantung, Kiangsu, Kansu, Szechuan, Hupeh, Yunnan, Hunan, Fukien).

KIRIN: 8, Charbin (FREY); 2, Kung-chu-ling, Manchuria, M. Ito; 1, Mau-er-schan (FREY); 12, Harbin, v. Jettmar (ZMB). SHANTUNG: 2, Tsing-tau, S. Glaue (ZMB); 1, W. Shangtung, X-XI. 1903, Blackwelder (US). KIANGSU: 1, Shanghai, Loomis (US); 1, Shanghai, Van Dyke (CAS). KANSU: 1, Hoei-sien, S. Kansu (ZMB). SZECHUAN: 4,

Wei-chow, Graham (US); 1, O-er, nr. Wei-chow, Graham (US); 1, Cheng-tu, Graham (US). HUPEH: 1, Liang-ho-keu, Lichuan, 1948, Gressitt & Djou (CAS, BISHOP). YUN-NAN: 11, ?Kunming, C. L. Liu (US); 6, Yunnan (ZMB); 3, Chao-chow-fu, W. Yunnan, 2300 m, 21. IX-23. XII. 1914, (ZMB). HUNAN: 1, Tai-kwong Village, Lam-Mo (LING-NAN). FUKIEN: 11, Ta-chu-lan, 1000 m, Shaowu, Maa (BISHOP).

HOST: Cirsium sp.



Fig. 238. J genitalia. a, Altica coerulea Olivier; b, A. caerulescens (Baly).

303. Altica coerulea Olivier Fig. 238, a.

Haltica coerulea O1., 1791, Encycl. Meth. 6: 590 (India); 1808, Entomologie, 640, pl. 1, fig. 5 a-b.—Maulik, 1926, Fauna India, Chrys. & Halt., 423, fig. 138 (India, Ceylon).

DISTRIBUTION: India, Kashmir, Ceylon, S. China (Kwangtung, Fukien), Hainan I., N. Vietnam (Tonkin).

KWANGTUNG: 10, Yim-na Shan, 10. VI-15. VI. 1936, Gressitt (CAS); 4, Canton, Lingnan Univ. Campus, VIII. 1950, Gressitt (BISHOP); many, Tsha-jiu San, Mell (ZMB). FUKIEN: 2, nr. Foochow, Kellogg (US). HAINAN I.: 1, Five Finger Mts., Ting-an Distr., 25-27. IV. 1932, Hoffmann; 1, Tai-pin-ts'uen, Lam-ka-heung, Lai-mo-ling (mt. Range), Kiung-shan Distr., 20-24. IV. 1935, To; 1, Ch'ung-mei, 15 mi. SE of Naam-fung, Lin-kao Distr., 18-19. VIII. 1934, To; 1, Naam-fung, 16 km SSW of Noda, Tan-hsien Distr., 1. VII. 1932, Lau & To; 3, 10-24. III. 1909, Schoede (ZMB); 89, 10-25. III. 1909, H. Schoede (ZMB). N. VIETNAM: 5, Hoa-Binh, W. Tonkin, Cooman (FREY).

HOSTS: Jussiaea spp.

304. Altica cyanea (Weber) Fig. 237, b.

Galleruca cyanea W., 1801, Observ. Ent. 1: 67 (Sumatra; EDINBURGH).—Fabricius, 1801, Syst. Eleuth. 1: 497.

Haltica janthina Illiger, 1807, Mag. Inskde. 6: 115 (ianthina).

Haltica aenea Olivier, 1808, Ent. 6: 646, pl. 4, fig. 56,

- Haltica cyanea: Jacoby, 1889, Mus. Civ. Genova, Ann. 7 (27): 191.—Duvivier, 1892, Soc. Ent. Belg., Ann. 36: 429.—Jacoby, 1896, op. cit. 40: 254.—Weise, 1922, Tijdschr. Ent. 45: 109 (Java, Fukien, Formosa, Borneo).—Maulik, 1926, Fauna India, Chrys. & Halt., 422 (India, Burma).—Chen, 1933, Peking Nat. Hist. Bull. 8 (1): 51, fig. 2; 1934, Soc. Ent. France, Ann. 103: 176, 180; 1934, Sinensia 5 (3-4): 392, fig. 10.—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 25, 28.
- Haltica australis Blackburn, 1889, Linn. Soc. N. S. Wales, Proc. 3 (2) : 1493; R. Soc. S. Austral., Trans. 22: 75.
- Haltica birmanensis Jacoby, 1896, Soc. Ent. Belg., Ann. 40: 254.
- Haltica coerulea Weise, 1923, Arkiv Zool. 15 (12): 109.
- Altica cyanea: Ohno, 1960, Toyo Univ., Bull. Dept. Lib. Arts 1: 90, figs.—Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 170 (hosts).

DISTRIBUTION: Sunda Is., Malaya, India, Burma, Indochina, China (Shensi, Hupeh, Szechuan, Sikang, Chekiang, Anhwei, Fukien, Kwangtung), Japan, Taiwan, Philippines, New Guinea, Queensland.

HUPEH: 7, Sui-sa-pa, Lichuan Distr., VIII. 1948, Gressitt & Djou; 3, Liang-ho-keu to Wan-ga-ying, Gressitt (CAS, BISHOP). SZECHUAN: 1, SE of Lung-chue-pa, Wan-hsien Distr., 1948, Gressitt (CAS); 1, Kintung, Chau-chia-tsu, Djou (CAS); 1, Chung-king, 1948, Gressitt & Djou (CAS, BISHOP); 4, Mt. Omei, Franck (CAS); 50, Hua-yin-shan, 110 km N of Chungking, Graham (US); 20, Chungking, Graham (US); 25, Sui-fu, Graham (US); 18, Tseo-jia-geo, S of Sui-fu, Graham (US); 11, Mt Omei, Graham (US); 3, Kia-ting, Graham (US); 2, Cheng-tu, Graham (US); 1, Kuan-hsien, Graham (US); 1, Tsang-lin-shien, S of Sui-fu, Graham (US). SIKANG: 6, Ya-chow, Graham (US); 8, Ya-chow to Mou-pin, Graham (US); 8, betw. Ya-chow and Kia-ting, Graham (US); 1, betw. Ning-yuen-fu & Den-shiang-uin, Graham (US). CHEKIANG: 1, Hangchow, 22. V. 1923, Van Dyke (CAS); 10, Lan-chi, 12. VII. 1926, Van Dyke (CAS). FUKIEN: 140, Ta-chu-lan; 167, Shui-pei-kai; 40, Yungan City, IV. 1941; 6, Bohea hills, Chungan; 1, San-kang, Chungan; 2, Wingan; 2, Yun-ping Shan, Shaowu; 1, Ta-chu-lan, Shaowu; 3, Shaowu City; 2, Tsi-li-chiao, 1000 m, Chungan, 1941-43, Maa (BISHOP, CAS); 1, Fu-tschau, Siemssen (USNM); 1, Foochow, VII. 1926, Kellogg (US). KWANGTUNG: 22, Tin-tong, Lochang, 18. VIII. 1947, Gressitt (CAS, BISHOP); 1, Canton, Honan I., X. 1939, Gressitt; 1, Tsin-leong-shan, 5. VI. 1936, Gressitt; 3, Canton, Honan I., Hoffmann & K. C. Young (CAS, LINGNAN); 1, Iu-ling-paai, Yaoshan Distr., 17-18. IX. 1934, F. K. To; 1, Tai-shak-tau, Kai-kok, Chung-shan Distr., 11. VIII. 1933, H. Y. Chan & K. C. Lee (LINGNAN); many, Canton, Pak-wan San, 10. XII-11. IV, Mell (ZMB). KIANGSI: 3, Kanchow, 4. X. 1940, Maa (BISHOP). N. VIETNAM: 4, Hoabinh, W. Tonkin, Cooman (FREY).

HOSTS: Jussiaea spp., Ludwigia ovalis Miq.

#### 305. Altica deserticola Weise Figs. 293, c & 240, a.

Haltica deserticola Ws., 1889, Soc. Ent. Ross., Horae 23: 570, 635 (C. Mongolia; Amdo; ? Moscow).—Heikertinger, 1930, Winkler's Cat. Col. Reg. Pal., 1332.

DISTRIBUTION: SE Russia, Caucasus, C. Asia, Mongolia, N. China (Kirin, Tsinghai, Sikang).

KIRIN: 9, Hun-chung, 24. V. 1943, Nakao (KIMOTO); 2, Charbin (FREY); 2, Tschen

(FREY). TSINGHAI: 4, Kukunor (ZMB). SIKANG: 2, Ta-tsien-lu to Kiu-lung (FREY).

## 306. Altica kozlovi Ogloblin

Haltica kozlovi Ogl., 1921, Rev. Russe d'Ent. 17: 25, fig. 3 (Gansu; ? Moscow). This species is not included in the key.

DISTRIBUTION: N. China (Kansu).



Fig. 239. & genitalia. a, Altica latericosta Jacoby; b, A. pamiranica Weise; c, A. deserticola Weise.

307. Altica latericosta Jacoby Fig. 239, a.

Haltica latericosta Jac., 1885, Zool. Soc. Lond., Proc. 726, 754 (Sapporo; BM).—Matsumura, 1931, Nippon Konchu Daizukwan, 237, fig. 689.—Chen, 1934, Arkiv Zool. 27
A (5): 6, fig. 2 (S. Kansu, N. Szechuan).—Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 25.

Altica latericosta: Ohno, 1960, Toyo Univ., Bull. Dept. Lib. Arts 1: 79, figs. (hosts).-Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 171.

DISTRIBUTION: Japan, W. China (Kansu, Szechuan, Sikang).

SZECHUAN: 130, Sui-fu, Graham (US); 2, nr. Ta-tsien-lu, Graham (US); 1, Mt. Omei, Graham (US); 1, Song-pan?, Graham (US); 2, betw. Kia-ting and Sui-fu, Graham (US). SIKANG: 1, nr. Ning-yuen-fu, Graham (US); 1, U-long-kong nr. Ta-tsien-lu, Graham (US); 1, San-kiang, Wassuland, VIII. 1934, 1, San-kiang-kou, Friedrich (FREY).

HOSTS: Salix spp.

308. Altica pamiranica Weise Fig. 239, b.

Haltica pamiranica Ws., 1889, Soc. Ent. Ross., Horae 23: 635, nota (Pamir; ?ZMB); 1908,

1963

Exped. Filchner 10: 93.-Chen, 1934, Sinensia 5: 415.

DISTRIBUTION: Pamir, Turkestan, NW China (Sinkiang, Kansu, Shansi, Heilung-kiang).

SINKIANG: 2, Tekesthal, Thien Shan (ZMB). KANSU: 1, Tscho-lo Schan (FREY). SHANSI: 2, Shoh-chow (FREY). HEILUNGKIANG: 7, Tsi-tsi-har Sta. on Chinese East Ry., V. 1939, Loukashkin (CAS). ?PROV: 2, Lau-tsi-hou, nr. Singi-fu, W. Filchner (ZMB); 16, Shi-wan-tsze, Hiu-mou, Kiang-keou (ZMB).

#### 309. Altica tamaricis weisei Jacobson

- Haltica laeviuscula Weise, 1889 (nec Harold, 1875), Soc. Ent. Ross., Horae 23: 634 (Szetschuan; ? Moscow).
- Haltica Weisei Jacobson, 1892, Soc. Ent. Ross., Horae 26: 463 (new name for H. laeviuscula Weise, 1889).
- Haltica tamaricis Schranck var. Weisei Heikertinger, 1930, Winkler's Cat. Col. Reg. Pal. 2: 1332.

DISTRIBUTION: Mongolia, W. China (Szechuan), Korea.

We could not study the type of the subspecies but it is possible that this is a synonym of A. latericosta Jacoby.



Fig. 240. a, Altica deserticola Weise; b, A. viridicyanea (Baly).

310. Altica viridicyanea (Baly) Figs. 240, b & 241, b.

Graptodera viridicyanea B., 1874, Ent. Soc. Lond., Trans. 1874: 191 (Nagasaki; BM).
Haltica viridicyanea: Baly, 1878, Cist. Ent. 2: 376 (Sind Valley).—Weise, 1922, Tijdschr.
Ent. 65: 109 (Shikoku, Korea, Hong Kong).—Maulik, 1926, Fauna India, Chrys. & Halt., 422.—Matsumura, 1931, Nippon Konchu Daizukwan, 238, fig. 691.—Chen, 1934,

Sinensia 5 (3-4): 392.-Chûjô, 1936, Nat. Hist. Soc. Formosa, Trans. 26: 25.

Altica viridicyanea: Ohno, 1960, Toyo Univ., Bull. Dept. Lib. Arts 1: 86, figs. (host).-Chûjô & Kimoto, 1961, Pacific Ins. 3 (1): 172.

DISTRIBUTION: Japan, Ryukyu Is., Korea, China (Kirin, Hupeh, Szechuan, Kweichow, Yunnan, Fukien, Kwangtung), India.

KIRIN: 1, Harbin, v. Jettmar (ZMB). HUPEH: 83, Sui-sa-pa, Lichuan Distr.; 11, Liangho-keu, Lichuan; 6, Hsiao-ho, Lichuan; 2, Wang-chia-ying to Sui-sa-pa, Lichuan; 1, Motai-chi-au Shan; 1, SE of Lung-chu-pa, Wan Distr.; all VII–IX. 1948, Gressitt & Djou (CAS, BISHOP). FUKIEN: 1, Shui-pei-kai, Shaowu, Maa; 1, Shaowu City, Maa (BISHOP).

HOSTS: Geranium nepalense Sweet var. Thunbergii (Sieb. & Zucc.) Kudo.



Fig. 241. S genitalia. a, Altica cirsicola Ohno; b, A. viridicyanea (Baly).

#### Subfamily HISPINAE

This subfamily is very distinct from the preceding ones. It is generally easily distinguished from the Cassidinae, but appears to merge with it through a few genera. The larva of *Callispa* closely resembles those of the Cassidinae. The two groups together (Cryptostomata), are sometimes considered to represent a single unit, or a separate family. The Hispinae are relatively well known, to a considerable extent through the efforts of Erich Uhmann. The Chinese fauna was monographed by Gressitt in 1950 [Lingnan Sci. Jour. 23 (1-2): 53-142, pls. 4-8], and further additions were made by Gressitt in 1953 and by Uhmann in 1955.

Tribe Botryonopini

Botryonopa (no. 1)

1. bicolor.

Tribe Anisoderini

Estigmena (no. 2)

2. chinensis. Lasiochila (no. 3) 3. insulana fukiena Tribe Callispini Callispa (nos. 4–15) 4. angusta; 5. apicalis; 6. bowringii; 7. cyanipennis; 8. dimidiatipennis recticollis; 9. donckieri; 10. elliptica; 11. f. fortunii; 12. f. emarginata; 13. karena; 14. ruficollis; 15. sundara. Tribe Leptispini Leptispa (nos. 16-20) 16. abdominalis; 17. fruhstorferi; 18. godwini; 19. longipennis; 20. virida. Tribe Coelaenomenoderini Javeta (no. 21) 21. foveicollis. Tribe Promecothecini Promecotheca (no. 22) 22. cyanipes trilbyi. Tribe Gonophorini Wallaceana (no. 23) 23. sita. Neodownesia (no. 24) 24. rubra. Downesia (nos. 25-32) 25. balyi; 26. gracilis; 27. kwangtunga; 28. latenigra basipennis; 29. marginicollis; 30. strandi; 31. tarsata; 32. vandykei. Agonita (nos. 33-41) 33. carbunculus; 34. chinensis; 35. discrepans; 36. immaculata; 37. laticeps; 38. maculigera; 39. parvula tricolor; 40. picea; 41. sculpturata. Gonophora (no. 42) 42. pulchella. Tribe Chaeridionini Chaeridiona (no. 43) 43. cupreovirida. Prionispa (no. 44) 44. sinica. Tribe Oncocephalini Oncocephala (no. 45)

45. atratangula.

#### Tribe Hispini

Hispellinus (nos. 46-50)

46. callicanthus; 47. chinensis; 48. formosanus; 49. moerens; 50. moestus.

Acmenychus (no. 51)

51. inermis.

Sinispa (no. 52)

52. yunnana.

Hispa (nos. 53-54)

53. atra; 54. andrewesi.

Asamangulia (no. 55)

55. longispina.

Rhadinosa (nos. 56-61)

56. **abnormis**; 57. fleutiauxi; 58. lebongensis; 59. nigrocyanea; 60. reticulata; 61. tayana. Dactylispa (nos. 62–106)

62. angulosa; 63. approximata; 64. asoka; 65. balyi; 66. cervicornis; 67. chaturanga; 68. chinensis; 69. crassicuspis; 70. digitata; 71. excisa; 72. ferrugineonigra; 73. filiola; 74. gressitti; 75. higoniae; 76. issikii; 77. kaulina; 78. klapperichi; 79. latispina saurus; 80. longispina; 81. longula; 82. luhi; 83. maculithorax; 84. marginicollis; 85. masonii; 86. mauliki; 87. nigrodiscalis; 88. pallidicollis; 89. parbatya; 90. paucispina; 91. pici; 92. planispina; 93. platyacantha; 94. pungens; 95. reitteri; 96. s. sauteri; 97. s. piceomaculata; 98. sinui spina; 99. sjoestedti; 100. spectabilis; 101. stoetzneri; 102. subquadrata; 103. superspinosa; 104. tuberculata; 105. uhmanni; 106. vulnifica.

Dicladispa (nos. 107-109)

107. armigera; 108. boutani (=similis); 109. semicyanea.

Platypria (nos. 110-113)

110. alces; 111. hystrix; 112. melli; 113. yunnana.

Cassidispa (nos. 114-116)

114. bipuncticollis; 115. maderi; 116. mirabilis.

#### KEY TO CHINESE TRIBES AND GENERA OF HISPINAE

1963

internally; prothorax constricted anterior to base (Promecothecini) Promecotheca
4(3). Elytron generally with pairs of puncture rows divided by prominent costae;
antennal segment 3 not much longer than 1 or 2; posterior tibia untoothed 5
Elytron with 1 more prominent costa; pronotum with foveae and pubescent
areas (Coelaenomenoderini) Javeta
5(4). Two rows of punctures between suture and 1st costa of elytron, at least in
part: mouth not very close to antennal insertions
A single row of punctures between suture and 1st costa from base to apex:
mouth close to antennal insertions Wallacean
6(5) Proportium parallel-sided flattened and somewhat margined laterally: elytral
costae depressed at least basally
Pronotum neither narallel-sided nor flattened above: elvtral costae for most
nart distinct
7(6) Anterior margin of month cavity situated close to antennal insertions : proportion
deeply sculptured : elvtra broadened in middle Neodownesis
Anterior margin of mouth cavity not close to antennal insertions: pronotum
smooth: elutra parallel-sided
$\mathcal{O}(\mathcal{A})$ Distribution of the parameters of
8 (0). Flothorax subcylindical, harlowly inargined faterally
riotiorax transverse, broadened in inidule, with profilment definiculate fateral
margins
9 (8). Each eightron with 3 costae and 8 (or at least 7) rows of punctures Agonita
Each eightron with 2 costae and only 6 rows of punctures (A. sonant Chujo;
I aiwan) Agonielia
10 (2). Frons small; upper edge of mouth cavity close to antennal insertions
Frons fully as long as broad, considerably separating mouth cavity from an-
tennal insertions (Oncocephalini) Oncocephalia
11 (10). Either anterior or posterior lateral angles of prothorax bearing a fine bristle 12
Neither anterior nor posterior lateral angles of prothorax bearing a fine bristle 14
12 (11). A fine bristle located near anterolateral angle of prothorax; body elongate;
prothorax subcylindrical (Anisoderini)13
A fine bristle located near posterior angle of prothorax; body broadly oblong-
oval, dorso-ventrally compressed; prothorax transverse (Callispini) Callispa
13 (12). Prothorax with anterior margin emarginate in middle; elytral interstices smooth
Estigmena
Prothorax with anterior margin not emarginate in middle; elytral interstices
raised posteriorly Lasiochila
14 (11). Body subparallel-sided, several times as long as broad; dorsal surfaces fairly
even and smooth
Body broad, angularly widened at posterior end of elytra; dorsal surfaces ridged
or tuberculate (Chaeridionini)
15 (14). Mouth cavity separated from antennal insertions by a small clypeus (Lepti-
spini)Leptispa
Mouth cavity close to antennal insertions: clypeus lacking (Botryonopini)
Botrvonopa
16 (14). Labial palpi absent
Labial palpi present

17(1). A spine, or group of spines, on each side of middle of anterior margin of
pronotum
Anterior dorsal margin of pronotum lacking spines
18 (17). At least antennal segment 1 with a long dorsal spine 19
Antenna lacking spines entirely Dactylispa
19 (18). A single claw at extremity of each tarsus, or claws fused basally 20
Tarsal claws paired, normal or asymmetrical22
20 (19). Tarsal claws single
Tarsal claws fused basally, slightly divergent apically; antennal segments 1, 3
and 4 each with a dorsal spine Sinispa
21 (20). Tarsal claws tapering; antennal segment 1 with a single dorsal spine Hispellinus
Tarsal claws of equal width throughout; antennal segments 1-2 each with a
dorsal spine Acmenychus
22 (19). Tarsal claws equal
Tarsal claws unequal Asamangulia
23 (22). Antennal segments 1-6 with 1 or more spines each on upper sides Hispa
Only antennal segment 1 with a distinct spine above (rarely vestigial) Rhadinosa
24 (17). Antenna with only 9 segments; body broad 25
Antenna with 11 segments; body narrow, subparallel; prothorax with a group
of several spines behind anterolateral angles and generally a single one at
side behind middle; elytral margin not produced Dicladispa
25 (24). Prothorax with a wide, spined expansion at side, and 2 similar expansions on
side of elytron Platypria
Prothorax and elytron provided with continuous, expanded margins edged with
similar teeth Cassidispa

## Tribe BOTRYONOPINI

## Genus Botryonopa Blanchard

Botryonopa Bl., 1845, Hist. Nat. Ins. 2: 181 (type: Bothryonopa sanguinea Guerin; Java).—
Maulik, 1919, Fauna India, Hisp. & Cass., 2.—Gressitt, 1950, Lingnan Sci. Jour. 23:
61.—Uhmann, 1954, Philip. Jour. Sci. 83: 39.

## 1. Botryonopa bicolor Uhmann

Botryonopa bicolor U., 1927, Suppl. Ent. 16: 109 (Taiwan; ZMB).—Chûjô, 1933, Nat. Hist. Soc. Formosa, Trans. 23: 306.—Gressitt, 1950, Lingnan Sci. Jour. 23: 62.
DISTRIBUTION: Taiwan.

## Tribe ANISODERINI

## Genus Estigmena Hope

*Estigmena* H., 1840, Col. Man. 3: 174 (type: *E. chinensis* Hope; SE Asia).—Baly, 1858, Cat. Hisp., 100.—Chapuis, 1875, Gen. Col. 11: 296.—Weise, 1897, Dtsch. Ent. Zschr. 1897:

897

117.—Maulik, 1919, Fauna India, Hisp. & Cass., 26.—Gressitt, 1950, Lingnan Sci. Jour. 23: 62.

#### 2. Estigmena chinensis Hope

Estigmena chinensis H., 1840, Col. Man. 3: 175, pl. 2, fig. 1 (China; OXFORD).—Baly, 1858, Cat. Hisp., 100, pl. 7, fig. 7; 1894, Ind. Mus. Notes 3: 80.—Gestro, 1888, Mus. Civ. Genova, Ann. ser. 2, 6: 655; 1897, op. cit. 38: 49.—Maulik, 1913, Ind. Mus., Rec. 9: 116; 1919, Fauna India, Hisp. & Cass., 27.—Stebbing, 1914, Ind. For. Ins., 254.—Gressitt, 1950, Lingnan Sci. Jour. 23: 62.

Estigmena chinensis var. atricollis Pic, 1924, Mel. Exot. Ent. 42: 29.

DISTRIBUTION: S. China (Kwangtung), India, Ceylon, Nepal, Sikkim, Assam, Burma, Pegu, Cambodia, Siam, Sumatra.

#### Genus Lasiochila Weise

- Lasiochila W., 1916, Dtsch. Ent. Zschr., 37.—Achard, 1921, Soc. Ent. France, Bull. 1921: 62.—Uhmann, 1930, Zool. Meded. 13: 92.—Gressitt, 1950, Lingnan Sci. Jour. 23: 63.
- Anisoderopsis Maulik, 1916, Zool. Soc. Lond., Proc. 1916: 24; 1919, Fauna India, Hisp. & Cass., 36.

#### KEY TO CHINESE SPECIES OF LASIOCHILA

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Lasiochila insulana fukiena Gr., 1950, Lingnan Sci. Jour. 23: 65 (Fukien; LINGNAN).

# DISTRIBUTION: SE China (Fukien).

## Tribe CALLISPINI

# Genus Callispa Baly

~		_
Callispa 9 1	<ul> <li>a B., 1858, Cat. Hisp., 4 (type: C. fortunii Baly; China).</li> <li>b: 272.—Weise, 1893, Ins. Deutschl. 6: 1060.—Maulik, 1919, Fauna India, Hisp. &amp; Cass., 43.—Gressitt, 1950, Ling-</li> </ul>	—Chapuis, 1875, Gen. Col.
r	nan Sci. Jour. 23 (1–2): 66.	
Th	is genus occurs in the Oriental and Ethiopian Regions.	LÀS
	Key to Chinese species of Callispa	<b>A</b>
1.	Elytra testaceous or reddish basally, black or blue- green apically; form generally subelliptical, rarely oblong or wedge-shaped	TR
	or purplish5	
2(1).	Length of body about 2 × as great as breadth; form somewhat ovate	Fig. 242. Lasiochila insulana fukiena Gress, (from Lingnan Jour. 23).
	form oblong-oval or elliptical	
3(2).	Apical 1/4 or more of elytron pitchy black; at least 12 before middle of elytron: length 5.2 mm	rows of punctures just
	Apical 1/2 of elytron black with slight greenish reflecting tures just before middle of elytron: length 33-35 mm	ons; 9 rows of punc-
1(2)	Form oblong-oval subparallel: proportium emarginate and	cally: elytra nale red
4(2).	on basel 2/5 remainder metallic blue group i length 5	A mm
		dimidiatipennis recticollis
	Form narrowly elliptical; pronotum convex anteriorly; e apical 3/5 and a narrowing extension as far as humero a slight metallic tint: length 45 mm	elytra dull red basally, as on each black with 10 elliptica
5(1)	Propotum red or reddish testaceous elvtra metallic green	blue-black or violet 6
5(1).	Dorsal surface entirely dark metallic blue-green ; body sor	newhat wedge-shaped;
6(5)	Ventral surfaces partly black or pitchy	7
o(5).	Ventral surfaces partially reddich testageous	····· / ···· / ··· · · · · · · · · · ·
7(6)	Prothoray short strongly narrowed anically: body some	what elongate-oblong.
/(0).	length 7 mm	
	Prothorax not strongly narrowed, more than 2 × as broad in form; length 5 mm	as long; body ovate 
8(6).	Elytron regularly striate-punctate, the punctures in 10 or middle	r 11 rows just behind 9
	Elytron partly irregularly punctured, particularly behin	d middle; prothorax
	rounded laterally and $3 \times$ as broad as long; length 8	3.4–9.5 mm 13. karena

- 9 (8). Prothorax rounded laterally, narrowed anteriorly ...... 10 Prothorax nearly rectangular and straight-sided; length 8 mm ..... 7. cyanipennis

## 4. Callispa angusta Gressitt

Callispa angusta Gr., 1950, Lingnan Sci. Jour. 23: 67, pl. 4, fig. 4 (Fukien; LINGNAN); 1953, Pan-Pac. Ent. 29: 121.

DISTRIBUTION: SE China (Fukien).

#### 5. Callispa apicalis Pic

Callispa apicalis Pic, 1924, Soc. Ent. France, Bull. 1924: 100 (Fukien; PARIS).—Gressitt, 1939, Pan-Pac. Ent. 15: 132; 1950, Lingnan Sci. Jour. 23: 68.—Uhmann, 1954, Ent. Blätt. 50: 187.

DISTRIBUTION: E. China (Fukien, Chekiang, Kiangsu).

FUKIEN: Ta-chu-lan, Shaowu, 26–29. V. 1943, Maa (BISHOP).



Fig. 243. *Callispa bowringii* Baly: a, mature larva; b, pupa; dorsal views (after Chen, Lingnan Sci. Jour. 7).

6. Callispa bowringii Baly Fig. 243.

Callispa Bowringii B., 1858, Cat. Hisp., 5 (Hong Kong; BM).-Gressitt, 1938, Lingnan Sci. Jour. 17: 321; 1939, op. cit. 18: 163, 197.—Uhmann, 1940, Ent. Blätt. 36: 126.— Gressitt, 1950, Lingnan Sci. Jour. 23: 69.-Uhmann, 1951, Philip. Jour. Sci. 80: 349. Callispa bowringii var. atripes Pic, 1924, Mel. Exot. Ent. 42: 27.

Chrysomelid pest of bamboo-Chen, 1931, Lingnan Sci. Jour. 7: 515-28, pl. 16.

DISTRIBUTION: S. China (Kwangtung, Hupeh, Fukien), Hainan I.

HUPEH: 1, Hsiao-ho, Lichuan Distr., 11. VIII. 1948, Gressitt & Djou (CAS). FUKIEN: 7, Shui-pei-kai, 1000 m, 14. IV, 3, V. 1942, Maa; 19. IV. 1942, K. S. Lin; 3, Ta-chu-lan, Shaowu, I, IV, IX, X. 1942, Maa (BISHOP, CAS). KWANGTUNG: 2, Ting-wu Shan, 7-26. VII. 1950; 20, Mei-hsien, 9. VI. 1936, Gressitt (CAS).

HOSTS: Bambusa Oldhami Munro, B. multiplex (Lour.) Raeusch, B. sinospinosa Mc-Clure, B. tuldoides Munro, Dendrocalamus latiflorus Munro, Phyllostachys aurea, Riv., Arundinaria sp., Lingnania Chungii McClure, L. cerosissima McClure, Sinobambusa tootsik (Mak.) McClure, Sinocalamus Beecheyanus (Munro) McClure.

## 7. Callispa cyanipennis Pic

Callispa cyanipennis Pic, 1924, Mel. Exot. Ent. 42: 27 (China; PARIS).-Gressitt, 1950, Lingnan Sci. Jour. 23: 69. DISTRIBUTION: China.

## 8. Callispa dimidiatipennis recticollis Gressitt

Callispa dimidiatipennis recticollis Gr., 1938, Lingnan Sci. Jour. 17: 321 (Hainan; CAS); 1950, op. cit. 23: 70.

DISTRIBUTION: Hainan I.

9. Callispa donckieri Pic Fig. 244, a.

Callispa Donckieri Pic, 1924, Soc. Ent. France, Bull. 1924: 99 (Fukien; PARIS).-Gressitt, 1950, Lingnan Sci. Jour. 23: 70; 1953, Pan-Pac. Ent. 29: 121. DISTRIBUTION: SE China (Fukien).

FUKIEN: 1, Upper Kuatun, 1400 m, Chungan, VIII. 1945, Maa (BISHOP).

## 10. Callispa elliptica Gressitt

Callispa elliptica Gr., 1939, Lingnan Sci. Jour. 18: 198, pl. 7, fig. 2 (S. Kiangsi; CAS); 1950, op. cit. 23: 70.

DISTRIBUTION: SE China (Kiangsi).

#### Fig. 244, b. 11. Callispa fortunii fortunii Baly

Callispa Fortunii B., 1858, Cat. Hisp., 6, pl. 4, fig. 2 ("N. China"; BM).-Spaeth, 1935, Stylops 4: 255.—Gressitt, 1939, Lingnan Sci. Jour. 18: 198; 1939, Pan-Pac. Ent. 15: 133; 1950, Lingnan Sci. Jour. 23: 71.-Uhmann, 1940, Ent. Blätt. 36: 126. DISTRIBUTION: China (Anhwei, Chekiang, Fukien, Kiangsi, Kwangtung).



Fig. 244. a, Callispa donckieri Pic; b, C. fortunii fortunii Baly; c, C. ruficollis Fairm.

## 12. Callispa fortunii emarginata Gressitt

Callispa fortunii emarginata Gr., 1938, Lingnan Sci. Jour. 17: 322 (Hainan; USNM); 1950, op. cit. 23: 71.

DISTRIBUTION: Hainan I.

#### 13. Callispa karena Maulik

Callispa karena M., 1919, Fauna India, Hisp. & Cass., 62 (Burma, Tonkin, Laos; BM).—Gestro, 1920, Mus. Civ. Genova, Ann. 48: 393.—Gressitt, 1938, Lingnan Sci. Jour. 17: 323; 1939, op. cit. 18: 163; 1950, op. cit. 23: 72.

DISTRIBUTION: Burma, Laos, N. Vietnam, Hainan I.

## 14. Callispa ruficollis Fairmaire Fig. 244, c.

Callispa ruficollis Fairm., 1889, Soc. Ent. France, Ann. ser. 6, 9: 84. (Muping; PARIS).-Gressitt, 1950, Lingnan Sci. Jour. 23: 72; 1953, Pan-Pac. Ent 29: 121.

DISTRIBUTION: China (Sikang, Hupeh, Szechuan).

HUPEH: 3, Sui-sa-pa, 1000 m, 27. VII-23. VIII; 54, Gau-yu-tai to Wang-chia-ying, 20. IX; 1, Wang-chia-ying to Sui-sa-pa, 21. VII; 1, Liang-ho-keu, 10. IX, Gressitt & Djou, 1948 (CAS, BISHOP, LINGNAN).

1B

15. Callispa sundara Maulik

Callispa sundara M., 1919, Fauna India, Hisp. & Cass., 61 (Tenasserim; BM).—Gressitt, 1939, Lingnan Sci. Jour. 18: 164; 1950, op. cit. 23: 73.
DISTRIBUTION: Burma, Hainan I.

#### Tribe LEPTISPINI

## Genus Leptispa Baly

Leptomorpha Germar, 1842 (nec Faldermann), Fauna Ins. Eur. 22: pl. 10.

Leptispa B., 1858, Cat. Hisp., 1 (type: Leptomorpha filiformis Guerin; Europe, Africa).—
Weise, 1911, Col. Cat. 35: 44 (Lepthispa).—Chûjô, 1933, N. H. Soc. Formosa, Trans.
23: 309.—Gressitt, 1950, Lingnan Sci. Jour. 23: 73.

Paralellispa Fairmaire, 1884, Soc. Ent. France, Ann. ser. 6, 4: 238.

- 4

## KEY TO CHINESE SPECIES OF LEPTISPA

.1

. . . .

1. Dorsal surfaces not entirely black; prothorax broader than long
Dorsal surfaces entirely black; prothorax not always broader than long; length
5.0–6.5 mm
2 (1). Thorax and legs red; pronotum oblong, finely and irregularly punctured; venter
pale; length over 7 mm 19. longipennis
Pronotum and elytra metallic green to partly purplish; distinctly punctured;
venter black; length under 5 mm 20. virida
3(1). Prothorax distinctly and somewhat evenly narrowed from base to apex; ab-
domen red or brownish 4
Prothorax subparallel or feebly convex at sides, narrowed at apex; body entirely
shiny black 5
4(3). Pronotum smooth except for small punctures of several sizes 16. a. abdominalis
Pronotum finely sculptured besides being punctured (Chûjô, 1934; Taiwan)
abdominalis formosana*
5 (3). Body just over $3 \times$ as long as broad
Body $4 \times$ as long as broad; pronotum rather finely and subevenly punctured
6 (5). Pronotum smooth, with fairly dense punctures in part; occiput rather even
and sparsely punctured18. godwini
Pronotum finely sculptured and punctured; occiput roughened, with sculptures
and close punctures (Chûjô, 1933; Taiwan) miwai*

## 16. Leptispa abdominalis Baly Fig. 245, a.

Leptispa abdominalis B., 1858, Cat. Hisp., 3 ("N. China"; BM).—Gressitt, 1939, Lingnan Sci. Jour. 18: 164, 199; 1950, op. cit. 23: 74.—Uhmann, 1951, Ent. Blätt. 47: 22

Paradownesia Gestro, 1899, Mus. Civ. Genova, Ann. 40: 220.—Maulik, 1917, Ann. Mag. Nat. Hist. ser. 8, 20: 130.

(Peking). DISTRIBUTION: China (Kwangtung, Hopei). KWANGTUNG: 2, Macau, V. 1948, Krauss (BISHOP); 1, Hong Kong, Koebele (CAS).

#### 17. Leptispa fruhstorferi (Gestro)

Paradownesia Fruhstorferi G., 1906, Mus. Civ. Genova, Ann. 42: 483 (Tonkin; GENOVA).
Leptispa godwini: Maulik, 1917, Ann. Mag. Nat. Hist. ser. 8, 20: 132 (fruhstorferi synony-mized with godwini).—Uhmann, 1951, Ent. Blätt. 47: 23.



Fig. 245. a, Leptispa abdominalis Baly; b, L. longipennis (Gestro).

We have re-examined the specimens Maulik studied in the British Museum and find that *fruh-storferi* is quite distinct from *godwini*, being more elongate, although otherwise similar.

DISTRIBUTION: N. Vietnam (Tonkin).

## 18. Leptispa godwini Baly

Leptispa Godwini B., 1869, Ent. Soc. Lond., Trans.
1869: 364 (Shanghai; BM).—Chûjô, 1933,
N. H. Soc. Formosa, Trans. 23: 128.—Gressitt, 1939, Lingnan Sci. Jour. 18: 165; 1939,
Pan-Pac. Ent. 15: 133; 1950, Lingnan Sci. Jour. 23: 75; 1953, Pan-Pac. Ent. 29: 121.

Chûjô recorded this from Japan, but later described the material as another species (*taguchii*).

DISTRIBUTION: S. China (Kiangsu, Chekiang, Fukien, Kiangsi, Hupeh).

19. Leptispa longipennis (Gestro) Fig. 245, b.

Downesia longipennis G., 1890, Mus. Civ. Genova, Ann. 30: 243, fig. 1 (Burma; GENOVA).

Downesia (Paradownesia) longipennis, G., 1899, op. cit. 40: 220.

Leptispa longipennis: Maulik, 1917, Ann. Mag. Nat. Hist. ser. 8, 20: 130; 1919, Fauna India, Hisp. & Cass., 81.—Gressitt, 1939, Lingnan Sci. Jour. 18: 165; 1950, op. cit. 23: 56 (biol.), 75.—Uhmann, 1958, Col. Cat. Suppl. 35 (2): 187.

DISTRIBUTION: Burma, Bhutan, S. China (Kwangtung).

HOST: Sinocalamus Beecheyanus (Munro) McClure (larva among terminal new leaves).

## 20. Leptispa viridis Gressitt Fig. 246, a.

Leptispa virida Gr., 1950, Lingnan Sci. Jour. 23: 76 (Kwangsi; MCZ).—Uhmann, 1958, Col. Cat. Suppl. 35 (2): 189 (viridis).

DISTRIBUTION: China (Kwangsi, Fukien).

FUKIEN: 2, Ho-tien, Changting Distr., 19. IV. 1941, Maa (BISHOP, CAS).

#### Tribe COELAENOMENODERINI

## Genus Javeta Baly

Javeta B., 1858, Cat. Hisp., ix, 108 (type: J. pallida B.; India).—Chapuis, 1875, Gen. Col. 11, App.: 339.—Maulik, 1919, Fauna India, Hisp. & Cass., 105.—Uhmann, 1951, Ent. Blätt. 47: 27.

This genus is confined to the Oriental Region.

- 21. Javeta foveicollis (Gressitt) Fig. 246, b.
- Wallaceana foveicollis Gr., 1939, Lingnan Sci. Jour. 18: 168, pl. 5, fig. 2 (Hainan; LINGNAN); 1950, op. cit. 23: 93, pl. 8, fig. 6.

Javeta foveicollis: Uhmann, 1958, Col. Cat. Suppl. **35**(2): 216.

DISTRIBUTION: Hainan I.



Fig. 246. a, *Leptispa viridis* Gress.; b, *Javeta foveicollis* (Gress.), head and pronotum (from Lingnan Sci. Jour.).

#### Tribe PROMECOTHECINI

## Genus Promecotheca Blanchard

Promecotheca B., 1853, Voy. Pole Sud Zool. 4: 312 (type: Hispa cyanipes Erichson; Philippines).—Baly, 1858, Cat. Hisp., 97, pl. 2, fig. 4.—Chapuis, 1875, Gen. Col. 11: 300.
—Gressitt, 1950, Lingnan Sci. Jour. 23: 81; 1957, Nova Guinea (n. s.) 8: 279.

This genus occurs primarily in the insular eastern half of the Oriental Region.

## 22. Promecotheca cyanipes trilbyi Thomson

Promecotheca trilbyi Th., 1856, Revue Zool. ser. 2, 8: 117, pl. 5, fig. 5 (China; ? PARIS).— Gressitt, 1950, Lingnan Sci. Jour. 23: 82.

Promecotheca cyanipes ab. trilbyi: Weise, 1922, Philip. Jour. Sci. D 21: 71.

There seems to be no verification that this species is actually from China. DISTRIBUTION: China.

#### Tribe GONOPHORINI

#### Genus Wallaceana Maulik

Wallacea Baly, 1858 (nec Doleschall), Cat. Hisp., 97 (type: W. Bowringii Baly; Java).— Chapuis, 1875, Gen. Ins. 11: 282.—Maulik, 1919, Fauna India, Hisp. & Cass., 106.
Wallaceana Maulik, 1928, Zool, Soc, Lond., Proc. 1928: 159.—Gressitt, 1950, Lingnan Sci,

## Jour. 23: 92.

The species *foveicollis*, described in this genus by Gressitt, has been transferred to *Javeta*, by Uhmann.

## 23. Wallaceana sita Maulik?

Wallacea sita M., 1919, Fauna India, Hisp. & Cass., 109 (Burma; BM). Wallaceana sita: Uhmann, 1940, Ent. Blätt. **36**: 126 (Fukien).

Uhmann recorded this species from Fukien, indicating that his material was smaller than the size recorded by Maulik. Uhmann later (1955, Ent. Blätt. 50: 187) indicated that the Fukien material was *Wallaceana rubra* (Gressitt), eliminating *Neodownesia*. We differ with this however (see *Neodownesia*), and thus do not know whether *sita* occurs in China or not.

DISTRIBUTION: Burma, ?S. China.

#### Genus Neodownesia Gressitt

Neodownesia Gr., 1953, Pan-Pac. Ent. 29(3): 212 (type: N. rubra Gr.; Fukien).

Uhmann has indicated this as a synonym of *Wallaceana*, but we believe it is a distinct genus because of alternately carinate elytral interstices.



Fig 247. a, *Neodownesia rubra* Gress.; b, *Downesia vandykei* Gress. (from Pan-Pac. Ent. **29**; Lingnan Sci. Jour. **23**).

## 24. Neodownesia rubra Gressitt Fig. 247, a.

*Neodownesia rubra* Gr., 1953, Pan-Pac. Ent. **29** (3): 122 (NW Fukien; LING-NAN).

Wallaceana rubra: Uhmann, 1954, Ent. Blätt. 50: 187.

DISTRIBUTION: SE China (Fukien).

## Genus Downesia Baly

Downesia B., 1858, Cat. Hisp., 107 (type: D. insignis B.; N. India).—Chapuis, 1875, Gen. Col. 11: 329.—Gestro, 1899, Mus. Civ. Genova, Ann. 40: 218, 223.—Weise, 1911, Gen. Ins. 125: 83.—Maulik, 1919, Fauna India, Hisp. & Cass., 110.—Uhmann,

1928, Treubia 10: 63.—Gressitt, 1938, Lingnan Sci. Jour. 18: 162; 1950, op. cit. 23: 82.—Uhmann, 1955, Philip. Jour. Sci. 84: 230.

Hanoia Fairmaire, 1888, Soc. Ent. France, Ann. ser. 6, 8: 375 (type: H. Auberti Fairm.).

Key to Chinese species of Downesia

	Prothorax longer than broad; body orange; antenna and tarsi black, pronotum
	finely punctured; length 8 mm 31. tarsata
2(1).	Pronotum distinctly margined at side
	Pronotum feebly margined at side; pronotal punctures sparse but distinct;
	body largely pale ochraceous; legs pale; pronotum reddish; elytra pitchy
	reddish brown; length 5.7 mm 25. balyi
3(2).	Interval between suture and 1st costa of elytron with 2 puncture rows, at least
	behind middle 4
	Interval between suture and 1st costa of elytron with a single row of punctures
	throughout; body largely black; abdomen pale; length 3.9-5.5 mm 27. kwangtunga
4(3).	Elytra reddish basally, at least in part, black on remainder; legs, prothorax
	and ventral surfaces of body reddish; antenna and tarsi black 5
	Elytra unicolorous; legs entirely black; body length over 8 mm 8
5(4).	Mid tibia lacking an acute tooth at apex
	Mid tibia with an acute tooth at apex 28. latenigra basipennis
6(5).	Elytral interspace 4 carinate from near base7
	Elytral interspace 4 carinate only near apex; length 5 mm 26. gracilis
7(6).	Prothorax broader than long, dull; elytron nearly impunctate on basal 1/6,
	dull; tarsi red; length 6 mm (Baly, 1888; Burma, Vietnam) gestroi*
	Prothorax nearly as long as broad, shiny; elytron punctured to base, shiny;
	tarsi black; length 4.4-7.3 mm 32. vandykei
8(4).	Body almost entirely black; side of pronotum dark reddish; abdomen pale
. ,	reddish: basal portion of pronotum with a single central depression
	29. marginicollis
	Proportium and elvtra chestnut red ventral surfaces black has a portion of
	pronotum with a depression on each side of middle
	pronotoni with a depression on each side of initiate

## 25. Downesia balyi Gressitt

Downesia tarsata Gr. (nec Baly), 1939, Lingnan Sci. Jour. 18: 166. Downesia balyi Gr., 1950, op. cit. 23: 83 (Kwangtung; LINGNAN). DISTRIBUTION: S. China (Kwangtung).

## 26. Downesia gracilis Uhmann

Downesia gracilis U., 1955, Ent. Blätt. 50: 188 (NW Fukien; BONN). DISTRIBUTION: SE China (Fukien).

## 27. Downesia kwangtunga Gressitt

Downesia kwangtunga Gr., 1950, Lingnan Sci. Jour. 23: 84 (N. Kwangtung; LINGNAN). DISTRIBUTION: S. China (Kwangtung).

#### 28. Downesia latenigra basipennis Pic

Downesia latenigra var. basipennis Pic, 1924, Mel. Exot. Ent. 41: 5 (Tonkin; ? PARIS).— Uhmann, 1955, Ent. Blätt. 50: 188 (NW Fukien).

DISTRIBUTION: N. Vietnam, S. China (Fukien).

## 29. Downesia marginicollis Weise

Downesia marginicollis W., 1922, Philip. Jour. Sci. 21: 71 (Tschonting; ZMB).—Gressitt, 1939, Lingnan Sci. Jour. 18: 166. —Uhmann, 1949, Koleopt. Zschr. 1: 4.—Gressitt, 1950, Lingnan Sci. Jour. 23: 85.

DISTRIBUTION: S. China (Kwangtung, Fukien).

HOST: Sinocalamus Beecheyanus (Munro) McClure (larva feeds in leaf buds).

## 30. Downesia strandi Uhmann

Downesia strandi U., 1943, Fol. Zool.-Hydrobiol. 12: 121 (Tien-mu Shan; UHMANN); 1949, Kol. Zschr. 1: 5, fig. 3.—Gressitt, 1950, Lingnan Sci. Jour. 23: 83 ("rufodorsata" in key), 85.

DISTRIBUTION: SE China (Chekiang).

## 31. Downesia tarsata Baly

Downesia tarsata B., 1869, Ent. Soc. Lond., Trans. 1869: 377 (Hong Kong; BM).—Gressitt, 1950, Lingnan Sci. Jour. 23: 86.

DISTRIBUTION: China (Kwangtung).

KWANGTUNG: 2, Macao, F. Muir (BISHOP).

#### 32. Downesia vandykei Gressitt Fig. 247, b.

Downesia vandykei Gr., 1939, Pan-Pac. Ent. 15: 133 (Hangchow; CAS); 1950, Lingnan Sci. Jour. 23: 87.—Uhmann, 1955, Ent. Blätt. 50: 188.

DISTRIBUTION: SE China (Chekiang, Fukien), N. Vietnam (Tonkin).

## Genus Agonita Strand

Gonophora Baly, 1858, Cat. Hisp., 108 (part).

Distolaca B., 1858, l. c., 116 (part).

Agonia Ws. (nec Förster), 1905, Dtsch. Ent. Zschr. 1905: 116 (type: A. wallacei Baly; Sumatra).—Maulik, 1919, Fauna India, Hisp. & Cass., 122.—Gressitt, 1950, Lingnan Sci. Jour. 23: 87.

Agonita Strand, 1942, Folia Zool.-Hydrobiol. 11: 391 (new name for Agonia Ws.).

## Key to Chinese species of Agonita

2(2)		
		a
	Elytra red; ventral surfaces and legs shiny black; head and prothorax red	
2(1).	Elytra black; ventral surfaces reddish	3
	Punctures between 1st an 2nd costae irregular near base, partly in 3 or 4 rows	4
1.	Punctures between 1st and 2nd costae in only 2 rows for entire length	2

- 4 (1). Elytra more or less unicolorous; black, red or pitchy, sometimes with slightly

paler or darker areas
surfaces testaceous
5(4). Elytra black
Elytra and rest of dorsum red to brown or pitchy; antenna black 8
6 (5). Elytra black; pronotum paler7
Elytra and rest of body black, except mouthparts and tarsi; eyes not conspi-
cuously prominent (Chûjô, 1933; Taiwan) unicolor*
7 (6). Pronotum blackish apically and dull reddish basally; legs and ventral surfaces
pitchy black to dull reddish; eyes very prominent; length 5.5-6.2 mm, 37. laticeps
Pronotum and head reddish ochraceous; antenna black; legs and ventral sur-
2(5) Elytron very slightly broadened just enterior to middle: proportium perrously
grooved medially; dorsum largely red or ochraceous; length 5 mm
Elytron slightly narrowed in central portion; pronotum not grooved medially;
dorsum pale pitchy red-brown; pitchy brown to pitchy black beneath; legs
black; length 5.4 mm 40. picea
9 (8). Dorsum red; antenna black; legs red; punctures between elytral costae 1 and
2 partly in 4 rows
Dorsum ochraceous, paler on pronotum and more orange on elytra; legs pale
ochraceous to reddish; punctures between elytral costae 1 and 2 in 3 rows

#### 33. Agonita carbunculus (Maulik)

Agonia carbunculus M., 1919, Fauna India, Hisp. & Cass., 139 (Burma; BM).—Gressitt, 1939, Lingnan Sci. Jour. 18: 167; 1950, op. cit. 23: 88 (carbuncula).

Agonita carbunculus: Uhmann, 1958, Col. Cat. Suppl. 35 (2): 237.

DISTRIBUTION: Burma, S. China (Kwangtung, Sikang).

SIKANG: 1, Yachow, 23. VI. 1929, 600–1500 m, Graham (USNM).

#### 34. Agonita chinensis (Weise)

Agonia chinensis W., 1922, Philip. Jour. Sci. 21: 75 ("Kiautschau"; ZMB).—Gressitt, 1939, Lingnan Sci. Jour. 18: 167; 1950, op. cit. 23: 88, pl. 4, fig. 6.

Agonita chinensis: Uhmann, 1949, Kol. Zschr. 1: 4.

DISTRIBUTION: S. China (Kweichow, Kwangtung, Fukien).

KWANGTUNG: 1, Ting-wu shan, 7–12. VII. 1950, Gressitt (CAS). FUKIEN: 3, Wu-kwoh, Shaowu, 2. IX. 1949, Maa (BISHOP).

## 35. Agonita discrepans Uhmann

Agonita discrepans U., 1954, Ann. Mag. Nat. Hist. ser. 12, 7: 509 (Fukien; BONN); 1955, Ent. Blätt. 50: 188 (as n. sp.).

DISTRIBUTION: SE China (Fukien).

## 36. Agonita immaculata (Gestro)

Gonophora immaculata G., 1888, Mus. Civ. Genova, Ann. 26: 175 (Burma; GENOVA); 1890,

op. cit. 30: 236.

Agonia immaculata: Weise, 1911, Col. Cat. 35: 56.—Maulik, 1919, Fauna India, Hisp. & Cass., 136, fig. 43.—Gressitt, 1939, Lingnan Sci. Jour. 18: 167; 1950, op. cit. 23: 89.
 Agonita immaculata: Uhmann, 1958, Col. Cat. Suppl. 35 (2): 238.

DISTRIBUTION : Burma, Tenasserim, Bengal, Assam, N. Vietnam, S. China (Yunnan-Vietnam border).

## 37. Agonita laticeps (Gressitt)

Agonia laticeps Gr., 1939, Lingnan Sci. Jour. 18: 199, pl. 7, fig. 1 (SE Kiangsi; USNM); 1950, op. cit. 23: 89.

Agonita laticeps: Uhmann, 1958, Col. Cat. Suppl. 35 (2): 239.

DISTRIBUTION: SE China (Kiangsi).

## 38. Agonita maculigera (Gestro) Fig. 248, a.

Gonophora maculigera G., 1888, Mus. Civ. Genova, Ann. 26: 131 (Burma; GENOVA).
Agonia maculigera: Weise, 1911, Col. Cat. 35: 56.—Maulik, 1919, Fauna India, Hisp. & Cass., 128.—Gressitt, 1938, Lingnan Sci. Jour. 17: 325; 1939, op. cit. 18: 168.—Uhmann, 1940, Ent. Blätt. 36: 126.—Gressitt, 1950, Lingnan Sci. Jour. 23: 90.
DISTRIBUTION: Burma, Hainan I., SE China (Fukien).

#### 39. Agonita parvula tricolor (Chûjô)

Agonia tricolor Ch., 1933, N. H. Soc. Formosa, Trans. 23: 314, pl. 1, fig. 4 (Taiwan; TARI). Agonia (s. str.) parvula tricolor: Gressitt, 1950, Lingnan Sci. Jour. 23: 90. Agonita tricolor: Uhmann, 1958, Col. Cat. Suppl. 35 (2): 241.

DISTRIBUTION: Taiwan, SE China (Fukien).



Fig. 248. a, Agonita maculigera (Gestro); b, A. picea Gress.; c, A. sculpturata Gress. (from Lingnan Sci. Jour. 23; Pan-Pac. Ent. 29).

40. Agonita picea Gressitt Fig. 248, b.

Agonita picea Gr., 1953, Pan-Pac. Ent. 29 (3): 124, fig. 3 (NW Fukien; LINGNAN). DISTRIBUTION: SE China (Fukien).

#### 41. Agonita sculpturata Gressitt Fig. 248, c.

Agonita sculpturata Gr., 1953, *l.c.*, fig. 2 (NW Fukien; LINGNAN).—Uhmann, 1955, Ent. Blätt. 50: 189.

DISTRIBUTION: SE China (Fukien).

#### Genus Gonophora Baly

Gonophora Baly, 1858, Cat. Hisp., 109 (type: Hispa haemorrhoidalis Fabricius; Sunda-Malaya).
—Chapuis, 1875, Gen. Col. 11: 303.—Maulik, 1919, Fauna India, Hisp. & Cass., 142.
—Gressitt, 1950, Lingnan Sci. Jour. 23: 92.—Uhmann, 1955, Philip. Jour. Sci. 84: 231.

#### 42. Gonophora pulchella Gestro

- Gonophora pulchella G., 1888, Mus. Civ. Genova, Ann. 26: 176 (Burma; GENOVA).—Maulik, 1919, Fauna India, Hisp. & Cass., 146.—Uhmann, 1939, Arkiv Zool. 30 A (26): 9. —Gressitt, 1939, Lingnan Sci. Jour. 18: 168; 1950, op. cit. 23: 92.
- Gonophora bengalensis Weise, 1908, Stett. Ent. Ztg. 49: 214; 1911, Gen. Ins. 125: 87, pl. 4, fig. 10.
- Gonophora pulchella var. Clermonti Pic, 1927, Mel. Exot. Ent. 49: 25 (Tonkin).

DISTRIBUTION: Burma, Bengal, Assam, Indo-China, Hainan I.

## Tribe CHAERIDIONINI

#### Genus Chaeridiona Baly

- Chaeridiona B., 1869, Ent. Soc. Lond., Trans. 1869: 380 (type: C. metallica Baly; India). —Uhmann, 1951, Ent. Blätt. 47: 24.
- Choeridiona: Maulik, 1919, Fauna India, Hisp. & Cass., 85.—Gressitt, 1950, Lingnan Sci. Jour. 23: 77.

## 43. Chaeridiona cupreovirida Gressitt Fig. 249, a.

Choeridiona cupreovirida Gr., 1950, Lingnan Sci. Jour. 23: 77, pl. 5, fig. 3 (NW Fukien; LINGNAN).

DISTRIBUTION: China (Fukien).

#### Genus Prionispa Chapuis

Prionispa Ch., 1875, Gen. Col. 11: 337 (type: P. subopaca Ch.; Malaya).—Gestro, 1899, Mus. Civ. Genova, Ann. 40: 226; 1910, op. cit. 44: 557.—Weise, 1911, Gen. Ins. 125: 73.—Maulik, 1919, Fauna India, Hisp. & Cass., 84, 88.—Uhmann, 1943, Zool. Anz. 141: 246.—Gressitt, 1950, Lingnan Sci. Jour. 23: 78.—Uhmann, 1958, Col. Cat. Suppl.

1963



Fig. 249. a, *Chaeridiona cupreovirida* Gress.; b, *Oncocephala atratangula* Gress., side view of elytron; c, same, dorsal view of cephalic protuberance, greatly enlarged (from Lingnan Sci. Jour.).

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## 44. Prionispa sinica Gressitt

Prionispa sinica Gr., 1950, Lingnan Sci. Jour. 23: 78 (NC Fukien; AMNH). DISTRIBUTION: SE China (Fukien).

## Tribe ONCOCEPHALINI

## Genus Oncocephala Chevrolat

Oncocephala Ch., 1847, d'Orbigny's Dict Univ. Hist. Nat. 9: 110 (type: Oncocephala quadrilobata Guerin; S. Asia).—Chapuis, 1875, Gen. Col. 11: 308.—Weise, 1897, Dtsch. Ent. Zschr. 1897: 120.—Gestro, 1899, Mus. Civ. Genova, Ann. 40: 313.—Maulik, 1919, Fauna India, Hisp. & Cass., 98.—Gressitt, 1950, Lingnan Sci. Jour. 23: 80.

Key to Chinese species of Oncocephala

- 45. Oncocephala atratangula Gressitt Fig. 249, b-c.
- Oncocephalus atratangula Gr., 1938, Lingnan Sci. Jour. 17: 324, pl. 11, figs. 1-2 (Hainan I.; CAS); 1939, op. cit. 18: 166 (Oncocephala); 1950, op. cit. 23: 80, pl. 7, fig. 5. DISTRIBUTION: Hainan I.

## Tribe HISPINI

## Genus Hispellinus Weise

Monochirus Chapuis, 1875 (nec Rafinesque), Gen. Col. 11: 330.-Maulik, 1919, Fauna India,
Hisp. & Cass., 151.-Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 319.

Hispellinus Ws., 1897, Dtsch. Ent. Zschr. 1897: 144 (type: Hispa multispinosa Germar; Australia); 1905, op. cit. 1905: 317; 1911, Gen. Ins. 125: 91.—Gressitt, 1950, Lingnan Sci. Jour. 23: 95.—Uhmann, 1954, Zool. Mus. Berl. Mitt. 30: 96.

#### KEY TO CHINESE SPECIES OF HISPELLINUS

1.	Most of discal spines of elytron shorter and stouter than marginal spines 2
	Most of discal spines of elytron as long as marginal spines
2.	Prothoracic spines all nearly horizontally directed; marginal spines of elytron 18-26
	in number
	Prothoracic spines more or less obliquely raised, particularly the anterior ones;
	marginal spines of elytron 21-24 in number 47. chinensis
3.	Antennal segment 2 larger than 3 4
	Antennal segment 2 shorter than 3, subglobose; pronotum strongly rugose, smooth
	and grooved in center; body dull; length 4.5-5.0 mm 46. callicanthus
4.	Antennal segment 2 variable; pronotum finely rugose, distinctly grooved medially;
	length 4.0–5.0 mm 50. moestus
	Antennal segment 2 subglobose; pronotum feebly rugose, with a short, shallow me-

# 46. Hispellinus callicanthus (Bates)

Hispa callicantha B., 1866, Zool. Soc. Lond., Proc. 1866: 354 (Formosa; BM).

Monochirus callicanthus: Chapuis, 1876, Soc. Ent. Belg., C. R. 19: XXV.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 320.

Hispellinus callicanthus: Weise, 1897, Dtsch. Ent. Zschr. 1897: 145; 1911, Gen. Ins. 125: 91.—Maulik, 1919, Fauna India, Hisp. & Cass., 17.—Uhmann, 1934, Mus. Hist. Nat. Belg., Bull. 10 (2): 6.—Gressitt, 1950, Lingnan Sci. Jour. 23: 95.—Uhmann, 1954, Zool. Mus. Berl., Mitt. 30: 102.

We are dubious about the mainland China records of this species. DISTRIBUTION: Taiwan, ?S. China.

# 47. Hispellinus chinensis Gressitt

Monochirus callicanthus: Gr. (nec Bates), 1939, Lingnan Sci. Jour. 18: 169 (part).

Hispellinus chinensis Gr., 1950, op. cit. 23: 96, pl. 8, fig. 5 (N. Kwangtung, etc.; LINGNAN). DISTRIBUTION: S. China (Kwangtung, Hunan, Szechuan).

# 48. Hispellinus formosanus (Uhmann)

- Monochirus formosanus U., 1927, Suppl. Ent. 16: 111 (Formosa; DEI).—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 321.
- Hispellinus formosanus: Uhmann, 1940, Ent. Blätt. 26: 127 (Fukien).—Gressitt, 1950, Lingnan Sci. Jour. 23: 97.—Uhmann, 1954, Zool. Mus. Berl., Mitt. 30: 100, figs. 2, 3.
  DISTRIBUTION: Taiwan, SE China (Fukien).

# 49. Hispellinus moerens (Baly)

Hispa moerens B., 1874, Ent. Soc. Lond., Trans. 1874: 215 (N. China; BM).

Monochirus moerens: Ws., 1911, Col. Cat. 35: 60.—Gressitt, 1939, Pan-Pac. Ent. 15: 136.
Hispellinus moerens: Uhmann, 1943, Folia Zool.-Hydrobiol. 12: 204.—Gressitt, 1950, Lingnan Sci. Jour. 23: 97; Yuasa, 1950, Nippon Konchu Zukan, ed. 2, 1208.—Uhmann, 1954, Zool. Mus. Berlin, Mitt. 30: 99.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 195.
DISTRIBUTION: E. China (Kiangsu, Chekiang), Taiwan, E. Siberia, Japan. HOSTS: Miscanthus spp.



Fig. 250. a, *Hispellinus moestus* (Baly); b, *Hispellinus* sp., pupa, from mine in grass leaf, Canton.

# 50. Hispellinus moestus (Baly) Fig. 250, a.

- Hispa Perroteti : Motschulsky (nec Guérin), 1861, Schrenck's Reise Amurl.2: 238 (India).
- Monochirus moestus B., 1888, Mus. Civ. Genova, Ann. 26: 622 (Burma; GENOVA); 1890, Soc. Ent. France, Ann. ser. 6, 9: 489 (Indochina). —Gestro, 1890, Mus. Civ. Genova, Ann. 30: 245; 1897, op. cit. 38: 73; 1898, op. cit. 39: 217.—Weise, 1897, Dtsch. Ent. Zschr. 1897: 126. —Gestro, 1902, Soc. Ent. Ital., Bull. 1902: 55; 1907, Mus. Nat. Hung., Ann. 5: 77.—Maulik, 1919, Fauna India, Hisp. & Cass., 152, fig. 46.

Hispellinus Perroteti: Weise, 1897, Dtsch. Ent. Zschr. 1897: 144.

Hispellinus moestus: Weise, 1897, *l. c.*, 145.—Uhmann, 1938, Ent. Tdskr.
59: 227 (Yunnan); 1940, Ent. Blätt.
36: 126.—Gressitt, 1950, Lingnan Sci. Jour. 23: 98, pl. 5, fig. 5; 1953, Pan-Pac Ent. 29: 125.—Uhmann, 1954, Zool. Mus. Berl., Mitt. 30: 103.

Monochirus callicanthus: Gressitt, 1939, Lingnan Sci. Jour. 18: 169, 200 (part).

DISTRIBUTION: Burma, India, SE Asia, Philippines, S. China (Yunnan, Kwangsi, Kweichow, Kwangtung, Kiangsi, Fukien, Anhwei, Kiangsu), Hainan I.

KIANGSI: Sung-wu, VII. 1936, Gressitt (CAS).

#### Genus Acmenychus Weise

Acmenychus W., 1905, Dtsch. Ent. Zschr. 1905: 318 (type: Hispa inermis Zoubkoff; C. Asia, Mongolia).—Maulik, 1919, Fauna India, Hisp. & Cass., 156.—Gressitt, 1950, Lingnan Sci. Jour. 23: 98.

Monochirus: Heyden, 1878, Schneid. Leder. Beitr. Kaukas. Kaferf., 343.-Weise, Ins. Deutschl.

6: 1061; 1897, Dtsch. Ent. Zschr. 1897: 144 (part).

### 51. Acmenychus inermis (Zoubkoff)

Hispa inermis Z., 1833, Soc. Nat. Moscou, Bull. 6: 337 (Kirghiz; ?Moscow).

Monochirus Potanini Weise, 1890, Soc. Ent. Ross., Horae 24: 485.

Acmenychus potanini: Ws., 1893, Ins. Deutschl. 6: 1061; 1905, Dtsch. Ent. Zschr. 1905: 318.
 Acmenychus inermis: Uhmann, 1942, Ent. Blätt. 38: 212; 1943, Fol. Zool.-Hydrobiol. 12: 203.—Gressitt, 1950, Lingnan Sci. Jour. 23: 99.

DISTRIBUTION: Kirghiz, Turkestan, Mongolia.

#### Genus Sinispa Uhmann

Sinispa U., 1938, Ent. Tidskr. 59: 224 (type: S. yunnana Uhmann; SW China); 1940, op. cit. 60: 143.—Gressitt, 1950, Lingnan Sci. Jour. 23: 99.

This genus includes only a single known species, known only from China.

# 52. Sinispa yunnana Uhmann

Sinispa yunnana U., 1938, Ent. Tidskr. 59: 224 (Yunnan; UHMANN); 1943, Fol. Zool.-Hydrobiol. 12: 206; 1949, Ent. Blätt. 41-44: 188.—Gressitt, 1950, Lingnan Sci. Jour. 23: 99.

Black with slight metallic green sheen; antennal segments 3 and 4 with short dorsal spines; tarsal claws fused basally.

DISTRIBUTION: SW China (Yunnan).

# Genus Hispa Linnaeus

- Hispa L., 1767, Syst. Nat. ed. 12, 1 (2): 603.—Fabricius, 1801, Syst. Eleuth. 2: 58 (part).— Thomson, 1866, Skand. Col. 8: 316.—Chapuis, 1875, Gen. Col. 11: 260.—Gestro, 1899, Mus.Civ. Genova, Ann. 40: 330 (type: *H. atra* L.; Europe).—Gressitt, 1950, Lingnan Sci. Jour. 23: 100.—Barber, 1951, Pan-Pac. Ent. 27: 17.—Uhmann, 1952, Treubia 21: 231.
- Hispella Chapuis, 1875, Gen. Col. 11: 260, 334 (subgenus; type: *H. atra* L.).—Weise, 1893, Ins. Deutschl. 6: 1064; 1897, Dtsch. Ent. Zschr. 1897: 143, 146.—Gestro, 1899, Mus. Civ. Genova, Ann. 28: 79.—Reitter, 1912, Fauna Germ. 4: 213.—Maulik, Ind. Mus., Rec. 11: 374; 1919, Fauna India, Hisp. & Cass., 156.

### KEY TO CHINESE SPECIES OF HISPA

#### 53. Hispa atra Linnaeus

Hispa atra L., 1767, Syst. Nat. ed. 12, 1 (2): 603 (Europe; LONDON).—Fabricius, 1775, Syst. Ent., 71.—Thomson, 1866, Skand. Col. 8: 317.—Redtenbacher, 1874, Fauna Austr., ed. 3, 2: 519.—Gressitt, 1950, Lingnan Sci. Jour. 23: 100.

Hispella atra: Weise, 1893, Ins. Deutschl. 6: 1065,—Reitter, 1912, Fauna Germ. 4: 213.—

1963

Liu, 1936, Lingnan Sci. Jour. 15: 255 (S. Shansi, Hopei).—Maulik, 1939, Zool. Soc. Lond., Proc. B 109: 132, 144, fig. 1.

The China records need verification.

DISTRIBUTION: S. Europe, N. Africa, W. Asia, N. China (S. Shansi, Hopei).

HOSTS: Poa spp., Agropyrum repens Beauv.

# 54. Hispa andrewesi (Weise) Fig. 251.

Hispella Andrewesi Ws., 1897, Dtsch. Ent. Zschr. 1897: 126 (India; BM); 1911, Gen. Ins.
125: 93.—Maulik, 1919, Fauna India, Hisp. & Cass., 161, fig. 50.—Spaeth, 1933, Stylops 2: 274 (Tonkin).—Maulik, 1939, Zool. Soc. Lond., Proc. B 1939: 144.



Fig. 251. *Hispa andrewesi* (Weise), dorsal view of head and prothorax (from Lingnan Sci. Jour.).

- Hispella Donckieri Pic, 1924, Mel. Exot. Ent. 42: 28 (Tonkin; PARIS).—Spaeth, 1933, Stylops 2: 274.—Gressitt, 1939, Lingnan Sci. Jour. 18: 170, 200, pl. 5, fig. 3 (Hainan, Kwangtung, Kwangsi).—Maulik, 1939, Zool. Soc. Lond., Proc. B 1939: 144.
- Hispella sp.: Gressitt, 1938, Lingnan Sci. Jour. 17: 325.
- Hispa donckieri: Gr., 1950, op. cit. 23: 101, pl. 7, fig. 4 (Anhwei).

Hispa Andrewesi: Uhmann, 1958, Col. Cat. Suppl. 35 (2): 269. (Yunnan).

DISTRIBUTION: India, Ceylon, Burma, Java, Vietnam, S. China (Kwangsi, Anhwei, Kwangtung, Yunnan, Sikang), Hainan I.

KWANGTUNG: 3, Ting-wu Shan, 23–26. VII. 1950, Gressitt (CAS). SIKANG: 1, Ning-yuen-fu, 2000 m, 9. VII. 1928, Graham (US).

HOST: A narrow-leaved grass.

#### Genus Asamangulia Maulik

Asamangulia M., 1915, Ind. Mus., Rec. 11: 378 (type: A. cuspidata M.; India); 1919, Fauna India, Hisp. & Cass., 168.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 319.—Gressitt, 1950, Lingnan Sci. Jour. 23: 104.

# Key to Chinese species of Asamangulia

Spine of scape reaching to end of antennal segment 3; marginal spines of elytron about 3 × as long as broad (Uhmann, 1927; Taiwan; Saccharum)...... horni\*

55. Asamangulia longispina Gressitt Fig. 252.

Rhadinosa reticulata: Gr. (nec Baly), 1938, Lingnan Sci. Jour. 17: 325 (Hainan); 1939, op.

cit. 18: 172, 200 (Kwangtung; Kiangsi).

Asamangulia longispina Gressitt, 1950, op. cit. 23: 104 (N. Kwangtung, etc; LINGNAN).

DISTRIBUTION: S. China (Kwangtung, Fukien, Kiangsi), Hainan I.

FUKIEN: 6. Kien-yang City, 23. VI. 1941, Maa (BI-SHOP); 1, Ta-chu-lan, Shaowu, 17. V. 1945, K. S. Lin; 1, Shao-wu City, 3. IX. 1942, Maa (CAS, BISHOP).

HOST: ?Miscanthus sp.

# Genus Rhadinosa Weise

Rhadinosa W., 1905, Dtsch. Ent. Zschr. 1905: 318 (type: Hispa nigrocyanea Motsch.; E. Asia); 1911, Gen. Ins. 125: 94.-Maulik, 1919, Fauna India, Hisp. & Cass., 164.-Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 321.-Gressitt, 1950, Lingnan Sci. Jour. 23: 101.-Uhmann, 1958, Col. Cat. Suppl. 32 (2): 276.

### KEY TO CHINESE SPECIES OF RHADINOSA

- 1. Antennal scape with a long spine ...... 2 Antennal scape with only a low tubercle; margin of elytron with 11-12 spines ..... 56. abnormis
- Antennal segments 3-5 minutely spined or toothed on
- 3. External margin of elytron with 20-23 spines, those at apex nearly as long as those on anterior portion of side; humeral spines slightly arched and moderately short ... 4 External margin of elytron with 13-15 spines, those at apex distinctly shorter than those on anterior portion of side; humeral spines long and straight ..... 57. fleutiauxi
- 4. External margin of elytron with about 21 spines; elytral punctures small round and External margin of elytron with 22 or 23 spines; elytral punctures large and shallow; shiny black with grayish hairs; length 5.25 mm ........... 60. reticulata
- 5. Elytral disc and margin of pronotum almost glabrous; external margin of elytron Elytral disc and margin of pronotum with erect white hairs; external margin of

Rhadinosa abnormis Gressitt and Kimoto, n. sp. Fig. 253, a-b. 56.

Black; antenna clothed with reddish black to silvery pubescence on apical 1/2; pronotum with some very fine pale pubescence; elytron slightly pitchy black, with only a few minute hairs; abdomen partly reddish pitchy; ventral surfaces and legs with very little pubescence.

Head gradually narrowed and truncate anteriorly; occiput weakly convex and finely

Fig. 252. Asamangulia longispina Gress.



granulose; interantennal projection very short and narrow; frontoclypeus moderately convex and somewhat transversely rugulose. Antenna 2/5 as long as body, fairly stout in distal 1/2; segment 1 quite stout, broadened apically and with an obtuse tubercle above: 2 rounded-cylindrical, about as long as broad; 3 longer than broad, thickened apically; 4 slightly longer and more cylindrical; 5 similar to 4; 6 more thickened apically; 7-10 much stouter and gradually shorter; 11 stout basally, tapering apically, longer than 7. Prothorax 3/4 as long as broad, obtuse at side; spine on anterior border branched at base, each arm straight, arm 1 much longer than 2 and pointing considerably forward, arm 2 suberect; lateral spines 2, 1; spine 1 longest and straightest and pointing nearly forward, 2 and 3 slightly arched forward at apex and equal in length; disc moderately convex, transversely depressed parallel to base and finely rugulose, with a smoother shallowly depressed area in center. Scutellum large, subtriangular, rounded behind, finely punctured. Elytron about  $3.5 \times$  as long as broad excluding spines, somewhat narrowed a little behind in humerus and broadened in apical 1/2; disc with fairly regular distinct punctures and about 14 spines exclusive of scutellar and humeral rows, anterior and sublateral discal spines very short and partly only strong tubercles, but posterior discal spines fairly long and erect, about as long as average length of marginal spines; marginal spines 11, including those on apex, all fairly strong and equally spaced and mostly almost 1/2 as long as width of elytron; apical spines very little shorter than lateral spines. Ventral surfaces finely punctulate at sides. Legs fairly short and not very stout. Length 2.8 mm; breadth 1.7 including spines, 1.2 excluding spines.

DISTRIBUTION: S. China (Kwangtung).

Holotype (LINGNAN), Yao Shan, Lin Distr., N. Kwangtung Prov., 24–26. IV. 1934, F. K. To; paratype (BISHOP), same data.

This species lacks one of the principal characters of *Rhadinosa*, a long spine on the scape. Instead it has only a tubercle. However, it is otherwise very similar to species of the genus, and is very similar to *fleutiauxi* Baly except for fewer marginal spines on elytron.

57. Rhadinosa fleutiauxi (Baly) Fig. 253, c.

Hispa Fleutiauxi B., 1889, Soc. Ent. France, Ann. ser. 6, 9: 491 (Cambodia; PARIS). Hispella (Pseudhispella) Fleutiauxi: Gestro, 1897, Mus. Civ. Genova, Ann. 38: 81.

Rhadinosa Fleutiauxi: Weise, 1911, Col. Cat. 35: 62.—Uhmann, 1938, Ann. Mag. Nat. Hist. ser. 11, 1: 428.—Gressitt, 1938, Lingnan Sci. Jour. 17: 325 (Hainan); 1939, op. cit. 18: 171, 200 (Kwangtung).—Uhmann, 1940, Ent. Blätt. 36: 126 (Fukien).—Gressitt, 1950, Lingnan Sci. Jour. 23: 102.—Uhmann, 1954, Ann. Mag. Nat. Hist. ser. 12, 7: 515.

DISTRIBUTION: Indo-China, S. China (Kwangtung, Kwangsi, Hupeh, Hunan, Kiangsi, Fukien), Hainan I.

KWANGTUNG: Meihsien City, 29. V; Yim-na Shan, VI. 1936; 1, Tin-tong, Lochang Distr., 18. VIII. 1947, Gressitt (CAS). KIANGSI: 1, Tai-au-hong, 4. VII. 1936, Gressitt (CAS). HUPEH: Liang-ho-keu, Lichuan, 4. IX. 1948, Djou. HAINAN: Lia-mui, 2. VIII. 1935, Gressitt (CAS).

HOST: Wild grasses.

#### 58. Rhadinosa lebongensis Maulik

Rhadinosa lebongensis M., 1919, Fauna India, Hisp. & Cass., 168 (India; BM).-Uhmann,



Fig. 253. a, *Rhadinosa abnormis* n. sp., left side of pronotum; b, same, posterior portion of left elytron; c, *R. fleutiauxi* (Baly).

1938, Ent. Tidskr. **59**: 227 (Yunnan).—Gressitt, 1938, Lingnan Sci. Jour. **18**: 171.— Uhmann, 1943, Folia Zool.-Hydrobiol. **12**: 205.—Gressitt, 1950, Lingnan Sci. Jour. **23**: 102.

DISTRIBUTION: N. India, Assam, SW China (Yunnan, Kiangsi, Fukien).

# 59. Rhadinosa nigrocyanea (Motschulsky)

Hispa nigro-cyanea M., 1861, Schrenck's Reise Amurl. 2: 237, pl. 11, fig. 26 (Amur; ?Moscow).—Fairmaire, 1889, Soc. Ent. France, Ann. ser. 6, 9: 83.

Monochirus nigrocyanea: Schneider & Leder, 1878, Naturf. Ver. Brünn, Verh. 17: 88.

Pseudispella nigrocyanea: Weise, 1902, Dtsch. Ent. Zschr. 1901: 238.

Rhadinosa nigrocyanea: Ws., 1905, op. cit. 1905: 318.—Yuasa, 1932, Nippon Konchu Zukan, 588, fig. 1150.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 323, 329; 1941, op. cit. 31: 233 (Korea).—Gressitt, 1939, Pan-Pac. Ent. 15: 137; 1939, Lingnan Sci. Jour. 18: 171; 1950, op. cit. 23: 103.—Ohno, 1954, Shin Konchu 7: 51.—Uhmann, 1955, Ent. Blätt. 50: 206.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 195.

Hispella nigrocyanea: Reitter, 1927, Ent. NachrBl. 1: 34.

Rhadinosa reticulata: Uhmann, 1940, Ent. Blätt. 36: 126 (Fukien).

DISTRIBUTION: S. Siberia, China (Sinkiang, Manchuria, Anhwei, Kiangsu, Kiangsi,

Chekiang, Fukien, Kwangtung), Hainan I., Korea, Japan.

FUKIEN: Ta-chu-lan, Shaowu, IV. 1943; Shui-pei-kai, Shaowu, 18. VI. 1943, Maa (BI-SHOP). CHEKIANG: Mokan Shan (CAS).

HOSTS: Miscanthus spp. (Japan), "Digitaria glabra" (Siberia, Motschulsky).

#### 60. Rhadinosa reticulata (Baly)

Hispa reticulata B., 1888, Mus. Civ. Genova, Ann. ser. 2, 6: 665 (Burma; GENOVA).—Weise, 1897, Dtsch. Ent. Zschr. 1897: 142.

Rhadinosa reticulata: Weise, 1911, Col. Cat. 35: 62.—Maulik, 1919, Fauna India, Hisp. & Cass., 164, fig. 52.



Fig. 254. *Rhadinosa tayana* Gress., dorsal view of head and prothorax (from Lingnan Sci. Jour. 18).

The specimens earlier reported from China as this species by Gressitt (see Lingnan Sci. Jour. 23: 104) represent *Asamangulia longispina* Gr. and those by Uhmann (1940, Ent. Blätt. 36: 126) are *R. nigrocyanea* (Mots.).

DISTRIBUTION: Burma, S. China (Fukien).

61. Rhadinosa tayana Gressitt Fig. 254.

Rhadinosa tayana Gr., 1939, Lingnan Sci. Jour. 18: 172, pl. 5, fig. 7 (Taya I.; LINGNAN); 1950, op. cit. 23: 103.

DISTRIBUTION: Hainan I. (Taya I.).

### Genus Dactylispa Weise

Hispa: Chapuis, 1875, Gen. Col. 11: 333 (part).

Hispa (Podispa) Chapuis, 1875, l.c., 335 (part).

Dactylispa Ws., 1897, Dtsch. Ent. Zschr. 1897: 137 (type: D. andrewesi Ws., syn. of Hispa severinii Gestro; India); 1899, Archiv Naturg. 65 (1): 265, note.—Gestro, 1899, Mus. Civ. Genova, Ann. 40: 329.—Weise, 1905, Dtsch. Ent. Zschr. 1905: 317; 1911, Gen. Ins. 125: 95.—Maulik, 1919, Fauna India, Hisp. & Cass., 170.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 322.—Gressitt, 1950, Lingnan Sci. Jour. 23: 105.—Uhmann, 1954, Philip. Jour. Sci. 83: 1; 1955, Ent. Blätt. 50: 191.

Triplispa Ws., 1897, Dtsch. Ent. Zschr. 1897: 150.

### KEY TO CHINESE SPECIES OF DACTYLISPA

	with tubercles instead of spines
4(3).	Spine of side of upper surface of anterior end of pronotum with 3 branches 5
	Spine of side of anterior end of pronotum with 2 branches
5(4)	Side of prothorax with 3 spines 6
• ( • )•	Side of prothorax with 4 or 5 spines
6(5)	Pronotum with a transverse raised smooth area across center 7
• ( • ).	Pronotum lacking a transversely oblong-oval raised smooth area across center 8
7(6)	Dorsal surface largely black: antenna lateral thoracic spines less and middle
, (0).	of elvtral margin ochraceous elvtron with a broad margin bearing spines of
	various lengths 87 nigrodiscalis
	Dorsal surfaces dark brown to nitchy nartly naler including anices of marginal
	spines which are uniform in length along side of elvtron 101 stoetzneri
8(6)	Body entirely testaceous except for discal spines of elytron tips of thoracic
0(0).	spines and small marks on pronotum: elvtral margin slightly expanded: an-
	tenna with segments 3-11 cylindrical
	Dorsal surface of body entirely black : elytral margin not expanded : antenna
	with most of segments thickened distally 77 kauling
9(5)	Side of prothorax with 3 spines with a common origin followed by a single
/ .	isolated shorter spine: pronotum with a raised impunctate oval or triangular
	area in center
	Side of prothorax with 4 or 5 spines arising from a common base 12
10(9)	Discal spines of elytron long and slender: lateral spines long regular 11
10 ( ) ).	Discal spines of elytron short: marginal spines long at side alternating with
	short spines those at apex very short dorsal surface testaceous, with head
	some spots on pronotum, and discal spines of elvtron black 100. spectabilis
11(10).	Lateral elvtral spines alternating with spinules: dorsum black, apical elvtral
<b>`</b>	spines $3.5 \times as$ long as broad
	Lateral elytral spines not regularly alternating with spinules; dorsum pale
	brown with pitchy spots, including a pair on pronotal disc; apical elytral
	spines 5× as long as broad94. pungens
12(9).	Dorsal surfaces testaceous with pitchy spines; apical spines of elytron extremely
	reduced; elytral margin expanded
	Dorsal surfaces entirely black; antenna testaceous; elytral margin not expand-
	ed; apical spines not extremely reduced 89. parbatya
13(4).	Each side of prothorax with 3 spines 14
	Each side of prothorax with 5 spines; elytron oblong, margin very slightly
	broadened, relatively straight; marginal spines long and slender 84. marginicollis
14 (13).	Elytral margin broadly expanded anteriorly and posteriorly, marginal spines
	broad and flattened, triangular 15
	Elytron more or less oblong in shape, margin regularly, or not at all, expanded,
	at most slightly broadened anteriorly and posteriorly; marginal spines at
	least in part long and slender 18
15 (14).	Lateral prothoracic spines distinctly longer than spaces between them; discal
	spines of elytron more or less acute at tips; spines on anterior marginal
	convexities distinctly longer than broad; elytral disc partly reddish 16
	Lateral prothoracic spines no longer than spaces between them; discal spines

of elytron blunt; spines on anterior marginal convexities no longer, or hardly

	longer, than broad
16 (15).	Pronotum with 5 raised smooth areas across middle: disc of elvtron and mar-
10 (10).	ginal spines of prothorax and elytron pitchy red : anterior lobes of marginal ex-
	pansions of elytron with numerous tubercles: posterior branch of anterior spine
	of pronotum broad and hardly longer than anterior spine 79 latisping saurus
	Proportium with 3 closely approximate rounded smoothish areas on center of
	disc: elytral disc and marginal spines of prothoray and elytron pale ochra-
	coust: anterior lobes of marginal expansions of elutron with only a few
	tubereles, posterior branch of enterior spine of proportium slander and much
	langer then enterior branch and for spine of pronotally stender and mach
17 (15)	Spings on optation conversition of alternal margin no longer than broad triangular
17 (15).	spines on anterior convexities of erytral margin no longer than broad, thangular
	Spines on antenion conversition of skytral manual handly longer than broad
	spines on anterior convexities of eightal margin barely longer than broad,
10 (14)	acuminate apically (Chujo, 1955; Talwan) iatipennis
18 (14).	Pronotum with a transverse, oblong-oval, convex area across middle of disc 19
10 (10)	Pronotum lacking a large transverse raised impunctate area on disc
19 (18).	External and apical margins of elytron with less than 13 major spines; elytral
	surface partly black and partly testaceous
	External and apical margins of elytron with more than 15 major spines; elytral
	surface largely black or testaceous with black spines
20 (19).	Convex portion of pronotal disc nearly impunctate, pitchy red; mid lateral
	prothoracic spine fairly straight, bearing a spinule, pitchy black; last 3 major
	discal spines of elytron subequally spaced
	Convex portion of pronotal disc partially punctured, shiny black; mid lateral
	prothoracic spine curved, lacking a spinule, testaceous except at apex; last
	3 major discal spines of elytron unequally spaced 63. approximata
21 (19).	Elytron not very hairy, the hairs short and sparse, not arising from projec-
	tions; prothorax black or yellowish testaceous, spines with or without spinules,
	but lacking bristles 22
	Elytron very hairy, the hairs numerous and long, often arising from slight pro-
	jections; prothorax pitchy or reddish, dorsal and anterior lateral spines with
	spinules and long hairs
22 (21).	Thoracic spines without spinules; prothorax and elytron largely black or pitchy 23
	Thoracic spines with preapical spinules; prothorax and elytron yellowish tes-
	taceous, latter with discal spines and their bases black, pronotum with a
	pitchy spot on each side before center; lateral margin of elytron slightly
	expanded and bases of marginal spines broadened 81. longula
23 (22).	Top of apical declivity of elytron with a transverse row of 3 spines; swollen
	portion of pronotal disc widened in middle
	Top of apical declivity of elytron with 5 (rarely 4) major spines; swollen por-
	tion of pronotal disc narrow and parallel-sided 103. superspinosa
24 (23).	Most of elytral spines as long as width of elytron; last 3 discal spines not
	almost in a transverse row, innermost separated from spine anterior to it by
	about 3 punctures
	Major elytral spines shorter than width of elytron; last 3 discal spines almost

1B

	in a transverse row, innermost separated from spine anterior to it by 5 or
	6 punctures
25 (18).	Lateral margin of elytron not broadly expanded; first 2 lateral prothoracic
	spines with a common basal trunk
	Lateral margin of elytron broadly expanded; first 2 lateral prothoracic spines
	usually not branching from a common base at any distance from side of
26 (25)	I steral spine 3 of prothoray slightly detached from hase of trunk of anterior 2 27
20 (25).	Lateral spine 3 of prothorax arising from base of trunk of anterior 2 fully as
	long as spine 1
27 (26).	Lateral spine 3 of prothorax much shorter than 1 or 2
	Lateral spine 3 of prothorax as long as 2; elytron with 14 spines on external
	margin and 6 shorter spines on apical margin (Chûjô, 1933; Taiwan) arisana*
28 (27).	Elytron with fine hairs arising from punctures, disc with 10 large spines; pro-
	notum almost entirely black
	Elytron glabrous, disc with 12 or 13 large spines; pronotum with a pair of
<b>2</b> 0 (25)	small black spots
29 (25).	Lateral prothoracic spine 3 arising from near base of long common trunk of
	spines 1-2, lateral eightal spines at least in part as broad basally as spaces
	Lateral prothoracic spine 3 not arising from common trunk of spines 1–2 31
30 (29).	Lateral prothoracic spine 3 arising distal to base of common trunk of anterior
	2; spines of apical margin of elytron barely longer than broad 66. cervicornis
	Lateral prothoracic spine 3 arising from extreme base of common trunk of
	anterior 2; spines of apical margin of elytron much longer than broad
31 (29).	Spines on apical margin of elytron not extremely short, at least mostly longer
	Inan broad
	broad 34
32 (31).	Pronotal disc with a broad median longitudinal impunctate stripe: lateral pro-
•= (•=).	thoracic spine 3 separated from origin of 1 and 2: numerous small spines in-
	terspersed among major marginal spines of elytron
	Pronotal disc almost entirely punctured; all 3 lateral prothoracic spines arising
	from a common base, equally spaced and similarly shaped; few small spines
	on elytral margins
33 (32).	Lateral prothoracic spines 1-2 more or less round in cross-section, with a sub-
	cylindrical common base; 3rd spine 4/5 as long as 1-2; pronotum pale
	ochraceous, no distinct impunctate area on each side of median strip
	Lateral prothoracic spines 1-2 flattened basally with a broad common base:
	3rd spine $1/2$ as long as $1-2$ : pronotum marked with blackish or pitchy an
	impunctate area on each side of median area
34 (31).	Spines on lateral margin of elytron more or less equal in length, 10 or more
- /	in number; apical spines equal and regular
	Spines on lateral margin of elytron often unequal in length or width, major

1**B** 

ones generally 8–10 in number, apical spines unequal or not regularly spaced,
or minute
35 (34). Spines on lateral margin of elytron not extremely long, flattened basally, about 15 in number 36
Spines on lateral margin of elytron long and slender, 10 or 11 in number; red-
brown, marked with black on pronotum, discal spines of elytron and some
of marginal spines
36 (35). All spines relatively short, lateral protnoracic ones flattened, subequal, with a
Prothoracic spines and humeral and marginal spines of elytron not very short,
lateral thoracic spines 1-2 appendiculate and longer than 3; spines of lateral
margin of elytron at least $3 \times$ as long as broad, feebly flattened basally,
37 (36) Spines of lateral margin of elytron subuniform mostly longer than width of
explanate margin; dorsum largely pitchy
Spines of lateral margin of elytron irregular in length, partly no longer than
width of explanate margin; color ochraceous
Jateral margin of elytron distinctly widened below humerus
margin very broad basally, $3-5 \times$ as long as broad; posterolateral discal
spine of elytron with a very broad base
39 (38). Lateral margin of elytron distinctly flattened
occasional shorter spine interspersed among them : propotal disc largely
rugose-punctate with a raised median line; spines of elytral disc short and
tubercle-like
40 (39). Lateral margin of elytron with longer spines alternating with shorter ones 41
only a single central impunctate area; dorsal spines strong; those on elytral
apex minute
41 (40). Prothoracic spines long and slender, lateral spine 2 nearly $2 \times$ as long as 3;
pronotum with some impuncate areas at middle and side
almost entirely punctured; posterolateral spine of elytral disc with a very
broad base; dorsum largely black (Chûjô, 1933; Taiwan) insulicola*
62. Dactylispa angulosa (Solsky)
Hispa angulosa S., 1871, Soc. Ent. Ross., Horae 8: 262 (Amur; ?Moscow)Fairmaire,
1888, Revue d'Ent. 7: 157.

- Hispa japonica Baly, 1874, Ent. Soc. Lond., Trans. 1874: 215 (Japan; BM).-Lewis, 1893, Entomologist 26: 153.
- Dactylispa angulosa: Weise, 1897, Dtsch. Ent. Zschr. 1897: 148.—Doi, 1927, Dobutsugaku-Zasshi 39: 334 (Korea).—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 328.—Gressitt, 1939, Pan-Pac. Ent. 15: 137; 1950, Lingnan Sci. Jour. 23: 111.—Chûjô, 1941, N. H. Soc. Formosa, Trans. 31: 232 (Korea).—Uhmann, 1940, Ent. Blätt. 36: 125, 128; 1955, op. cit. 50: 194.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 193 (hosts).

DISTRIBUTION: SE Siberia, Japan, China (Kiangsu, Anhwei, Chekiang, Hopei, Manchuria, Shensi, Szechuan, Kweichow), Korea.

KIANGSU: 1, Nanking, 14. VIII. 1919, Loomis (US). SHENSI: 1, Chin-ling Mts., IV-V. 1904; 1, S. Shensi, V. 1904, Blackwelder (US). SIBERIA: 14, Vladivostok, 1923, Prinada (US).

HOSTS: Filipendula palmata, F. multijuga Maxim, Isodon inflexus (Thunb.) Kudo, Prunella vulgaris L. var. lilacina Nakai.

63. Dactylispa approximata Gressitt Fig. 255, a.

Dactylispa approximata Gr., 1939, Lingnan Sci. Jour. 18: 201, pl. 7, fig. 4 (SW Fukien; USNM); 1950, op. cit. 23: 111; 1953, Pan-Pac. Ent. 29: 125.—Uhmann, 1955, Ent. Blätt. 50: 206.

DISTRIBUTION: S. China (Fukien, Kwangtung).

FUKIEN: 3, Ta-chu-lan, Shaowu, 30. IV-12. V. 1942, 16. V. 1943, Maa; 1, San-chiang, 1. V. 1943, Maa (BISHOP).

### 64. Dactylispa asoka Maulik

Dactylispa asoka, M., 1919, Fauna India, Hisp. & Cass., 218 (S. India; BM).—Uhmann, 1934, Dtsch. Ent. Ges., Mitt. 5: 30 (Tonkin); 1938, Ann. Mag. Nat. Hist. ser. 11, 1: 427 (Siam); 1938, Ent. Tidskr. 59: 227 (Yunnan).—Gressitt, 1950, Lingnan Sci. Jour. 23: 112.

DISTRIBUTION: S. India, SW China (Yunnan), Vietnam, Thailand.

### 65. Dactylispa balyi (Gestro)

Hispa discoidalis: Baly (nec Chapuis), 1888, Mus. Civ. Genova, Ann. 26: 664. (Burma).
Hispa balyi Gestro, 1890, op. cit. 30: 250 (Burma; GENOVA); 1897, op. cit. 38: 82 (Java, Sumatra).

Dactylispa balyi: Weise, 1911, Col. Cat. 35: 64.—Maulik, 1919, Fauna India, Hisp. & Cass., 210.—Gestro, 1920, Mus. Civ. Genova, Ann. 48: 397 (Laos).—Gressitt, 1938, Lingnan Sci. Jour. 17: 332; 1939, op. cit. 18: 175; 1950, op. cit. 23: 113.

Dactylispa tonkinea Uhmann, 1930, Ent. Blätt. 26: 135 (Tonkin).

DISTRIBUTION: Burma, S. China (Kwangsi, Kwangtung), Hainan I., Laos, Vietnam, Sumatra, Java.

66. Dactylispa cervicornis Gressitt Fig. 255, b.

Dactylispa cervicornis Gr., 1950, Lingnan Sci. Jour. 23: 113 (NW Fukien; LINGNAN).

DISTRIBUTION: S. China (Fukien, Kwangtung).

FUKIEN: Sin-fung-ling, San-kang, Chungan Distr., 10. VI. 1943, Maa (BISHOP). KWANG-TUNG: Ting-wu Shan, 23–26. VII. 1950, Gressitt (BISHOP).

#### 67. Dactylispa chaturanga Maulik

Dactylispa chaturanga M., 1919, Fauna India, Hisp. and Cass., 237, fig. 67 (S. India; BM).
 —Gressitt, 1939, Lingnan Sci. Jour. 18: 176; 1950, op. cit. 23: 114.

DISTRIBUTION: S. India, Vietnam, S. China (Hunan, Kwangtung).



Fig. 255. a, *Dactylispa approximata* Gress.; b, *D. cervicornis* Gress. (from Lingnan Sci. Jour. 23).

# 68. Dactylispa chinensis Weise

Dactylispa chinensis Ws., 1905, Arkiv Naturg. 71, 1: 102 (S. China; ?ZMB).—Uhmann, 1938, Ent. Tidskr. 59: 227; 1940, Ent. Blätt. 36: 126.—Gressitt, 1950, Lingnan Sci. Jour. 23: 115; 1953, Pan-Pac. Ent. 29: 125.—Uhmann, 1955, Ent. Blätt. 50: 200.

Dactylispa gestroi Gressitt, 1938, Lingnan Sci. Jour. 17: 327, pl. 11, fig. 4 (Hainan; CAS); 1939, op. cit. 18: 177, 203.

DISTRIBUTION: S. China (Hunan, Hupeh, Kwangsi, Fukien, Kwangtung), Hainan I. HUPEH: 1, Liang-ho-keu, 7. IX. 1948, Gressitt & Djou; 1, Shao-ho, 13. VIII. 1948, Gressitt & Djou; 1, Hsiao-ho, 9. VIII. 1948, Gressitt & Djou, Lichuan Distr., (BISHOP, CAS); 1, Wu-tsu-tse Mt., Hwang Mai Distr., 25–29. VIII. 1933, Djou (CAS). KWANGTUNG: 1, Ting-wu Shan, 7–12. VII. 1950, Gressitt (CAS). FUKIEN: 2, Ta-chu-lan, 1000 m, Shaowu, 14. V. 1942, 15. IV. 1942; 1, Tsi-li-chiao, 1000 m, Chungan Distr., 28. IV. 1945, Maa (BISHOP).

# 69. Dactylispa crassicuspis Gestro Fig. 256, a.

Dactylispa crassicuspis G., 1908, Soc. Ent. Ital., Bull. 38: 184 (Yunnan; GENOVA).—Gressitt, 1939, Lingnan Sci. Jour. 18: 177, 202; 1950, op. cit. 23: 116; 1953, Pan-Pac. Ent. 29: 125.—Uhmann, 1940, Ent. Blätt. 36: 126; 1955, op. cit. 50: 198, 209.

DISTRIBUTION: China (Shensi, Hupeh, Hunan, Szechuan, Kweichow, Kwangtung, Kiangsi, Fukien).

SHENSI: 1, Chin-ling Mts., IV-V. 1904; 1, S. Shensi, V. 1904, Blackwelder (US). HUPEH: 9, Hsiao-ho, Lichuan Distr., 8–12, 26. VIII. 1948; 6, Liang-ho-keu, Lichuan Distr., 1–9. IX. 1948; 1, Gau-yu-tai to Wang-chia-ying, 1200 m, Lichuan Distr., 20. IX. 1948; 2, Liang-ho-keu to Wang-chia-ying, 18. IX. 1948; 1, Lichuan, 31. VIII. 1948, all Gressitt & Djou (BISHOP, CAS). FUKIEN: 1, Ta-chu-lan, 1000 m, Shaowu, 7. VI. 1943, Maa (BISHOP).

### 70. Dactylispa digitata Uhmann

Dactylispa digitata U., 1955, Ent. Blätt. 50: 202, fig. 9 (NW Fukien; BONN).

DISTRIBUTION: SE China (Fukien).

# 71. Dactylispa excisa (Kraatz) Fig. 256, b.

Hispa excisa Kr., 1879, Dtsch. Ent. Zschr. 23: 140, pl. 2, fig. 10 (Amur; ?ZMB).

Dactylispa excisa: Weise, 1911, Col. Cat. 34: 65.—Uhmann, 1940, Ent. Blätt. 36: 127; 1955, op. cit. 50: 204.—Chûjô, 1941, N. H. Soc. Formosa, Trans. 31: 232 (Korea).

Dactylispa excisa var. repanda W., 1922, Philip. Jour. Sci. 21: 81 (Kiautschau; ?ZMB).— Gressitt, 1939, Lingnan Sci. Jour. 18: 202; 1950, op. cit. 23: 117; 1953, Pan-Pac. Ent. 29: 126.



Fig. 256. Dactylispa crassicuspis Gestro; b, D. excisa (Kraatz); c, D. higoniae (Lewis).

DISTRIBUTION: China (Hupeh, Shensi, Kirin, Szechuan, Kweichow, Kiangsi, Anhwei, Chekiang, Fukien), Korea, Taiwan.

HUPEH: 2, Sui-sa-pa, 1000 m, Lichuan Distr., 30. VII.-6. VIII. 1948, Gressitt & Djou (CAS). SZECHUAN: 2, NE of Mo-tau-chi, Wan-hsien Distr., 26. IX. 1948, Gressitt & Djou (BISHOP, CAS). FUKIEN: 1, Shi-li-tun, Chungan Distr., 21. I. 1943, Maa (BISHOP). SHEN-SI: 1, S. Shensi, V. 1904, Blackwelder (US).

### 72. Dactylispa ferrugineonigra Maulik

Dactylispa ferrugineo-nigra M., 1919, Fauna India, Hisp. & Cass., 208 (Burma; BM).—Uhmann, 1938, Ent. Tidskr. 59: 227.—Gressitt, 1950, Lingnan Sci. Jour. 23: 117.—Uhmann, 1954, Philip. Jour. Sci. 83: 13, 24.

DISTRIBUTION: Burma, SE China (Yunnan).

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# 73. Dactylispa filiola Weise

Dactylispa filiola W., 1897, Dtsch. Ent. Zschr. 1897: 135 (S. India; BM); 1905, op. cit. 1905: 120.—Gressitt, 1938, Lingnan Sci. Jour. 17: 333; 1939, op. cit. 18: 177, 203; 1950, op. cit. 23: 117.

Dactylispa feae: Gressitt (nec Gestro), 1938, op. cit. 17: 332 (Hainan).

DISTRIBUTION: S. India, Ceylon, S. China (Kiangsi, Fukien, Kwangtung, Kwangsi), Hainan I.

HAINAN: 3, Fan-heang, 7. VI. 1935, Gressitt (CAS); 2, Dwa-bi, 325 m, 19–30. VII. 1935, Gressitt (BISHOP).

### 74. Dactylispa gressitti Uhmann

Dactylispa gressitti U., 1955, Ent. Blätt. 50: 205 (NW Fukien; BONN). DISTRIBUTION: SE China (Fukien).

75. Dactylispa higoniae (Lewis) Fig. 256, c.

Hispa higoniae L., 1896, Ann. Mag. Nat. Hist. ser. 6, 17: 342 (Japan; BM).

Dactylispa higoniae: Weise, 1911, Col. Cat. 35: 66.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 326.—Uhmann., 1955, Ent. Blätt. 50: 210 (=corpulentina).—Chûjô & Kimoto, 1961, Pacific Ins. 3: 194.

Dactylispa corpulentina U., 1927, Suppl. Ent. 16: 113 (Formosa: ?ZMB).—Chûjô, 1933, N.
H. Soc. Formosa, Trans. 23: 325.—Gressitt, 1938, Lingnan Sci. Jour. 17: 332; 1939, op. cit. 18: 176, 202; 1950, op. cit. 23: 115.

DISTRIBUTION: Japan, Taiwan, S. China (Kiangsi, Kwangtung), Hainan I.

### 76. Dactylispa issikii Chûjô

Dactylispa issikii Ch., 1938, Umeno Ent. Lab., Bull. 6: 12, fig. 1 (Kyushu; UMENO). DISTRIBUTION: Japan (Kyushu), China.

HOSTS: Arundinaria pygmaea Mitt. var. glabre Ohwi, A. Simonii Riv., Phyllostachys bambusoides S. & Z., Oryza sativa L.

# 77. Dactylispa kaulina Gressitt

Dactylispa kaulina Gr., 1950, Lingnan Sci. Jour. 23: 118 (N. Kwangtung; LINGNAN).-Uhmann, 1955, Ent. Blätt. 50: 200.

DISTRIBUTION: S. China (Kwangtung, Fukien).

# 78. Dactylispa klapperichi Uhmann

Dactylispa klapperichi U., 1955, Ent. Blätt. 50: 192, fig. 2 (NW Fukien; BONN).

DISTRIBUTION: SE China (Fukien, Hupeh).

HUPEH: 2, Sui-sa-pa, Lichuan, VIII. 1948, Gressitt & Djou (CAS).

# 79. Dactylispa latispina saurus Uhmann, NEW STATUS

Dactylispa latispina: Gressitt (?nec Gestro), 1938, Lingnan Sci. Jour. 17: 333; 1939, op. cit. 18: 203; 1950, op. cit. 23: 120.

Dactylispa saurus Uhmann, 1955, Ent. Blätt. 50: 194, figs. 4, 5 (NW Fukien; BONN).

Our material appears to be very close to *latispina*, not mentioned in Uhmann's comparisons.

DISTRIBUTION: S. China (Fukien, Kwangtung), Hainan I.

# 80. Dactylispa longispina Gressitt

Dactylispa longispina Gr., 1938, Lingnan Sci. Jour. 17: 328 (Hainan; USNM); 1939, op. cit. 18: 178; 1950, op. cit. 23: 120.—Uhmann, 1954, Philip. Jour. Sci. 83: 25.

DISTRIBUTION: Hainan I., S. China (Hupeh, Fukien, Kwangtung), Vietnam.

HUPEH: 1, Liang-ho-keu, Lichuan Distr., 7. IX. 1948, Gressitt & Djou (BISHOP, CAS). KWANGTUNG: 1, Ting-wu Shan, 7–12. VII. 1950, Gressitt (BISHOP).

# 81. Dactylispa longula Maulik

Dacıylispa longula M., 1919, Fauna India, Hisp. & Cass., 204 (Burma; BM).—Gressitt, 1938,
 Lingnan Sci. Jour. 17: 333; 1939, op. cit. 18: 203; 1950, op. cit. 23: 121.

DISTRIBUTION: Burma, S. China (Kiangsi, Kwangtung), Hainan I.

HAINAN: 1, Lia-mui, 350 m, 2. VIII. 1935, Gressitt (CAS).

# 82. Dactylispa luhi Uhmann

Dactylispa luhi U., IN Barber, 1951, Pan-Pac. Ent. 27: 19 (W. Hills, Peking; USNM).-Gressitt, 1950, Lingnan Sci. Jour. 23: 121.

DISTRIBUTION: NE China (Hopei).

HOST: Arthraxon hispidus.

# 83. Dactylispa maculithorax Gestro

- Dactylispa maculithorax G., 1908, Soc. Ent. Ital., Bull. 38: 189 (Yunnan; GENOVA).-Uhmann, 1940, Ent. Blätt. 36: 127.-Gressitt, 1950, Lingnan Sci. Jour. 23: 121.
- Dactylispa maculicollis: Uhmann, 1938, Ent. Tidskr. 59: 227 (Yunnan; error).

DISTRIBUTION: S. China (Yunnan, Fukien).

# 84. Dactylispa marginicollis Gressitt

Dactylispa marginicollis Gr., 1939, Lingnan Sci. Jour. 18: 203, pl. 7, fig. 3 (Kwangtung, Fukien; USNM); 1950, op. cit. 23: 122.

DISTRIBUTION: S. China (Kiangsi, Fukien, Kwangtung).

# 85. Dactylispa masonii Gestro

Dactylispa Masonii G., 1923, Mus. Civ. Genova, Ann. 51: 9 (Hangchow; GENOVA).—
Uhmann, 1940, Ent. Blätt. 36: 127; 1949, Kol. Zschr. 1: 8 (=ussurina).—Gressitt, 1950, Lingnan Sci. Jour. 23: 123.—Chûjô, 1958, Kagawa Univ., Mem. Fac. Lib. Arts & Educ. 2 (58): 10.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 194.

Dactylispa ussurina Uhmann, 1928, Col. CentralBl. 3: 35 (E. Siberia).

Dactylispa flavomarginata Shirôzu, 1957, Sieboldia 2: 53, pl. 6, fig. 2 (Japan; SHIROZU).

DISTRIBUTION: SE China (Chekiang, Fukien, Manchuria), E. Siberia, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima).

HOSTS: Petasites japonicus (S. & Z.) Maxim, Compositae spp.

Dactylispa mauliki Gr., 1950, Lingnan Sci. Jour. 23: 123 (N. Kwangtung; LINGNAN). DISTRIBUTION: S. China (Kwangtung).

### 87. Dactylispa nigrodiscalis Gressitt

Dactylispa nigrodiscale Gr., 1938, Lingnan Sci. Jour. 17: 329, pl. 11, fig. 6 (Hainan; CAS). Dactylispa nigrodiscalis: Gr., 1939, op. cit. 18: 204 (S. Kiangsi); 1950, op. cit. 23: 124.

DISTRIBUTION: S. China (Fukien, Kwangtung), Hainan I.

# 88. Dactylispa pallidicollis Gressitt

Dactylispa pallidicolle Gr., 1938, Lingnan Sci. Jour. 17: 330, pl. 11, fig. 8 (Hainan; CAS). Dactylispa pallidicollis: Gr., 1939, op. cit. 18: 175; 1950, op. cit. 23: 124.

DISTRIBUTION: Hainan I.

# 89. Dactylispa parbatya Maulik

- Dactylispa xanthopus: Maulik (nec Gestro), 1918, Ann. Mag. Nat. Hist. ser. 9, 1: 70 (Sikkim).
- Dactylispa parbatya M., 1919, Fauna India, Hisp. & Cass., 234, fig. 65–66 (N. India; ZOOL. SURV. IND.).—Uhmann, 1938, Ent. Tidskr. 59: 227 (Yunnan).—Gressitt, 1950, Lingnan Sci. Jour. 23: 125.

DISTRIBUTION: N. India, S. China (Yunnan, Fukien).

FUKIEN: 1, Ta-chu-lan, Shaowu, 9. V. 1943, Maa (BISHOP).

# 90. Dactylispa paucispina Gressitt Fig. 257.

Dactylispa paucispina GI., 1939, Lingnan Sci. Jour. 18: 178, 204, pl. 5, fig. 6 (Kwangtung, Kiangsi; LINGNAN); 1950, op. cit. 23: 125.—Uhmann, 1955, Ent. Blätt. 50: 198.
DISTRIBUTION: S. China (Kiangsi, Fukien, Kwangtung).



Fig. 257. a, *Dactylispa paucispina* Gress., dorsal view of head and prothorax; b, same, dorsal view of body (from Lingnan Sci. Jour.).

#### 91. Dactylispa pici Uhmann

Dactylispa pici U., 1934, Berl. Ent. Ges., Mitt. 5: 28 (Tonkin; ?ZMB); 1940, Ent. Blätt. 36: 127, fig. 6 (Fukien).

DISTRIBUTION: N. Vietnam, S. China (Fukien).

# 92. Dactylispa planispina Gressitt Fig. 258, a.

Dactylispa planispina Gr., 1950, Lingnan Sci. Jour. 23: 125. (NW Fukien; LINGNAN).—
Uhmann, 1954, Philip. Jour. Sci. 83: 18; 1955, Ent. Blätt. 50: 196, figs. 4, 5.
DISTRIBUTION: S. China (Fukien).

# 93. Dactylispa platyacantha (Gestro)

Hispa platyacantha G., 1897, Mus. Civ. Genova, Ann. 38: 126 (Burma; GENOVA).

Dactylispa platyacantha: Weise, 1911, Col. Cat. 35: 68.—Maulik, 1919, Fauna India, Hisp. & Cass., 191.—Uhmann, 1938, Ent. Tidskr. 59: 227 (Yunnan).—Gressitt, 1939, Lingnan Sci. Jour. 18: 181, 205; 1950, op. cit. 23: 126 (SE China); 1953, Pan-Pac. Ent. 29: 126.

DISTRIBUTION: Burma, S. China (Yunnan, Kiangsi, Fukien, Kwangtung).

#### 94. Dactylispa pungens (Boheman)

Hispa pungens B., 1859, Resa Eugen., 202 (Hong Kong; STOCKHOLM).

- Dactylispa pungens: Weise, 1911, Col. Cat. 35: 68.—Gressitt, 1950, Lingnan Sci. Jour. 23: 127.—Uhmann, 1954, Philip. Jour. Sci. 83: 31.
- Dactylispa atracumina Gressitt, 1938, Lingnan Sci. Jour. 17: 326, pl. 11, fig. 3 (Hainan; CAS).

DISTRIBUTION: S. China (Hong Kong, Kiangsi), Hainan I.

KIANGSI: 2, Tai-au-hong, S. of Sung-wu, 540 m, 5. VII. 1936, Gressitt (CAS).

#### 95. Dactylispa reitteri Spaeth

Dactylispa reitteri Sp., 1933, Ent. NachrBl. 7: 136 (Sikang; SPAETH: MANCHESTER).—Uhmann, 1948, Naturf. Ges. Basel 59: 22.—Gressitt, 1950, Lingnan Sci. Jour. 23: 127.— Uhmann, 1954, Philip. Jour. Sci. 83: 14.

DISTRIBUTION: W. China (Sikang).

# 96. Dactylispa sauteri sauteri Uhmann

 Dactylispa sauteri U., 1927, Suppl. Ent. 16: 115, fig. 3.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 325.—Uhmann, 1940, Ent. Blätt. 50: 127.—Gressitt, 1950, Lingnan Sci. Jour. 23: 128.

DISTRIBUTION: Formosa, SE China (Fukien).

- 97. Dactylispa sauteri piceomaculata Gressitt Fig. 258, b.
- Dactylispa piceomaculata Gr., 1939, Lingnan Sci. Jour. 18: 179, 205, pl. 5, fig. 5 (Hong Shan; LINGNAN).

Dactylispa sauteri piceomaculata: Gr., 1950, op. cit. 23: 128.

DISTRIBUTION: S. China (Kiangsi, Hupeh, Fukien, Kwangtung).



Fig. 258. a, Dactylispa planispina Gress.; b, D. sauteri piceomaculata Gress.; c, D. sinuispina Gress.

HUPEH: 2, Liang-ho-keu, Lichuan, 7. IX; 1, Hsiao-ho, Lichuan, 9. VIII; 3, Sui-sa-pa, 1000 m, Lichuan Distr., 22–26. VIII., Gressitt & Djou, 1948 (BISHOP, CAS).

98. Dactylispa sinuispina Gressitt Fig. 258, c.

Dactylispa sinuispina Gr., 1938, Lingnan Sci. Jour. 17: 331, pl. 11, fig. 7 (Hainan; CAS);
1939, op. cit. 18: 181, 205.—Uhmann, 1940, Ent. Blätt. 36: 127.—Gressitt, 1950,
Lingnan Sci. Jour. 23: 129, pl. 6, fig. 4; 1953, Pan-Pac. Ent. 29: 126.—Uhmann,
1955, Ent. Blätt. 50: 193.

DISTRIBUTION: Hainan I., S. China (Hunan, Kweichow, Kiangsi, Fukien, Kwangtung).

KWANGTUNG: 1, Ting-wu Shan, 7-12. VII. 1949, Gressitt (BISHOP).

99. Dactylispa sjoestedti Uhmann Fig. 259.

Dactylispa (Triplispa) Sjöstedti U., 1928, Ent. Tidskr. 49: 102 (India; STOCKHOLM).

Dactylispa sjöstedti: Gressitt, 1939, Lingnan Sci. Jour. 18: 181, 205, pl. 5, fig. 4; 1950, op. cit. 23: 129 (sjostedti).

DISTRIBUTION: India, S. China (Kwangtung, Kiangsi, Kweichow).

HOSTS: Bambusa multiplex (Lour.) Raeusch., B. tuldoides Munro, B. sinospinosa Mc-Clure, Lingnania Chungii McClure, L. cerocissima McClure, Sinobambusa tootsik (Mak.) Nakai.





Fig. 259. Dactylispa sjoestedti Uhmann: a, dorsal view of head and prothorax; b, dorsal view of pupa; c, ventral view of pupa.

#### 100. Dactylispa spectabilis Gestro

Dactylispa (Triplispa) spectabilis G., 1914, Mus. Civ. Genova, Ann. 46: 75 (Yunnan; GENOVA).

Dactylispa spectabilis: Gressitt, 1950, Lingnan Sci. Jour. 23: 130. DISTRIBUTION: SW China (Yunnan).

# 101. Dactylispa stoetzneri Uhmann

Dactylispa stötzneri U., 1955, Ent. Blätt. 50: 204, figs. 12–14 (NW Fukien; BONN). DISTRIBUTION: SE China (Fukien).

# 102. Dactylispa subquadrata (Baly)

Hispa subquadrata B., 1874, Ent. Soc. Lond., Trans. 1874: 216 (Japan; BM).—Liu, 1936, Lingnan Sci. Jour. 15: 255.

Dactylispa subquadrata: Weise, 1897, Dtsch. Ent. Zschr. 1897: 148; 1911, Gen. Ins. 125: 96.—Uhmann, 1928, Col. CentralBl. 3: 37.—Yuasa, 1932, Icon. Ins. Japon (Nippon Konchu Zukan), 587, fig. 1148.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 329.—Gressitt, 1939, Pan-Pac. Ent. 15: 138; 1950, Lingnan Sci. Jour. 23: 130.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 194.

Dactylispa adstricta Weise, 1922, Philip. Jour. Sci. 21: 81 (Japan; BM).

DISTRIBUTION: Japan, E. China (Kiangsu).

HOSTS: Castanea crenata S. & Z., Castanopsis cuspidata (Th.) Schot., Quercus acutissima Carr., Q. glauca, Q. mongolica Fish. var. grosseserrata Rehd. & Wils., Q. serrata Th., Q. variabilis Bl.

# 103. Dactylispa superspinosa Gressitt and Kimoto, n. sp. Fig. 260.

Largely shiny black above with a slight pitchy tinge, ochraceous on antenna beyond

middle of segment 1, pitchy reddish on apices of most dorsal and lateral spines, ochraceous at extreme apex of elytron including most of apical spines; ventral surfaces of thorax black; abdomen and legs pale ochraceous; labrum dull red; palpi testaceous. Dorsum appearing glabrous, but with a few very minute hairs arising from punctures; ventral surfaces very sparingly pubescent with a few pale hairs on abdomen; legs with very little pubescence.



Fig. 260. *Dactylispa superspinosa* n. sp.: a, dorsal view of prothorax; b, posterior portion of elytron.

long as 7, stoutest near base. Prothorax somewhat raised anteriorly with a strong subcreat branching spine on each side and fine transverse striations between the spines; lateral spines 2, 1; 1 and 2 fairly stout, weakly sinuate, 2 slightly longer than 1, 3 about 1/2 as long as 2, straight and gradually tapering; disc somewhat depressed at side, heavily and closely punctured except for a smooth transverse raised area at center. Scutellum about as broad as long, rounded-subtruncate apically. Elytron  $3.5 \times$  as long as broad, subparallel-sided, very slightly widened somewhat before apex; disc with strong flat-bottomed regular punctures; lateral margin slightly thickened but not flattened; spines mostly quite long, cylindrical and gradually tapering; 4 short erect spines near scutellum, 4 gradually longer spines on humerus and discal spines 5, subequally spaced in row II, 5 in row IV, first 2 fairly short and last 2 almost adjacent, 2 in row VI, 1 a short distance behind humerus and the other at beginning of apical 1/3, and 2 spines with a common base in row VIII; spines on inner portion of disc all long and subequal, in fairly regular zig-zag arrangement, and 5 spines at top of apical declivity arranged 2, 2, 1 from outside toward suture; spines of external margin in part 4/5 as wide as elytral disc, numbering 15 to posterolateral angle and with 5 additional ones on apex gradually decreasing in length but all much longer than broad and nearly cylindrical basally, mid apical spine about 2/5 as long as longer lateral spines; almost no trace of minute spinules between spines. Ventral surfaces with metathorax strongly swollen and feebly punctured; abdomen moderately punctured and subrugose at sides. Legs fairly short with hind femur rather weakly swollen. Length 4.6 mm; breadth 1.7 excluding spines, 2.6 including lateral spines.

*Paratypes*: Coloration varying to considerably paler with dorsum dark pitchy brown and venter largely ochraceous to testaceous with metepisternum pitchy brown. Smooth

Head as broad as prothorax at apex, subsquarish between eyes and behind antennal insertion with a fine median groove and each side slightly raised; vertex slightly acute and projecting just above antennal insertions; frontoclypeus subpentagonal, widest at apex, moderately convex and finely granulate in central portion. Antenna 5/6 as long as body; segment 1 weakly arched and subcylindrical; 2 about 3/5 as long as 1; 3 as long as 1; 3-6 decreasing slightly in length; 7 as long as 3 and thickened apically; 8 about as long as 6 but stouter; 8-10 decreasing very slightly in length; 11 about as

area of pronotum sometimes distinctly grooved medially; last spine of elytral row IV sometimes single; sometimes only 4 spines on apical margin of elytron with 1 or 2 vestigial spines.

DISTRIBUTION: W. China (W. Hupeh).

Holotype (CAS), Wang-chia-ying to Sui-sa-pa, 1200–1400 m, Lichuan Distr., W. Hupeh, 21. VII. 1948, Gressitt & Djou; 3 paratypes (BISHOP, CAS, LINGNAN), Liang-ho-keu, Lichuan, 9. IX. 1948, and Sui-sa-pa, 1000 m, 15. IX. 1948.

Differs from *sauteri* Uhmann in having discal spines shorter than width of elytron, and from *piceomaculata* Gressitt in having 3 instead of 6 punctures between last 2 spines of row II (inner row), and from both in having 5 (sometimes 4) major spines along top of apical declivity, instead of 3, and raised area of pronotum narrower and parallel-sided (anterior-posterior).

### 104. Dactylispa tuberculata Gressitt

Dactylispa tuberculata Gr., 1950, Lingnan Sci. Jour. 23: 131, pl. 6, fig. 7 (N. Kwangtung; LINGNAN).

DISTRIBUTION: S. China (Kwangtung).

### 105. Dactylispa uhmanni Gressitt

Dactylispa uhmanni Gr., 1950, Lingnan Sci. Jour. 23: 132 (Fukien; LINGNAN).- Uhmann, 1954, Philip. Jour. Sci. 83: 31; 1955, Ent. Blätt. 50: 201.

DISTRIBUTION: S. China (Fukien).

FUKIEN: 1, Ta-chu-lan, 1000 m, Shaowu, 7. VI. 1943, Maa (BISHOP); 1, San-kang, Chungan Distr., 5–6. V. 1945, Maa (BISHOP).

# 106. Dactylispa vulnifica Gestro

Dactylispa vulnifica G., 1908, Soc. Ent. Ital., Bull. 38: 186 (Yunnan; GENOVA).-Gressitt, 1950, Lingnan Sci. Jour. 23: 133.

DISTRIBUTION: SW China (Yunnan).

Note: "Dactylispa maculosa (Fairmaire)" should be suppressed as a nomum nudum (see Gressitt, 1950, Lingnan Sci. Jour. 50: 122).

#### Genus Dicladispa Gestro

- Hispa: Chapuis (nec Linnaeus), 1875, Gen. Col. 11: 334.—Weise, 1893, Ins. Deutschl. 6: 1061; 1897, Dtsch. Ent. Zschr. 1897: 137.—Maulik, 1919, Fauna India, Hisp. & Cass., 247.—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 331.
- Hispa (Dicladispa) Gestro, 1897, Mus. Civ. Genova, Ann. 38:81 (type: Hispa testacea L.; Europe).
- Dicladispa Gestro, 1898, t. c., 712; 1899, op. cit. 40: 329; 1900, t. c., 439.—Gressitt, 1950, Lingnan Sci. Jour. 23: 133.—Barber, 1951, Pan-Pac. Ent. 27: 18.—Uhmann, 1952, Treubia 21: 232.

#### KEY TO CHINESE SPECIES OF DICLADISPA

2. Pronotal disc not conspicuously depressed transversely between posterior spines,

### 107. Dicladispa armigera (Olivier)

- Hispa armigera Ol., 1808, Ent. 6: 763, pl. 1, fig. 8 (E. Indies; ?PARIS).—Weise, 1904, Dtsch.
  Ent. Zschr. 1904: 457; 1911, Gen. Ins. 125: 103.—Maulik, 1919, Fauna India, Hisp.
  & Cass., 3, 249, figs. 1, 70.—Gestro, 1920, Mus. Civ. Genova, Ann. 48: 402.—Fey, 1925, Chekiang Bur. Ent., Pop. Bull. 14: 1–9, 3 figs.—Uhmann, 1928, Treubia 10: 61.
  —Jen, 1930, Chekiang Bur. Ent., Misc. Pub. 3: 12+72+2 pp., illus.—Ladell, 1933, Siam Soc. N. H., Jour. Suppl. 9: 161.—Chu, 1936, Prob. Ins. 1 (11): 7.—Gressitt, 1939, Lingnan Sci. Jour. 18: 182, 207. The reference cited by Uhmann (1958, Col. Cat. 35, 2: 325) for Chu, 1938 ("ex Chu 1936") is non-existent.
- Hispa aenescens Baly, 1887, Asiat. Soc. Bengal, Jour. 55: 412 (India; BM).—Cotes, 1889, Ind. Mus. Notes, 37.—Gestro, 1890, Mus. Civ. Genova, Ann. 30: 248.

Hispa (Dicladispa) aenescens: Gestro, 1897, op. cit. 38: 82.

Dicladispa armigera armigera: Gressitt, 1950, Lingnan Sci. Jour. 23: 134.

Dicladispa aenescens: Barber, 1951, Pan-Pac. Ent. 27: 18.

Dicladispa armigera: Uhmann, 1952, Treubia 21: 236; 1954, Ann. Mag. Nat. Hist. ser. 12, 7: 516.

DISTRIBUTION: India, Nepal, Burma, SE Asia, Sumatra, Java, Hainan I., S. China (Kwangtung, Fukien).

KWANGTUNG: Meihsien, 29. V. 1936, Gressitt. FUKIEN: Ying-ting, 16. VIII. 1940; Shui-pei-kai, Shaowu, 24. VII. 1942, Maa (BISHOP).

HOST: Oryza sativa L. (rice).

### 108. Dicladispa boutani (Weise)

Hispa Boutani Ws., 1905, Archiv Naturg. 71 (1): 101 (Tonkin; Uhm. lect. ZMB); 1911, Gen. Ins. 125: 103.

- Hispa similis Uhmann, 1927, Suppl. Ent. 16: 116 (Formosa; DEI).—Chûjô, 1933, N. H. Soc. Formosa, Trans. 23: 331.—Shiraki, 1934, (Surv. Ins. Inj. Agr. Crops Taiwan)
  2: 116, figs.—Uhmann, 1940, Ent. Blätt. 36: 126; 1952, Treubia 21: 237, fig. 1 (boutani chr. similis in text and fig). New Synonymy.
- Dicladispa armigera similis: Gressitt, 1950, Lingnan Sci. Jour. 23: 134 (Kwangtung); 1953, Pan-Pac. Ent. 29: 126.
- Dicladispa boutani similis: Chûjô & Kimoto, 1960, Niponius (Takamatsu) 1 (4): 10 (Ryukyu: Iriomote); 1961, Pacific Ins. 3: 194.

The records of Fey, Jen and Chu may belong to this species. The status of these forms needs further clarification.

DISTRIBTION: Vietnam, S. China (Szechuan, Shensi, Kiangsi, Chekiang, Fukien, Kwangtung), Taiwan, S. Ryukyu Is.

SZECHUAN: Betw. Kia-ting & Sui-fu, 400 m, 15. VI. 1929, Graham; betw. Chengtu & Kuan-hsien, 2. VII. 1924; Sui-fu, 21. VI. 1928, Graham (US). SHENSI: Chin-ling Mts., IV–V. 1904, Blackwelder (US). KIANGSI: Hong Shan, 1000 m, 25. VI. 1936, Gressitt. FUKIEN: Len-cheng to Wing-hing, 1939; Shui-pei-kai, Shaowu, 24. VII. 1942, Fung-shih, Shanghang, 8. VIII. 1940, Maa (BISHOP, CAS). KWANGTUNG: Meihsien, 31. V. 1936, Gressitt.

HOST: Oryza sativa L.

# 109. Dicladispa semicyanea (Pic)

Hispa semicyanea Pic, 1932, Mel. Exot. Ent. 60: 26 (China; PARIS). Dicladispa semicyanea: Gressitt, 1950, Lingnan Sci. Jour. 23: 135.

DISTRIBUTION: China.

### Genus Platypria Guérin-Méneville

Platypria Guer., 1840, Revue Zool. 1840: 139 (type: Hispa echidna Guer.; India).—Chapuis, 1875, Gen. Col. 11: 336.—Gestro, 1890, Mus. Civ. Genova, Ann. 30: 220; 1897, op. cit. 38: 515.—Weise, 1897, Dtsch. Ent. Zschr. 1897: 142; 1905, op. cit. 1905: 317; 1911, Gen. Ins. 125: 106.—Maulik, 1919, Fauna India, Hisp. & Cass., 256.—Gressitt, 1950, Lingnan Sci. Jour. 23: 136.

This genus occurs in Africa and the Oriental Region.

KEY TO CHINESE SPECIES OF PLATYPRIA

1.	Anterior lobe of elytron normally with 6 spines; pronotum and elytron more or less
	glabrous; basal portion of lateral lobe of prothorax with 4 deep depressions 2
	Anterior lobe of elytron normally with 5 spines; elytron with sparse erect pale hairs;
	basal portion of lateral lobe of prothorax with a single large depression
2.	Posterior lobe of elytron set off from hind margin of elytron; spines of both not
	forming a continuous even series (Pic, 1924; N. Vietnam: Tonkin) fenestrata*
	Posterior lobe of elytron not set off from hind margin of elytron; spines of both
	forming a continuous even series 112. melli
3.	Dorsum with many hairs, conspicuous on margins and lateral spines of elytron; base
	of pronotum and parts of elytron black 4
	Dorsum with but few short hairs, almost lacking on lateral spines of elytron; pro-
	notum and elytron spotted with black; scutellum deeply concave 113. yunnana
4.	Elytral disc almost entirely black; lateral lobe of prothorax narrow and elongate,
	spine 4 much longer on posterior margin than on anterior margin, spine 1 direct-
	ed obliquely inward 110. alces
	Elytral disc not almost entirely black; lateral lobe of prothorax somewhat rounded,
	not elongate, spine 4 hardly longer on posterior margin than on anterior, spine
	1 pointing anteriorly, spine 5 minute 111. hystrix

110. Platypria alces Gressitt Fig. 261, a.

Platypria alces Gr., 1938, Lingnan Sci. Jour. 17: 334, pl. 11, fig. 9 (Hainan; USNM); 1939, op. cit. 18: 182; 1950, op. cit. 23: 137, pl. 7, fig. 6.

DISTRIBUTION: Hainan I.



Fig. 261. a, *Platypria alces* Gress.; b, *P. yunnana* Gress. Dorsal views of head and prothorax (from Lingnan Sci. Jour. 17, 18).



Fig. 262. *Platypria melli* Uhmann. tung); 1950, *op. cit.* **23**: 137 (F

# 111. Platypria hystrix (Fabricius)

- Hispa hystrix F., 1798, Ent. Syst. Suppl., 116 (India; København).
- *Platypria erinacea*: Olivier (*nec* Fabr.), 1808, Ent. **6**: 762, pl. 1, fig. 6 (India).
- Platypria hystrix: Guérin-Méneville, 1840, Rev.
  Zool. 1840: 141.—Gestro, 1897, Mus. Civ.
  Genova, Ann. 38: 113.—Maulik, 1919, Fauna India, Hisp. & Cass., 264.—Uhmann, 1938, Ent. Tidskr. 59: 227 (Yunnan).—
  Gressitt, 1950, Lingnan Sci. Jour. 23: 138.
- Platypria digitata Gestro, 1888, Mus. Civ. Genova, Ann. 26: 178 (Burma; GENOVA).
- DISTRIBUTION: India, Nepal, Burma, SW China (Yunnan), Vietnam, SE Asia, Java.

HOST: Erythrina indica.

112. Platypria melli Uhmann Fig. 262.
Platypria fenestrata: Gressitt (nec Pic), 1939, Lingnan Sci. Jour. 18: 182 (Hunan, Kwang-

tung); 1950, op. cit, 23: 137 (Fukien); 1953, Pan-Pac. Ent. 29: 126.

*Platypria melli* Uhmann, 1955, Ent. Blätt. **50**: 211, fig. 10 (Kwangtung, Fukien; ZMB). DISTRIBUTION: S. China (Kwangtung, Fukien, Hunan).

# 113. Platypria yunnana Gressitt Fig. 261, b.

Platypria yunnana Gr., 1939, Lingnan Sci. Jour. 18: 183, pl. 5, fig. 1 (nr. Kunming, Yunnan; LINGNAN); 1950, op. cit. 23: 138.

DISTRIBUTION: SE China (Yunnan).

### Genus Cassidispa Gestro

Cassidispa G., 1899, Mus. Civ. Genova, Ann. 40: 174 (type: C. mirabilis G.; China).—
Weise, 1905, Dtsch. Ent. Zschr. 1905: 317; 1911, Gen. Ins. 125: 108.—Uhmann, 1947, Rev. Zool. Bot. Afr. 40: 130.—Liu, 1936, Lingnan Sci. Jour. 15: 249.—Gressitt, 1950, op. cit. 23: 135.

This genus is known only from China and tropical Africa.

# KEY TO CHINESE SPECIES OF CASSIDISPA

"windows" on explanate margin ...... 116. mirabilis

2. Prothorax with about 9 teeth on lateral lobe; elytron with about 40 narrow, transverse "windows" on explanate margin; disc somewhat irregularly punctured ...

Prothorax with 12 teeth on lateral lobe; elytron with 30-33 "windows" and teeth on explanate margin; disc more strongly and regularly punctured... 114. bipuncticollis

#### 114. Cassidispa bipuncticollis Chen

Cassidispa bipuncticollis Chen, 1941, Sinensia 12: 196 (Kiao-cheu, Shansi; HOANGHO-PAIHO). —Gressitt, 1953, Pan-Pac. Ent. 29: 126.

DISTRIBUTION: N. China (Shansi).

#### 115. Cassidispa maderi Uhmann

Cassidispa maderi U., 1938, Ent. Tdskr. 59: 225, fig. 1 (Yunnan; UHMANN); 1947, Rev. Zool. Bot. Afr. 40: 130.—Gressitt, 1950, Lingnan Sci. Jour. 23: 135.
DISTRIBUTION: SW China (Yunnan).

# 116. Cassidispa mirabilis Gestro

Cassidispa mirabilis G., 1899, Mus. Civ. Genova, Ann. 40: 175, fig. (Ta-tsien-lu; GENOVA). —Weise, 1911, Gen. Ins. 125: 108.—Uhmann, 1947, Rev. Zool. Bot. Afr. 40: 133.— Gressitt, 1950, Lingnan Sci. Jour. 23: 136.

DISTRIBUTION: W. China (Sikang).

#### Subfamily CASSIDINAE

This final subfamily is often thought to be the most specialized among the Chrysome-

lidae. It is often separated from the Hispinae by characters such as possession of freeliving larvae with paired caudal appendage, and adults with broadly expanded prothoracic and elytral margins. However, both of these characters break down and are possessed by some Hispinae. The genus *Notosacantha* apparently has leaf-mining larvae. The Chinese fauna in this subfamily was monographed by Gressitt in 1952, and some later additions have been made by L. N. Medvedev.

Tribe Notosacanthini

Notosacantha (nos. 1–6).

1. castanea; 2. centinodia; 3. fumida; 4. marginalis; 5. oblongopunctata; 6. sinica.

Tribe Basiprionotini

Craspedonta (no. 7) 7. leayana insulana.

Megapyga (no. 8)

8. chinensis.

Epistictina (no. 9)

9. viridimaculata.

Basiprionota (nos. 10–17)

10. bimaculata; 11. bisignata; 12. chinensis; 13. gressitti; 14. maculipennis reducta; 15. multipunctata; 16. whitei. Stenoprioptera: 17. tibetana.

### Tribe Aspidomorphini

Aspidomorpha (nos. 18-26)

18. chandrika; 19. difformis; 20. dorsata; 21. furcata; 22. fuscopunctata; 23. indica; 24. miliaris; 25. sanctaecrucis; 26. transparipennis.

Sindia (no. 27)

27. sedecimmaculata.

Sindiola (no. 28) 28. hospita.

Laccoptera (nos. 29-32)

29. quadrimaculata; 30. quatuordecimnotata; 31. tredecimpunctata; 32. yunnanica.

# Tribe Cassidini

Thlaspida (nos. 33-37) 33. biramosa chinensis; 34. b. japonica; 35. cribrosa; 36. lewisii; 37. pygmaea.

Glyphocassis (nos. 38-41)

38. lepida; 39. s. spilota; 40. s. gansuica; 41. trilineata szechuana.

Ischyronota (nos. 42–43)

42. conicicollis; 43. desertorum.

Chiridopsis (nos. 44-45)

44. bowringii; 45. punctata.

Cassida (nos. 46–96)

Alledoya: 46. vespertina. Taiwania: 47. amurensis; 48. circumdata; 49. discalis; 50.

eoa; 51. expansa; 52. expressa; 53. imparata (=imitatrix); 54. juglans; 55. juno; 56. obtusata; 57. plausibilis; 58. purpuricollis; 59. quadriramosa; 60. rati; 61. sauteri; 62. sigillata; 63. spaethiana; 64. versicolor. Mionycha: 65. concha; 66. hincksi. Cassida: 67. berolinensis; 68. fuscorufa; 69. jacobsoni; 70. japana; 71. klapperichi; 72. laticollis; 73. lineola; 74. mandli; 75. mongolica; 76. murraea ussuriensis; 77. nebulosa; 78. nucula; 79. pallidicollis; 80. piperata; 81. p. prasina; 82. p. mongolensis; 83. probata; 84. rubiginosa; 85. sikanga; 86. spaethi; 87. stigmatica. Odontionycha: 88. inflata; 89. viridis. Cassidule-lla: 90. nobilis; 91. parvula; 92. velaris; 93. vittata. Tylocentra: 94. deltoides; 95. lenis; 96. virguncula.

#### KEY TO CHINESE TRIBES AND GENERA OF CASSIDINAE

1.	Head visible from above, not covered by pronotum (Basiprionotini)
2 (1).	Vertex not produced anteriorly; elytral margin narrow at base; pronotum grooved laterally
	Vertex strongly produced into a forward projecting plate above antennal inser- tions; pronotum very broad, lacking submarginal groove Notosacantha
3 (2).	Pronotal and elytral margins narrowly expanded; anterior margin of pronotum feebly emarginate; elytra metallic or partly so, very deeply and subseriately
	Pronotal and elytral margins broadly or moderately expanded; anterior margin of pronotum deeply and arcuately or very broadly emarginate; elytra non- metallia in large part shellowly and interplanty pupetized.
1(3)	Body oblong-ovate 5
4 (3).	Body strongly broadened and rounded posteriorly: scutellum triangular
	Megapyga
5 (4).	Pronotum grooved medially and nearly impunctate, its anterior margin obtuse-
	Proportium coarsely punctured not grooved medially its anterior margin broad-
	ly and transversely emarginate: elytra only partially metallic Epistictina
6(1).	Tarsal claws bearing a comb-like structure at base (Aspidomorphini)
	Tarsal claws lacking a comb-like structure at base (Cassidini) 10
7 (6).	Comb-like structure present on both sides of tarsal claws
	Comb-like structure present on inner side of tarsal claws only Sindia
8 (7).	Body somewhat triangular or pentagonal in outline, fairly deep; elytron rugu- lose and deeply punctured, with moderately broad, declivitous lateral ex-
	pansion
	Body rounded in outline, depressed; elytron fairly smooth, with broad, sub- horizontal lateral expansion
9 (8).	Comb-like structures long on both sides of tarsal claws Sindiola
	Comb-like structures short on outer sides of tarsal claws Laccoptera
10 (6).	Prosternum lacking a groove on side for reception of antenna11
	Prosternum with a groove on side for reception of at least basal portion of antenna
11 (10).	Apical margin of elytron lacking a row of fine hairs on underside; claws
	often toothed basally Cassida

1B

### Tribe NOTOSACANTHINI (Hoplionotini)

### Genus Notosacantha Chevrolat

- Notosacantha Chev., 1837, Dejean's Cat. Col., ed. 3, 367, 391.—Barber & Bridwell, 1940, Brookl. Ent. Soc., Bull. 35: 7 (type: Cassida echinata Fabr.; Madagascar).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 444.
- Hoplionota Hope, 1840, Col. Man. 3: 153.—Guérin, 1844, Icon. Regne Anim. Ins. 2: 287.—
  Boheman, 1850, Mon. Cassid. 1: 16.—Chapuis, 1875, Gen. Col. 11: 357.—Wagener, 1881, Münch. Ent. Ver., Mitt. 5: 21.—Spaeth, 1913, Zool.-Bot. Ges. Wien, Verh. 63: 381; 1914, op. cit. 64: 290.—Maulik, 1919, Fauna India, Hisp. & Cass., 284.

#### KEY TO CHINESE SPECIES OF NOTOSACANTHA

1.	Anterior process of head narrowed distally or nearly obsolete
	Anterior process of head broadest near apex, truncate or convex apically 4
2(1).	Anterior process of head distinct, narrowed distally, cleft in middle 3
	Anterior process of head nearly obsolete, blunt and not flattened, feebly cleft
	at middle of apex; elytral ridges and tubercles very high; anterior inner
	tubercle laterally compressed and posterior tubercle acute1. castanea
3 (2).	Body subrounded, brown, with a broad "window" at middle of each side;
	pronotal margin even anteriorly
	Body suboblong, black, with a narrow "window" at middle of each side;
	pronotal margin subserrate anteriorly
4(1).	Body outline suboblong; prothorax practically as broad as widest part of
	elytra
	Body outline subrounded; prothorax distinctly narrower than widest portion
	of elytra; punctures of pronotal expansions elliptical or round
5(4).	Prothorax about $3 \times$ as broad as long; punctures on explanate margin of
	pronotum not all oblong in shape: elytron with a "window spot"

Prothorax barely more than 2× as broad as long; punctures on explanate margin of pronotum oblong; elytron with a longitudinal ridge parallel to

suture, with a few short branches, but lacking tubercles and lateral "window

- Elytral disc with 3 sharp major tubercles connected by some distinctly raised reticulate ridges (Gressitt, 1952; Taiwan) ...... trituberculata\*

# 1. Notosacantha castanea (Spaeth)

Hoplionota castanea Sp., 1913, Zool.-Bot. Ges. Wien, Verh. 63: 507 (Tonkin; Spaeth: Man-CHESTER); 1933, Wien. Ent. Ztg. 50: 126 (Taiwan).

Notosacantha castanea: Gressitt, 1952, Calf. Acad. Sci., Proc. ser. 4, 27: 446. DISTRIBUTION: N. Vietnam, Taiwan.

# 2. Notosacantha centinodia (Spaeth)

Hoplionota centinodia Sp., 1913, Zool.-Bot. Ges. Wien., Verh. 63: 514 (Yunnan; SPAETH: MANCHESTER); 1933, Wien. Ent. Ztg. 50: 128.

Notosacantha centinodia: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 446.

DISTRIBUTION: SW China (Yunnan).

3. Notosacantha fumida (Spaeth) Fig. 263 a.

Hoplionota fumida Sp., 1913, Zool.-Bot. Ges. Wien, Verh. 63: 513 (S. China; BM); 1933, Wien. Ent. Ztg. 50: 131.—Gressitt, 1938, Lingnan Sci. Jour. 17: 573 (N. Kwangtung).

Notosacantha fumida: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 447, pl. 27, fig. 2. DISTRIBUTION: S. China (Kwangtung).

4. Notosacantha marginalis (Gressitt) Fig. 263, b. Hoplionota marginalis Gr., 1942, Lingnan Nat. Hist. Surv. & Mus. Spec. Publ. 5: 1, fig. 1



Fig. 263. a, Notosacantha fumida (Spaeth); b, N. marginalis (Gress.); c. N. oblongopunctata (Gress.); d, N. sinica Gress. [from Calif. Acad. Sci., Proc. ser. 4, 27 (17)].

(N. Kwangtung; LINGNAN).

Notosacantha marginalis: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 447, pl. 27, fig. 1. DISTRIBUTION; S. China (Kwangtung).

5. Notosacantha oblongopunctata (Gressitt) Fig. 263, c.

Hoplionota oblongopunctata Gr., 1938, Lingnan Sci. Jour. 17: 573 (Hainan; LINGNAN).

Notosacantha oblongopunctata: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 448, pl. 30, fig. 1.

DISTRIBUTION: Hainan I.

6. Notosacantha sinica Gressitt Fig. 263, d.

Notosacantha sinica: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 449, pl. 30, fig. 2 (NW Fukien; LINGNAN).

DISTRIBUTION: SE China (Fukien).

# Tribe BASIPRIONOTINI (Priopterini)

# Genus Craspedonta Chevrolat

Craspedonta Chev., 1837, Dejean's Cat. Col., ed. 3, 391 (type: Imatidium leayanum Latreille; India).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 451.—Hincks, 1952, R. Ent. Soc. Lond., Trans. 103: 331.

Calopepla Hope, 1840, Col. Man. 3: 152.—Boheman, 1850, Mon. Cassid. 1: 8.—Chapuis, 1875, Gen. Col. 11: 370.—Maulik, 1919, Fauna India, Hisp. & Cass., 306.

7. Craspedonta leayana insulana (Gressitt) Fig. 264.

Calopepla leayana subsp. insulana Gr., 1938, Lingnan Sci. Jour. 17: 187, 574 (Hainan; USNM).

Craspedonta leayana insulana: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 451.

DISTRIBUTION: Hainan I.

HOST: Gmelina sp.

# Genus Megapyga Boheman

Megapyga Boh., 1850, Mon. Cassid. 1: 40 (type: M. coeruleomaculata Boh.; Philippines).—Chapuis, 1875, Gen. Col. 11: 369.

8. Megapyga chinensis Spaeth

Megapyga chinensis Sp., 1936, R. Ent. Soc. Lond., Proc. B 5: 8 (Cho-Ganh; BM).

DISTRIBUTION: S. China.

Genus Epistictina Hincks

Epistictia Boheman (nec Amyot), 1850, Mon. Cassid. 1: 12.-Chapuis, 1875, Gen. Col. 11:





371.—Maulik, 1919, Fauna India, Hisp. & Cass., 318 (type: *E. viridimaculata* Boh.; India).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 453.

Epistictina Hincks, 1950, Ann. Mag. Nat. Hist. ser. 12, 3: 509 (new name for Epistictia Boh.).

# 9. Epistictina viridimaculata (Boheman)

Epistictia viridimaculata Boh., 1850, Mon. Cassid. 1: 15 (Nepal; GENOVA).—Maulik, 1919, Fauna India, Hisp. & Cass., 320, fig. 99.—Chen, 1935, Sinensia 6: 780 (Kweichow), fig. 6.—Gressitt, 1938, Lingnan Sci. Jour. 17: 576; 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 453.

Epistictia perplexa Baly, 1863, Jour. Ent. 2: 7 (Indo-China).

Epistictia Perryi Baly, 1863, l. c., 8 (Assam).

Epistictia marginata Kirsch, 1875, Zool. Mus. Dresden, Mitt. 1: 56.

Epistictia viridimaculata var. collaris Weise, 1897, Dtsch. Ent. Zschr. 1897: 99.

Epistictina viridimaculata: Hincks, 1950, Ann. Mag. Nat. Hist. ser. 12, 3: 509.

DISTRIBUTION: Nepal, India, Assam, Burma, SW China (Kweichow, Kwangsi), Indo-China, Thailand, Malacca.

#### Genus Basiprionota Chevrolat

Basiprionata Chev., 1837, Dejean's Cat. Col., ed. 3: 391 (type: Cassida octopunctata Fabr.; Siam, Java, Borneo).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 454.

- Prioptera Hope, 1840, Col. Man. 3: 153, 176 (type: C. octopunctata F.).—Boheman, 1850, Mon. Cassid. 1: 44.—Chapuis, 1875, Gen. Col. 11: 368.—Wagener, 1881, Münch. Ent. Ver., Mitt. 5: 27.—Maulik, 1919, Fauna India, Hisp. & Cass., 310.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 7.
- Stenoprioptera Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (132) (type: S. tibetana Sp.; Tibet).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 453.

# KEY TO CHINESE SPECIES OF BASIPRIONOTA

- 4 (3). Pronotum with a pair of small distinct round black spots; elytral disc each with about 3 small black spots, closely and deeply punctured; last 4 antennal seg-

ments black15. multipunctata
Pronotum with a vague pitchy brown area on each side of center; elytral disc
largely black, explanate margin with a large posterolateral black spot; elytron
finely and sparsely punctulate; only last antennal segment black
5 (2). Body not much longer than broad 6
Body 1/2 again as long as broad; elytral disc fairly even; explanate margin dis-
tinctly produced at sutural angle (Spaeth, 1914; Prioptera; Taiwan) angusta*
6 (5). Dorsum with a black spot on posterolateral margin of elytron7
Dorsum entirely pale on pronotum and elytron; thoracic sterna largely black;
length 10.5 mm; breadth 8.5 mm 13. gressitti
7 (6). Elytral disc rather uneven, with a conspicuous depression anterior to middle of
disc
Elytral disc not very uneven, with only a shallow depression near middle of
disc; length 11.5–13.0 mm 11. bisignata
8 (7). Pronotum with lateral margin of disc strongly arcuate; 4 or 5 irregular rows
of punctures between ridges 1 and 2 just behind middle of elytron; size small:
9–10 mm in total length 10. bimaculata
Pronotum with lateral margin of disc not strongly arcuate; 7-9 irregular rows
of punctures between ridges 1 and 2 just behind middle of elytron; size large:
11-16 mm in total length12. chinensis

Subgenus Basiprionota Chevrolat, s. str.

Basiprionota (Basiprionota) bimaculata (Thunberg) Fig. 265, a.
 Cassida bimaculata Th., 1789, Nov. Ins. Spec. 5: 86, pl. 5, fig. 93 (China; UPSSALA).
 Cassida bimacula Herbst, 1799, Natursyst. Käf. 8: 262, pl. 132, fig. 4.
 Prioptera bimaculata: Boheman, 1850, Mon. Cassid. 1: 52.—Maulik, 1919, Fauna India,



Fig. 265. a, Basiprionota bimaculata (Thunb.), pupa; b, B. bisignata (Boh.); c, B. chinensis (Fabr.) (from Calif. Acad. Sci., Proc.).

Hisp. & Cass., 317 (Assam).

Basiprionota bimaculata: Gressitt, 1952, Calif. Acad. Sci., Proc., ser. 4, 27: 456, text fig. 1. Biology: Gressitt, 1952, p. 535.

DISTRIBUTION: S. China (Hupeh, Szechuan).

SZECHUAN: 2, Sui-fu, 1924, Graham (US).

HOSTS: Premna, Liquidambar formosana Hance.

11. Basiprionota (Basiprionota) bisignata (Boheman) Fig. 265, b.

Prioptera bisignata Boh., 1862, Mon. Cassid. 4: 22 (N. China; STOCKHOLM).—Weise, 1912, Archiv Naturg. 78 A(2): 96.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 8.

Prioptera chinensis: Gressitt (nec Fabricius), 1939, Pan-Pac. Ent. 15: 138.

Basiprionota bisignata : Gr., 1952, Calf. Acad. Sci., Proc. ser. 4, 27 : 457, pl. 27, fig. 9.

DISTRIBUTION: E. China (Shantung, Chekiang).

12. Basiprionota (Basiprionota) chinensis (Fabricius) Fig. 265, c.

Cassida chinensis F., 1798, Syst. Ent. Suppl., 84 (China; LUND); 1801, Syst. Eleuth. 1: 402. —Herbst, 1799, Natursyst. Käf. 8: 353.

Prioptera satrapa Boheman, 1862, Mon. Cassid. 4: 17 (Kiangsu; STOCKHOLM).

Prioptera chinensis: Weise, 1910, Naturf. Ver. Brünn, Verh. 48: 42; Weise, 1912, Archiv Naturg. 78 A (2): 96.—Spaeth & Reitter, 1926, Best.-Tab. Eur. Col. 95: 8 (Szechuan).
 —Liu, 1936, Lingnan Sci. Jour. 15: 256.

Prioptera bimaculata: Gressitt (nec Thunberg), 1938, op. cit. 17: 575 (Kwangtung).

Basiprionota chinensis: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 457, 536, pl. 27, fig. 7.

DISTRIBUTION: S. China (Sikang, Szechuan, Kiangsi, Chekiang, Fukien, Kwang-tung).

### 13. Basiprionota (Basiprionota) gressitti Medvedev

Basiprionota gresitti Med., 1957, Beitr. Ent. 7: 554 (Yachow; Moscow).

Basiprionota gressitti: 1959, Zool. Rec. 94 (13): 389 (correction).

DISTRIBUTION: W. China (Sikang).

14. Basiprionota (Basiprionota) maculipennis reducta (Gressitt) Fig. 266, a.

Prioptera maculipennis subsp. reducta Gr., 1938, Lingnan Sci. Jour. 17: 185, 575 (Hainan; USNM).

Basiprionota (Basiprionota) maculipennis reducta: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 458, pl. 27, fig. 6.

DISTRIBUTION: Hainan I.

# 15. Basiprionota (Basiprionota) multipunctata (Gressitt)

Prioptera multipunctata Gr., 1938, Lingnan Sci. Jour. 17: 186, 575 (Hainan; CAS). Basiprionota multipunctata: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 459.

DISTRIBUTION: Hainan I.

16. Basiprionota (Basiprionota) whitei (Boheman) Fig. 266, b.

Prioptera Whitei Boh., 1856, Cat. Col. Ins. Brit. Mus. 9: 11 (C. China; BM); 1862, Mon.



Fig. 266. a, Basiprionota maculipennis reducta (Gress.); b, B. whitei (Boh.) (from C. A. S., Proc.).

Cassid. 4: 26.—Spaeth & Reitter, 1926, Best.-Tab. Eur. Col. 95: 8.—Liu, 1936, Lingnan Sci. Jour. 15: 25 (Kiangsu).

Prioptera trabeata Fairmaire, 1888, Soc. Ent. Belg., Ann. 32: 46 (Kiangsi; PARIS).

Prioptera whitei trabeata: Spaeth, 1914, Col. Cat. 62: 19.—Gressitt, 1938, Lingnan Sci. Jour. 17: 383, 577; 1938, Pan-Pac. Ent. 15: 139.

Basiprionota whitei: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 459, pl. 27, fig. 4.—Chûjô, 1957, Kagawa Univ., Mem. Fac. Lib. Arts & Ed. 2 (47): 5 (Hunan; "Basiprioptera").

DISTRIBUTION: S. China (Kiangsu, Chekiang, Kiangsi, Fukien, Hunan, Kwang-tung).

# Subgenus Stenoprioptera Spaeth

# 17. Basiprionota (Stenoprioptera) tibetana (Spaeth)

Stenoprioptera tibetana Sp., 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzber.): (132) (Yunnan, Tibet: Yerkalo; SPAETH: MANCHESTER).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 454 (Szechuan).

DISTRIBUTION: W. China (Yunnan, Tibet, Szechuan).

### Tribe ASPIDOMORPHINI

#### Genus Aspidomorpha Hope

Aspidomorpha H., 1840, Col. Man. 3: 158 (type: Cassida miliaris Fabr.; Oriental Region).
 —Boheman, 1854, Mon. Cassid. 2: 242.—Chapuis, 1875, Gen. Col. 11: 401.—Weise, 1897, Dtsch. Ent. Zschr. 1897: 105.—Maulik, 1919, Fauna India, Hisp. & Cass., 324.
 —Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 460.

### KEY TO CHINESE SPECIES OF ASPIDOMORPHA
2 (1). Length of body 10-13.5 mm; elytron marked with black spots or patches
Length of body 6-7 mm; elytral disc and marginal patch red-brown
3 (1). At least anterior angle of explanate margin of elytron with pigmented patch ex-
tending to lateral border 4
Neither anterior nor posterior lateral angles of explanate margin of elytron with
dark patch reaching to lateral border; body rounded; last 2 antennal segments
black
4 (3). Size large; at least 10 mm in body length
Size small; under 8.5 mm in body length 6
5 (4). Form rounded; posterolateral angle of explanate margin of elytron with at least
partial pigmented patch; elytral disc irregular
From subtriangular, broadest near anterior angle of explanate margin; postero-
lateral angle of explanate margin with pigmented area; elytral disc fairly
even behind middle
6 (4). Only anterior angle of explanate elytral margin with a dark spot
Both anterior and posterior angles of explanate elytral margin with dark areas 8
7 (6). Explanate margin of elytron deeply pigmented along suture at apex; last 2 an-
tennal segments black
Explanate margin of elytron not pigmented along suture at apex; last 2 anten-
nal segments only slightly pigmented
8 (6). Elytron finely punctate-striate without depressions; elytral disc yellowish-brown;
body outline ovate
Elytron with 9 rows of strong punctures and 1 or 2 depressions; elytral disc
dark brown; body outline nearly round

### 18. Aspidomorpha chandrika Maulik

Aspidomorpha chandrika Maul., 1918, Ann. Mag. Nat. Hist. ser. 9, 1: 322 (India; Zool. SURV. IND.); 1919, Fauna India, Hisp. & Cass., 331, fig. 102 (Burma).—Gressitt, 1938, Lingnan Sci. Jour. 17: 577; 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 461.

DISTRIBUTION: India, Burma, Hainan I.

HOST: Ipomoea sp.

#### 19. Aspidomorpha difformis (Motschulsky)

Deloyala difformis Mots., 1860, Etudes Ent. 9: 27 (Amur; Moscow).

Aspidomorpha difformis: Boheman, 1862, Mon. Cassid. 4: 277.—Baly, 1874, Ent. Soc. Lond., Trans. 1874: 211.—Kraatz, 1879, Berl. Ent. Zschr. 23: 270.—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 280 (Japan).—Weise, 1900, Archiv Naturg. 66: 295.—Matsumura, 1907, Thous. Ins. Japan 4: 39, pl. 58, fig. 34.—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (129) (Korea); 1926, Best.-Tab. Eur. Col. 95: 10.— Doi, 1926, Dobutsug. Zasshi 39: 337.—Yokoyama, 1930, (Col. of Japan) 1: 20, pl. 2, fig. 6.—Yuasa, 1932, Nippon Konchu Zukan, 587, fig. 1147 (Ryukyu Is.).—Chûjô, 1934, Sylvia 5: 152; 1936, Umeno Ent. Lab., Bull. 3: 13; 1942, N. H. Soc. Formosa, Trans. 32: 41.—Gressitt, 1939, Pan-Pac. Ent. 15: 139; 1952, Calif. Acad. Sci., Proc., ser. 4, 27: 462.—Medvedev, 1957, Beitr. Ent. 7: 554 (Taiwan).

1963

Aspidomorpha difformis ab. japonica Spaeth, 1926, Best.-Tab. Eur. Col. 95: 10 (Japan).-Yuasa, 1932, Nippon Konchu Zukan, 587.-Chûjô, 1934, Sylvia 5: 153.-Spaeth, 1942, Arb. Morph. Tax. Ent. Berlin-Dahlem 9: 12 (Erzendjanzsy, Manchuria).

DISTRIBUTION: Siberia (Ussuri, Amur), Hokkaido, Honshu, Kyushu, Ryukyu Is. (Okinawa); Korea, Taiwan, E. China (Kirin, Chekiang, Fukien).

FUKIEN: 1, Ta-chu-lan (Datchulen), 1929, T. H. Cheng (US); Kuatun, 10. V. 1938, Klapperich (FREY).

Cassida dorsata F., 1787, Mant. Ins. 1: 64 (Siam; BM); 1792, Ent. Syst. 1: 301; 1801, Syst. Eleuth. 1: 401. —Linnaeus, 1787, Syst. Nat. ed. 13, Gmelin 1, 4:

1641.—Herbst, 1799, Natursyst. Käf. 8: 342. Aspidomorpha dorsata: Boheman, 1854, Mon. Cassid. 2: 296.—Spaeth, 1914, Col. Cat. 62: 68 (Sunda).—Maulik, 1919, Fauna Brit. Ind., Hisp. & Cass., 332 (India, Celebes).—Gressitt, 1938, Lingnan Sci. Jour. 17: 188, 578 (Hainan); 1952, Calif. Acad. Sci., Proc. ser. 4,

Aspidomorpha calligera Boheman, 1854, Mon. Cassid. 2: 297 (India: STOCKHOLM).—Weise, 1897, Dtsch. Ent.

DISTRIBUTION: India. Cevlon. Assam. Burma. Hai-

HOSTS: Calystegia japonica Choisy; Chenopodium sp.

20. Aspidomorpha dorsata (Fabricius) Fig. 267.



Fig. 267. Aspidomorpha dorsata (Fabr.) (from C.A. S., Proc.).

HOST: Ipomoea sp.

21. Aspidomorpha furcata (Thunberg) Fig. 268.

Cassida furcata Th., 1789, Nov. Ins. Spec. 5: 87, pl. 5, fig. 96 (Siam; København).—Herbst, 1799, Natursyst. Käf. 8: 265, pl. 132, fig. 7.

27: 463, pl. 27, fig. 3.

Zschr. 1897: 104 (=dorsata).

nan I., Thailand, Malaya, Sunda Is., Celebes.

Cassida dorsata Olivier (nec Fabricius), 1790, Enc. Meth. 5: 386; 1808, Ent. 6: 961; 97, pl. 3, fig. 45.

Cassida micans Fabricius, 1801, Syst. Eleuth. 1: 398 (Sunda).

- Aspidomorpha micans: Boheman, 1854, Mon. Cassid. 2: 313.—Weise, 1901, Dtsch. Ent. Zschr. 1901: 52.
- Aspidomorpha furcata: Weise, 1897, op. cit. 1897: 104 (India).—Spaeth, 1913, Mus. Nat. Hung., Ann. 11: 46 (Formosa).—Maulik, 1919, Fauna India, Hisp. & Cass. 333 (Ceylon).—Miwa, Chûjô & Mitono, 1932, N. H. Soc. Formosa, Trans. 22: 304 (Botel-Tobago).—Chûjô, 1934, Sylvia 5: 151.—Liu, 1936, Lingnan Sci. Jour. 15: 257 (Amoy).—Gressitt, 1938, op. cit., 17: 189, 384, 578 (Kwangtung, Hainan); Pan.-Pac. Ent. 15: 139 (Annam); 1952, Calif. Acad. Sci., Proc., ser. 4,2 7: 463, pls. 31, 32, 36, figs. 1, 4, 7 (Kiangsu, etc.).
- Biology: Kershaw & Muir, 1907, Ent. Soc. Lond., Trans. 1907: 250.—Hutson, et al., 1929, Ceylon Dept. Agr., Tech. Rep.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 528-535.



Fig. 268. Aspidomorpha furcata (Thunb.): a, Fifth instar larva, dorsal view with caudal process in normal position; b, same, caudal process directed backwards; c, ootheca opened, showing 2 eggs above and 3 below; d, pupa, ventral view; e, right wing; f, pupa, dorsal view, caudal process directed backwards; g, first instar larva; h, adult, dorsal view; i, adult, ventral view [from Calif. Acad. Sci. Proc. ser. 4, 27 (17)].

DISTRIBUTION: India, Ceylon, Assam, Burma, S. China (Kiangsu, Fukien, Kwangtung, Kwangsi, Szechuan), Hainan, Taiwan, Vietnam, Thailand, Malaya, Sunda Is.

HOSTS: Ipomoea Batatas Lamk.; I. aquatica Forsk.; I. cairica Sweet; I. digitata L.; Calocasia antiquorum var. esculenta Sch. (?).

# 22. Aspidomorpha fuscopunctata Boheman

Aspidomorpha fuscopunctata Boh., 1854, Mon. Cassid. 2: 298 (Sunda Is.; STOCKHOLM).—
Weise, 1897, Dtsch. Ent. Zschr. 1897: 104 (India, Burma).—Spaeth, 1912, Sarawak
Mus. Jour. 1: 117; 1914, Col. Cat. 62: 68 (S. China).—Maulik, 1919, Fauna India,
Hisp. & Cass., 326 (Malaya).—Gressitt, 1938, Lingnan Sci. Jour. 17: 189, 579 (Hainan, Indo-China); 1939, Pan-Pac. Ent. 15: 140; 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 464.

Aspidomorpha rubrodorsata Boheman, 1854, Mon. Cassid. 2: 310.

DISTRIBUTION : India, Burma, Indo-China, S. China (Kwangtung), Hainan, Malaya, Sunda Islands, Philippines.

HAINAN: 1, Tai-pin (Dwa-bi), 22. VII. 1935, Gressitt (CAS).

### 23. Aspidomorpha indica Boheman

Aspidomorpha indica Boh., 1854, Mon. Cassid. 2: 318 (India; BM).—Weise, 1905, Dtsch. Ent. Zschr. 1905: 123.—Spaeth, 1913, Mus. Nat. Hung., Ann. 11: 46 (Formosa); 1914, Col. Cat. 62: 68 (Yunnan).—Maulik, 1919, Fauna India, Hisp. & Cass., 327.—Chûjô, 1934, Sylvia 5: 153.—Gressitt, 1939, Pan-Pac. Ent. 15: 140; 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 465 (Szechuan).

DISTRIBUTION: India, W. China (Szechuan, Yunnan), Vietnam, Taiwan.

YUNNAN: 8, Kunming, 1. VIII. 1944, C. L. Liu (US).

HOSTS: Ipomoea sp., Convolvulus japonicus Th.

24. Aspidomorpha miliaris (Fabricius) Fig. 269.

Cassida miliaris F., 1775, Syst. Ent. (Java; BM); 1781, Spec. Ins. 1: 111; 1787, Mant. Ins.



Fig. 269. Aspidomorpha miliaris (Fabr.): a, dorsal view of pupa; b, adult (from C. A. S., Proc.).

1: 64; 1792, Ent. Syst. 1: 300; 1801, Syst. Eleuth. 1: 400 ("St. Helena").—Olivier, 1790, Enc. Meth. 5: 385; 1808, Ent. 6: 943; 97, pl. 2, fig. 25 (India).—Herbst, 1799, Natursyst. Käf. 8: 312, pl. 135, fig. 8.

Cassida quatuordecimpunctata Olivier, 1808, Ent. 6: 943; 97, pl. 4, fig. 66.

Aspidomorpha celebensis Blanchard, 1853, Voy. Pole Sud (d'Urville) 4: 316, pl. 18, fig. 9. —Boheman, 1862, Mon. Cassid. 4: 281.

- Aspidomorpha miliaris: Boheman, 1854, Mon. Cassid. 2: 261.—Wollaston, 1877, Col. St. Helenae, 215 (St. Helena?).—Weise, 1896, Dtsch. Ent. Zschr. 1896: 16.—Spaeth, 1903, Mus. Nat. Hung., Ann. 1: 138; 1914, Col. Cat. 62: 69.—Maulik, 1919, Fauna India, Hisp. & Cass., 334, figs. 103–4 (Andamans).—Gressitt, 1938, Lingnan Sci. Jour. 17: 189 (Hainan, Indo-China); 1939, Pan-Pac. Ent. 15: 140 (Sumatra); 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 466, pl. 28, fig. 1, pl. 36, fig. 2 (Hong Kong).
- Aspidomorpha amplissima Boheman, 1854, Mon. Cassid. 2: 260 (Philippines).—Weise, 1896, Dtsch. Ent. Zschr. 1896: 16.

Aspidomorpha miliaris abb. flaveola & inundata Weise, 1910, Philip. Jour. Sci. D 5: 143.

Biology: Schultze, 1908, op. cit. A, 3: 164, pl. 2, pl. 3, figs. 1–4, pl. 6, figs. 6–9.—Bishop, 1909, R. Asiat. Soc., Sts. Br., Jour. 53: 129.

DISTRIBUTION: India, Andaman Islands, Assam, Burma, S. China (Yunnan, Hong Kong), Hainan I., Vietnam, Malaya, Sumatra, Java, Borneo, Celebes, Philippines, New Guinea.

HOSTS: Calonyction bona-nox Boy., Convolvulus sp., Ipomoea triloba L., I. pes-caprae L., I. Batatas Lamk., Gmelina arborea (?).



Fig. 270. Aspidomorpha sanctaecrucis (Fabr.); a, dorsal view of pupa; b, adult (from C. A S., Proc.).

### 25. Aspidomorpha sanctaecrucis (Fabricius) Fig. 270.

Cassida St. Crucis F., 1792, Ent. Syst. 4 (App.): 446(Sunda Is.; København); 1801, Syst. Eleuth. 1: 401.—Illiger, 1808, Mag. Ins. 5: 227.

Cassida elevata Fabricius, 1801, Syst. Eleuth. 1: 399 (Sunda Is.; København).

Aspidomorpha sanctae-crucis: Boheman, 1854, Mon. Cassid. 2: 287, pl. 6, fig. B.—Spaeth, 1914, Col. Cat. 62: 69.

Aspidomorpha Heroina Boheman, 1854, Mon. Cassid. 2: 284 (no. loc.).

Aspidomorpha limbipennis Boh., 1854, l. c., 285; 1862, 4: 266 (Ceylon).

- Aspidomorpha bajula Boh., 1854, op. cit., 2: 288 ("America").
- Aspidomorpha lobata Boh., 1854, l. c., 289 (India).—Spaeth, 1914, Dtsch. Ent. Zschr. 1914: 544 (Subsp. ?).
- Aspidomorpha Stevensi Baly, 1863, Jour. Ent. 1: 11 (Indo-China; subsp. ?).
- Aspidomorpha fraterna B., 1863, l. c. (Indo-China; subsp. ?).
- Aspidomorpha Stae Crucis: B., 1863, l. c., 13 (Siam).
- Aspidomorpha St. crucis: Weise, 1897, Dtsch. Ent. Zschr. 1897: 102 (Burma).
- Aspidomorpha insularis Spaeth, 1912, Sarawak Mus. Jour. 1: 118 (Sunda Is.).
- Aspidomorpha sanctae-crucis: Maulik, 1913, Ind. Mus., Rec. 1913; 111; 1919, Fauna India, Hisp. & Cass., 329, fig. 101 (Assam).—Gressitt, 1938, Lingnan Sci. Jour. 17: 189, 580 (Hainan, Kwangtung); 1939, Pan-Pac. Ent. 15: 140; 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 467, 536, pl. 28, fig. 3, pl. 36, fig. 3 (Szechuan, Fukien).
- Biology: Weise, 1897, Dtsch. Ent. Zschr. 1897: 102.—Maulik, 1919, Fauna India, Hisp. & Cass., 273, figs. 85-7.
- DISTRIBUTION: India, Ceylon, Assam, Burma, S. China (Yunnan, Kwangtung, Fukien, Szechuan), Hainan, Indo-China, Thailand, Malaya, Sunda Islands.
  - FUKIEN: 1, Shui-pei-kai, Shaowu, 24. V. 1944, Maa (BISHOP).
  - HOSTS: Ipomoea sp., Tectona sp., Michelia sp. (?).
- 26. Aspidomorpha transparipennis (Motschulsky)
- Coptocycla transparipennis Mots., 1860, Etudes Ent. 9: 41 (Amur;? Moscow).
- Aspidomorpha transparipennis: Kraatz, 1879, Dtsch. Ent. Zschr. 23: 142.—Weise, 1900, Archiv Naturg. 66 (1): 295 (Honshu).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh.
  64: (129) (Korea).—Matsumura, 1931, Nippon Konchu Daizukan, 226, fig. 620.— Chûjô, 1934, Sylvia 5: 151; 1941, N. H. Soc. Formosa, Trans. 31: 233 (Korea).— Spaeth, 1942, Arb. Morph. Tax. Ent. Berlin-Dahlem 9: 12 (Erzendjansy).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 468.—Chûjô & Kimoto, 1961 Pacific Ins. 3: 196.
- Aspidomorpha elliptica Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 280 (Honshu).
- Aspidomorpha transparipennis ab. elliptica: Chûjô, 1934, Sylvia 5: 151.
- Aspidomorpha transparipennis var. vetula Weise, 1900, Archiv Naturg. 66 (1): 295 (Honshu).
  - DISTRIBUTION: Amur, Korea, NE China (Kirin), Japan (Hokkaido, Honshu).
  - KOREA: 1, Yong-mun San, 16. VI. 1955, H. K. Kim (BISHOP).
  - HOSTS: Chenopodium (?), Calystegia japonica Choisy.

# Genus Sindia Weise

Sindia Ws., 1897, Dtsch. Ent. Zschr. 1897: 105 (type: Cassida clathrata Fabr.; India).----Maulik, 1919, Fauna India, Hisp. & Cass., 340.-Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 468.

# 27. Sindia sedecimma culata (Boheman)

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Cassida sedecimmaculata Boh.. 1856, Cat. Col. Ins. Brit. Mus. 9: 119 (India; Stockholm); 1862, Mon. Cassid. 4: 290.

Aspidomorpha sedecimmaculata: Gemminger & Harold, 1874, Cat. Col. 12: 3651.

Sindia sedecimmaculata: Spaeth, 1901, Zool.-Bot. Ges. Wien, Verh. 51: 347.—Maulik, 1919, Fauna India, Hisp. & Cass., 343 (Sikkim).—Chen, 1935, Sinensia 6: 780, fig. 7

(Kweichow).-Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 469.

Pale ochraceous (orange-brown in life) with several black spots on dorsum; appendages pale; median portion of venter black. Length 7 mm; breadth 5.

DISTRIBUTION: India, SW China (Kweichow).

### Genus Sindiola Spaeth

Sindiola Sp., 1903, Ent. Tidskr. 1: 112 [type: Aspidomorpha (Sindiola) parallelipennis Spaeth;
Burma].—Maulik, 1919, Fauna India, Hisp. & Cass., 344.—Spaeth, 1932, Rev. Zool.
Bot. Afr. 22: 227; 1938, Ent. Tidskr. 59: 231.—Gressitt, 1952, Calif. Acad. Sci.,
Proc. ser. 4, 27: 469.

28. Sindiola hospita (Boheman) Fig. 271.

- Laccoptera hospita Boh., 1855, Mon. Cassid. 3: 68 (Indo-China; STOCKHOLM).
- Laccoptera vigintisexnotata subsp. puncticolle Gressitt, 1938, Lingnan Sci. Jour. 17: 189, 582 (Hainan; USNM).
- Sindiola hospita: Spaeth, 1938, Ent. Tidskr. **59**: 232 (Annam).— Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, **27**: 470, pl. 27, fig. 5 (Kwangsi).

Hyaline, with many small black spots and a common spot on sutural tubercle and a large spot on posterolateral portion of elytron. Pronotum feebly punctured; elytron deeply seriate-punctate. Length 8.7–9.2 mm.

DISTRIBUTION: Indo-China, Hainan I., S. China (Kwangsi, Szechuan).

HAINAN: 1, Ta-hian, 10. VI. 1935, Gressitt (CAS).

### Genus Laccoptera Boheman

Laccoptera Boh., 1855, Mon. Cassid. 3: 55 (type: L. excavata Boh.; S. Africa).—Chapuis, 1875, Gen. Col. 11: 408.—Weise, 1897, Dtsch. Ent. Zsch. 1897: 205; 1899, Archiv Naturg. 65 (1): 246.—Maulik, 1919, Fauna India, Hisp. & Cass., 346.

### KEY TO CHINESE SPECIES OF LACCOPTERA



Fig. 271. Sindiola hospita (Boh.) (from C. A. S., Proc.).

margin of elytron lacking dark patches; metasternum only slightly pitchy.....



Fig. 272. Laccoptera quadrimaculata (Thunb).: a, ootheca with fecal covering; b, ootheca, feces removed; c, egg removed from ootheca; d, first instar larva; e, mature fifth instar larva; f, fourth instar larva; g, pupa, dorsal view; h, pupa, ventral view; i, adult [from Calif. Acad. Sci., Proc. ser. 4, 27 (17)].

29. Laccoptera quadrimaculata (Thunberg) Fig. 272.

Laccoptera quadrimaculata Th. 1789, Nov. Ins. Spec. 5: 86, pl. 5, fig. 94 (China; UPSSALA).
 —Maulik, 1919, Fauna India, Hisp. & Cass., 347 (India).—Gressitt, 1952, Calif.
 Acad. Sci., Proc. ser. 4, 27: 471, pls. 35, 36, figs. 5, 8.—Chûjô & Kimoto, 1961,
 Pacific Ins. 3: 201.

1B

Laccoptera quadrimaculata subsp. Bohemani Weise, 1910, Naturf. Ver. Brünn, Verh. 48: 42 (S. China).—Spaeth, 1913, Mus. Nat. Hung., Ann. 11: 46 (Taiwan); 1914, Col. Cat. 62: 82 (E. India); 1914, Suppl. Ent. 3: 15, fig. 110 (Burma); 1926, Best.-Tab. Eur. Col. 95: 9.—Chûjô, 1934, Sylvia 5: 153.—Gressitt, 1938, Lingnan Sci. Jour. 17: 191, 384, 581 (Hainan, Kwangtung, Fukien); 1939, Pan-Pac. Ent. 15: 140.

Laccoptera Bohemani: Spaeth, 1914, Ent. Mitt. 3: 226; 1914, Suppl. Ent. 3: 15.

Laccoptera Thunbergi Spaeth, 1914, Suppl. Ent. 3: 15 (new name).

Biology: Kershaw & Muir, 1907, Ent. Soc. Lond., Trans. **1907**: 290.—Hoffmann, 1933, Lingnan Sci. Jour. **12**: 259, pl. 16.—Gressitt, 1952, p. 537, pl. 35 & 36, figs. 5 & 8.

DISTRIBUTION: S. China (Kiangsu, Chekiang, Fukien, Kwangtung, Hupeh, Szechuan, Sikang, Hainan I.), Taiwan, Indo-China, Burma, India, East Indies, Andamans.

KIANGSU: 1, Soochow (US). HUPEH: 2, Sui-sa-pa, Lichuan, 25. VII-15. IX. 1948; Szechuan-Hupeh border, Wan Distr., 22. IX. 1948, Gressitt & Djou (CAS, BISHOP).

HOSTS: Ipomoea Batatas Lamk, I. purpurea Roth, Calystegia Soldonella (L.) R. & S.

#### 30. Laccoptera quatuordecimnotata Boheman

Laccoptera quatuordecim-notata Boh., 1862, Mon. Cassid. 4: 386 (India; Stockholm).-Maulik, 1919, Fauna India, Hisp. & Cass., 352.

Laccoptera quatuordecimpunctata: Medvedev, 1957, Beitr. Ent. 7: 554 (Shanghai; error). DISTRIBUTION: India, Ceylon, E. China (Kiangsu).

# 31. Laccoptera tredecimpunctata (Fabricius)

Cassida miliaris Herbst (nec Fabricius), 1799, Natursyst. Käf. 8: 312, pl. 135, fig. 8.

Cassida 13-punctata Fabricius, 1801, Syst. Eleuth. 1: 398 (Sunda Is., K $\phi$ BENHAVN).

Aspidomorpha philippinensis Blanchard, 1853, Voy. Pole Sud (d'Urville) 4: 321, pl. 18, fig. 14 (Philippines).

Laccoptera tredecimpunctata: Boheman, 1855, Mon. Cassid. 3: 73.—Baly, 1863, Jour. Ent. 1: 14 (Siam).—Spaeth, 1914, Col. Cat. 62: 83.—Maulik, 1919, Fauna India, Hisp. & Cass., 350, fig. 112 (India).—Gressitt, 1938, Lingnan Sci. Jour. 17: 582 (Hainan); 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 472 (Hong Kong).

Laccoptera 13-punctata: Weise, 1905, Dtsch. Ent. Zschr. 1905: 123.

DISTRIBUTION: India, Thailand, Hainan, Hong Kong, Sunda Is., Philippines.

#### 32. Laccoptera yunnanica Spaeth

Laccoptera yunnanica Sp., 1914, Ent. Mitt. 3: 226 (Yunnan; SPAETH: MANCHESTER).-Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 473.

DISTRIBUTION: SW China (Yunnan).

### Tribe Cassidini

#### Genus Thlaspida Weise

Thlaspida Ws., 1899, Archiv Naturg. 65 (1): 272 (type: Coptocycla cribrosa Boheman; India, SE Asia).—Spaeth, 1914, Suppl. Ent. 3: 16.—Maulik, 1919, Fauna India, Hisp.

#### Pac. Ins. Mon.

& Cass., 428.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 62.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 473.

### KEY TO CHINESE SPECIES OF THLASPIDA

1.	Explanate margin of elytron marked with a dark spot only behind middle, or entire-
	ly pale; pronotal disc not depressed anteriorly2
	Explanate margin of elytron marked with dark spots both near humeri and behind
	middle; pronotal disc very feebly convex anteriorly; explanate margin at apex
	distinctly less than $1/2$ as wide as greatest width at side; disc reddish testaceous
	to partly pitchy
2.	Body not nearly round; length more than 6.5 mm
	Body nearly round; length 5.2 mm
3.	Explanate margin at apex about $1/2$ as wide as greatest width at side; lateral angle
	of pronotum placed distinctly anterior to median transverse line; disc usually
	partly pitchy4
	Explanate margins at apex less than $1/2$ as wide as greatest width at side; lateral
	angle of pronotum placed very near median transverse line; disc often nearly
	unicolorous; posterolateral dark patch on explanate margin often lacking; elytral
	border evenly rounded posterolaterally (Spaeth, 1913; Taiwan) formosae*
4.	Elytral border with a distinct obtuse angle posterolaterally, nearly parallel-sided in
	central portion; explanate margin at apex no more than $1/2$ as wide as greatest
	width at side; side of disc generally reddish brown
	Elytral borders rounded or with very feebly obtuse angles posterolaterally, narrowed
	posteriorly from anterior to middle of side; explanate margin at apex often dis-
	tinctly more than $1/2$ as wide as greatest width at side; lateral portion of disc
	often pitchy 33. biramosa chinensis

# 33. Thlaspida biramosa chinensis Spaeth Fig. 273, a.

Thlaspida chinensis Sp., 1926, Best.-Tab. Eur. Col. 95: 64 (Szechuan; SPAETH: MANCHESTER). Thlaspida japonica: Gressitt (nec Spaeth), 1938, Lingnan Sci. Jour. 17: 191, 385 (Hainan, Kwangtung, Fukien); 1939, Pan-Pac. Ent. 15: 141 (part).

Thlaspida biramosa chinensis: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 274, pl. 28, fig. 9. DISTRIBUTION: S. China (Szechuan, Kweichow, Hupeh, Hunan, Kwangtung), Hainan I., Indo-China.

HUPEH: 2, Sui-sa-pa, Lichuan, 1000 m, 23-31. VIII. 1948, Gressitt & Djou (CAS, LINGNAN).

# 34. Thlaspida biramosa japonica Spaeth

?Coptocycla biramosa var. a Boheman, 1862, Mon. Cassid. 4: 464 (China).

Coptocycla biramosa: Kraatz, 1879, Dtsch. Ent. Zschr. 23: 272 (Japan).—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 283.

Thlaspida biramosa: Weise, 1899, Archiv Naturg. 65 (1): 273 (Kiangsu).

Thlaspida japonica Spaeth, 1914, Suppl. Ent. 3: 1914 (Japan, N. China; SPAETH: MAN-CHESTER); 1914, Col. Cat. 62: 127; 1926, Best.-Tab. Eur. Col. 95: 63.—Yokoyama, 1931, (Col. Japan) 2: 18, pl. 3, fig. 1.—Yuasa, 1932, Nippon Konchu Zukan, 585,



Fig. 273. a, *Thlaspida biramosa chinensis* Spaeth; b, *T. lewisii* (Baly) [from C. A. S., Proc. ser. 4, **27** (17)].

fig. 144.—Chûjô, 1934, Sylvia 5: 155; 1941, N. H. Soc. Formosa, Trans. 31: 236 (Korea).—Gressitt, 1939, Pan-Pac. Ent. 15: 141 (Mokan Shan).

Thlaspida biramosa japonica: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 475.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 201.

DISTRIBUTION: Japan (Honshu, Kyushu), Korea, E. China (Kiangsu, Chekiang, Anhwei).

KOREA: 1, Yong-mun San, 6. IV. 1955, H. K. Kim (BISHOP).

HOST: Callicarpa japonica Thunb., C. mollis S. & Z. (Japan).

35. Thlaspida cribrosa (Boheman)

Coptocycla cribrosa Boh., 1855, Mon. Cassid. 3: 404 (Assam; STOCKHOLM).

Thlaspida cribrosa: Weise, 1899, Archiv Naturg. 65 (1): 273.—Spaeth, 1914, Suppl. Ent. 3: 17.—Maulik, 1919, Fauna India, Hisp. & Cass., 428, fig. 129.—Medvedev, 1957, Beitr. Ent. 7: 554 (Taiwan).

DISTRIBUTION: NE India, Burma, Thailand, Laos, Taiwan.

36. Thlaspida lewisii (Baly) Fig. 273, b.

Coptocycla Lewisii Baly, 1874, Ent. Soc. Lond., Trans. 1874: 214 (Honshu; BM).—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 283.

Coptocycla testacea Rybakow, 1884, Soc. Ent. Ross., Horae 18: 136 (Ussuri).

Thlaspida testacea: Spaeth, 1914, Suppl. Ent. 3: 16 (Amur).

Thlaspida Lewisi: Spaeth, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (145) (Korea).-Doi, 1927, Dobutsug. Zasshi 39: 337 (Korea).-Chûjô, 1934, Sylvia 5: 155; 1941, N. H. Soc. Formosa, Trans. 31: 236.-Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 477, pl. 28, fig. 8.-Chûjô & Kimoto, 1961, Pacific Ins. 3: 202.

DISTRIBUTION: Amur, Ussuri, E. China (Liaoning, Fukien), Korea, Japan (Honshu, Hokkaido).

HOSTS: Fraxinus sieboldiana Blume, Ligustrum obtusifolium S. & Z.

# 37. Thlaspida pygmaea Medvedev

Thlaspida pygmaea Med., 1957, Beitr. Ent. 7: 555 (Yachow; Moscow). DISTRIBUTION: W. China (Sikang).

### Genus Glyphocassis Spaeth

Glyphocassis Sp., 1914, Dtsch. Ent. Zschr. 1914: 547 (type: Cassida trilineata Hope; N. India).—Maulik, 1919, Fauna India, Hisp. & Cass., 359.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 477 (Hebdomecosta a synonym).

Hebdomecosta Spaeth, 1915, Wien. Ent. Ztg. 34: 361 (type: H. reitteri Sp., E. China).

KEY TO CHINESE SPECIES OF GLYPHOCASSIS

38. Glyphocassis lepida (Spaeth) Fig. 274, a.

Coptocycla lepida Sp., 1914, Zool.-Bot. Ges. Wien, Verh. 64: (145) (Chungking; Spaeth: MANCHESTER).



Fig. 274. a, *Glyphocassis lepida* (Spaeth); b, *G. trilineata szechuana* Gress. [from C.A.S., Proc. ser. 4, **27** (17)]. Hebdomecosta lepida: Sp., 1915, Wien. Ent. Ztg. 34: 363.

Glyphocassis tetrasticta Gressitt, 1942, Lingnan Nat. Hist. Surv. & Mus. Spec. Publ. 5: 3, fig. 3 (Sikang; W. Chi-NA U.).

*Glyphocassis lepida* : Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, **27** : 478, pl. 29, fig. 8.

DISTRIBUTION: S. China (Sikang, Szechuan, Kiangsi, Hupeh).

39. Glyphocassis spilota spilota (Gorham) Fig. 78, i.

Coptocycla spilota Gor., 1885, Zool. Soc. -Spaeth, 1926, Best.-Tab. Eur. Col. 95: 66. Hebdomecosta reitteri Spaeth, 1915, Wien. Ent. Ztg. 34: 362 (Kiautschau; Spaeth: MAN-CHESTER).—Gressitt, 1939, Pan-Pac. Ent. 15: 143 (Hangchow).

Metriona spilota: Chûjô, 1934, Sylvia 5: 159.

?Glyphocassis trilineata: Liu (nec Hope ?), 1936, Lingnan Sci. Jour. 15: 261 (Kiangsu).

- Hebdomecosta shirahatai Chûjô, 1949, Kansai Ent. Soc., Trans. 14 (2): 9, fig. 1 (N. Honshu).
- Hebdomecosta spilota: Chûjô, 1942, N. H. Soc. Formosa, Trans. 32: 43 (Korea).—Spaeth, 1942, Arb. Morph. Tax. Ent. Berlin-Dahlem 9: 12.

Glyphocassis spilota: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 479.

DISTRIBUTION: Japan, Korea, E. China (Shantung, Kiangsu, Chekiang, Fukien).

40. Glyphocassis spilota gansuica Medvedev

Glyphocassis spilota subsp. gansuica Med., 1957, Beitr. Ent. 7: 555 (Kanssu: Chojsjan; Moscow).

DISTRIBUTION: NW China (Kansu).

# 41. Glyphocassis trilineata szechuana Gressitt Fig. 274, b.

Glyphocassis trilineata szechuana Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 480, pl. 28, fig. 7 (E. Szechuan; LINGNAN).

DISTRIBUTION: W. China (Szechuan).

HOST: Ipomaea Batatas L.

### Genus Ischyronota Weise

Ischyronota Ws., 1893, Ins. Deutschl. 6: 1069 (type: Cassida desertorum Gebler; C. Asia).
 —Reitter, 1901, Wien. Ent. Ztg. 20: 103.—Jacobson, 1901, t. c., 125.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 481.

### Key to Chinese species of Ischyronota

4.0 5.5 mm

# 42. Ischyronota conicicollis (Weise)

Cassida conicicollis Ws., 1890, Soc. Ent. Ross., Horae 24: 487 (Gobi; ?Moscow).
Ischyronota conicicollis: Reitter, 1901, Wien. Ent. Ztg. 20: 108.—Jacobson, 1901, t. c., 127.
—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (144) (Tien Shan).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 481.

DISTRIBUTION: Transcaspia to Mongolia.

# 43. Ischyronota desertorum (Gebler)

Cassida desertorum Geb., 1833, Soc. Nat. Moscou, Bull. 6: 305 (S. Russia; Moscow).

Cassida gibbula Boheman, 1854, Mon. Cassid. 2: 430 (Turcomania).

Cassida Jakowleffi Reitter, 1889, Dtsch. Ent. Zschr. 1889: 288 (Astrachan).

Cassida desertorum ab. araxicola Reitter, 1889, l. c. (S. Russia).

Ischyronota desertorum: Jacobson, 1901, Wien. Ent. Ztg. 20: 125.—Spaeth, 1914, Col. Cat. 62: 87 (C. Asia); 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (146) (Kuldja).— Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 482. DISTRIBUTION: S. Russia to C. Asia (Sinkiang).

#### Genus Chiridopsis Spaeth

Deloyala Chevrolat, 1837, Dejean's Cat. Col. ed. 3, 371, 395 (part).

Chirida: Weise, 1896, Dtsch. Ent. Zschr. 1896: 12 (part).—Spaeth, 1914, Col. Cat. 62: 124 (part).—Maulik, 1919, Fauna India, Hisp. & Cass., 412.

Chiridopsis Spaeth, 1924, Voy. Alluaud et Jeannel Afrique Or. 18: 337 (type: Coptocycla aubei Boh.; Africa).-Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 482.

### KEY TO CHINESE SPECIES OF CHIRIDOPSIS

44. Chiridopsis bowringii (Boheman) Fig. 275, a.

Coptocycla Bowringii Boh., 1885, Mon. Cassid. 2: 123 (Hong Kong; STOCKHOLM).

Chirida bowringii: Maulik, 1913, Ind. Mus., Rec. 9: 116 (Burma); 1919, Fauna India, Hisp. & Cass. 416.—Gressitt, 1938, Lingnan Sci. Jour. 17: 193, 589 (Hainan, Canton).

Chirida Bowringii: Spaeth, 1914, Col. Cat. 62: 125 (Tonkin).

Chiridopsis Bowringii: Sp., 1930, Cat. Col. Reg. Palaearct. 2: 1359.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 483, pl. 29, fig. 2.

DISTRIBUTION: S. China (Kwangtung, Hong Kong), Hainan, N. Vietnam, Burma. KWAGTUNG: Lau-fu Shan, V. 1909, Mell (ZMB).



Fig. 275. a, Chiridopsis bowringii (Boh.); b, C. punctata (Weber) (from C. A. S., Proc.).

# 45. Chiridopsis punctata (Weber) Fig. 275, b.

Cassida punctata W., 1801, Obs. Ent. 1: 5 (Sunda Is.).

Cassida punctaria Fabricius, 1801, Syst. Eleuth. 1: 392.—Olivier, 1808, Ent. 6: 965; 97, pl. 6, fig. 90.

Coptocycla punctaria: Boheman, 1855, Mon. Cassid. 3: 254.-Baly, 1863, Jour. Ent. 2: 14

(Indo-China).

Chirida punctaria: Weise, 1897, Dtsch. Ent. Zschr. 1897: 108.

Chirida punctata: Spaeth, 1914, Col. Cat. 62: 125.—Maulik, 1919, Fauna India, Hisp. & Cass., 415 (Burma).—Gressitt, 1938, Lingnan Sci. Jour. 17: 193, 589 (Hainan, Kwangtung).

Chiridopsis punctata: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 483, pl. 29, fig. 1.

DISTRIBUTION: Sunda Is., Burma, S. China (Kwangtung), Hainan, Vietnam, Thailand.

# Genus Cassida Linnaeus

- Cassida L., 1758, Syst. Nat., Ed. 10, 1: 362 (type: C. nebulosa L.; Europe).—Fabricius, 1801, Syst. Eleuth. 1: 387.—Suffrian, 1844, Stett. Ent. Ztg. 5: 49.—Boheman, 1854, Mon. Cassid. 2: 329.—Chapuis, 1875, Gen. Col. 11: 338.—Weise, 1893, Ins. Deutschl. 6: 1070.—Reitter, 1912, Fauna Germ. 4: 213.—Maulik, 1919, Fauna India, Hisp. & Cass., 361.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 23.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 484.
- Deloyala Redtenbacher (nec Chevrolat), 1858, Fauna Austr., ed. 2, 952; 1874, ed. 3, 2: 520.—Weise, 1893, Ins. Deutschl. 6: 1076.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 15, 61.—Chûjô, 1934, Sylvia 5: 167.—Liu, 1936, Lingnan Sci. Jour. 15: 258.
- Cassidula Weise (nec Humphrey, 1797), 1889, Wien. Ent. Ztg. 8: 260; 1891, op. cit. 10: 204; 1893, Ins. Deutschl. 6: 1076.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 24, 53.—Chûjô, 1934, Sylvia 5: 165, 169 (type: Cassida vittata Villers; designation by Gressitt, 1952, antedates that of Hincks: C. nobilis L.).
- Mionycha Weise, 1891, Wien. Ent. Ztg. 10: 204 (type: Cassida azurea Fabr.; Europe); 1893, Ins. Deutschl. 6: 1075.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 24.—Chûjô, 1934, Sylvia 5: 167.—Gressitt, 1952, p. 503.
- Odontionycha Ws., 1891, Wien. Ent. Ztg. 10: 204; 1893, Ins. Deutschl. 6: 1074.—Bedel, 1898, Faune Col. Bassin Seine 5: 207.—Spaeth, 1912, Mus. Nat. Hung., Ann. 10: 498; 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (135); 1926, Best.-Tab. Eur. Col. 95: 23, 24.—Gressitt, 1952, p. 521.
- Taiwania Spaeth, 1913, Mus. Nat. Hung., Ann. 11: 48 (type: T. sauteri Sp.; Taiwan).-Gressitt, 1952, p. 486.
- Tylocentra Reitter, 1926, in Spaeth and Reitter, Best.-Tab. Eur. Col. 95: 24, 57 (type: Cassida virguncula Weise; designation by Gressitt, 1952 antedates that of Hincks: C. turcmenica Ws.)

Cassidulella Strand, 1928, Ent. Nachr. Bl. 2: 2 (new name for Cassidula Weise).

- Alledoya Hincks, 1950, Ann. Mag. Nat. Hist. ser. 12, 3: 508 (new name for *Deloyala* Redt. nec Dup. & Chevr., type: Cassida seraphina Ménétries).
- Lasiocassis Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 485 (type: Cassida vespertina Boh.; E. Palearctic; for Deloyala Redt. nec Dup. & Chevr.).
- Coptocycla of authors (Old World species, part).

Metriona of authors (Old World species, part or all).

# Key to Chinese species of Cassida

1. Elytral disc generally strongly convex; explanate margin of elytron more than

2 (1).	<ul> <li>1/2 as wide at middle as disc, transparent and unpigmented in central portion; suture often raised into a tubercle behind scutellum; tarsal claws toothed (except in <i>Alledoya</i>)</li></ul>
	<i>wania</i> )
3 (2).	Explanate margin of elytron with a dark humeral area or dark basal margin 4
	Explanate margin of elytron lacking a humeral dark spot
4 (3).	Explanate margin of elytron lacking a posterolateral dark spot
5 (4)	Explanate margin of elytron with a narrow oblique basal spot separated from
5(4).	basal margin by a pale border nearly as wide as dark spot separated from basal margin by a pale border nearly as wide as dark spot; elytra 2× as wide as pronotum, lacking coarse transverse rugae
	oblique rugae on discs
6 (4).	Puncture rows of elytral disc narrower than interpunctural areas; body general-
	ly more than 6 mm in length
	than 6 mm in length: elytra with a moderate obtuse postscutellar tubercle
	finan o min in lengin, crytra with a moderate, obtase posisedienar tuberere
7(6).	Elytra without a distinct postscutellar tubercle
	Elytra with a prominent postscutellar tubercle, without distinct black spots,
	not entirely smooth; punctures subovate, blunt
8 (7).	Explanate margin of elytron narrowly black on basal margin; elytral disc with a distinct black spot on humeral callus and a spot on postscutellar area;
	disc smooth with fine punctures
	Explanate margin of elytron broadly black on basal margin; elytral disc with-
	out a distinct black spot on humeral callus or on postscutellar area but with
Q(3)	Proportium narrowed and angulate at side, not broadly rounded; humerus meet-
J (J).	ing side of pronotum rather closely, both as regarding external margin and
	inclination
	Pronotum broadly rounded at each side; humerus not meeting side of prono-
	tum very closely, projecting and inclined somewhat at a steeper angle 16

10 (9). Pronotum slightly punctured; body less than 5 mm in length; explanate margin

# Gressitt & Kimoto: Chrysomelidae of China

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965

	of elytron punctured
	margin of elvtron impunctate 13
11 (10).	Head sparsely or indistinctly punctured; lateral angle of pronotum nearly a
	right angle
	yellowish with elytral punctures brown; elytral punctures widely and irre-
	gularly spaced
12 (11).	Explanate margin of elytron more than $1/2$ as wide as disc at middle, fully
	1/2 as wide at apex as at widest portion; elytral disc marked with black
	53. imparata
	than 1/2 as wide at apex as at widest portion; elytral disc entirely pale
	56. obtusata
13 (10).	Elytra with a raised X-shaped area astride suture at summit, which is often paler than rest of surface
	Elytra lacking a raised X-shaped area astride suture at summit
14 (13).	Explanate margin of elytron nearly 3/4 as wide as disc; pronotal disc evenly
	convex
	Explanate margin of elytron barely over 1/2 as wide as disc; central portion
	of pronotal disc more strongly convex than remainder; posterolateral por-
15 (13)	Side of elytral disc and evaluate margin steenly and subevenly declivitous
15 (15).	dorsum entirely pale or with a prominent U-shaped black mark on elytra
	Side of elytral disc and explanate margin not equally declivitous, forming a strong angle with each other; dorsum greenish yellow with black spots
16 (9).	Body oblong-scutiform in dorsal outline, broadest at humeral angles, narrow-
	ed posteriorly, more than 6 mm in total length
	Body rounded oval or rounded oblong, broadest behind humeri, less than 6 mm
17 (16)	In total length
17(10).	more than 2X as broad as long distinctly more convex anteriorly 61 souteri
	Puncture rows 5 & 6 deeply impressed behind middle: pronotum not quite $2\times$
	as broad as long, transversely symmetrical
18 (16).	Dorsal surfaces entirely testaceous or greenish; ventral surfaces black with
	abdomen bordered with pale19
	Dorsal surfaces spotted or extensively marked with black; head and abdomen,
	or head and thoracic sterna, reddish or yellow, or ventral surfaces entirely
10 (18)	pare
19 (10).	rows as broad as interpunctural areas: interpunctural area 2 slightly raised
	52. expressa
	Pronotum 3/5 as long as broad; dried specimens not partly greenish; puncture
	rows narrower than interpunctural areas; a raised crescent on side of sum-

	mit of elytron; explanate margin undulating
20 (18).	Pronotal and elytral discs almost entirely black; pronotum $2 \times$ as broad as
	long; lateral outline slightly convex between summit of elytra (postscutellar
	area) and anterior border of pronotum; puncture rows completely regular
	at central portion of side of elytron 49. discalis
	Pronotal disc entirely pale; elytral disc black with 2 irregular, broad oblique
	bands, and outer border, yellowish; lateral outline straight or partly concave
	between summit of elytra and anterior border of pronotum; puncture rows
	somewhat confused or interrupted at central portion of side of elytron
<b>01</b> (1)	(Gressitt, 1952; Taiwan) insulana*
21 (1).	Tarsal claws toothed basally; body broad and nat ( <i>Odontionycha</i> )
22 (21)	Dersel hady outline chlore outly breader at hymeri then posterolateral
22 (21).	borsar body outline oblong-oval, hardry broad; color nale testaceous in dried spec
	imans 82 inflate
	Dorsal body outline oyate much broader anteriorly than posteriorly: body
	about 1/3 as deep as broad: color greenish 89 viridis
23 (21).	Tarsal claws narrowly divergent, minute, hidden by hairs of tarsal segment 3:
20 (21).	frontoclypeal area with central portion narrowly triangular: elytron regularly
	seriate-punctate ( <i>Mionycha</i> )
	Tarsal claws strongly divergent, not minute, projecting at least slightly beyond
	end of lobes of tarsal segment 3, not hidden by hairs of latter
24 (23).	Pronotum impunctate; dorsum yellow, deeper yellow on outer 2 interpunctural
	areas of elytral disc; apex of antenna slightly darkened; length 5.0 mm;
	breadth 4.0 65. concha
	Pronotum with close, fairly coarse, punctures, and minute punctures in inter-
	spaces; dorsum brownish yellow; antenna entirely pale; length 4.7 mm;
	breadth 3.5
25 (23).	Explanate margin of elytron feebly declivitous; body generally broadly oval
	or oblong and flattened (Cassida s. str.)
	Explanate margin of elytron steeply declivitous, generally projecting farther
26 (25)	inferior than ventral surfaces of body, forming a concavity
26 (25).	Eight for regularly senate-punctate, without any punctures in central portion be- tween puncture roug $\frac{2}{3}$ & 4
	Electron not regularly seriate nunctate throughout at least with some evtra
	Environ not regularly senate-punctate infoughout, at least with some extra punctures between puncture rows $3 \& 4$
27 (26)	Explanate margin of elvtron not distinctly thickened at border in central
27 (20).	nortion 28
	Explanate margin of elvtron strongly thickened at border in central portion:
	dorsum yellowish brown with fine black speckling; pronotum broadly round-
	ed at side
28 (27).	Pronotum narrowly rounded or subacute at side, not broadly rounded; lateral
	angle anterior to middle, or near base 29
	Pronotum broadly rounded at middle of each side; frontoclypeal area impress-
	ed with deep converging oblique grooves
29 (28).	Lateral angle of pronotum rounded-angulate, located near base 30

	Lateral angle of pronotum subacute, placed slightly anterior to middle; elytral
	disc and explanate margin not steeply declivitous at side; venter black
30 (29).	Elytral disc and explanate margin somewhat steeply declivitous; venter pale;
	length 4–5 mm
	Elytral disc and explanate margin not steeply declivitous; venter largely black;
	length 7.6 mm
31 (28).	Head strongly narrowed anteriorly 32
	Head subtrapeziform; body evenly convex, with regular puncture rows; humeral
	angle practically touching middle of side of pronotum
32 (31).	Explanate margin of elytron lacking black marking; body 1/4 again as long
	as broad; elytral disc generally reddish brown, sometimes with numerous
	longitudinal lines and spots of black 70. japana
	Explanate margin of elytron with a posterolateral black mark; body nearly
	1/2 again as long as broad; elytral disc always partly black at side 80. piperata
33 (26).	Head black; body only rarely as much as $1/3$ as deep as broad
	Head coarsely punctured; body fully $2/5$ as deep as broad; interpunctural
	area 2 of each elytron strongly raised; pronotum broadly rounded laterally,
	reddish; elytra red or black
34 (33).	Dorsal surfaces contrastingly marked with distinct discal spots on elytron, in-
	cluding one on each humeral callus, or with pronotal and elytral discs large-
	ly black and explanate margin shiny yellow
	Dorsal surfaces not contrastingly marked in dried specimens, generally reddish
	yellow or greenish on explanate margin as well as discs
35 (34).	Pronotum and elytral discs almost entirely black; humeral angle subacute;
	body less than $1/3$ as long as broad
	Dorsum reddish with suture and about 6 spots on elytral disc black; humeral
	angle rounded; body fully 1/2 again as long as broad
36 (34).	Legs completely black; elytron with short bristle-like hairs; labrum broadly
	and shallowly emarginate apically; explanate margin sharp-edged
	Legs not entirely black, though femora sometimes black basally; explanate
	margins not very sharp-edged
37 (36).	Frontoclypeal area fully as broad as long; body slightly more than 1/3 as deep
	as broad; lateral angle of pronotum distinctly angulate; elytral disc gener-
	ally lacking transverse rugae
	Frontoclypeal area about 1/4 again as long as broad; body less than 1/3 as
	deep as broad; explanate margins subhorizontal; lateral margins of pronotum
	broadly rounded; elytral discs with several irregular subtransverse rugae;
aa (aa)	dorsum largely black or rusty brown
38 (37).	Prothorax narrower than elytral humeri; elytra subparallel-sided, not widened
	behind humeri
	Prothorax as broad as elytral numeri; elytra widened behind humeri; elytral
20 (20)	punctures not very regular; disc clouded; explanate margin pale /2. laticollis
39 (38).	rronotum strongly tapering and distinctly angulate at side; frontoclypeal area
	as long as broad; anterior margin of numeral angle thickened and raised 40
	Pronotum moderately tapering, obtusely rounded at lateral angle; frontoclypeal

# Pac. Ins. Mon.

	area broader than long; anterior margin of humeral angle not thickened
	and raised
40 (39).	Elvtra without a distinct tubercle behind scutellum, feebly concave near scu-
. ,	tellum; pronotal angle behind middle; length of body about 6 mm; breadth
	4
	Elytra with a distinct tubercle behind scutellum, distinctly concave beside
	scutellum; pronotal angle near middle; length of body 7-8 mm; breadth
	5.5–6.5
41 (36).	Interpunctural areas of elytral disc lacking minute hairs
	Interpunctural areas of elytral disc with minute white hairs; form elongate-
	oval; pronotum subsemicircular, closely meeting bases of elytra; explanate
12 (11)	margin of elytron less than 1/3 as while as disc
42 (41).	Frontoclypeal area fully as broad as long
43(42)	Explanate margin of elytron fully $1/2$ as broad as disc at middle: pronotum
10 (12).	as broad as elytra, evenly arcuate anteriorly
	Explanate margin of elytron barely $1/3$ as broad as disc at middle; pronotum
	narrower than elytra, obtusely rounded-angulate anteriorly (Gressitt, 1952;
	NC Taiwan) rubiginosa taiwana*
44 (42).	Pronotum much narrower than elytra, with lateral margin rounded near middle
	of side
	Pronotum as broad as elytra, or practically so, with lateral margin narrowed
	and subacute, the angle placed close to base; elytral disc subregularly punc-
	tured, with interpunctural areas slightly raised and for most part slightly
45 (44)	Humeral angle broadly rounded a free space between it and lateral angle of
45 (44).	pronotum: labrum broadly emarginate: length of body 7 mm: breadth 5 mm
	86. spaethi
	Humeral angle subacute, slightly produced, closely meeting basal margin of
	pronotum; labrum narrowly emarginate; length of body 6 mm; breadth
	4 mm
46 (25).	Elytra evenly convex; interpunctural area 3 with scattered punctures; middle
	coxae close together; ventral surfaces largely black (Cassidulella) 47
	Elytra moderately tuberculate at summit; interpunctural area 3 lacking punc-
	(Theorem (Th
17 (16)	(Tylocentra)
47 (40).	annear before meeting 48
	Frontoclypeus bounded by grooves which unite to form a single median groove
	before reaching antennal insertions, the groove continuing to vertex; femora
	black; length 3.5–5.5 mm
48 (47).	Grooves along sides of frontoclypeus meeting at antennal insertions
	Grooves along frontoclypeus disappearing before antennal insertions; head
	black; frontoclypeus longer than broad, closely punctured, fairly flat; length
	5.0–6.5 mm
49 (48).	Frontoclypeus yellow, broader than long; femora largely testaceous; pronotum

1B

### Subgenus Alledoya Hincks

46. Cassida (Alledoya) vespertina (Boheman)

Cassida vespertina Boh., 1862, Mon. Cassid. 4: 357 (N. China; STOCKHOLM).—Baly, 1874, Ent. Soc. Lond., Trans. 1874: 213 (Japan).—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 282.

- Deloyala vespertina: Weise, 1900, Archiv Naturg. 66 (1): 295 (Amur).—Spaeth, 1914, Suppl. Ent. 3: 19 (Taiwan); 1926, Best.-Tab. Eur. Col. 95: 61.—Yokoyama, 1931, (Col. Japan) 2: 19, pl. 3, fig. 4.—Yuasa, 1932, Nippon Konchu Zukan, 586, fig. 1145.—Liu, 1936, Lingnan Sci. Jour. 15: 258.—Gressitt, 1938, op. cit. 17: 586 (Hunan).
- Cassida (Deloyala) vespertina: Spaeth, 1914, Col. Cat. 62: 95.—Chûjô, 1934, Sylvia 5: 168. —Gressitt, 1939, Pan-Pac. Ent. 15: 142 (Chekiang).
- Cassida (Lasiocassis) vespertina: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 486 (Fukien, Hupeh, Sikang).

Cassida (Alledoya) vespertina: Chûjô & Kimoto, 1961, Pacific Ins. 3: 196.

DISTRIBUTION: Amur, Ussuri, Mongolia, China (Chahar, Szechuan, Sikang, Hupeh, Hunan, Kwangtung, Fukien, Chekiang), Taiwan, Korea, Japan, Ryukyu Is. (Miyako, Ishigaki).

SHENSI: 1, S. Shensi, V. 1904, Blackwelder (US). HUPEH: Sui-sa-pa, Lichuan, 25. VIII. 1948, Gressitt & Djou (CAS).

HOSTS: Clematis apiifolia DC, Calystegia Soldanella (L.) R. & S.

### Subgenus Taiwania Spaeth

# 47. Cassida (Taiwania) amurensis (Kraatz) Fig. 276, a.

Coptocycla amurensis Kraatz, 1879, Dtsch. Ent. Zschr. 23: 141.

Metriona amurensis: Spaeth, 1914, Cat. Col. 62: 142.—Spaeth & Reitter, 1926, Best.-Tab. Eur. Col. 95: 65.

Cassida (Metriona) amurensis: Chûjô, 1942, N. H. Soc. Formosa, Trans. 32: 43 (Korea). Cassida (Taiwania) amurensis: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 489, pl. 29, fig. 9 (Hsiao-ling).

DISTRIBUTION: SE Siberia (Ussuri), NE China (Kirin), Korea.

KIRIN: 1, Sungari R., 100 km S of Kirin, 23. VI-16. VII. 1913, Sowerby (US).

48. Cassida (Taiwania) circumdata Herbst Fig. 276, b.

 Cassida circumdata Herbst, 1790, Natursyst. Käf. 8: 268, pl. 132, fig. 11 (E. Indies; ?ZMB).
 —Olivier, 1808, Ent. 6: 967; 97, pl. 6, fig. 93.—Boisduval, 1835, Faune Ent. de l' Oceanie (Astrolabe) 2: 536.—Maulik, 1919, Fauna India, Hisp. & Cass., 404 (India).



Fig. 276. a, Cassida (Taiwania) amurensis (Kraatz); b, C. (T.) circumdata Herbst; c, C. (T.) discalis Gress. [from C. A. S., Proc. ser. 4, 27 (17)].

Cassida trivittata Fabricius, 1801, Syst. Eleuth. 1: 397 (E. Indies).—Olivier, 1808, Ent. 6: 973; 97, pl. 6, fig. 103.—Blanchard, 1853, Voy. Pole Sud (d'Urville) Zool. 4: 323, pl. 18, fig. 16.

Cassida U-fuscum Wiedemann, 1823, Zool. Mag. 2: 74.

Coptocycla circumdata: Boheman, 1855, Mon. Cassid. 3: 279.—Baly, 1863, Jour. Ent. 2: 14.— Schönfeldt, 1890, Ent. Nachr. 16 (11): 175.

Coptocycla trivittata: Boheman, 1855, Mon. Cassid. 3: 280.

Metriona circumdata: Weise, 1901, Dtsch. Ent. Zschr. 1901: 53.—Spaeth, 1903, Mus. Nat. Hung., Ann. 1: 128; 1913, op. cit. 11: 47.—Maulik, 1913, Ind. Mus., Rec. 9: 114.—Miwa, 1933, N. H. Soc. Formosa, Trans. 23: 12 (S. Ryukyu).—Liu, 1936, Lingnan Sci. Jour. 15: 261.—Chûjô, 1934, Sylvia 5: 161 (S. Kyushu).—Gressitt, 1938, Lingnan Sci. Jour. 17: 191, 386, 584 (Hainan, Kwangtung); 1939, Pan-Pac. Ent. 15: 141.

Metriona circumdata ab. pescadorensis Chûjô, 1934, Sylvia 5: 162.

Cassida cuticula Gressitt, 1938, Lingnan Sci. Jour. 17: 191 (Hainan).

- Cassida (Taiwania) circumdata: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 489, pl. 28, fig. 2, pl. 36, figs. 6, 9 (Szechuan, Kiangsi).—Chûjô & Kimoto, 1961, Pacific Ins. 3: 199.
- Biology: Schultze, 1908, Philip. Jour. Sci B. 3: 267, pl. 5, figs. 4–8, pl. 6, figs. 4.—Yeung, 1934, Lingnan Sci. Jour. 13: 143, pls. 11–12.—Gressitt, 1952, p. 537.

DISTRIBUTION: S. Kyushu, Ryukyu Is., Taiwan, S. China (Szechuan, Kiangsi, Fukien, Kwangtung, Kwangsi), Hainan I., Indo-China, India, Ceylon, E. Indies, Philippine Is.

HOSTS: Ipomoea palmata Forsk, I. Batatas Lamk., I. acquatica Forsk, I. cairica Sweet, I. digitata L., Calystegia Soldanella (L.) R. & S.

# 49. Cassida (Taiwania) discalis Gressitt Fig. 276, c.

Cassida discale Gr., 1938, Lingnan Sci. Jour. 17: 386, 587 (Kiangsi; CAS).

Cassida (Taiwania) discalis: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 491, pl. 30, fig. 4. DISTRIBUTION: SE China (Kiangsi, Kwangtung).

50. Cassida (Taiwania) eoa (Spaeth)

Metriona eoa Sp., 1928, Ent. Odd. Mus. Praha, Sbornik 6: 46 (Yunnan; PRAHA). Cassida eoa: Sp., 1938, Ent Tidskr. 59: 255 (Burma).

Cassida (Taiwania) eoa: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 491.

DISTRIBUTION: SW China (Yunnan), Burma.

# 51. Cassida (Taiwania) expansa Gressitt

Cassida (Taiwania) expansa Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 492 (Hainan; LINGNAN).

DISTRIBUTION: Hainan I.

# 52. Cassida (Taiwania) expressa (Spaeth)

Metriona expressa Sp., 1914, Ent. Mitt. 3: 230 (Yunnan; SPAETH: MANCHESTER).

Cassida (Taiwania) expressa: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 493 (Hu-peh).

DISTRIBUTION: S. China (Yunnan, Hupeh).

- 53. Cassida (Taiwania) imparata Gressitt & Kimoto, new name
- Cassida (Taiwania) imitatrix Gr. (nec Spaeth, 1916), 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 493, pl. 30, fig. 5 (Kwangsi; LINGNAN).

DISTRIBUTION: S. China (Kwangsi).

# 54. Cassida (Taiwania) juglans Gressitt Fig. 277, b.

Cassida juglans Gr., 1942, Lingnan N. H. Surv. & Mus. Spec. Publ. 5: 4, fig. 4 (Mo-kan Shan; HEUDE).



Fig. 277. a, *Cassida (Taiwania) imparata* Gress. & Kim.; b, *C. (T.) juglans* Gress. (from C.A.S., Proc. and Lingnan N. H. S. & Mus., Spec. Publ.).

Cassida (Taiwania) juglans: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 496. DISTRIBUTION: E. China (Chekiang).

Fig. 277, a.

## 55. Cassida (Taiwania) juno Boheman

Cassida juno Boh., 1862, Mon. Cassid. 4: 324 (Hong Kong; Stockholm). Cassida (Taiwania) juno: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 496. DISTRIBUTION: S. China (Hong Kong).

# 56. Cassida (Taiwania) obtusata Boheman Fig. 278.

Cassida obtusata Boheman, 1854, Mon. Cassid. 2: 405 (India; STOCKHOLM).—Spaeth, 1914, Suppl. Ent. 3: 19 (Formosa).—Maulik, 1919, Fauna India, Hisp. & Cass., 376.— Chûjô, 1934, Sylvia 5: 173.—Gressitt, 1938, Lingnan Sci. Jour. 17: 192, 387, 588; 1939, Pan-Pac. Ent. 15: 142 (Kwangtung, Hainan).



Fig. 278. Cassida (Taiwania) obtusata Boh.: a, fifth instar larva; b, pupa, dorsal view, caudal process directed backwards; c, third instar larva; d, first instar larva; e, second instar larva; f, pupa, ventral view; g, ootheca with single egg; h, adult [after Calif. Acad. Sci., Proc. ser. 4, 27 (17)].

Cassida (Taiwania) obtusata: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 497, pl. 34.

Biology: Kershaw & Muir, 1907, Ent. Soc. Lond., Trans. 1907: 251.—Gressift, 1952, p. 537, pl. 34.

DISTRIBUTION: India, Indo-China, Burma, Luzon, S. China (Fukien, Kwangtung), Hainan I., Taiwan.

HOSTS: Celosia argentea L., Amaranthus spp. Adults also feed on Citrus spp.

# 57. Cassida (Taiwania) plausibilis (Boheman) Fig. 279, a.

Coptocycla plausibilis Boh., 1862, Mon. Cassid. 4: 395 (China; Stockholm).—Baly, 1863, Jour. Ent. 1: 14 (Cambodia).

Metriona plausibilis: Spaeth, 1914, Col. Cat. 62: 144.

Metriona sp. Gressitt, 1938, Lingnan Sci. Jour. 17: 191 (Hainan).

Metoriona objecta: Gr. (nec Spaeth?), 1938, t. c., 584 (Hainan).

Cassida (Taiwania) plausibilis: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 498, pl. 28, fig. 4.

DISTRIBUTION: S. China, Hainan, Cambodia, Thailand.

# 58. Cassida (Taiwania) purpuricollis (Spaeth)

Metriona purpuricollis Sp., 1914, Ent. Mitt. 3: 229 (Kunming; SPAETH: MANCHESTER). Cassida (Taiwania) purpuricollis: Gressitt, Calif. Acad. Sci., Proc. ser. 4, 27: 498.

DISTRIBUTION: SW China (Yunnan).

# 59. Cassida (Taiwania) quadriramosa Gressitt

Cassida (Taiwania) quadriramosa Gr., 1952, t. c., 499 (Chang-yang; MCZ).

DISTRIBUTION: C. China (Hupeh).

# 60. Cassida (Taiwania) rati Maulik

Cassida rati Maul., 1923, Zool. Soc. Lond., Proc. 1923: 605, textfig. 6 (Manipur; BM).— Spaeth, 1938, Entom. Tidskr. 59: 236 (Burma, Taiwan. Hang-chow).

Metriona rati: Spaeth, 1928, Ent. Odd. Nar. Mus. Praze, Sbornik 6: 46.

Cassida (Taiwania) rati: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 500.

DISTRIBUTION: Manipur, Burma, S. China (Chekiang, Kiangsi, ?Kwangtung, Fukien), Taiwan).

?KWANGTUNG: Lung-zo-tam, 29. IX. 1912, Mell (ZMB).

### 61. Cassida (Taiwania) sauteri Spaeth

Taiwania sauteri Sp., 1913, Mus. Nat. Hung., Ann 11: 48 (Taiwan; ?BUDAPEST); 1914, Suppl. Ent. 3: 17.—Chûjô, 1934, Sylvia 5: 168.

Taiwania achardi Sp., 1928, Ent. Odd. Nar. Mus. Praze, Sbornik 4: 93 (Tonkin).

Cassida sauteri: Sp., 1938, Ent. Tidskr. 59: 236.

Cassida (Taiwania) sauteri: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 500.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 200.

DISTRIBUTION: Taiwan, Ryukyu Is. (Okinawa), S. China (Fukien), N. Vietnam.

HOST: Rhaphiolepis umbellata (Thunb.) Makino.

# 62. Cassida (Taiwania) sigillata (Gorham)

Coptocyla sigillata Gor., 1885, Zool. Soc. Lond., Proc. 1885: 284 (Japan; BM).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (131); 1914, Col. Cat. 62: 130.

Metriona sigillata: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 66.—Chûjô, 1934, Sylvia 5: 158; 1941, N. H. Soc. Formosa, Trans. 31: 235 (Korea).—Gressitt, 1939, Pan-Pac. Ent. 15: 141 (Mo-kan Shan).

Cassida (Taiwania) sigillata: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 501.

DISTRIBUTION: Japan (Honshu), Korea, E. China (Chekiang, Fukien, Kwangtung), Taiwan.

FUKIEN: Kua-tun, #14.5IV.\*1938, Klapperich (FREY).



Fig. 279. a, *Cassida (Taiwania) plausibilis* (Boh.); b, C. (T.) spaethiana Gress. (after C. A. S., Proc.).

63. Cassida (Taiwania) spaethiana Gressitt Fig. 279, b.

Taiwania spaethi Gr. (nec Weise, 1900), 1942, Lingnan Nat. Hist. Surv. & Mus. Spec. Publ. 5: 2, fig. 2 (N. Kwangtung; LINGNAN).

Cassida spaethiana Gr., 1945, Lingnan Sci. Jour. 21: 147 (n. n.).

Cassida (Taiwania) spaethiana: Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 502, pl. 28, fig. 5.

DISTRIBUTION: S. China (Kwangtung, Fukien, Chekiang, Hupeh).

CHEKIANG: Tien-mu Shan (FREY). FUKIEN: Kua-tun, 18. IV. 1938, Klapperich (FREY); Shao-wu, Maa (BISHOP). HUPEH: Sui-sa-pa, VII. 1948, Gressitt & Djou (CAS).

64. Cassida (Taiwania) versicolor (Boheman) Fig. 280.

Coptocycla versicolor Boh., 1855, Mon. Cassid. 3: 414 (China; STOCKHOLM).

Coptocycla Thais Boheman, 1862, op. cit. 4: 463 (N. China).—Baly, 1874, Ent. Soc. Lond., Trans. 1874: 214 (Kiangsi).—Kraatz, 1879, Dtsch. Ent. Zschr. 23: 271.—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 284.—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 65: (Sitzb): (130) (Amur).

Coptocycla crucifera Kraatz, 1879, Dtsch. Ent. Zschr. 23: 271 (Japan).—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 283.



Fig. 280. Cassida (Taiwania) versicolor (Boh.): a, adult; b, pupal exuviae, dorsal view, with prothoracic shield missing; c, part of side of prothoracic shield.

Metriona Thais: Spaeth, 1914, Col. Cat. 62: 144; 1926, Best.-Tab. Eur. Col. 95: 65 (Tonkin). —Yuasa, 1932, Nippon Konchu Zukan, 582, fig. 1143 (hosts).—Chûjô, 1934, Sylvia

5: 160.—Gressitt, 1938, Lingnan Sci. Jour. 17: 585 (Hunan); 1939, Pan-Pac. Ent. 15: 141 (Chekiang).

Metriona versicolor: Spaeth, 1914, Col. Cat. 62: 144.

Metriona thais crucifera: Sp., 1914, l. c.-Chûjô, 1934, Sylvia 5: 160.-Gressitt, 1938, Lingnan Sci. Jour. 17: 191, 586 (Hainan).

Thlaspida chinensis: Gr. (nec Spaeth), 1938, t. c., 385 (Kwangtung).

Cassida versicolor ab. crucifera : Spaeth, 1938, Ent. Tidskr. 59 : 235.

Cassida (Taiwania) versicolor: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 502, pl. 28, fig. 6 (Hupeh).—Chûjô & Kimoto, 1961, Pacific Ins. 3: 200.

DISTRIBUTION: Amur, Japan, Ryukyu Is. (Ishigaki), Taiwan, S. China (Hupeh, Chekiang, Kiangsi, Hunan, Fukien, Kwangtung), Hainan, Tonkin, Burma.

HONG KONG: Tai-po, N. Terr. & H. K. Peak to Pok-fu-lam, on *Rhaphiolepis*, 15-17. VII. 1962, Gressitt.

HOSTS: Pyrus serotina Rehder, Malus sp., Sorbus gracilis K. Koch, Pourthiaea sp. Prunus sp., Rhaphiolepis indica.

### Subgenus Mionycha Weise

65. Cassida (Mionycha) concha Solsky

Cassida concha S., 1872, Soc. Ent. Ross., Horae 8: 264 (Siberia; Moscow).-Kraatz, 1879,

Dtsch. Ent. Zsch. 23: 269.

Cassida (Mionycha) concha: Weise, 1893, Ins. Deutschl. 6: 1090.—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (129); 1914, Col. Cat. 62: 96; 1926, Best.-Tab. Eur. Col. 95: 51.—Chûjô, 1934, Sylvia 5: 167; 1942, Mushi 14: 64 (Liaotung).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 504.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 199.

DISTRIBUTION: Siberia (Amur, Ussuri), NE China (Liaoning), Korea, Japan (Hon-shu).

# 66. Cassida (Mionycha) hincksi Medvedev

Cassida (Mionycha) hincksi Med., 1957, Beitr. Ent. 7: 555 (nr. Urga; Moscow). DISTRIBUTION: Mongolia.

# Subgenus Cassida Linnaeus s. str.

### 67. Cassida (Cassida) berolinensis Suffrian

Cassida obsoleta Herbst (nec Illiger), 1799, Natursyst. Käf. 8: 248, pl. 131, fig. 5.

- Cassida berolinensis Suffr., 1844, Stett. Ent. Ztg. 5: 270 (Berlin; ?type destroyed: STETTIN).—
  Boheman, 1854, Mon. Cassid. 2: 458.—Kraatz, 1874, Berl. Ent. Zschr. 18: 94.—Weise, 1889, Soc. Ent. Ross., Horae 23: 571 (Ordos).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (142).—Medvedev, 1957, Beitr. Ent. 7: 556 (L. Ubra).
- Cassida daurica Boheman, 1854, Mon. Cassid. 2: 457.
- Cassida berolinensis ab. pallidiventris Reitter, 1912, Fauna Germ. 4: 215.
- Cassida berolinensis ab. pectoralis Weise, 1896, Wien. Ent. Ztg. 15: 81.
- Cassida (Cassida) berolinensis: Spaeth, 1926, Best. Tab. Eur. Col. 95: 32.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 507.

DISTRIBUTION: Europe, Mongolia (Ordos), E. Siberia.

# 68. Cassida (Cassida) fuscorufa Motschulsky

Cassida fuscorufa Mots., 1866, Soc. Nat. Mosc., Bull. 39 (1): 178 (Japan; ?Moscow).— Kraatz, 1879, Dtsch. Ent. Zschr. 23: 268, 273 (Amur).—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 282 (fusco-rufa).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (138); 1926, Best.-Tab. Eur. Col. 95: 36 (Korea).—Yokoyama, 1931 (Col. Japan) 2: 19, pl. 3, fig. 5.—Chûjô, 1934, Sylvia 4: 177 (Taiwan); 1938, Mushi 11: 168 (Lao Shan); 1941, N. H. Soc. Formosa, Trans. 31: 234 (Korea); 1942, op. cit. 32: 42; 1942, Mushi 14: 64 (Liaotung).—Gressitt, 1938, Lingnan Sci. Jour. 17: 587 (Kuling); 1939, Pan-Pac. Ent. 15: 142 (Hangchow).—Spaeth, 1942, Arb. Morph. Tax. Ent. Berlin-Dahlem 9: 12 (Erzendjanzsy).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 507.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 197.

Cassida consociata Baly, 1874, Ent. Soc. Lond., Trans. 1874: 213.

Cassida russata: Weise (nec Fairmaire, 1887), 1889, Soc. Ent. Ross., Horae 23: 646.

DISTRIBUTION: Japan, E. Siberia (Amur), E. China (Heilungkiang, Kirin, Liaoning, Hopei, Kiangsu, Kiangsi, Fukien), Korea, Taiwan.

HUPEH: Sui-sa-pa & Hsiao-ho, Lichuan, VII, VIII. 1948, Gressitt & Djou (CAS, BI-SHOP).





Fig. 281. a, Cassida (Cassida) jacobsoni Spaeth; b, C. (C.) klapperichi Spaeth; c, C. (C). laticollis Gress. [after Calif. Acad. Sci., Proc. ser. 4, 27 (17)].

69. Cassida (Cassida) jacobsoni Spaeth Fig. 281, a.

Cassida Jacobsoni Sp., 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (138) (Fukien; SPAETH: MANCHESTER).

Cassida (Cassida) jacobsoni: Sp., 1926, op. cit. 95: 36.—Gressitt, 1952, Calif. Acad. Sci., Proc., ser. 4, 27: 508, pl. 29, fig. 5.

DISTRIBUTION: S. China (Fukien, Chekiang).

70. Cassida (Cassida) japana Baly Fig. 282.

Cassida japana B., 1874, Ent. Soc. Lond., Trans. 1874: 212 (Kyushu; BM).—Kraatz, 1879, Dtsch. Ent. Zschr. 23: 273.—Spaeth, 1914, Col. Cat. 62: 103 (Indo-China); 1914, Zool.-Bot. Ges. Wien, Verh. 64: (Sitzb.): (130); 1914, Suppl. Ent. 3: 19 (Taiwan); 1926, Best.-Tab. Eur. Col. 95: 31 (Szechuan).—Chûjô, 1934, Sylvia 5: 174.—Gressitt, 1939, Pan-Pac. Ent. 15: 142.—Spaeth, 1940, Kol. Rundschau 26: 37 (Shanghai).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 509, pl. 33.

Cassida rugifera Kraatz, 1879, Dtsch. Ent. Zschr. 23: 274.

Cassida piperata var. japana: Weise, 1900, Archiv Naturg. 66 (1): 295.

Cassida lineola: Gressitt (nec Creutzer), 1938, Lingnan Sci. Jour. 17: 387, 587 (Kiangsi, Kwangtung).

Biology: Gressitt, 1952, p. 539, pl. 33.

DISTRIBUTION: Japan (Kyushu, Shikoku, Honshu), S. China (Szechuan, Hupeh, Kiangsu, Anhwei, Chekiang, Kiangsi, Fukien, Kwangtung), Taiwan, Vietnam.

This species is intermediate between the subgenera *Cassida* and *Taiwania* in some respects, particularly as regards the body form, though the tarsal claws are not very distinctly toothed and the explanate margins are barely hyaline.

 71. Cassida (Cassida) klapperichi Spaeth Fig. 281, b.
 Cassida Klapperichi Sp., 1940, Kol. Rundsch. 26: 37 (Shanghai; SPAETH: MANCHESTER).— Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 509, pl. 29, fig. 3.



Fig. 282. Cassida (Cassida) japana Baly: a, fifth instar larva, caudal process directed backwards; b, first instar larva; c, pupa, caudal process directed backwards; d, third instear larva; e, ootheca, dorsal view; f, ootheca, ventral view; g, pupa, ventral view; h, adult [after Calif. Acad. Sci., Proc. ser. 4, 27 (17)].

DISTRIBUTION: E. China (Kiangsu, Hunan).

72. Cassida (Cassida) laticollis Gressitt Fig. 281, c.

Cassida (Cassida) laticollis Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 510, pl. 30, fig. 7. DISTRIBUTION: W. China (W. Hupeh).

73. Cassida (Cassida) lineola Creutzer Fig. 283, a.

Cassida lineola Cr., 1799, Ent. Vers. 119, pl. 2, fig. 23 (Europe).—Suffrian, 1844, Stett. Ent.
Ztg. 5: 210.—Boheman, 1854, Mon. Cassid. 2: 450.—Fairmaire, 1888, Revue d'Ent.
7: 157 (Peiping).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (138);
1914, Col. Cat. 62: 104 (Mongolia); 1926, Best.-Tab. Eur. Col. 95: 34.—Chûjô, 1934,

Sylvia 5: 175; 1936, Umeno Ent. Lab., Bull. 3: 13 (Korea).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 511, pl. 29, fig. 6.

Cassida russica Herbst, 1799, Natursyst. Käf. 8: 232, pl. 131, fig. 1 & (E. Europe).

Cassida signata H., 1799, l. c., 234, pl. 131, fig. 2 Q (Europe).

Cassida sibirica Gebler, 1833, Soc. Nat. Mosc., Bull. 6: 306 (Siberia).-Kraatz, 1874, Berl. Ent. Zeits. 18: 97; 1879, Dtsch. Ent. Zschr. 23: 267.

Cassida bicostata Fischer, 1842, Cat. Col. Sib. Or. Karel., 24 ♀ (Siberia).

Cassida suturalis Fisch., 1842, l. c., ♂ (Siberia).

Cassida nigroguttata Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 281 (Honshu).

Cassida nigrostrigata Fairmaire, 1888, Revue d'Ent. 7: 157 (Peiping).

Cassida lineola ab. russica: Spaeth, 1914, Col. Cat. 62: 104.

Cassida lineola var. sibirica: Sp., 1914, l.c.

Cassida lineola ab. nigrostrigata: Sp., 1914, l. c.

Cassida lineola ab. formosana Chûjô, 1934, Sylvia 5: 172, 176 (Taiwan).

Cassida lineola var. japonica Ch., 1951, Shikoku Ent. Soc., Trans. 2: 46.

DISTRIBUTION : Europe, Siberia, Mongolia, China (Chahar, Hopei, Hupeh, Fukien, Kwangsi), Korea, Japan, Taiwan.

SHENSI: 1, S. Shensi, V. 1904, Blackwelder (US). HUPEH: 1, Sui-sa-pa & Hsiaoho, Lichuan, VII, VIII. 1948, Gressitt & Djou (CAS, BISHOP).

HOSTS: Artemisia sp., Beta vulgaris Linn.

# 74. Cassida (Cassida) mandli Spaeth Fig. 283, b.

Cassida (Cassida) Mandli Sp., 1921, Kol. Rundsch. 9: 84 (Ussuri; SPAETH: MANCHESTER); 1926, Best.-Tab. Eur. Col. 95: 37.—Chûjô, 1942, N. H. Soc. Formosa, Trans. 32: 42 (Korea).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 512, pl. 29, fig. 7 (Hsiaoling).

DISTRIBUTION: E. Siberia (Ussuri), NE China (Liaoning). Korea.



Fig. 283. a, Cassida (Cassida) lineola Creutz.; b, C. (C.) mandli Spaeth; c, C. (C.) pallidicollis Boh. [after Calif. Acad., Sci., Proc. ser. 4, 27 (17)].

### 75. Cassida (Cassida) mongolica Boheman

Cassida mongolica Boh., 1854, Mon. Cassid. 2: 449 (Mongolia; STOCKHOLM).—Kraatz, 1879, Dtsch. Ent. Zschr. 23: 268 (E. Siberia).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.); (130, 139) (Kiautschau); 1926, Best.-Tab. Eur. Col. 95: 35 (N. Japan).—Chûjô, 1934, Sylvia 5: 177.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 513.

Cassida russata Fairmaire, 1887, Revue d'Ent. 6: 335 (Peiping).

DISTRIBUTION: E. Siberia, Mongolia, N. China (Hopei, Shantung), N. Japan.

### 76. Cassida (Cassida) murraea ussuriensis Spaeth

Cassida murraea ussuriensis Sp., 1921, Kol. Rundsch. 9: 84 (Ussuri; ?WIEN).

DISTRIBUTION: E. Siberia.

The typical subspecies has been recorded from C. Asia and Japan. It feeds on Carpesium, Inula, Mentha, Salicaria and Verbascum.

#### 77. Cassida (Cassida) nebulosa Linnaeus

Cassida nebulosa L., 1758, Syst. Nat., ed. 10, 365 (Europe; LINN. Soc. LOND.); 1767, op. cit. ed. 12, 1 (2): 575; 1761, Fauna Suec. ed. 2, 152.—Olivier, 1808, Ent. 6: 979; 97, pl. 2, fig. 31.—Stephens, 1831, Ill. Brit. Ent. 4: 367.—Suffrian, 1844, Stett. Ent. Ztg. 5: 277.—Boheman, 1854, Mon. Cassid. 2: 451.—Baly, 1874, Ent. Soc. Lond., Trans. 1874: 213 (N. China, Japan).—Kraatz, 1879, Dtsch. Ent. Zschr. 23: 267, 270 (Siberia). —Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 282.—Matsumura, 1907, Thous. Ins. Japan 4: 40, pl. 58, fig. 36 Q.—Spaeth, 1926, Best.-Tab. Eur. Col. 95: 30.—Yokoyama, 1931, (Col. Japan) 2: 19, pl. 3, fig. 3.—Matsumura, 1931, 6,000 Illus. Ins. Japan, 226, fig. 622.—Yuasa, 1932, in Nippon Konchu Zukan, 586, fig. 1146.—Cho, 1934, Chosen N. H. Soc., Jour. 17: 80 (Korea).—Chûjô, 1934, Sylvia 5: 172.—Liu, 1936, Lingnan Sci. Jour. 15: 259 (Kiangsu).—Chûjô, 1938, Mushi 11: 168 (Lao Shan); 1941, N. H. Soc. Formosa, Trans. 31: 234; 1942, Mushi 14: 64.—Gressitt, 1938, Lingnan Sci. Jour. 17: 588; 1939, Pan-Pac. Ent. 15: 142 (Hupeh, Manchuria); 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 513.—Medvedev, 1957, Beitr. Ent. 7: 556 (Peking).

Cassida affinis Fabricius, 1775, Syst. Ent., 88 (Europe).

Cassida maculata F., 1775, l. c. (Europe).

Cassida tigrina DeGeer, 1775, Mem. Ins. 5: 168, pl. 5, figs. 15, 16 (Siberia).

Cassida nigra Herbst, 1799, Natursyst. Käf. 8: 258, pl. 131, fig. 12 (Europe).

DISTRIBUTION: Europe, Siberia, N. China (Kirin, Liaoning, Hopei, Hupeh, Shangtung, Kiangsu, Szechuan), Korea, Japan.

KIRIN: Hsin-king, 24. VI. 1939, Tagawa (Кімото).

HOSTS: Amaranthus spp., Atriplex sp., Chenopodium sp., Convolvulus sp., Beta vulgaria L.

78. Cassida (Cassida) nucula Spaeth

Cassida nucula Sp., 1914, Ent. Mitt. 3: 228 (Yunnan; SPAETH: MANCHESTER).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 514.

DISTRIBUTION: SW China (Yunnan).

79. Cassida (Cassida) pallidicollis Boheman Fig. 283, c.

Cassida pallidicollis Boh., 1856, Cat. Col. Ins. Brit. Mus. 9: 138 (China; STOCKHOLM);
1862, Mon. Cassid. 4: 340.—Fairmaire, 1888, Revue d'Ent. 7: 158 (Peking).—Spaeth,
1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (130, 139) (Mongolia, Korea); 1926,
Best.-Tab. Eur. Col. 95: 32.—Doi, 1927, Dobutsug. Zasshi 39: 335, 337.—Matsumura,
1931, 6,000 Illus. Ins. Japan, 226, fig. 623, ♀.—Chûjô, 1934, Sylvia 5: 175.—Gressitt,
1952, Calif. Acad. Sci., Proc. ser. 4, 27: 514, pl. 29, fig. 4 (Kirin, Kiangsu).

Cassida diabolica Kraatz: 1879, Dtsch. Ent. Zschr. 23: 142 (E. Siberia).

Cassida (Mionycha) Morawitzi Jacobson, 1894, Soc. Ent. Ross., Horae 28: 245 (W. Siberia).
Cassida pallidicollis ab. morawitzi: Spaeth, 1942, Arb. Morph. Tax. Ent. Berlin-Dahlem 9: 12 (Erzendjanzsy).

DISTRIBUTION: N. and E. China (Mongolia, Heilungkiang, Kirin, Hopei, Shansi, Anhwei, Kiangsu), Korea, Siberia.

### 80. Cassida (Cassida) piperata Hope

Cassida piperata H., 1842, Ent. Soc. Lond., Proc. 1: 62 (Japan; BM); 1845, Ent. Soc. Lond., Trans. 4: 12.—Boheman, 1862, Mon. Cassid. 4: 322.—Weise, 1900, Archiv Naturg. 66 (1): 295.—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (130) (Japan); 1914, Suppl. Ent. 3: 19 (Formosa); 1926, Best.-Tab. Eur. Col. 95: 30 (N. China, Korea, Tonkin, Luzon).—Chûjô, 1934, Sylvia 5: 174 (Formosa); 1936, Mushi 11: 169 (Tsingtau); 1941, N. H. Soc. Formosa, Trans. 31: 235; 1942, Mushi 14: 65 (Dairen).—Gressitt, 1939, Pan-Pac. Ent. 15: 143 (Nanking); 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 515 (Fukien, Canton, Sikang).—Chûjô & Kimoto, 1961, Pacific Ins. 3: 198.

Cassida labilis Boheman, 1854, Mon. Cassid. 2: 402 (E. China).

Cassida biguttulata Kraatz, 1879, Dtsch. Ent. Zschr. 23: 275 (Amur).

Coptocycla sparsa Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 284 (Japan).

DISTRIBUTION: China (Liaoning, Hopei, Shantung, Kiangsu, Fukien, Kwangtung, Sikang), Taiwan, E. Siberia, Korea, Japan, N. Vietnam, Luzon.

SHANTUNG: 2, Hsiao-wu, Tai Shan, Meyer (US).

HOSTS: Alternanthera sessilis R. Br., Achryanthes sp., Amaranthus spp., Atriplex sp., Beta vulgaris, Chenopodium sp., Commelina nudiflora L.

### 81. Cassida (Cassida) prasina prasina Illiger

Cassida prasina III., 1798, Käfer Preuss. 1: 481 (Europe).—Weise, 1893, Ins. Deutschl. 6: 108, 110.—Reitter, 1912, Fauna Germ. 4: 218.—Spaeth, 1914, Zool.-Bot. Ges. Wien., Verh. 64 (Sitzb): (146) (C. Asia).

Cassida viridana Herbst, 1799, Natursyst. Käf. 8: 224 (Europe).

Cassida chloris Suffrian, 1844, Stett. Ent. Ztg. 5: 188 (Europe).—Boheman, 1854, Mon. Cassid. 2: 384.—Kraatz, 1874, Berl. Ent. Zschr. 18: 92.

Cassida sanguinolenta var. prasina: Desbrochers, 1891, Mon. Cassid. (Frelon), 40.

Cassida (Cassida) prasina: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 50.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 516.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 198.

DISTRIBUTION: Europe, C. Asia, China (Sinkiang, Kirin), Japan.

KIRIN: Hsing-king, 5. VII. 1939, Tagawa (Кімото).

HOSTS: Achillea millefolium L., A. ptarmica L. (Europe).

- 82. Cassida (Cassida) prasina mongolensis Medvedev
- Cassida prasina subsp. mongolensis Med., 1957, Beitr. Ent. 7: 556 (Kentej, Mongolia; Moscow).

DISTRIBUTION: Mongolia.

### 83. Cassida (Cassida) probata Spaeth

Cassida probata Sp., 1914, Ent. Mitt. 3: 277 (Yunnan; SPAETH: MANCHESTER).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 516.

DISTRIBUTION: SW China (Yunnan).

#### 84. Cassida (Cassida) rubiginosa Müller

- Cassida rubiginosa Müller, 1776, Zool. Danmark Prodr., 65 (Europe).—Weise, 1900, Archiv Naturg. 66 (1): 294.—Chûjô & Kimoto, 1961, Pacific Ins. 3: 198.
- Cassida rugosopunctata Motschulsky, 1866, Soc. Nat. Mosc., Bull. 39 (1): 177 (Japan; ?Moscow).—Kraatz, 1879, Dtsch. Ent. Zschr. 23: 273.—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 281.
- Cassida erudita Baly, 1874, Ent. Soc. Lond., Trans. 1874: 212 (Honshu).—Kraatz, 1879, Dtsch. Ent. Zschr. 23: 273.
- Cassida rubiginosa var. rugosopunctata: Spaeth, 1914, Col. Cat. 62: 109; 1926, Best.-Tab. Eur. Col. 95: 44 (Tibet, Korea).—Yokoyama, 1931, (Col. Japan) 2: 18, pl. 3, fig. 2.— Chûjô, 1934, Sylvia 5: 177 (Sachalin, Hokkaido); 1941, N. H. Soc. Formosa, Trans. 31: 235.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 517 (Fukien, Chekiang, Kiangsu, Hupeh).

DISTRIBUTION: Tibet, E. China (Fukien, Chekiang, Kiangsu, Hupeh), Korea, Sachalin, Japan (Hokkaido, Honshu).

KIANGSU: Ching-kiang, V. 1924, Illingworth (BISHOP).

HOSTS: Cirsium spp., Saussurea Tanakae F. & S., Carduus spp., Sonchus spp., Cynara spp., Onopordon spp., Tanacetum spp.

85. Cassida (Cassida) sikanga Gressitt Fig. 284, a.

Cassida (s. str.) sikanga Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 518, pl. 30, fig. 8 (Sikang; W. China).

DISTRIBUTION: W. China (Sikang).

# 86. Cassida (Cassida) spaethi Weise

Cassida stigmatica: Kraatz (nec Suffrian), 1879, Dtsch. Ent. Zschr. 23: 267 (Amur).

Cassida spaethi Ws., 1900, Dtsch. Ent. Zschr. 1900: 458 (Amur; ZMB).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (130) (Mongolia); 1914, Col. Cat. 62: 11 (Korea).

Cassida Kraatzi Ws., 1900, Archiv Naturg. 66: 295 (Amur).

- Cassida (Cassida) Spaethi: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 46 (Korea).-Chûjô, 1940, Mushi 13: 7.-Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 520.
- Cassida spaethi subsp. mandschukuoensis Spaeth, 1942, Arb. Morph. Tax. Ent. Berlin-Dahlem

**9**: 13 (Erzendjanzsy).

DISTRIBUTION: N. China (Mongolia, Heilungkiang), Siberia, Korea.

87. Cassida (Cassida) stigmatica Suffrian

Cassida stigmatica Suffr., 1844, Stett. Ent. Ztg. 5: 206 (Europe; STETTIN: ? destroyed).—Boheman, 1854, Mon. Cassid. 2: 385.—Kraatz, 1874, Berl. Ent. Zschr. 18: 88.—Reitter, 1912, Fauna Germ. 4: 217.—Spaeth, 1914, Col. Cat. 62: 111 (Siberia); 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (146) (Kuldja).—Ho, 1937 Wu's Cat. Ins. Sin. 3: 922.



Fig. 284. a, Cassida (Cassida) sikanga Gress.; b, C. (Odontionycha) inflata Gress. [after Calif. Acad. Sci., Proc. ser. 4, 27 (17)].

Cassida sanguineolenta var. stigmatica: Desbrochers, 1891, Mon. Cassid. (Frelon), 24.

Cassida (Cassida) stigmatica: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 46.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 520.

DISTRIBUTION: Europe, C. Asia (Sinkiang), Siberia.

HOST: Achillea millefolium L. (Compositae).

#### Subgenus Odontionycha Weise

- 88. Cassida (Odontionycha) inflata Gressitt Fig. 284, b.
- Cassida (Odontionycha) inflata Gr., 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 521, pl. 30, fig. 9 (Sui-sa-pa; CAS).

DISTRIBUTION: W. China (W. Hupeh).

### 89. Cassida (Odontionycha) viridis Linnaeus

- Cassida viridis L., 1758, Syst. Nat. ed, 10, 1: 362 (Europe; LINN. Soc. LOND.).—Reitter, 1912, Fauna Germ. 4: 213, pl. 150, fig. 11 a-b.—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (135); 1926, Best.-Tab. Eur. Col. 95: 25 (Siberia).—Matsumura, 1931, 6,000 Illus. Ins. Japan, 266, fig. 624 (Japan).—Chûjô, 1934, Sylvia 5: 166.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 522.
- Cassida equestris Fabricius, 1787, Mant. Ins. 1: 624 (Europe; KøβENHAVN).—Gorham, 1885, Zool. Soc. Lond., Proc. 1885: 281 (Honshu).—Matsumura, 1907, Thous. Ins. Japan 4: 39, pl. 68, fig. 35.—Yokoyama, 1930, (Col. Japan) 1: 29, pl. 3, fig. 7.
- Note: Cassida viridis subsp. japonica Yasutomi (1952, Kontyu 19:93, a homonym) is a synonym of C. (O.) erudita Baly.

DISTRIBUTION: Europe, Siberia, NE China (Kirin), Japan (Honshu, Hokkaido).

KIRIN: 1, I-mien-po, N. Kirin, Sowerby, #128 (US).

HOSTS: Salvia, Stachys, Mentha, Galeopsis, Lycopus, Circium spp.

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#### Subgenus Cassidulella Strand

### 90. Cassida (Cassidulella) nobilis Linnaeus

Cassida nobilis L., 1758, Syst. Nat. ed. 10, 1: 363 (Europe); 1761, Fauna Suec., ed. 2, 153; 1767, Syst. Nat., ed. 12, 1 (2): 575.—Fabricius, 1775, Syst. Ent., 90; 1801, Syst. Eleuth. 1: 396.—Boheman, 1854, Mon. Cassid. 2: 423.—Weise, 1893, Ins. Deutschl. 6: 1082, 1113.

Cassida (Cassidula) nobilis: Weise, 1889, Wien. Ent. Ztg. 8: 260.—Reitter, 1912, Fauna Germ. 4: 218, pl. 150, fig. 22.—Chûjô 1941, N. H. Soc. Formosa, Trans. 31: 233 (Korea).

Cassida (Cassidulella) nobilis: Chûjô & Kimoto, 1960, Niponius 1 (4): 10 (Honshu).

DISTRIBUTION: Europe, Siberia, Korea, Japan.

HOSTS: Spergula arvensis L., Chenopodium spp., Atriplex spp., Beta vulgaris, Honkenya sp., Silene sp.

# 91. Cassida (Cassidulella) parvula Boheman

Cassida parvula Boh., 1854, Mon. Cassid. 2: 428 (Mongolia; STOCKHOLM).—Weise, 1889, Soc. Ent. Ross., Horae 23: 571, 646 (Ordos); 1893, Ins. Deutschl. 6: 108 (Siberia). —Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): 146 (Kuldja).

Cassida navicula Boh., 1854, Mon. Cassid. 2: 429 (Caspian Sea).

- Cassida comparata Rybakow, 1889, Soc. Ent. Ross., Horae 23: 289 (Amdo).—Jacobson, 1910, Revue Russe d'Ent. 10: 60.
- Cassida (Cassidula) parvula: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 57 (Tientsin).-Chûjô, 1938, Mushi 11: 168 (Lao Shan).

Cassida (Cassidulella) parvula: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 524.

DISTRIBUTION: Caspian Sea, C. Asia (Turkestan, etc.), N. China (Sinkiang, Tsinghai, Mongolia, Kirin, Hopei, Shantung), Siberia.

KIRIN: Hsin-king, 28. VI. 1937, Tagawa (Кімото).

92. Cassida (Cassidulella) velaris Weise

- Cassida velaris Ws., 1896, Dtsch. Ent. Zschr. 1896: 28 (E. Siberia; ?ZMB).—Spaeth, 1914, Zool.-Bot. Ges. Wien, Verh. 64 (Sitzb.): (146) (Tibet, Japan).
- Cassida (Cassidula) velaris: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 54 (Ussuri).-Chûjô, 1934, Sylvia 5: 169.

Cassida (Cassidulella) velaris: Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27; 524.

DISTRIBUTION: E. Siberia (Ussuri), Tibet, N. China (Tsinghai, Kirin), Japan (Hon-shu).

KIRIN: Harbin, 19. IX. 1950, Jettmar (ZMB).

#### 93. Cassida (Cassidulella) vittata de Villers

- Cassida vittata Vill., 1789, Linn. Ent. 1: 93 (Europe)—Fairmaire, 1854, Gen. Col. d'Eur. 4: pl. 42, fig. 436.—Weise, 1893, Ins. Deutschl. 6: 1082, 1115.—Spaeth, 1914, Zool-Bot. Ges. Wien, Verh. 64: (130), (146) (Kyoto).
- Cassida (Cassidula) vittata: Weise, 1889, Wien. Ent. Ztg. 8: 260.—Reitter, 1912, Fauna Germ. 4: 218, pl. 150, fig. 23.

Cassida (Cassidulella) vittata: Chûjô & Kimoto, 1961, Pacific Ins. 3: 199.
## DISTRIBUTION: Europe, Siberia, Japan (Honshu).

HOSTS: Arenaria maritima, Beta vulgaris, Honkenya sp., Salicornia sp., Spergula sp., Urtica sp.

## Subgenus Tylocentra Reitter

### 94. Cassida (Tylocentra) deltoides Weise

- Cassida deltoides Ws., 1889, Soc. Ent. Ross., Horae 23: 571, 644 (Ordos; ZMB).-Spaeth, 1914, Col. Cat. 62: 101.
- Cassida (Tylocentra) deltoides: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 58.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 525.

DISTRIBUTION: Mongolia (Ordos).

#### 95. Cassida (Tylocentra) lenis Spaeth

Cassida (Tylocentra) lenis Sp., 1926, Best.-Tab. Eur. Col. 95: 59 (Singley; SPAETH: MAN-CHESTER).—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 526.

DISTRIBUTION: NW China.

## 96. Cassida (Tylocentra) virguncula Weise

- Cassida virguncula Ws., 1889, Soc. Ent. Ross., Horae 23: 571, 645 (Shansi; ZMB).—Ho, 1937, Wu's Cat. Ins. Sin. 3: 922 (Mongolia).
- Cassida (Tylocentra) virguncula: Spaeth, 1926, Best.-Tab. Eur. Col. 95: 58.—Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 526.

DISTRIBUTION: NW China (Shansi, Mongolia).

#### KEY TO KNOWN OOTHECAE OF CHINESE CASSIDINAE

1.	Ootheca composed of several or many thin, oblong, papery layers fastened at
	one end 2
	Ootheca not composed of many thin papery layers fastened at one end 4
2(1).	Ootheca of thin papery layers projecting at sides throughout
	Ootheca with papery layers of egg-containing portion folded at sides to form
	air cells; containing 32-80 eggs in 4 rows with 2 rows of air cells on each
	side of egg cells 24. Aspidomorpha miliaris
3 (2).	Ootheca rather flat, generally containing 2-9 eggs 21. Asp. furcata
	Ootheca rather thick, generally containing a few dozen eggs each
4(1).	Eggs laid singly or in small groups, generally with a thin covering layer or
	envelope, and often covered with feces in addition 5
	Eggs laid in a large dense group in a single layer, surrounded by a frothy
	mass which hardens to form a protective ootheca 7. Craspedonta leayana
5(4).	Eggs laid in small, rather evenly bordered capsules between 2 simple mem-
	branes without feces, or in groups covered with fecal masses
	Eggs laid singly between 2 irregular layers of semi-transparent material cover-
	ed with an irregular opaque layer with bars or undulations, which in turn
	is generally partly covered with bits of feces 10-16. Basiprionota
((=)	The shift is small connections individual means on loss the second second

6 (5). Eggs laid in small, sometimes individual, more or less transparent envelopes,

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	generally without a thick covering of feces
7(6).	Eggs not fringed with spicules
	Eggs fringed with small spicules, laid singly and covered with a translucent membrane
8 (7).	Ootheca covered, or partly covered, by feces; 3-15 eggs, in 3 layers, per ootheca
9 (8).	Ootheca without any fecal covering; 1–2 eggs per ootheca
	Egg with chorion not reticulate; micropyle distinct, consisting of a small plate with radiating impressions
10 (8).	Eggs laid between 2 semi-transparent brownish membranes of oval or oblong outline, with corrugations transverse or lacking
	ed like the vane of an arrow, with oblique corrugations from the bicarinate median ridge
11 (10).	Ootheca oblong, with transverse corrugations; containing a single egg
	Ootheca irregularly oval, lacking corrugations; generally 2 eggs per ootheca
	Key to known mature larvae of Chinese Cassidinae
1.	Lateral process 2 of mesothorax and anterior lateral process of metathorax shorter than posterior processes of same segments, or lacking
- (1)	furcae
2(1).	Lateral process 2 of mesothorax and anterior lateral process of metathorax lacking or minute; 14 pairs of lateral processes excluding caudal furcae;
	Lateral process 2 of mesothorax and anterior lateral process of metathorax somewhat shorter than posterior processes of same segments; 16 pairs of lateral processes
3 (2).	Anterior 2 pairs of processes of pronotum fully as long as lateral processes, nearly as long as last 2 abdominal pairs; dorsal surfaces dull and evenly pigmented except on sides of pronotum, which are pale
	Anterior 2 pairs of processes of pronotum shorter and stouter than most of lateral processes, much shorter than last 2 abdominal pairs; dorsum with many dark spots on paler ground color9. Epistictina
4 (2).	Lateral processes more or less stout, with granule-like spinules; feces attached to sides of exuviae in long curved filaments in concentric arcs
	Lateral processes long, slender and rigid, with slender spinules; feces not in

5 (4).	long curved filaments
6(1).	Lateral processes thick, short and neshy
	length of mature larva generally over 7 mm
7 (6).	Processes 1–2 on each side of prothorax distinctly joined at bases, bearing
	stout spinules; caudal furcae fully 2× as long as last pair of lateral processes 8 Processes 1–2 on each side of prothorax not very distinctly joined at bases, bearing slender spinules; caudal furcae not 2× as long as last pair of lateral processes
8 (7).	"Parasol" forming a triangle which is somewhat longer than broad 27. Sindia "Parasol" forming a triangle which is broader than long
	29. Laccoptera quadrimaculata
9 (7).	Feces generally not of extremely long slender filaments, or not retained long
	on exuviae
	Feces of very long siender filaments which are fairly persistent; lateral pro- cesses 15 & 16 much longer than 14 25 Asnidomorpha sanctaecrucis
10 (9).	Caudal furcae much longer than last pair of lateral processes
	Caudal furcae not longer, or barely longer, than lateral processes 12
11 (10).	Caudal furcae irregularly sinuate; spinules mostly longer than subbasal diameters of lateral processes; dark pigment only on sides of pronotum and bases of
	Caudal furcae regularly sinuate: spinules mostly shorter than subbasal diameters
	of lateral processes; bases of lateral processes and 2 spots on side of each
	abdominal tergite black
12 (10).	Lateral processes pale, enlarged at extreme bases; spinules abundant on distal portions of processes; dorsum pale green except for sides of pronotum
	Letter l processo block not enlaged baseling grinulas faw and short on distal
	portions of processes; dorsum creamy marked with pairs or transverse rows of black spots
13 (6).	Caudal furcae more than $2 \times$ as long as lateral process 15 14
	Caudal furcae not more than $2 \times$ as long as lateral process 15
14 (13).	Caudal furcae $2-3\times$ as long as lateral processes 15 or 16; length of spinules not as great as subbasal diameters of processes in all cases; generally feeds on Labiatae
	Caudal furcae about $4\times$ as long as lateral processes 15 or 16; length of
	spinules greater than subbasal diameters of lateral processes in most cases; generally feeds on Chenopodiaceae
15 (13).	Feces rather densely matted on exuviae; lateral processes 15 & 16 fairly equal in length, or body length under 5 mm
	Feces sparse or limited to caudal furca of 1st instar exuviae; lateral process

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## Key to known pupae of Chinese Cassidinae

1.	Pronotum at least slightly emarginate apically in middle, or with a few long projecting processes
	Pronotum not emarginate apically, or only very narrowly emarginate at middle
	of anterior border and fringed with many small processes 4
2(1).	Pronotum feebly emarginate apically, with 2 forward projecting processes on each side of anterior border
	Pronotum tuberculate on disc, distinctly emarginate apically, with 2 short, in- curved processes on each side of emargination; abdomen with stout fleshy lateral processes on segments 2-4
3 (2).	Abdomen with a long, curved process on each side of segments 1–5; dorsum
	marked with large areas of dark and pale 7. Craspedonta leayana insulana
	Abdomen with a stout triangular process on each side of segments 1-5; dor-
	sum marked with transverse or arcuate bands of black spots9. Epistictina
4 (1).	Anterior margin of pronotum with many small, slender processes
	Anterior margin of pronotum with only 2 processes on each side of middle;
	lateral expansions of abdominal segments with very short spinules; dorsum
	marked with a pair of oblong black spots on each of abdominal segments
5 (1)	1-2
5 (4).	Abdomen with spiracles 3 & 4 not 3 x as high as 1 and 2
	Abdomen with spiracles $5 \propto 4$ each $5 \propto as$ high as 1 and 2; lateral expan-
	sions of intermediate abdominal segments parametriced basally, with $4-6$
6(5)	More than 5 spinules on posterior margin of each lateral abdominal process 7
0(5).	Generally only 2-4 spinules on posterior margin of lateral processes of pos-
	terior abdominal segments
7(6).	Lateral abdominal processes gradually narrowed, slender and acuminate dis-
. (0).	tally: prothorax nearly 2× as broad as long
	Lateral abdominal processes suddenly narrowed distally: prothorax much less
	than $2 \times$ as broad as long, bordered by about 75 spinules of appreciable
	length

8 (7). Pronotum entirely pale; lateral abdominal processes entirely or largely pale; Pronotum black along base and on median portion almost to anterior margin; spinules of pronotal margin extremely short; 1st pair of lateral abdominal processes dark; length 15 mm...... 25. Aspidomorpha sanctaecrucis 9 (8). Abdominal terga largely dark brown; lateral abdominal process bordered anteriorly with brown, and with minute spinules; length 11 mm... 20. Asp. dorsata Abdominal terga brown along a lateral strip passing over spiracles; lateral abdominal processes entirely pale, with spinules fully 1/2 as long as those of pronotal margin; length 6-7 mm ...... 21. Asp. furcata 10(6). Anterior margin of pronotum lacking 1 or 2 pairs of spinules which are much Anterior margin of pronotum with 1 or 2 pairs of spinules which are much 11 (10). Side of pronotum evenly rounded, anterior margin not narrowly emarginate.....12 Side of pronotum angulate near middle; anterior margin narrowly emarginate 12 (11). Posterior margins of anterolateral processes of abdomen with 5-6 spinules and of posterior processes with 3-4 spinules; 4th abdominal spiracle not  $3 \times$  as long as the others ...... 64. Cass. (Taiwania) versicolor Posterior margins of all lateral abdominal processes with 3-4 spinules; 4th abdominal spiracle about  $3 \times$  as long as the others ..... Posterolateral corners of prothorax angulate and produced posteriorly; lateral expansions of abdominal segments 3-5 very short ..... 14 (13). Anterior spiracles of abdomen several times as high as wide; color grass green; length 4.75 mm......70. Cass. (Cass.) japana Anterior spiracles of abdominal segments not several times as high as wide;

#### color yellow green to yellow; length 4 mm...... 56. Cass. (Taiwania) obtusata

#### SUMMARY

Part 2 of this work treats 1,241 species, with eight additional subspecies, or a total of 1,249 kinds. These are enumerated under 225 genera of five subfamilies. One hundred and seventy-five species and three additional subspecies are described as new. In the entire work (1A-1B) 1,935 kinds are treated, including 243 new kinds. Most of the new species are described from Fukien, Kwangtung, Hupeh, Szechuan, Yunnan, Hainan Island, Kiangsi and Sikang. The geographical representation of the material studied is somewhat uneven, with much better sampling from parts of southwestern and southeastern China. Thus obviously the picture of the Chinese fauna presented here is imperfect. Many parts of the country have not been at all adequately sampled. Previously the species from the northern parts of the country, particularly the northeastern provinces, have been better known.

Geographical representation: In order to indicate to some extent the degree of cover-

	Genera	New genera	Species	Additional subspecies	New species	Additional new subspecies
Sagrinae	1		11	3		
Donaciinae	4		28			
Orsodacninae	1		1 (Ja	apan)		
Zeugophorinae	2		12		1	
Synetinae	1		2			
Megalopodinae	3		19		1	
Criocerinae	6		101	1	9	
Clytrinae	9		57	1	6	
Cryptocephalinae	6		172	9	13	
Chlamisinae	1		42		4	
Lamprosomatinae	1		8		2	
Eumolpinae	41		241	1	29	
Chrysomelinae	29		191	6	6	1
Galerucinae	95	4	531	1	139	2
Alticinae	62		307	1	28	
Hispinae	25		116		2	
Cassidinae	14		96			
Totals	301	4	1912	23	240	3

Table 1. Taxonomic representation of Chinese and Korean chrysomelid beetles.

age for the various subfamilies from different parts of China, and the zoogeographical affinities, some partial data are presented in tables 1–3. Table 1 indicates the relative representation of the various subfamilies, in terms of numbers of genera and species, and also indicates numbers of new species described. Table 2 indicates representation of the various subfamilies in various major portions of the geographical area covered, and representation of Chinese species in nearby areas. In these figures, each species is included in each area in which it occurs, so that one species may be included in the figures for various areas. The divisions "C. Asia", "N. China" and "S. China" are quite arbitrary, the latter two being approximately separated along the Yangtze River, and "C. Asia" including Sinkiang, Mongolia, Tsinghai and northern Tibet. Species recorded from just outside the borders of China are largely excluded from this table. Endemic species are considered to be those known only from a given area, such as only Korea, or Mongolia or Hainan Island, or only a few adjacent provinces of some portion of China-proper. Thus a still larger number of species are known only from China. However, most of those species widespread in China may be expected in S. Siberia, N. India or SE Asia.

In addition to the data presented in table 2, Chinese species occur in additional areas as follows:

N. America	9	Sachalin	2
N. Africa	2	Kurile Is.	2
W. Asia	9	Ryukyus Is.	28
Sunda Is.	16	Philippines	16
New Guinea	2		

To further indicate geographical representation of species, table 3 presents the respective numbers of species recorded from the various provinces or units treated. This, again

	(E C. Asia	urope	e) ( N. China	Siberi	a) Korea	(Japan	S. Chin	(Taiwa a	n) Hain	(SE Asia & India) an
Sagrinae							11			9
Donaciinae	4	5	16	4	1	4	8	2		3
Orsodacninae										
Zeugophorinae	1		4	2	1	2	5			2
Synetinae		1	2			1				
Megalopodinae			2	1	3		13		1	3
Criocerinae	8	7	11	3	16	12	70	8	19	24
Clytrinae	6	6	21	14	11	4	31		6	9
Cryptocephalinae	26	8	59	35	24	16	92	7	12	13
Chlamisinae			1		2	3	38	1	10	2
Lamprosomatinae			2		1	1	5		1	1
Eumolpinae	14	5	27	8	13	22	188	13	46	54
Chrysomelinae	68	18	50	39	21	15	76	9		32
Galerucinae	25	9	61	34	26	26	269	17	62	71
Alticinae	17	15	57	22	21	48	228	24	27	79
Hispinae	2	1	6	4	1	6	97	7	26	30
Cassidinae	18	10	22	26	17	23	63	17	20	27
Totals	18 <b>9</b>	85	341	192	158	183	1194	105	230	369

Table 2. Geographical representation of Chinese and Korean species.

gives a very imperfect picture of the actual situation. The numbers from some provinces are low because little collecting has been done in them, but for others they may be low because the fauna is actually relatively poor. In general, as indicated in table 2, there are many more species in the south than in the north. On the other hand, the north may be

	Total species	New species		Total species	New species
Fukien	394	43	Liaoning	53	2
Kwangtung	383	46	Tibet	50	4
Yunnan	333	33	Anhwei	48	3
Szechuan	330	38	Shantung	44	-
Hupeh	292	45	Shansi	43	-
Kiangsi	254	21	Hunan	36	-
Hainan	230	32	Tsinghai	19	-
Chekiang	202	10	Jehol	12	-
Sikang	184	14	Heilungkiang	10	-
Korea	158	-	Suiyuan	10	-
Kweichow	151	10	Chahar	8	-
Kiangsu	145	1	Honan	5	-
Kwangsi	128	2	Ninghsia	3	_
Kansu	120	1			
Kirin	119	3	"Monohumio"	14	
Hopei	107	1	" Manchurla"	11	
Mongolia	106	1	"China"	ll hina "5	
Sinkiang	73	-	" S, " OF " SW C.	nina J	
Shensi	53	3	IN. Unina	3	

Table 3. Numbers of species and new species by provinces or countries.

in general relatively better known, in spite of the large majority of the new species here described being from the south. Obviously, Honan and provinces immediately north and west of the Great Wall have received very little attention. The leading 12 provinces are all southern, and we have had very little new material from any of the others. Differing ratios of known to new species in part reflects previous relative poverty of records from Kwangtung, Hupeh, Hainan and others, and relative abundance of new material from Fukien, Kwangtung, Hupeh, Szechuan, Hainan and Sikang. Although many records existed for Yunnan, the 33 new species reflects the relative distinctness of the fauna as compared with the remainder of S. China. Some of the old records for Szechuan actually apply to Sikang, as do many of those for Tibet, as Sikang is a relatively new province formed from adjacent portions of the old Szechuan and old Tibet.

Zoogeography: Partly because of insufficient time and because of uncompleted studies of material from areas neighboring S. China, a full zoogeographical discussion of the fauna is postponed. Taiwan was excluded from the primary scope of this work because Dr. Chûjô still had parts of his series of monographs of the Taiwan chrysomelid fauna in press during the period of preparation of our paper. We hope to review the Taiwan fauna in the light of both studies, utilizing our largely unstudied material.

China does not represent a homogeneous zoogeographic area. It spans portions of two of the major zoogeographical regions, the Palearctic and Oriental. Of the former, there are two rather distinct subregions represented, the Manchurian and the Central Asian. Of the Oriental, much belongs to the Indo-Chinese Subregion, but there is much influence from the Himalayan, and some from the Malayan. The fauna of Tibet seems to pass from the C. Asian in Sinkiang, Mongolia, Tsinghai, N. Kansu, etc. in the north, to the Himalayan in the south. Sikang and Szechuan definitely have a mixed fauna, with perhaps Himalayan predominating, but with much Indo-Chinese and Palearctic influence. (See Gressitt, 1952, Calif. Acad. Sci., Proc. ser. 4, 27: 549–).

Some of the figures presented in the tables seem to suggest that species distribution of the Palearctic elements tend to be more extensive than those of the Oriental segment of the fauna. For instance, far more N. China species are known to occur in Europe than S. China species in the Sunda Is. or Ceylon. On the other hand it must be borne in mind that the Palearctic fauna is much better known.

The very small number of species in common between Hainan I. or S. China and the Philippines is conspicuous, and parallels the situation in the Cerambycidae (Gressitt, 1951, Longicornia 2: 631).

*Localities*: A number of the localities or environments of new species described herein are documented to some extent in the following papers:

- Gressitt, 1936. Notes on collecting in Hainan Island with data on localities. Lingnan Sci. Jour. 15: 465-70 (see maps in McClure, *op. cit.* 7: 267-90; 12: 367-80; 13: 557-601).
- Gressitt, 1937. Notes on a collecting trip in Southeastern China. op. cit. 16: 439-45, 1 map.
- Gressitt, 1953. The California Academy—Lingnan Dawn-redwood expedition. Calif. Acad. Sci., Proc. ser. 4, 28: 25-58, 13 figs.

It should be pointed out that Chûjô's records for Kwantung refer to S. Liaoning in NE

China, and not Kwangtung in SE China.

Additional collections: A little additional field work was done on Hong Kong Island and Hong Kong New Territories in July 1962 by Gressitt, with the help of Mr. Pui-yip So. Material was also studied which was taken by the following collectors not listed on page 4 (part 1): J. W. Blackstone, H. v. Bodemeyer, C. W. Brownwell, W. B. Cole, Hermann Frieb, H. Höne, H. v. Jettmar, Hon-kyu Kim, Dean Sage, Jr., H. Schoede, A. de C. Sowerby, D. M. Suk, S. B. Tsang, S. G. Wache and Y. Weisz.

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Corrections to Part 1 (Mon. 1A):

Page 37 and 70: Lema peninsularis G. & K. preoccupied by L. coreensis Monrós, 1958, Opera Lilloana 3: 182.

Page 224: The holotype of Basilepta latericosta G. & K. is a male.

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New names are indicated by **bold face** type, synonyms by *italics*. • • •

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