

## CHRYSOMELIDAE (COLEOPTERA) OF THAILAND, CAMBODIA, LAOS AND VIETNAM

### II. Clytrinae, Cryptocephalinae, Chlamisinae, Lamprosomatinae and Chrysomelinae<sup>1,2,3</sup>

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*Abstract.* This second paper of a series treats another 5 subfamilies of Chrysomelidae covering 188 species in 36 genera. The keys treat 40 genera and 191 species. Relevant synonymies are presented for genera and species, as well as general and local distribution of species. Sixteen species are described as new and a number of species are newly recorded from the area or from individual countries. Thirty-one species and 2 genera are relegated to synonymy. A supplement to the previous installment relegates another species to synonymy.

This paper is the second in a series<sup>1</sup> attempting to cover the chrysomelid beetles from the Thai-Indochina area. This series represents a sequel to "Chrysomelidae (Coleopt.) of China and Korea" (Gressitt & Kimoto 1961, 1963), and should be used in conjunction with that monograph. This installment treats 5 subfamilies, as follows: Clytrinae (10 genera, 48 species, including 7 new species and 14 new synonymies); Cryptocephalinae (5 genera, 81 species, including 7 new species and 13 new synonymies); Chlamisinae (1 genus, 15 species); Lamprosomatinae (3 genera, 6 species); and Chrysomelinae (21 genera, 39 species, including 2 new species and 4 new synonymies). It also includes a supplement to the Megalopodinae (1 genus, 1 species and a new synonymy). Two genera are synonymized and there are several new combinations.

Keys are presented to genera and species, including a few occurring just outside the area of treatment. Pertinent synonymies are presented, except that references under genera included in Gressitt & Kimoto (1961, 1963) are not repeated (other than original references and type designations). All known geographical records within the area, as well as general distribution for all the species treated, are also presented. A number of species are newly recorded from this general region, as well as a number new to individual countries.

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The sources of material are essentially the same as for the preceding installment. The main sources are Bishop Museum collections including the large J. A. Rondon collection from Laos (Gressitt et al. 1970); collections from various Japan-United States scientific cooperation projects funded by the U.S. National Science Foundation, the Japan Society for the Promotion of Culture, and the Ministry of Education of Japan; results of the rice stem-borer studies under the direction of Prof. K. Yasumatsu and Prof. Y. Hirashima; collections from Kasetsart University and the Thai Department of Agriculture, Bangkok; collections of Zoologische Staatssammlung, München, Basel Museum and Osaka Museum of Natural History; as well as private collections made by Dr Kintaro Baba and others. For further details refer to the introduction in Kimoto & Gressitt (1979). The material treated in this installment was collected by (initials used in text) P. D. Ashlock (PDA), K. Baba (KB), J. S. Burton (JSB), J. Clermont (JC), A. de Cooman (AC), J. L. Gressitt (JLG), K. Hatta (KH), F. G. Howarth (FGH), M. Jeanvoine (MJ), R. E. Leech (REL), B. W. Miller (BWM), Y. Miyatake (YM), K. Morimoto (KM), J. Nakao (JN), S. Nakao (SN), native collectors (NC), M. Poilane (MP), L. W. Quate (LWQ), S. Quate (SQ), J. A. Rondon (JAR), G. A. Samuelson (GAS), M. Sato (MS), J. Sedlacek (JS), T. Shibata (TS), H. M. Smith (HMS), N. R. Spencer (NRS), D. & E. Thurman (DT & ET), N. Wilson (NW), K. Yano (Yano), K. Yasumatsu (Yasumatsu), C. M. Yoshimoto (CMY) and Y. Yoshiyasu (YY).

For general information on the principal Laos survey and for locations of collecting localities, see introductory sections of Gressitt et al. (1970) and map and list of localities on p. 2 of Gressitt & Rondon (1970). For a general discussion of the biogeography of the Laos area, see Gressitt et al. (1970), in which the map on p. 595 shows the former political areas of Indochina.

The following abbreviations are used herein for depository museums:

AC. SIN.	Academia Sinica, Beijing
BANGKHEN	Kasetsart University and Agriculture Department, Bangkok, Thailand
BASEL	Museum d'Histoire Naturelle, Basel
BISHOP	Bishop Museum, Honolulu
BMNH	British Museum (Natural History), London
CAS	California Academy of Sciences, San Francisco
CHUJO	Private collection of Prof. Michio Chujo, in Nagoya
DRESDEN	Staatliche Museum für Tierkunde, Dresden
EHIME	Ehime University, Matsuyama, Shikoku
FREY	G. Frey Museum, Tutzing bei München
GENOVA	Museo Civico di Storia Naturale, Genova
KIMOTO	S. Kimoto collection, Kurume
KØBENHAVN	University Zoological Museum, København (Copenhagen)
KU	Kyushu University, Fukuoka

LINGNAN	Lingnan University, Canton (now absorbed by Sun Yat-Sen University, Gouangzhou)
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts
MOSCOW	Zoological Museum, Moscow State University, Moscow
MÜNCHEN	Zoologische Staatssammlung, München
NANKING	University of Nanking (types now at Sun Yat-Sen University, Guangzhou)
OSAKA	Osaka Museum of Natural History, Osaka
OXFORD	Oxford University, Oxford
PARIS	Museum National d'Histoire Naturelle, Paris
STOCKHOLM	Naturhistoriska Riksmuseum, Stockholm
TARI	Taiwan Agriculture Research Institute and Taiwan University, Taipei
USNM	U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C.
ZMB	Zoologische Museum der Humboldt Universität, Berlin East

The abbreviation "Umgeb." in geographical records refers to the German "Umgebung," meaning "environs of."

Subfamily CLYTRINAE

KEY TO GENERA OF CLYTRINAE

- 1. Posterior angles of pronotum more or less raised in ♂; posterior margin strongly sinuate . . . (Germar, 1817; type: *Labidostomis cyanicornis* Germar) . . . . . **Labidostomis**
- Posterior angles of prothorax not raised in ♂ . . . . . 2
- 2 (1). Elytral epipleuron strongly lobed at base; pygidium exposed . . . . . 3
- Elytral epipleuron not or very slightly convex; pygidium not exposed . . . . . 5
- 3 (2). Body fairly parallel-sided; epipleural lobe of elytron distinct but not conspicuously large . . . . . 4
- Body strongly narrowed anteriorly and posteriorly; epipleural lobe of elytron very large . . . . . **Aspidolopha**
- 4 (3). Posterior angle of pronotum strongly angulate; hind margin of pronotum strongly produced in middle . . . . . **Diapromorpha**
- Posterior angle of pronotum weakly angulate; hind margin of pronotum not so distinctly produced . . . . . **Aetheomorpha**
- 5 (2). Fore leg distinctly longer and more slender than others . . . . . 6
- Fore leg not longer and more slender than others . . . . . 7
- 6 (5). Head enlarged in ♂; posterior angles of pronotum distinctly angulate . . . . . **Coptocephala**

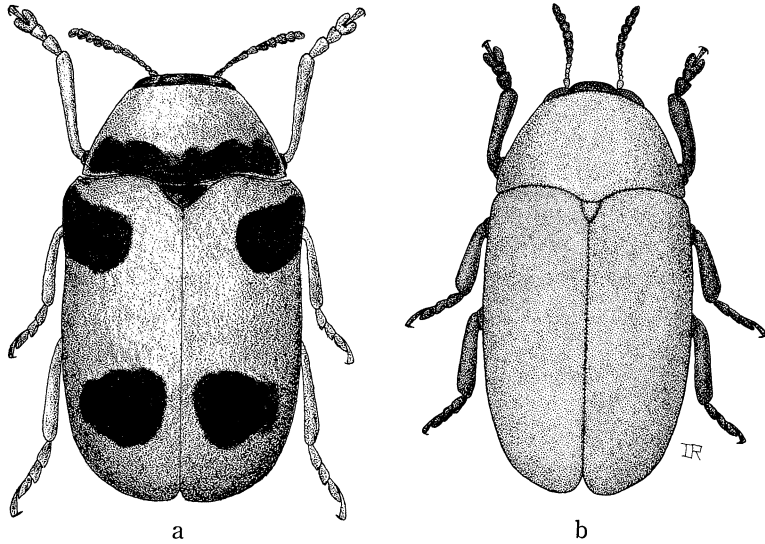


FIG. 1. a, *Aspidolopha egregia*; b, *Diapromorpha pallens*.

- Head normal in ♂; posterior angle of pronotum rounded, not distinctly angulate ..... **Tituboea**
- 7 (5). Antenna normal, not very strongly widened or serrate; elytron not dilated in ♂ ..... 8
- Antenna very strongly widened and serrate; elytron strongly dilated in ♂ ..... **Clytrasoma**
- 8 (7). Posterior angle of pronotum rounded, not distinctly angulate ..... 9
- Posterior angle of pronotum distinctly angulate, tarsus robust, broad, with segment 1-2 widened, especially in ♂ ..... **Physosmaragdina**
- 9 (8). Tarsus robust, broad, with segment 1-2 widened; 1 about as long as 2; body generally large ..... **Clytra**
- Tarsus slender, segment 1 of fore tarsus 2× as long as 2; body generally small ..... **Smaragdina**

**Genus *Aspidolopha* Lacordaire**

*Aspidolopha* Lac., 1848, Monogr. Phytoph. 2: 252 (type: *Clytra trimaculata* Fabricius; India).—Jacoby & Clavareau, 1906, Genera Insect. 49: 32.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 85.

**KEY TO SPECIES OF *Aspidolopha***

- 1. Body length more than 5.0 mm, scutellum with a weak central ridge .. 2
- Body length less than 5.0 mm, scutellum with central ridge, sharp and distinct; head and ventral surfaces bluish black; pronotum yellowish to reddish brown, with or without bluish basal marking, in most dark-

colored specimens pronotum bluish black with lateral portion brownish; scutellum bluish black; elytron yellowish to reddish brown with small humeral, large transverse median and small subapical markings bluish black, size of these markings variable, in most pale-colored specimens entirely brownish; antenna pitchy black with basal segments paler, legs bluish black with tibiae and tarsi brownish; length 4.0-5.0 mm . . . . . **melanophthalma**

- 2 (1). Elytron rugose and feebly costate, pronotum strongly punctate; metallic dark blue, thorax fulvous with transverse basal band bluish black; scutellum dark blue, elytron fulvus, humeral spot, another at apex and transverse band at middle dark blue; antenna bluish black with basal segments brownish; legs bluish black with tibiae and tarsi brownish; length 6.0 mm . . . . . **spilota**

Elytron not rugose, not costate; pronotum less strongly punctate; metallic dark blue, thorax fulvous with or without transverse basal band, scutellum dark blue; elytron yellowish brown with smaller humeral spot, larger transverse median band and smaller subapical markings near suture bluish black, size of these markings variable, in most pale-colored specimens entirely brownish; antenna bluish black with basal segments brownish; legs bluish black with tibiae and tarsi brownish; length 6.0-8.0 mm . . . . . **egregia**

**Aspidolopha egregia** (Boheman)

Fig. 1a, 2

*Clythra egregia* Boh., 1858, *Eugenies Resa*, *Insecta*: 154 (Malacca; STOCKHOLM).—Baly, 1865, *Trans. Entomol. Soc. London ser. 3*, **4**(1): 57 (Malacca).  
*Diapromorpha (Aspidolopha) egregia*: Lefèvre, 1890, *Nouv. Arch. Mus. Paris ser. 3*, **2**: 192 (Siam).  
*Aspidolopha distincta* Duvivier, 1891, *C. R. Soc. Entomol. Belg.* **35**: 32 (India).—Jacoby, 1908, *Fauna India, Coleopt.* **2**: 139, fig. 42 (India, Burma).—Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 85 (Yunnan).—Chüjō, 1964, *Nat. Life SE Asia* **3**: 259 (Thailand). **New synonymy.**  
*Aspidolopha thoracica* Jacoby, 1892, *Ann. Mus. Civ. Genova* **32**: 879 (Burma; GENOVA; BMNH); 1908, *Fauna India, Coleopt.* **2**: 139 (Burma).—Medvedev, 1970, *Verh. Naturforsch. Ges. Basel* **80**(2): 283 (Indochina: Song-Chav). **New synonymy.**  
*Aspidolopha moiensis* Pic, 1927, *Mél. Exot. Entomol.* **49**: 22 (Tonkin; PARIS). **New synonymy.**  
*Aspidolopha lajoyei* Pic, 1927, *Mél. Exot. Entomol.* **48**: 26 (Tonkin; with varr. *bisignata*, *obliterata*, *infasciata* Pic).—Medvedev, 1970, *Verh. Naturforsch. Ges. Basel* **80**(2): 283 (= *thoracica*).  
*Aspidolopha submaculata* Pic, 1927, *Mél. Exot. Entomol.* **50**: 6 (Tonkin).—Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 85 (= *bisignata*).  
*Diapromorpha (Aspidolopha) thoracica*: Gressitt, 1942, *Lingnan Sci. J.* **20**(2-4): 327 (Hainan).  
*Aspidolopha bisignata*: Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 85 (Yunnan; *A. lajoyei* var. *bisignata* Pic as an independent species).—Medvedev, 1970, *Verh. Naturforsch. Ges. Basel* **80**(2): 283 (= *thoracica*).

*Distribution.* India, Burma, Thailand, Laos, Vietnam, Hainan I, SW China, Malay Peninsula.

Gressitt & Kimoto (1961) treated *Aspidolopha lajoyei* var. *bisignata* Pic as a distinct species separable from *A. distincta* Duvivier in having a distinct pronotal convexity. As a result of our study of many additional specimens from various areas of SE Asia,

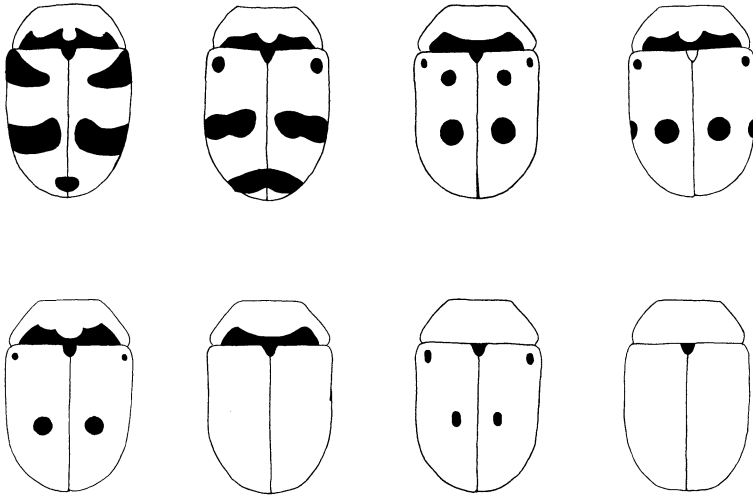


FIG. 2. *Aspidolopha egregia* (variation).

it is clear that this character is highly variable, merely representing intraspecific variation.

*Material examined.* THAILAND: 3, Tak, 850 m, IV.1955 (BANGKHEN); Chiang Mai Prov, 2, Chiang Dao, VI.1965, PDA; 1, Doi Suthep, 1300 m, VI.1965, PDA (BISHOP). LAOS: 13, Umgeb. Vientiane, III–VI.1963; 1, Umgeb. Paklay, 1963 (MÜNCHEN); 1, “Laos” (FREY); Borikhan Prov, 6, Pakkading, III.1965, IV, VI.1966, NC; 1, Uekinak, nr Pakkading, 100 m, IV.1965, JLG; 1, Ban Phon Hon, IV.1965, NC; 3, Khammouan Prov, Phon Tiou, V.1965, NC; Vientiane Prov, 2, Phou Khao Khoay, IV.1965, JLG; 9, Ban Van Heua, 800 m, IV, V.1965, JAR & JLG, V, VI.1966, NC; 1, Muong Sing, 650 m, NW of Luang Prabang, VI.1960, LWQ; 1, Khong Sedone, IV.1965, JAR; 1, Ile de Khong, 2, Pakse, V.1965, NC (BISHOP). VIETNAM: 6, Hoa Binh, AC (FREY); 1, 9 km S of Di Linh (Djiring), IV.1960, REL; 1, Haut Donai Prov, Laonam to Blao, 800–1200 m; 1, Annam, VI.1933; 1, Trang Bom, 50 km NW of Saigon, VII.1932, MP (USNM).

### *Aspidolopha melanophthalma* (Lacordaire)

Fig. 3

*Clytra bifasciata* Illiger, 1800 (nec *Clytra bifasciata* Degeer, 1778), in Wiedemann, Arch. Zool. **1**(2): 130 (Sumatra).—Monrós, 1953, Coleopt. Bull. **7**(6): 49 (nomenclature).

*Clytra bicolor* Weber, 1801 (nec *Clytra bicolor* Olivier; present genus *Ischiopachys*), Obs. Entomol.: 64 (Sumatra).—Clavareau, 1913, Coleopt. Cat. **53**: 44 (= *bifasciata* Illiger).—Monrós, 1953, Coleopt. Bull. **7**(6): 49 (nomenclature).

*Aspidolopha melanophthalma* Lac., 1848, Monogr. Phytoph. **2**: 254 (Bengal).—Weise, 1910, Verh. Naturforsch. Ver. Brünn **48**: 26 (Calcutta).—Jacoby, 1908, Fauna India, Coleopt. **2**: 144, fig. 47 (Tenasserim).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 85 (India, Burma, Thailand, Tonkin, Hainan).—Medvedev, 1970, Verhandl. Naturforsch. Ges. Basel **80**(2): 283 (Indo-China: Tuyen-Quang; Hagiang Pakha).

*Aspidolopha buquetii* Lac., 1848, Monogr. Phytoph. **2**: 255 (Java, Sumatra).—Baly, 1865, Trans. Entomol. Soc. London ser. 3, **4**(1): 50, pl. 2, fig. 2 (Java, Sumatra, Singapore, Penang, Trigancee, Siam, Borneo).—Chapuis, 1874, Genera Coleopt. **10**: pl. 114, fig. 1. —Clavareau, 1913, Coleopt. Cat. **53**: 44 (= *bifasciata* Illiger).—Monrós, 1953, Coleopt. Bull. **7**(6): 49 (replacing names of *bifasciata* Illiger and *bicolor* Weber).

#### **New synonymy.**

*Diapromorpha bifasciata*: Lefèvre, 1890, Ann. Soc. Entomol. Fr. ser. 6, **9**: 289 (Annam, Cambodge).—Duvivier, 1891, C. R. Soc. Entomol. Belg. **85**: 33 (India, Ceylon).

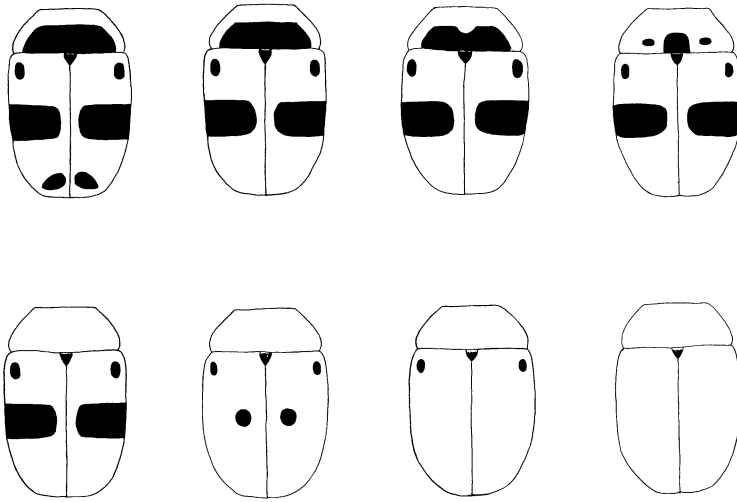


FIG. 3. *Aspidolopha melanophthalma* (variation).

*Diapromorpha* (*Aspidolopha*) *bifasciata*: Lefèvre, 1890, Nouv. Arch. Mus. Paris ser. 3, 2: 192 (Cambodge).

*Aspidolopha trinotata* Pic, 1928, Mél. Exot. Entomol. 52: 24 (Tonkin; PARIS; with var. *humeralis* Pic). **New synonymy.**

*Aspidolopha trinotata* var. *instigmata* Pic, 1933, op. cit. 61: 3 (Laos).

*Diapromorpha minuta* Pic, 1933, Mél. Exot. Entomol. 71: 3 (Tonkin; PARIS).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel 80(2): 283 (= *melanophthalma*).

*Aspidolopha siamensis* Pic, 1941, Échange 57: 8 (Siam; PARIS). **New synonymy.**

**Distribution.** India, Ceylon, Thailand, Laos, Cambodia, Vietnam, Hainan I, Malay Peninsula, Borneo, Sumatra, Java.

This species is very variable in the marking of the dorsal surfaces. Medvedev (1970) treated *Diapromorpha minuta* Pic as a synonym of *melanophthalma*. We support his treatment.

**Material examined.** THAILAND: 4, Phrae; 2, Nakhon Si Thammarat, IX.1958, VII.1961; 1, Khao Yai Natl Park, X.1963; 1, Prew, IV.1963; 1, Nakhon Nayok, XI.1963 (BANGKHEN); 3, Banna, Chawang, nr Nabon, 70 m, IX.1958, JLG; 3, Trang, Khao Phapha, 200–400 m, XII.1963, I.1964, GAS; 1, Nakhon Nayok Prov, Nakhon Ratchasima, Khao Yai Natl Park, VI.1965, PDA; 2, NW Chiang Mai Prov, Chiang Dao, 450 m, IV.1958, TCM; 1, Chiang Mai, 1100–1500 m, 1966, JS (BISHOP); 1, Kor Hong, VI.1965, YM; 1, Ban Pron, XI.1966, sweeping of paddy field, Yano & Yasumatsu; 1, Sam Pa Tong, VIII.1973, JN (KU). LAOS: 6, Umgeb. Vientiane, II–VI.1963; 1, Umgeb. Paklay, 1963 (MÜNCHEN); 1, “Laos” (FREY); 1, Ban Van Heua, V.1965, NC; 1, Vientiane, JS; 1, Pakkading, VI.1965, JLG; 1, Tha Ngone, XII.1965; 2, Phon Tiou, IV, VIII.1965 (BISHOP). VIETNAM: 14, Tonkin: Hoa Binh, AC; 1, Tonkin: Chapa, JC; 1, Tonkin: Than Moi, IX.1917, MJ (FREY); 1, Fyan, 900–1000 m, VII–VIII.1961, NRS; 1, Dalat, 1500 m, IX.1960, CMY; 14, 6 km S of Dalat, 1400–1500 m, VI–VII.1961, NRS; 3, M’drak, E of Ban Me Thuot, 400–600 m, XII.1961, CMY; 1, Ban Me Thuot, 500 m, V.1960, SQ; 1, Di Linh (Djiring), 1000 m, X.1960, CMY; 1, 17 km S of Di Linh, 1300 m, X.1960, CMY; 1, Karyu Danar, 200 m, II.1961, NRS; 1, 30 km NW of Kontum, 570 m, VI.1960, REL (BISHOP).

### ***Aspidolopha spilota* (Hope)**

*Cryptocephalus spilota* Hope, 1831, in Gray, Zool. Misc.: 30 (Nepal; BMNH).—Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, 12: 136 (Nepal & Sikkim).

*Aspidolopha rugosa* Jacoby, 1891, Entomologist **24** (Suppl.): 32 (Sikkim; BMNH); 1892, Ann. Mus. Civ. Genova **32**: 880 (Sikkim); 1908, Fauna India, Coleopt. **2**: 138, fig. 41 (Sikkim).—Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, **12**: 136 (= *spilota*).—Chûjô, 1964, Nat. Life SE Asia **3**: 259 (Thailand).

*Distribution.* Sikkim, Thailand.

No additional material.

### Genus *Diapromorpha* Lacordaire

*Diapromorpha* Lac., 1848, Monogr. Phytoph. **2**: 227 (type: *Clytra trifasciata* Olivier; Africa).—Chapuis, 1874, Genera Coleopt. **10**: 121.—Jacoby & Clavareau, 1906, Genera Insect. **49**: 25.—Jacoby, 1908, Fauna India, Coleopt. **2**: 162.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 84.

#### KEY TO SPECIES OF *Diapromorpha*

1. Elytron finely but not closely punctate, and interspaces of punctures wider than diameter of these punctures ..... 2  
 Elytron distinctly and closely punctate and interspaces of punctures narrower than diameter of these punctures; head black with clypeus and labrum ochraceous to dark brown, but in some specimens head entirely blackish; dorsal surfaces entirely ochraceous, ventral surfaces black; antenna dark brown to pitchy black with basal segments more brownish; legs ochraceous with femora bluish black, but in dark-colored specimens legs entirely blackish; length 6.2–7.2 mm ..... **pallens**
- 2 (1). Legs entirely blackish; head and ventral surfaces entirely black; pronotum black with a pair of subquadrate markings flavous at anterior angle, elytron flavous with 2 transverse bands, one before middle and other behind middle, and a small spot at apex black; antenna pitchy black with basal segments brownish; length 9–11 mm ..... **pinguis**  
 Legs ochraceous with femora bluish black; head and ventral surfaces bluish black; in typical form, ground color of dorsal surfaces fulvous, thorax with transverse basal marking black, and elytron with 2 black transverse bands, one before middle and other behind middle; in some specimens thorax unspotted or very obscurely marked behind middle, and in most pale-colored specimens thorax and elytron entirely ochraceous; length 7–8 mm ..... **sexmaculata**

#### *Diapromorpha pallens* (Fabricius)

Fig. 1b, 4f

*Cryptocephalus pallens* Fabr., 1787, Mant. Insect. **1**: 81 (China: KØBENHAVN).

*Diapromorpha melanopus* Lacordaire, 1848, Monogr. Phytoph. **2**: 238 (India).—Lefèvre, 1890, Nouv. Arch. Mus. Paris ser. 3, **2**: 192 (Laos).—Jacoby, 1889, Ann. Mus. Civ. Genova **29**: 156 (Burma); 1908, Fauna India, Coleopt. **2**: 168 (India, Siam).

*Diapromorpha pallens*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 84 (China, Hainan).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 283 (Annam; Khouang).

*Diapromorpha elongata* Pic, 1927, Mél. Exot. Entomol. **50**: 6 (Tonkin; PARIS). **New synonymy.**

*Distribution.* India, Burma, Thailand, Laos, Vietnam, Hainan I, S China.



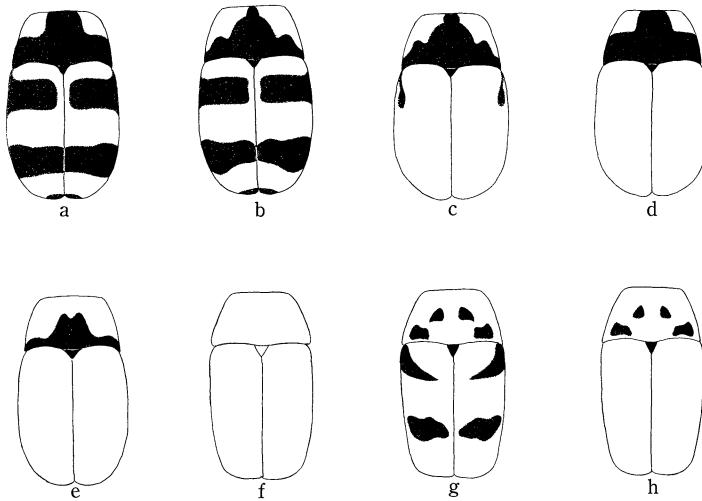


FIG. 4. a-e, *Diapromorpha pinguis*; f, *D. pallens*; g-h, *D. dejeani* (from India; Lacordaire, 1848).

Study of the type-specimen of *D. elongata* Pic in the Paris museum proves it is identical with *pallens*.

*Material examined.* THAILAND: 1, Chiang Mai; 2, Tak, VIII.1961 (BANGKHEN); 1, Chiang Mai Prov, Fang (Agric. Exp. Stn), VI.1965, PDA; 1, Pangmakampon (Pankampawng), nr Fang, 450 m, XI.1957, JLG (BISHOP). LAOS: 8, Umgeb. Paklay, 1963; 2, Umgeb. Pakse, 1964 (MÜNCHEN); 1, Vientiane, VI.1960, LWQ; 47, Vientiane Prov, Ban Van Heua, V,X,XI.1965, JAR, V.IX.1966, NC; 4, Tonphen, IX,XI.1965, XI.1966, NC; 9, Khammouang Prov, Phon Tiou, IV,IX.1965; 2, Sedone Prov, Paksong, VIII.1965; 1, Wapikhambong Prov, Khong Sedone, V.1965; 2, Xieng Khouang Prov, Ban Sam Thang, XI.1965; 1, Paksane, IX.1965; 1, Ile de Khong, XI.1965, NC (BISHOP). VIETNAM: 1, 25 km SW of Pleiku, 400 m, V.1960, LWQ; 2, 50 km SW of Pleiku, 250 m, V.1960, LWQ; 3, Dalat, 1400-1500 m, IX.1960, CMY; 2, 20 km S of Dalat, 1300 m, IX.1960, JLG; 1, 6 km S of Dalat, 1400-1500 m, VI.1961, NRS (BISHOP).

### *Diapromorpha pinguis* Lacordaire

Fig. 4a-e

*Diapromorpha pinguis* Lac., 1848, Monogr. Phytoph. **2**: 234 (India).—Lefèvre, 1889, Ann. Soc. Entomol.

Fr. ser. 6, **9**: 289 (Saigon); 1890, Nouv. Arch. Mus. Paris ser. 3, **2**: 191 (Cambodge).—Jacoby, 1908, Fauna India, Coleopt. **2**: 163 (India).

*Tituboea laportei* Baly, 1865, Trans. Entomol. Soc. London ser. 3, **4**(1): 44, pl. 2, fig. 8 (Triganeae, Penang, Siam).—Clavareau, 1913, Coleopt. Cat. **53**: 42 (= *pinguis* Lac.).

*Ceratobasis vitalisi* Pic, 1928, Mél. Exot. Entomol. **52**: 24 (Cochin China; with var. *postbinotatus* Pic). **New synonymy.**

*Distribution.* India, Thailand, Laos, Cambodia, Vietnam, Malay Peninsula.

*Material examined.* THAILAND: 7, Chon Buri (Cholburi), IX.1951, IX.1956, VII.1958, IX.1959, VIII.1961; 2, Sara Buri, X.1958, VII.1959; 1, Kanchanaburi, IX.1955; 1, Chiang Mai; 2, Nakhon Si Thammarat, IX,X.1958; 1, Ranong, X.1949; 9, Phrae, VIII.1938; 6, Trang, IX.1959; 2, Chumporn, VIII.1964; 10, Krabi, IX.1964; 1, Bangkhen, IX.1962; 1, Si Racha, VIII.1962; 1, Pang Nga, IX.1964 (BANGKHEN); 1, Payao, IX.1951, DT & ET (USNM); 2, Rubber Estate, Chawang, IX.1958, JLG (BISHOP). LAOS: 2, Umgeb. Pakse (MÜNCHEN); 1, Ile de Khong, VII.1965; 1, Pakkading, IX.1965; 15, Sayaboury

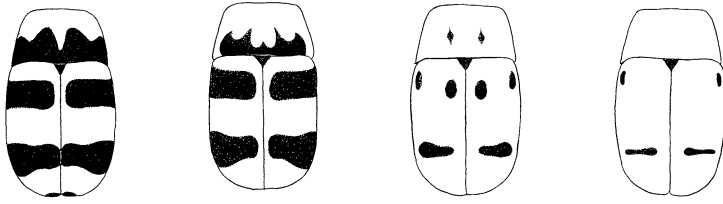


FIG. 5. *Diapromorpha sexmaculata* (variation).

Prov, Sayaboury, VIII.1965, XII.1966, NC (BISHOP). CAMBODIA: 1, Tonle Sap Lake, nr Siem Reap, XI.1962, TS (OSAKA). VIETNAM: 9, Nha Trang, XI.1960, CMY (BISHOP); 1, Trang Bom, 48 km NW of Saigon, VII.1932, MP (USNM).

**Diapromorpha sexmaculata** (Jacoby)

Fig. 5

*Gynandrophthalma sexmaculata* Jac., 1889, Ann. Mus. Civ. Genova **29**: 157 (Burma; GENOVA).

*Diapromorpha sexmaculata*: Jacoby, 1895, Ann. Soc. Entomol. Belg. **39**: 256 (Burma); 1908, Fauna India, Coleopt. **2**: 167 (Burma).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 283 (Annam: Khouang).

*Diapromorpha burmanica* Jacoby, 1908, Fauna India, Coelopt. **2**: 164 (Burma; BMNH). **New synonymy.**

*Distribution.* Burma, Thailand, Laos, Vietnam.

*Material examined.* THAILAND: 1, Saraburi, VII.1956; 3, Phrae, VI,VIII.1938 (BANGKHEN). LAOS: 6, Umgeb. Pakse, 1963, 1964; 3, Umgeb. Paklay, 1963; 1, Umgeb. Vientiane, III–VI.1963 (MÜNCHEN); 5, Vientiane Prov, Vientiane, VII.1965; 2, Khammouan Prov, Phon Tiou, IX.1965; 2, Dong Dok, VII.1965, NC (BISHOP).

**Genus Aetheomorpha** Lacordaire

*Aetheomorpha* Lac., 1848, Monogr. Phytoph. **2**: 311.—Jacoby & Clavareau, 1906, Genera Insect. **49**: 31.—Jacoby, 1908, Fauna India, Coleopt. **2**: 123 (type: *A. nematoides* Lacordaire; Africa).—Chūjō, 1952, Tech. Bull. Kagawa Agric. Coll. **4**(1): 38.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 86.

KEY TO SPECIES OF *Aetheomorpha*

- 1. Elytron entirely bluish ..... 2
- Elytron not entirely bluish ..... 3
- 2 (1). Elytron with several costae discally; entirely bluish black; length 6.0–7.5 mm ..... **cyanea**
- Elytron smooth, without costae discally; elytron bluish black; pronotum yellowish brown with median longitudinal stripe bluish black; head bluish black, in some specimens part of frontoclypeus yellowish brown in varying degrees; antenna pitchy black with basal segments brownish; ventral surfaces yellowish brown with meso- and metathorax bluish black; legs yellowish brown, with tarsus and apex of tibiae, and in some specimens femora, also infuscate; length 3.0–4.0 mm .. **coerulea**
- 3 (1). Elytron brownish with distinct discal markings blackish ..... 4

- Elytron entirely yellowish to reddish brown, or with apical markings black ..... 7
- 4 (3). Scutellum blackish ..... 5
- Scutellum brownish ..... 6
- 5 (4). Elytron yellowish brown with basal, median and subapical marking black, sutural margin blackish with blackish area widened in part; yellowish brown with scutellum, antenna, parts of meso- and metathorax, apex of tibiae and tarsi, and lower portion of pygidium blackish; length 3.5 mm ..... **assamensis**
- Elytron yellowish brown with basal, humeral, lateromedian, postmedian and apical markings black; yellowish brown with basal portion of head, apical segments of antenna, scutellum, part of ventral surfaces blackish; length 4-5 mm ..... **decemnotata**
- 6 (4). Elytron reddish brown with black lateral stripe and a spot in front of and another posterior to middle near suture black; reddish brown, head black with frontoclypeus and labrum reddish brown; antenna pitchy black with basal segments brownish; ventral surfaces with meso- and metathorax, apex of 5th abdominal segment and middle of pygidium black; legs entirely reddish brown; length 4.0-4.5 mm .. **parvula**
- Elytron reddish brown with humeral and subbasal markings, together with transverse broad band which is widened at side, black; in some specimens humeral marking and postmedian transverse band united at lateral margin and in other specimens postmedian band divided into 2 markings; head reddish brown, with vertex black; ventral surfaces mostly pitchy black; antenna pitchy black with basal segments brownish; length 3.8-5.0 mm ..... **malayana**
- 7 (3). Elytron yellowish brown, with or without small humeral spot blackish . . . . . 8
- Elytron yellowish brown with apical marking blackish; reddish brown, antenna mostly reddish brown; ventral surfaces yellowish brown, legs reddish brown; length 3.5 mm ..... **tonkinensis**
- 8 (7). Entirely ochraceous, antenna pitchy black with 3 basal segments brownish; length 4.8-6.0 mm (India, Nepal; Lacordaire, 1848) .... **fuscicornis**
- Ochraceous, ventral surfaces and legs black; elytron ochraceous with or without small humeral spot blackish; head ochraceous, in dark-colored specimens blackish in varying degrees; pale-colored specimens with ventral surfaces brownish in varying degrees and in most pale-colored specimens entirely brownish; legs of pale specimens brownish in varying degrees; antenna pitchy black with basal 3 segments brownish; length 5.0-7.0 mm ..... **sodalis**

**Aetheomorpha assamensis** Jacoby

Fig. 6e

*Aetheomorpha assamensis* Jac., 1908, Fauna India, Coleopt. 2: 131 (Assam, Siam; BMNH).

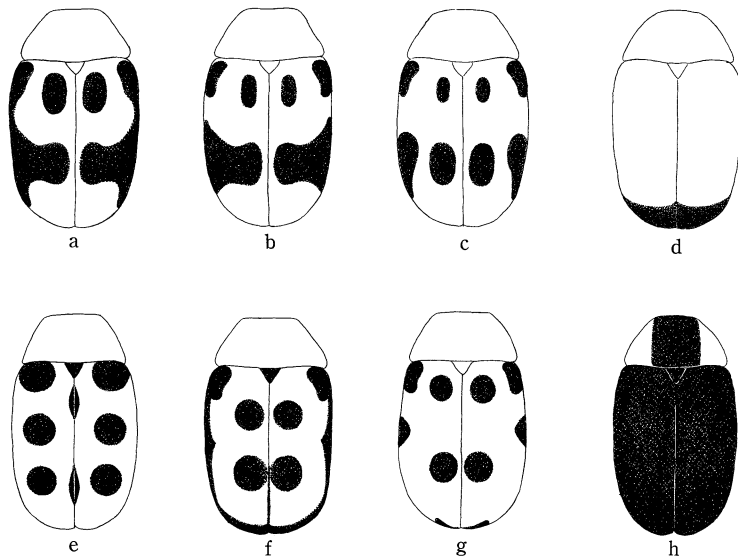


FIG. 6. a–c, *Aetheomorpha malayana*; d, *A. tonkinensis*; e, *A. assamensis*; f, *A. parvula*; g, *A. decemnotata*; h, *A. coerulea*.

*Distribution.* India, Thailand.

We have not seen any additional material from Thailand.

### *Aetheomorpha coerulea* (Jacoby), new combination

Fig. 6h

*Aspidolopha coerulea* Jac., 1892, Ann. Mus. Civ. Genova **32**: 882 (Burma: Karenee; GENOVA); 1908, Fauna India, Coleopt. **2**: 134 (Burma).

*Distribution.* Burma, Thailand, Vietnam.

*Material examined.* THAILAND: 1, Chiang Mai Prov, Chiang Mai, IV.1973, YY (KU). VIETNAM: 2, 6 km S of Dalat, 1400–1500 m, VI–VII.1961, NRS; 1, Fyan, 1200 m, VII–VIII.1961, NRS (BISHOP).

### *Aetheomorpha cyanea* Pic

*Aetheomorpha cyanea* Pic, 1928, Mém. Exot. Entomol. **52**: 25 (Laos: PARIS).

*Distribution.* Thailand, Laos.

*Material examined.* THAILAND: 6, Chiang Mai, 1500 m, IV.1939 (BANGKHEN). LAOS: 41, Umgeb. Vientiane, III–VI.1963; 6, Umgeb. Pakse, 1963; 3, Umgeb. Paklay, 1963; 6, Umgeb. Vanky, 1963, 1964 (MÜNCHEN); Vientiane Prov, 4, Ban Van Heua, IV.1965; 3, Phou Khaokhoay, IV.1967; Borikhan Prov, 1, Ban Phom Hon, VI.1965, NC; 1, Pakkading, IV.1965; 1, Ile de Khong, II.1965, NC; 6, Khammouan Prov, Phon Tiou, V.1965, NC; 1, VI.1965, NW (BISHOP).

### *Aetheomorpha decemnotata* (Jacoby)

Fig. 6g, 7b

*Gynandrophthalma decemnotata* Jac., 1892, Ann. Mus. Civ. Genova **32**: 884 (Burma; GENOVA). *Aetheomorpha decemnotata*: Jacoby, 1908, Fauna India, Coleopt. **2**: 132, fig. (Burma).

*Distribution.* Burma, Thailand, Laos.

In the type-specimen, the head is reddish brown with the vertex blackish. However, in 2 additional specimens of the type series, the head is entirely reddish brown. Our Indo-Chinese specimens seem to be the latter type.

*Material examined.* THAILAND: 1, Phrae (BANGKHEN); 1, Chiang Mai Prov, Doi Suthep, 1000 m, VI.1965, KM (KU). LAOS: 7, Khammouan Prov, Phon Tiou, VIII, IX.1965; 1, Tonpheng, X.1965; 2, Houei Kong, IV.1965; 1, Khong Sedone, IX.1965, NC (BISHOP).

### ***Aetheomorpha malayana* (Baly)**

Fig. 6a-c

*Gynandrophthalma malayana* Baly, 1865, Trans. Entomol. Soc. London ser. 3, 4(1): 51, pl. 2, fig. 4 (Batchian, Ké, Ternate, Ceram).—Monrós, 1956, Rev. Fr. Entomol. 23(3): 163 (nomenclature).

*Gynandrophthalma cochinchinensis* Lefèvre, 1889, Ann. Soc. Entomol. Fr. ser. 3, 2: 192 (Siam).—Jacoby, 1908, Fauna India, Coleopt. 2: 111, fig. 27 (Cochinchina, Burma).—Monrós, 1956, Rev. Fr. Entomol. 23(3): 163 (=malayana).

*Gynandrophthalma nigropicta* Lefèvre, 1891, C. R. Soc. Entomol. Belg. 35: 252 (India; PARIS).—Monrós, 1956, Rev. Fr. Entomol. 23(3): 163 (=malayana).

*Gynandrophthalma birmanica* Jacoby, 1892, Ann. Mus. Civ. Genova 32: 885 (Burma; GENOVA, BMNH); 1908, Fauna India, Coleopt. 2: 111 (=cochinchinensis).—Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, 12: 135 (=cochinchinensis).

*Aetheomorpha cincta* Weise, 1903, Dtsch. Entomol. Z. 1903: 28 (Ceylon).—Jacoby, 1908, Fauna India, Coleopt. 2: 124 (=nigropicta).

*Aetheomorpha nigropicta*: Jacoby, 1908, Fauna India, Coleopt. 2: 124 (India, Ceylon).

*Aetheomorpha malayana*: Bryant, Ann. Mag. Nat. Hist. ser. 9, 12: 135 (Bachian).

*Aetheomorpha cochinchinensis*: Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, 12: 135 (Cochinchina).—Kimoto & Takizawa, 1973, Kontyû 41: 172 (Nepal).

*Cyaniris cochinchinensis* var. *bavayi* Pic, 1932, Mém. Exot. Entomol. 59: 13 (Tonkin).

*Cyaniris arcuatecincta* Pic, 1943, Opusc. Mart. 2: 15 (Annam; PARIS). **New synonymy.**

*Distribution.* India, Nepal, Ceylon, Burma, Laos, Vietnam, Bachian, Kei, Ternate, Ceram.

*Material examined.* LAOS: 11, Attopeu Prov, Houei Khong, V.1965, JAR & NC; 5, Vientiane Prov, Phou Khao Khoay, 720 m, IV.1965, JLG; Ban Van Heua, SE of Phou Khao Khoay, IV.1965, JLG; 3, Sayaboury, IV.1965, NC; 1, Sedone Prov, Pakse, V.1965, PDA; 2, 5 km E of Pakse, V.1965, PDA; 4, Khong Sedone, IV.1965, JAR (BISHOP); 6, Umgeb. Vientiane, III-VI.1963; 1, Umgeb. Vanky, 1963; 1, Umgeb. Paklay, 1963 (MÜNCHEN). VIETNAM: 11, Tonkin: Hoa Binh, AC (FREY); 9, Di Linh (Djiring), 900-1200 m, IV.1960, SQ & LWQ; 4, 9 km S of Di Linh, 1, Chute de Bobla, IV.1960, REL; 2, Lang Bian Plateau, 1500-2000 m, V.1960, SQ, VI.1961, NRS; 6, Dalat, 1500 m, IV-V.1960, SQ & LWQ; 12, 6 km S of Dalat, 1400-1500 m, VI, VII.1961, NRS; 1, Chute de Bourg, 37 km SE of Dalat, 780 m, IV.1960, REL; 33, Ban Me Thuot, 500 m, V.1960, SQ & LWQ; 7, 76 km SW of Ban Me Thuot, 500 m, V.1960, LWQ; 1, M'drak, E of Ban Me Thuot, 400-600 m, XII.1960, LWQ; 13, 50 km SW of Pleiku, V.1960, LWQ; 3, 20 km N of Pleiku, 70-650 m, V.1960, SQ & LWQ; 1, 40 km SW of Pleiku, 300 m, V.1960, LWQ; 1, 30 km NW of Pleiku, 300 m, V.1960, LWQ (BISHOP); 1, Laonan-Blao, Haut Donai, 800-1200 m; 1, Annam, V-VI.1938, MP (USNM).

### ***Aetheomorpha parvula* Jacoby**

Fig. 6f

*Aetheomorpha parvula* Jac., 1908, Fauna India, Coleopt. 2: 132, fig. (India; BMNH).

*Distribution.* India, Thailand.

In the type specimen, the coloration of the head is reddish brown with a black

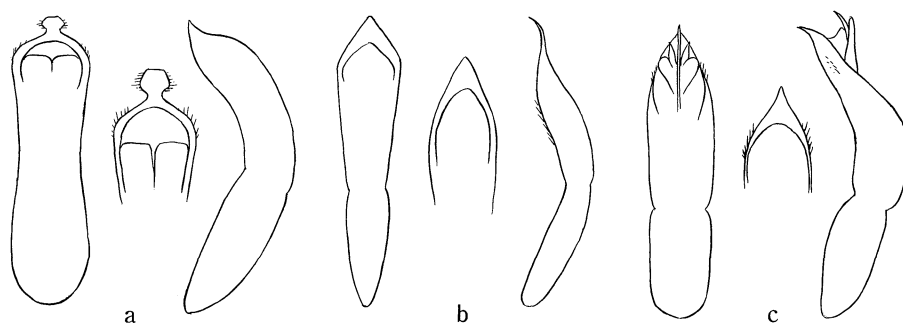


FIG. 7. Male genitalia: **a**, *Aetheomorpha sodalis*; **b**, *A. decemnotata*; **c**, *A. fuscicornis* (by material from Nepal).

median transverse band. The following specimen is identified as *parvula* with some question, as it has a black head with frontoclypeus reddish brown.

*Material examined.* THAILAND: 1, Chiang Mai, Fang, 500 m, IV.1958, TCM (BISHOP).

### ***Aetheomorpha sodalis* (Lacordaire)**

Fig. 7a

*Clythra (Aetheomorpha) sodalis* Lac., 1848, Monogr. Phytoph. **2**: 313 (India orientales).

*Aetheomorpha sodalis*: Jacoby, 1908, Fauna India, Coleopt. **2**: 127 (India).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 284 (Annam: Hagiang Pa-Kha).

*Cyaniris coomani* Pic, 1928, Mél. Exot. Entomol. **51**: 35 (Tonkin; PARIS; with varr. *hoana*, *clermonti*).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 284 (= *sodalis*).

*Cyaniris bicoloripes* Pic, 1933, Mél. Exot. Entomol. **61**: 3 (Tonkin; PARIS).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 284 (= *sodalis*).

*Cyaniris diversiceps* Pic, 1941, Opusc. Mart. **2**: 15 (Tonkin; PARIS).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 284 (= *sodalis*).

*Distribution.* India, Thailand, Laos, Vietnam.

*Material examined.* THAILAND: 3, Phrae; 1, Kanchanaburi, 400 m, V.1923; 25, Chiang Mai, VI–VII.1938 (BANGKHEN). LAOS: Vientiane Prov, 6, Vientiane, V–VIII.1965, NC; 1, Tha Ngone, IX.1965, NC; 2, Ban Van Heua, 20 km E of Phou Khao Khoay, V.1965, NC; Borikhane Prov, 6, Pakkading, 100 m; 5, Namkading, 100 m, IV.1965, JLG; Sedone Prov, 2, Paksong, VII.1965, NC; 6, Wapikhamthong Prov, Khong Sedone, IV.1965, VII.1967, JAR; 3, Khammouan Prov, Phon Tiou, VI.1965, NC (BISHOP); 6, Umgeb. Vientiane, III–VI.1963; 1, Umgeb. Vanky, 1963; 3, Umgeb. Paklay, 1963; 1, Umgeb. Pakse, 1963 (MÜNCHEN). VIETNAM: 2, 7 km SE of DiLinh (Djiring), 990 m, IV.1960, LWQ, V.1960, NC; 1, Nha Trang, XI.1960, CMY (BISHOP); 3, Hoa Binh, W Tonkin, AC (FREY).

### ***Aetheomorpha tonkinensis* (Jacoby)**

Fig. 6d

*Gynandrophthalma apicalis* Lefèvre, 1893 (nec Jacoby, 1891), Ann. Soc. Entomol. Fr. **62**: 114 (Tonkin; PARIS).

*Gynandrophthalma tonkinensis* Jacoby, 1895, Dtsch. Entomol. Z. **1895**: 172 (n. n. for *G. apicalis* Lefèvre).

*Distribution.* Vietnam, ? Sikkim.

The type specimen of *apicalis* Lefèvre, in the Paris museum, is labelled “Sikkim.” No additional material.

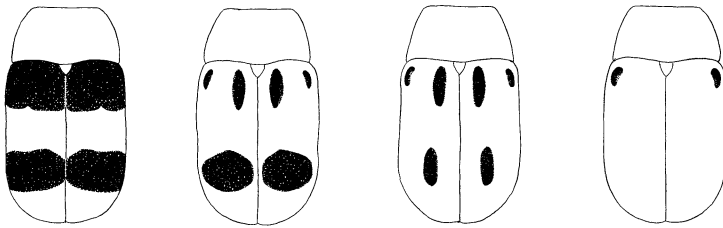


FIG. 8. *Coptocephala bifasciata* (variation).

### Genus *Coptocephala* Chevrolat

*Coptocephala* Chevr., 1837, in Dejean, Cat. Coleopt. ed. 3: 419.—Lacordaire, 1848, Monogr. Phytoph. 2: 323.—Jacoby & Clavareau, 1906, Genera Insect. 49: 49.—Jacoby, 1908, Fauna India, Coleopt. 2: 174 (type: *Clytra melanocephala* Olivier = *Coptocephala bistrinotata* (Fabricius); Algeria).—Chûjô, 1952, Tech. Bull. Kagawa Agric. Coll. 4(2): 82.—Monrós, 1957, Coleopt. Bull. 7(6): 46 (nomenclature).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 106.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(1): 134.

*Ceratobasis* Lacordaire, 1848, Monogr. Phytoph. 2: 362.—Chapuis, 1874, Genera Coleopt. 10: 129.—Jacoby & Clavareau, 1906, Genera Insect. 49: 54.—Jacoby, 1908, Fauna India, Coleopt. 2: 171.—Monrós, 1956, Rev. Fr. Entomol. 23: 163 (= *Coptocephala*).

*Physauchenia* Lacordaire, 1848, Monogr. Phytoph. 2: 367.—Chapuis, 1874, Genera Coleopt. 10: 128.—Jacoby & Clavareau, 1906, Genera Insect. 49: 51.—Gressitt, 1942, Lingnan Sci. J. 20(2-4): 329.—Chûjô, 1952, Tech. Bull. Kagawa Agric. Coll. 4(2): 84.—Monrós, 1956, Rev. Fr. Entomol. 23: 163 (= *Coptocephala*).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 105 (type designated as *Coptocephala bifasciata* Jacoby, 1886; = *Cryptocephalus pallens* auctt.).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(1): 134.

### *Coptocephala bifasciata* Jacoby

Fig. 8, 11a, 12e, h

*Clythra* (*Physauchenia*) *pallens*: Lacordaire, 1848 (nec Fabricius, 1787), Monogr. Phytoph. 2: 368 (E India, China).

*Coptocephala bifasciata* Jacoby, 1888, Proc. Zool. Soc. London 1888: 341 (China).

*Physauchenia bifasciata*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 105 (China, Hainan, Tonkin, Taiwan).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel 80(2): 284 (Indo-China: Song-Chav; Toyen-Quang).

*Distribution*: China, Hainan, Taiwan, Vietnam.

Head and ventral surfaces shining black, pronotum yellowish to reddish brown, scutellum reddish brown. Elytral markings variable: 1) yellowish to reddish brown with basal and postmedian transverse bands black; 2) brownish with humeral and basal markings, together with postmedian band black; 3) brownish with humeral, basal, postlateral and postmedian markings black; 4) brownish with humeral, basal and postmedian markings black; 5) brownish with humeral and basal markings black; 6) brownish with humeral markings black; 7) entirely yellowish to reddish brown; antenna black with 4 basal segments brownish; legs black with basal ½ of tibiae yellowish brown. Length: 5.5-6.5 mm.

Monrós (1970) treated *Physauchenia fasciaticeps* Pic and *P. tonkinea* Pic as synonyms of this species. According to our study of the types in the Paris museum, those 2 species are transferred to *Tituboea*.

*Material examined*. VIETNAM: 4, Tonkin: Sept-Pagodes (USNM).

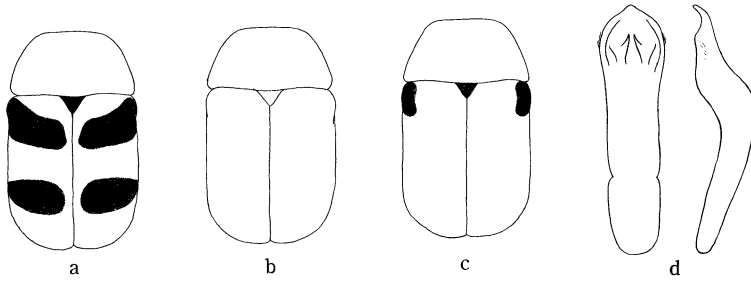


FIG. 9. a-b, *Tituboea paviei*; c, *T. tonkinea*; d, same, ♂ genitalia.

Genus *Tituboea* Lacordaire

*Tituboea* Lac., 1848, Monogr. Phytoph. 2: 141.—Jacquelin du Val, 1856, Genera Coleopt. d'Eur. 4: 215.—Lefèvre, 1892, Ann. Soc. Entomol. Fr. ser. 5, 2: 115.—Chapuis, 1874, Genera Coleopt. 10: 119.—Redtenbacher, 1874, Fauna Austriaca ed. 3, 2: 890.—Weise, 1882, Naturgesch. Insect. Dtschl. 6: 102.—Jacoby & Clavareau, 1906, Genera Insect. 49: 19.

KEY TO SPECIES OF *Tituboea*

- 1. Pronotum immaculate ..... 2  
 Pronotum with 2 pairs of small and round blackish markings, arranged in a transverse row; elytron yellowish brown, with lateral margin, and humeral, subbasal and postmedian markings blackish; antenna pitchy black with 3 basal segments fulvous; legs with tarsi and apices of tibiae blackish; length 5.0 mm ..... **harmandi**
- 2 (1). Labrum reddish brown ..... 3  
 Labrum pitchy black; yellowish brown, head black, antenna pitchy black with 3 or 4 basal segments brownish, elytron with humerus black or dark brown; ventral surfaces bluish black, legs yellowish brown with apical parts of femora and tibiae and entire tarsi blackish; length 7.0 mm ..... **tonkinea, n. comb.**
- 3 (2). Head black with apical 1/2 reddish brown, and in most pale-colored specimens almost entirely brownish; ground color yellowish brown; scutellum pitchy brown; ventral surfaces of abdomen blackish with 1st segment brownish in varying degrees; antenna black with basal segments brownish; legs black with basal 2/3 of femora reddish brown; in some ♀ specimens: elytron reddish brown with subbasal and postmedian markings black; reddish brown, head, scutellum, ventral surfaces of abdomen and legs entirely blackish; length 6.0–8.0 mm .. **paviei**  
 Head reddish brown with a black transverse band at middle; reddish brown, antenna pitchy black with basal segments brownish, legs reddish brown with tarsi, apical portion of femora, and basal and apical



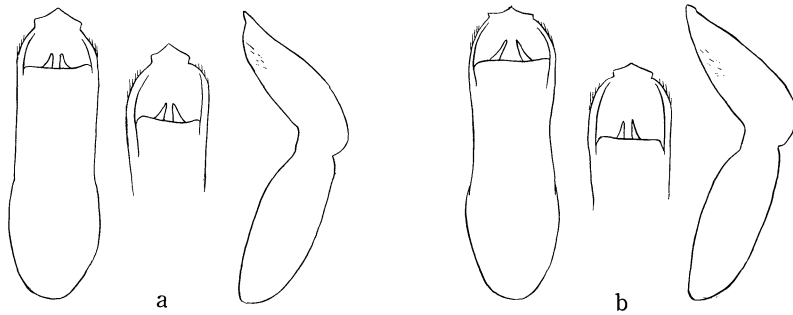


FIG. 10. Male genitalia: **a**, *Tituboea fasciiceps*; **b**, *T. paviei*.

portions of tibiae black; ventral surfaces largely blackish; length 8.0 mm ..... **fasciiceps**

**Tituboea fasciiceps** (Pic), **new combination**

Fig. 10a

*Physauchenia fasciiceps* Pic, 1927, Mél. Exot. Entomol. **50**: 6 (Laos; PARIS).

*Distribution.* Thailand, Vietnam.

*Material examined.* THAILAND: 1, "Siam" (BANGKHEN).

Medvedev (1970) treated *Physauchenia fasciiceps* as a synonym of *Coptocephalus bifasciata* Jacoby. However, *Physauchenia fasciiceps* Pic can be separated from *C. bifasciata* in having the body slightly larger and robuster, and the pronotum more transverse, nearly 2× as wide as long, and the posterior corner not distinctly angulate but rounded. On the other hand, this species might prove to be synonymous with *Tituboea paviei* Lefèvre. We treat this as an independent species at present because of the slightly different ♂ aedeagus.

**Tituboea harmandi** Lefèvre

*Tituboea harmandi* Lefèvre, 1893, Ann. Soc. Entomol. Fr. **62**: 112 (Cochinchina).

*Distribution.* Vietnam.

We could not trace the location of the type of this species.

**Tituboea paviei** Lefèvre

Fig. 9a-b, 10b, 12f

*Tituboea paviei* Lef., 1890, Nouv. Arch. Mus. Paris ser. 3, **2**: 189 (Cambodge; PARIS); 1904, Mission Pavie Indochine **3**: 146 (Cambodge).

*Antipa* (*Tituboea*) *tonkinea* Pic, 1931, Bull. Soc. Linn. Lyon **10**: 139 (Tonkin; PARIS). **New synonymy.**

*Distribution.* Thailand, Cambodia.

Lefèvre recognized this as a very variable species and described the infraspecific variation. According to our study of the type of *Antipa* (*Tituboea*) *tonkinea* Pic, this

species is the same as var.  $\beta$  of *T. paviei* Lefèvre. However, we need additional material for verification of this.

*Material examined.* THAILAND: 1, Khon Kaen, X.1970, M. Sato (EHIME). LAOS: 1, Vientiane Prov, Ban Van Heua, V.1961, NC (BISHOP).

***Tituboea tonkinea* (Pic), new combination**

Fig. 9c-d

*Physauchenia tonkinea* Pic, 1927, Échange **43**: 7 (Tonkin; PARIS).

*Distribution:* Vietnam.

Medvedev (1970) treated this species as a synonym of *Coptocephala bifasciata* (Jacoby). However, this species is not a synonym of *bifasciata*.

*Material examined.* VIETNAM: 2, Hoa-Binh, Tonkin, A. Cooman (FREY).

Genus ***Clytrasoma*** Jacoby

*Clytrasoma* Jac., 1908, Fauna India, Coleopt. **2**: 149 (type: *Clythra palliata* F.; S Asia).—Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 328.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 92.

***Clytrasoma palliatum* (Fabricius)**

Fig. 11b

*Clythra palliata* F., 1801, Syst. Eleuth. **2**: 30 (India orientalis).—Lacordaire, 1848, Monogr. Phytoph. **2**: 191 (India).

*Clytra transversa* Illiger, 1802, Mag. Entomol. **1**: 182 (Ostindien).—Lacordaire, 1848, Monogr. Phytoph. **2**: 192 (= *palliata*).

*Clythra gibbosa* Vigors, 1826, Zool. J. **2**: 241, pl. 9, fig. 11 ("Maderaspatana").—Lacordaire, 1848, Monogr. Phytoph. **2**: 191 (= *palliata*).

*Clythra conformis* Lacordaire, 1848, Monogr. Phytoph. **2**: 194 (Bengale). **New synonymy.**

*Clytrasoma palliata*: Jacoby, 1908, Fauna India, Coleopt. **2**: 150, fig. 50 (India).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 92 (China).—Chújò, 1964, Nat. Life SE Asia **3**: 260 (Thailand).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 284 (Indo-China: Khouang).

*Clytrasoma conformis*: Jacoby, 1908, Fauna India, Coleopt. **2**: 150, fig. 51 (India).—Medvedev, 1970, Verh. Naturforsch. Ges. Basel **80**(2): 284 (Indo-China: Khouang).

*Clytra conformis*: Weise, 1922, Tijdschr. Entomol. **65**: 42 (China: Fokien).

*Clytrasoma palliata* varr. *reducta*, *rufithorax* and *subobliterata* Pic, 1932, Mém. Exot. Entomol. **60**: 35 (Tonkin).

*Clytrasoma laosensis* Pic, 1928, Mém. Exot. Entomol. **52**: 24 (Laos; PARIS). **New synonymy.**

*Clytrasoma tonkinea* Pic, 1932, Mém. Exot. Entomol. **64**: 3 (Tonkin; PARIS). **New synonymy.**

*Clytrasoma marginata* Pic, 1932, Mém. Exot. Entomol. **60**: 35 (Cochinchina; PARIS). **New synonymy.**

*Clytrasoma quadrisignata* Pic, 1937, Mém. Exot. Entomol. **69**: 19 (China; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 92 (= *palliata*).

*Distribution.* India, Thailand, Laos, Vietnam, S China.

Head, antenna, underside and legs black; pronotum yellowish brown with a pair of angulate markings black, in some specimens these markings become larger and merge; scutellum black; elytron yellowish brown with 3 black transverse bands, viz. humeral, median and subapical markings, varying in size and shape, in some specimens median band divided into interior and exterior markings. In ♂ elytron strongly dilated, in ♀ elytron slightly or not at all dilated and 5th abdominal segment with a deep fovea in middle. Length 12–15 mm.

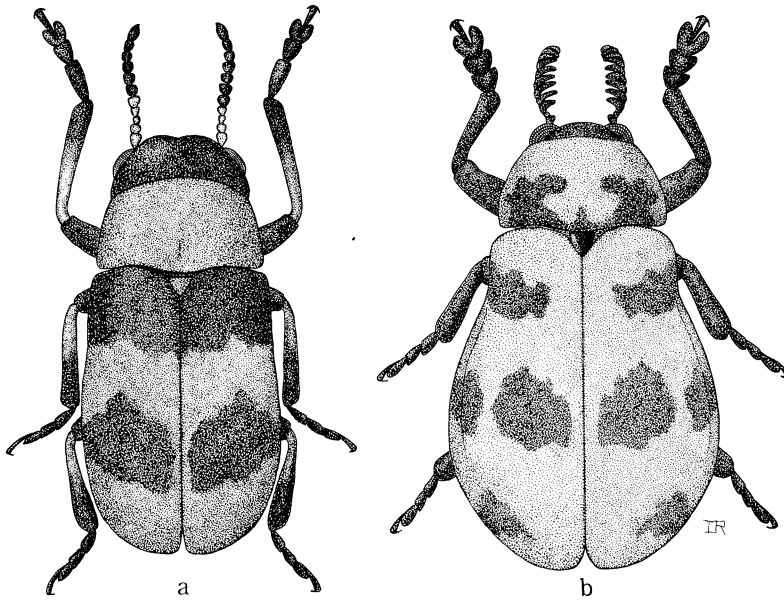


FIG. 11. a, *Coptocephala bifasciata*; b, *Clytrasoma palliatum*.

According to our studies on the types of *laosensis* Pic, *tonkinea* Pic and *marginata* Pic in the Paris museum, these 3 are identical with *palliatum*. We could not trace the type of *Clythra conformis* Lacordaire, but it is also undoubtedly a synonym of *palliatum*.

*Material examined.* THAILAND: 2, Phu Kae, IX.1964; 1, Chanthaburi, IV.1959; 3, Nakhon Ratchasima, VIII.IX.1959; 1, Chon Buri, VI.1958; 1, Saraburi, VII.1963; 2, Tak, V.1959; 1, Pak Thong Chia, VIII.1963; 1, Khu Kae, VIII.1964; 2, Bangkhen, VIII.1964 (BANGKHEN). LAOS: 27, Umgeb. Vientiane, 1963; 3, Umgeb. Pakse, 1963; 2, Umgeb. Vanky, 1964; 1, Umgeb. Paklay, 1963 (MÜNCHEN); Sithandone Prov, 1, Ile de Khong, V.1965, NC; Khammouan Prov, 7, Phon Tiou, IV.1965, NC; Vientiane Prov, 1, Vientiane, V-VI.1960, SQ & LWQ; Sedone Prov, 1, Pakse, V.1965, PDA; Wapikhamthong Prov, 3, Khong Sedone, V.1965, V.1967, NC, JAR (BISHOP).

### Genus *Clytra* Laicharting

*Clytra* Laich., 1781, Verz. Tyrol. Insect. 1: 165 (type: *C. quadripunctata* Laich.; Europe).—Gressitt, 1942, Lingnan Sci. J. 20(2-4): 327.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 88.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(1): 135.

*Clythra* Fabricius, 1798, Suppl. Entomol. Syst.: 110.

*Camptolens* Chevrolat, 1837 (nec Lacordaire, 1848), in Dejean, Cat. Coleopt. ed. 3: 419.—Monrós, 1953, Coleopt. Bull. 7(6): 47 (type: *Clytra rugosa* Fabricius; =*Clytra*).

*Miochira* Lacordaire, 1848, Monogr. Phytoph. 2: 315.—Chapuis, 1874, Genera Coleopt. 10: 123.—Jacoby & Clavareau, 1906, Genera Insect. 49: 56.—Jacoby, 1908, Fauna India, Coleopt. 2: 159 (type: *Miochira gracilis* Lacordaire). **New synonymy.**

### KEY TO SPECIES OF *Clytra*

1. Head closely pubescent in front of eye, finely rugose, almost or entirely blackish ..... 2

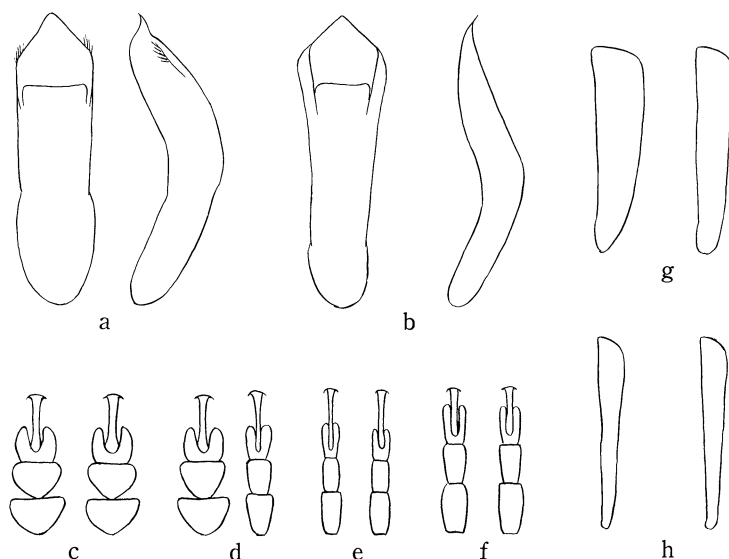


FIG. 12. **a-b**, ♂ genitalia; **c-f**, anterior tarsus (left, ♂; right, ♀); **g-h**, anterior tibia (left, ♂; right, ♀). **a**, *Clytra annamita*; **b**, *C. gracilis*; **c**, *C. duodecimmaculata*; **d**, *Physosmaragdina nigrifrons*; **e**, *Coptocephala bifasciata*; **f**, *Tituboea paviei*; **g**, *Physosmaragdina nigrifrons*; **h**, *Coptocephala bifasciata*.

- Head glabrous, smooth, largely brownish ..... 4
- 2 (1). Elytron at least marked with small humeral spot but without a large triangular patch posterolaterally ..... 3
- Elytron fulvous with a large triangular patch placed near apex at side, and apical margin narrowly black; fulvous, antenna black with basal 3 segments fulvous; length 9–10 mm ..... **orientalis**
- 3 (2). Smaller than 9 mm; legs reddish brown with femora bluish black; head bluish black with labrum pitchy brown; pronotum yellowish brown; scutellum pitchy black with apex brownish; elytron yellowish brown, with distinct humeral and ill-defined postmedian markings blackish; these markings often reduced in size to varying degrees, and in most pale-colored specimens elytron with ill-defined small humeral spot only; ventral surfaces bluish black; antenna dark brown with basal segments paler; length 8–9 mm ..... **subviridis**
- Larger than 11 mm; legs entirely black; body often largely black, coloration of dorsal surface variable, pronotum black with a pair of subquadrate markings fulvous at anterior angle; in most dark-colored specimens pronotum entirely black but in most pale-colored ones entirely reddish brown; scutellum black, pitchy brown or reddish brown; elytron reddish brown with basal, median and apical markings black; size of these markings varies considerably, in most pale-colored

- specimens elytron only marked with a small humeral spot; length 11-12 mm ..... **duodecimmaculata**
- 4 (1). Elytron with blackish markings ..... 5  
Entirely yellowish brown; length 6-7 mm ..... **unicolor, n. sp.**
- 5 (4). Elytron with 1 or 2 transverse bands ..... 6  
Elytron otherwise marked ..... 7
- 6 (5). Elytron ochraceous with postmedian transverse band black, in some specimens humerus with a blackish spot; body largely ochraceous, in some specimens meso- and metathorax and 5th abdominal segments blackish in varying degrees, antenna reddish brown with apical segments slightly darker; legs ochraceous; length 6-7 mm .... **unifasciata**  
Elytron ochraceous with subbasal and postmedian transverse bands black; pronotum ochraceous with or without a pair of black subbasal markings; head ochraceous with or without blackish marking at vertex; ventral surfaces ochraceous with meso- and metathorax and 5th abdominal segment together with lateral portions of abdominal segments 1-4 blackish in varying degrees; antenna pitchy brown with basal segments much paler; legs ochraceous with median portion of femora blackish in varying degrees; length 6-7 mm ..... **annamita**
- 7 (5). Elytron with lateral margin broadly blackish ..... 8  
Elytron with lateral margin not broadly blackish ..... 9
- 8 (7). Elytron with a wide marginal stripe extending toward basal  $\frac{2}{3}$ , and 2 elongate spots placed before middle and another behind middle, black; in some specimens posterior discal spot united with marginal stripe; ochraceous, head with vertex in part blackish, pronotum with a pair of ill-defined, small lateral markings dark brown; ventral surfaces ochraceous with meso- and metathorax largely blackish, and abdominal segments in part blackish; antenna pitchy brown with basal segments paler; legs ochraceous; length 4.4-5.0 mm ... **miyatakei, n. sp.**  
Elytron with a wide marginal stripe, merged with humeral, lateral and sublateral round spots, sutural stripe extending and broadening toward basal  $\frac{2}{5}$  and oblique postmedian spot, black; in some specimens humeral spot free from marginal stripe; ochraceous, head with blackish area on each side of eye, pronotum with or without a pair of subbasal markings black; ventral surfaces ochraceous with meso- and metathorax and abdomen in part pitchy black; antenna pitchy brown with basal segments paler; legs ochraceous with tarsi and apex of tibiae infusate; length 4.7-5.0 mm ..... **morimotoi, n. sp.**
- 9 (7). Elytron yellowish brown with 4 or 5 black markings ..... 10  
Elytron yellowish brown with 6 black markings; viz. humeral, latero-subbasal, median, lateromedian, postmedian and lateroapical markings; pronotum yellowish brown, with a pair of fairly large blackish

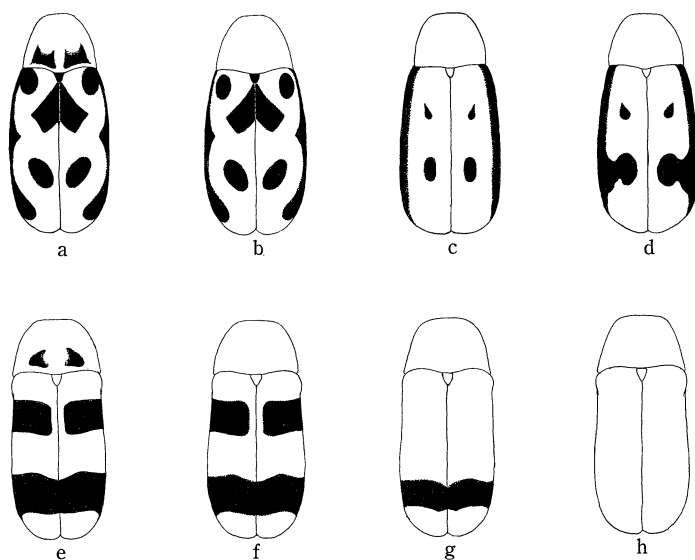


FIG. 13. a-b, *Clytra morimotoi*; c-d, *C. miyatakei*; e-f, *C. annamita*; g, *C. unifasciata*; h, *C. unicolor*.

- markings; head yellowish brown with posterior portion of eye black; ventral surfaces yellowish brown with entire meso- and metathorax together with middle of prothorax and lateral portion of abdominal segments black in varying degrees; antenna pitchy brown with basal segments much paler; legs yellowish brown with middle of femora and apical portions of tibiae blackish; length 6.5–7.0 mm . . . . . **variegata**
- 10 (9). Elytron ochraceous with 4 black markings, viz. humeral, subbasal, lateral, and postmedian markings; pronotum ochraceous with or without a pair of small markings black; scutellum ochraceous; head and ventral surfaces ochraceous with meso- and metathorax and 5th abdominal segments black; antenna pitchy brown with basal segments brownish; legs pitchy black with apex of femora and base of tibiae ochraceous; length 5–6 mm . . . . . **gracilis**
- Elytron ochraceous with 5 black markings, viz. humeral, subbasal, lateral, postmedian and apical markings; pronotum ochraceous with or without a pair of small black markings; scutellum ochraceous; head fulvous with or without a black spot at vertex, breast and abdomen partly blackish; length 5–6 mm (Jacoby, 1889; Burma, Nepal; Fig. 15 c–d). . . . . **indica**

**Clytra annamita** Lefèvre

Fig. 12a, 13e–f

*Clytra annamita* Lef., 1889, Ann. Soc. Entomol. Fr. ser. 6, 9: 288 (Saigon; PARIS); 1890, Nouv. Arch. Mus. Paris ser. 3, 2: 190 (Siam).—Jacoby, 1908, Fauna India, Coleopt. 2: 156 (Burma, Cochinchina).  
*Clytra saigonensis* Pic, 1927, Bull Soc. Zool. Fr. 52: 188 (Saigon; PARIS). **New synonymy.**

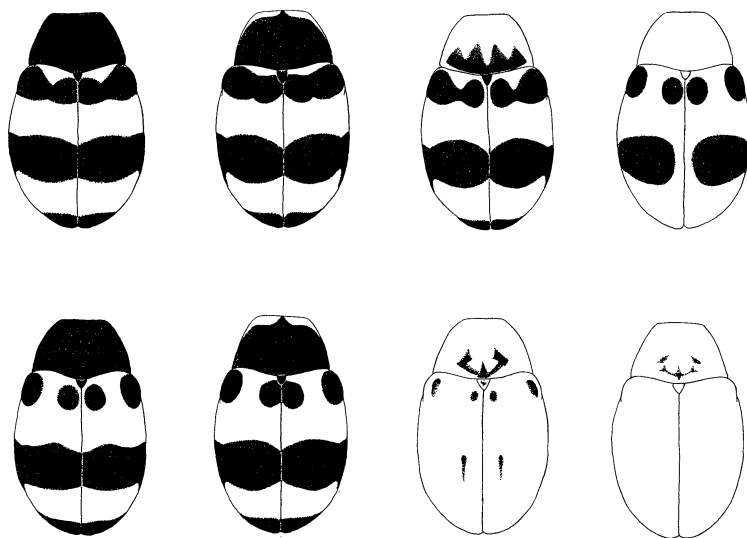


FIG. 14. *Clytra duodecimmaculata* (variation).

*Distribution.* Thailand, Laos, Vietnam.

*Clytra saigonensis* Pic seems to be a color variation of *annamita*. Most of the specimens before us are characteristic in having the pronotum with a pair of blackish markings, as on *saigonensis*, but in some others the pronotum is entirely pale, as in the nominate form.

*Material examined.* LAOS: 1, Sedone Prov, Pakson, VII.1965, NC; 6, Sithandone Prov, Ile de Khong, V.1965, NC (BISHOP). VIETNAM: 1, 34 km SE of Ban Me Thuot, 500 m, V.1960, SQ; 1, 31 km S of Di Linh, 1050 m, IV.1960, REL; 1, 40 km SW of Pleiku, 300 m, V.1960, LWQ (BISHOP).

### *Clytra duodecimmaculata* (Fabricius)

Fig. 12c, 14

*Cryptocephalus decemmaculatus duodecimmaculatus* F., 1775, Syst. Entomol.: 106 ("Cape of Good Hope").

*Cryptocephalus duodecimmaculatus* F., 1781, Species Insect. 1: 139 ("Cape of Good Hope").

*Chrysomela cryptocephala* Hornstedt, 1788, Schr. Naturforsch. Freunde Berlin, 2: 7, pl. 1, fig. 2, 5, 8, 11 (Java).

*Clytra duodecimmaculata*: Lacordaire, 1848, Monogr. Phytoph. 2: 220 (Java, Sumatra).—Baly, 1865, Trans. Entomol. Soc. London ser. 3, 4(1): 48 (Java, Sumatra, Siam).—Lefèvre, 1889, Ann. Soc. Entomol. Fr. ser. 6, 9: 288 (Cambodge); 1890, Nouv. Arch. Mus. Paris ser. 3, 2: 190 (Cambodge).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 92 (S China).

*Diapromorpha gigantea* Jacoby, 1892, Ann. Mus. Civ. Genova 32: 878 (Burma; GENOVA); 1908, Fauna India, Coleopt. 2: 162 (Burma). **New synonymy.**

*Clytra theresae* Pic, 1927, Mél. Exot. Entomol. 48: 30 (Cochinchina; PARIS; with var *inapicalis* Pic). **New synonymy.**

*Clytra binhana* Pic, 1927, Mél. Exot. Entomol. 48: 31 (Cochinchina; PARIS). **New synonymy.**

*Distribution.* Burma, Thailand, Laos, Cambodia, Vietnam, Hainan I, S China, Sumatra, Java.

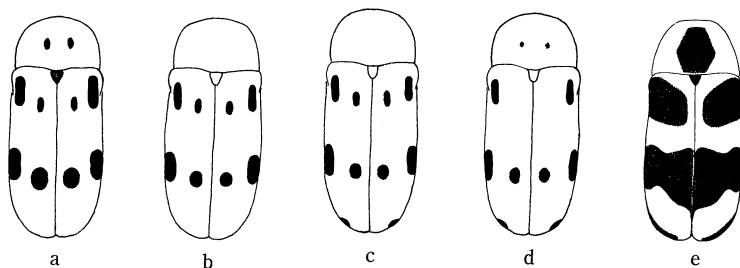


FIG. 15. a–b, *Clytra gracilis*; c–d, *C. indica*; e, *C. montana* (Kashmir, N India, Nepal; Jacoby, 1895).

*Material examined.* THAILAND: 1, Chanthaburi, Prew, 45 m, IV–V.1958, TCM (BISHOP); 5, Chon Buri, IV, VIII, IX.1959, VIII.1964; 7, Nakhon Ratchasima, X.1958, IX, X.1959; 1, Chanthaburi, VIII.1959; 3, Bangkok, Thon Buri, VIII, IX.1956, VIII.1958; 3, Sara Buri, VII.1956; 3, Kanchanaburi, VIII.1963; 1, Nakhon Pathom, VII.1964; 1, Phet Buri, IX.1964; 1, Prachin Buri, VII.1963; 2, Muak Lek, VIII, X.1964; 2, Bangkok, VII.1963; 1, Khao Yai, VIII.1964; 2, Pak Chong, IX.1963, VIII.1964; 1, Lopburi, X.1964; 1, Phu Khae, VIII.1964 (BANGKHEN). LAOS: 2, Umgeb. Vientiane, III–VI.1963–64; 1, Umgeb. Pakse, 1964 (MÜNCHEN); 140, Sedone Prov, Pakse, V–VIII.1965; VII–VIII.1967; 14, Ile de Khong, II.1965; 20, Phon Tiou, VII.1965; 5, Vientiane, IV, VII.1965, X.1966, JAR; 10, Paksong, VII.1967; 6, Tonpheng, X.1965; 1, Ban Van Heua, VIII.1967, NC; 4, Khong Sedone, VII.1967, NC; 4, Pakkading, IV, IX, X.1965, JLG & NC (BISHOP). VIETNAM: 2, Dalat, 6 km S, 1400–1500 m, VI, VII.1961, NRS (BISHOP).

### *Clytra gracilis* (Lacordaire)

Fig. 12b, 15a–c

*Miochira gracilis* Lac., 1848, Monogr. Phytoph. 2: 316 (Assam).—Jacoby, 1908, Fauna India, Coleopt. 2: 160 (Sikkim, Assam, Burma).

*Melitonoma affine* Jacoby, 1889, Ann. Mus. Civ. Genova 27: 158 (Burma; BMNH, GENOVA).—Kimoto & Takizawa, 1973, Kontyû 41: 172 (= *gracilis*).

*Aetheomorpha pectoralis* Lefèvre, 1893, Ann. Soc. Entomol. Fr. 1893: 113 (Tonkin; PARIS).—Kimoto & Takizawa, 1973, Kontyû 41: 172 (= *gracilis*).

*Gynandrophthalma argyrica* Weise, 1913, Wien. Entomol. Ztg. 32: 220 (n. n. for *Melitonoma affine* Jacoby, 1889, nec *Gynandrophthalma affinis* Hellwig, 1798).

*Miochira gracilis*: Kimoto & Takizawa, 1973, Kontyû 41: 172 (Nepal).

*Distribution.* Kashmir, Nepal, India, Burma, Thailand, Laos, Vietnam.

The type specimen of *pectoralis* Lefèvre, preserved in the Paris museum, is labelled “Sikkim.”

*Material examined.* THAILAND: 1, Kanchanaburi, V.1962 (BANGKHEN); 1, Fang Spa, XI.1968, KH (EHIME). LAOS: 3, Khammouan Prov, Phon Tiou, IX.1965, JAR & NC; 1, Houei Kuong, V.1965; 1, Pakkading, VIII.1965; 1, Tonpheng, III.1965, NC; 3, 18 km NW of Xieng Khouang, 1035 m, VIII.1960, REL (BISHOP); 1, Umgeb. Pakse, 1963 (MÜNCHEN). VIETNAM: 1, 50 km SW of Pleiku, 250 m, V.1960, LWQ; 2, 20 km N of Pleiku, 650 m, V.1960, LWQ (BISHOP).

### *Clytra miyatakei* Kimoto & Gressitt, new species

Fig. 13c–d

Slender, subparallel-sided. Pale orange ochraceous marked with black; a transverse pitchy black spot on occiput; a humeral stripe extending to end of basal  $\frac{2}{3}$  of elytron, gradually broadening until it touches external margin just behind middle; elytral disc with 2 similar pitchy black spots, slightly closer to suture than to humeral stripe and separated by a space equal to their lengths, in some specimens posterior spot joined to lateral stripe; eye and mandible pitchy black; a small pitchy spot on side of prothorax; meso-



and metasterna largely blackish; abdomen with central portion of last sternite and middle of each side of middle sternites pitchy black. Body glabrous above; antenna with short pale pubescence; ventral surfaces almost entirely clothed with fairly loose oblique silvery buff hairs; legs with slightly shorter hairs.

*Head* narrower than prothorax; smooth and evenly convex with weak minute punctures; frontoclypeus strongly emarginate apically; gena about  $\frac{1}{4}$  as deep as eye; eye large, hardly emarginate near antennal insertion,  $\frac{3}{5}$  as broad as deep. Antenna reaching to just behind middle of prothorax; 1st segment about as broad as long; 2nd slightly broader than long; 3rd slightly broader apically but much smaller than 4th; 4th to 10th similar, each distinctly broader than long; 11th barely longer than broad. *Prothorax* slightly broader than long, evenly convex and vaguely and minutely punctured; side feebly convex with anterior and posterior angles rounded; basal margin distinctly sinuate. Scutellum triangular, about as broad as long. *Elytron*  $3\times$  as long as broad, subparallel, slightly sinuate at side, broadly rounded apically; disc with numerous minute punctures which are partly arranged in irregular rows, most of punctures separated by spaces  $2\times$  to  $3\times$  as great as their diameters. *Ventral surfaces* in large part finely but distinctly punctured. Legs short; hind femur hardly  $\frac{2}{3}$  as long as abdomen; 1st tarsal segment of hind leg distinctly longer than 2nd or 3rd segment but hardly as long as last. *Length* 4.4 mm.

Holotype (KYUSHU UNIV. TYPE NO. 2182), THAILAND: Chiang Mai Prov, Doi Suthep, Tankeo, 800 m, 10.VI.1965, Y. Miyatake. Paratypes: THAILAND: 1, Tak, 31.V.1959; 1, Chiang Mai, 300 m, 23.VI.1936; 1, Kanchanaburi, 31.V.1962 (BANGKHEN, KIMOTO); 1, Chiang Mai, Fang (Agric. Exp. Stn), 600 m, 14.VI.1965, P.D. Ashlock (BISHOP).

*C. miyatakei* differs from *Clytra tsinensis* Pic in having a pair of subbasal spots instead of a central spot, and in having a curved postscutellar mark instead of a free discal spot.

*Distribution.* Thailand.

### ***Clytra morimotoi* Kimoto & Gressitt, new species**

Fig. 13a-b

Slender, subparallel-sided. Somewhat yellowish ochraceous- to amber-colored marked with pitchy black spots; head with a spot on labrum, and a large blackish area on each side bordering eye, the 2 areas barely meeting on postocciput; pronotum with a suboblong transverse spot on each side near base; scutellum pitchy with apex ochraceous; elytron with a somewhat squarish-oblique humeral spot, a sutural stripe from behind scutellum broadening and extending obliquely outward nearly to middle of disc at end of basal  $\frac{2}{5}$ , continued posteriorly as an extremely narrow sutural stripe; an obliquely oval spot just behind middle and nearly touching sutural stripe; outer margin black in basal  $\frac{1}{5}$ , broadening just anterior to middle to merge with a lateral spot and at its apex merging with a preapical sublateral rounded spot; ventral surfaces largely pale on prothorax and abdomen, largely black on hind thorax, with a brownish spot at middle near posterior margin at metasternum, and some pitchy areas on last abdominal segment and on side of 2nd abdominal segment; legs largely pale with much of tarsi and apices of tibiae pitchy to dark reddish brown; hind femur slightly brownish near base. Dorsum with only a few pale hairs on sides of head; venter largely clothed with sparse silvery hairs; legs with shorter silvery buff hairs.

*Head* much narrower than prothorax, largely smooth and shiny, with fine irregular punctures, denser behind eyes and sparser on central portion of frontoclypeus; gena  $\frac{1}{4}$  as deep as eye; eye  $\frac{4}{5}$  as broad as deep. *Antenna* not reaching to base of prothorax; 1st segment slightly longer than broad; 2nd much smaller, about as broad as long; 3rd fairly slender, slightly broadened at apex; 4th subtriangular; 5th and following much broader and flatter, mostly a little broader than long. *Prothorax*  $\frac{3}{5}$  as long as broad, much broader at apex than at base, nearly as broad slightly behind middle as at base, subrounded at side; anterior margin weakly convex; basal margin sinuate and truncate at middle; disc even and fairly smooth, with numerous weak punctures. *Scutellum* slightly longer than broad, triangular, acute apically, minutely punctured. *Elytron*  $3.5\times$  as long as broad, weakly convex at side, broadly rounded apically; disc fairly smooth and even, very slightly depressed behind basal  $\frac{1}{4}$ , with some irregular rows of minute punctures, about 10 rows just behind middle. *Ventral surfaces* with numerous minute punctures; last abdominal seg-

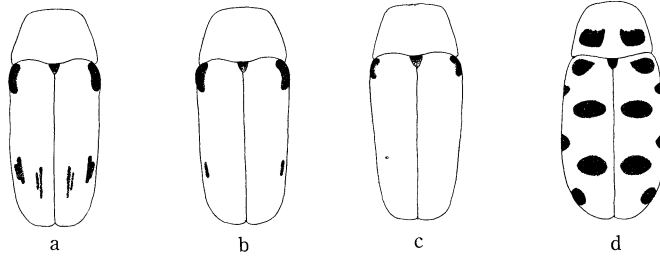


FIG. 16. a–c, *Clytra subviridis*; d, *C. variegata*.

ment slightly depressed and less punctate at middle. *Legs* fairly slender; hind femur barely  $\frac{2}{3}$  as long as abdomen; 1st tarsal segment of hind leg slender, slightly longer than 2nd or 3rd segment. Length 4.7 mm.

**Holotype** (KYUSHU UNIV. TYPE NO. 2183), THAILAND: Chiang Mai Prov, Doi Suthep, 1000 m, 10.VI.1965, K. Morimoto. **Paratopotype**: same data as holotype (BISHOP). **Paratype**: same data as holotype but 19.VI.1965, Y. Miyatake (KIMOTO).

This species differs from *C. tsinensis* Pic in being smaller, with pronotum entirely pale and with elytron bearing a continuous humeral black stripe instead of an interrupted one.

#### ***Clytra orientalis* Lefèvre**

*Clytra orientalis* Lef., 1891, C. R. Soc. Entomol. Belg. **35**: 250 (Bangkok).—Jacoby, 1908, Fauna India, Coleopt. **2**: 157 (Bangalore).

*Distribution*. Thailand, India.

We have not seen the type of this species. No additional material examined.

#### ***Clytra subviridis* Pic**

Fig. 16a–c

*Clytra subviridis* Pic, 1932, Mél. Exot. Entomol. **60**: 36 (Saigon; with var. *humeralis*; PARIS).

*Distribution*. Thailand, Laos, Vietnam.

*Material examined*. THAILAND: 2, Chiang Mai (BANGKHEN); 2, Chiang Mai Prov, Mae Sa Waterfall, VI.1965, YM (KU). LAOS: 1, Vientiane, VI.1960, SQ; 1, Ile de Khong, VII.1965; 1, Pakse, VI.1967, JAR (BISHOP).

#### ***Clytra unicolor* Kimoto & Gressitt, new species**

Fig. 13h, 17b

Yellowish brown, antenna with apical segments somewhat infusate, ventral surfaces largely yellowish brown with middle of proepimeron, meso- and metathorax, a pair of lateral markings on 1st to 4th abdominal segments and entire 5th abdominal segment blackish; pygidium black with lateral portion yellowish brown.

*Head* convex, smooth, shining; vertex with a shallow longitudinal furrow at middle, sparsely impressed with minute punctures on median portion; covered with fine hairs and impressed by stronger punctures on interior portion of ocular; frontoclypeus impressed with stronger punctures than on vertex, with a pair of shallow depressions. *Antenna* robust, short, with 3rd segment smallest, narrowest, hardly widened apically; 4th subtriangular, widened apically, nearly as long as 3rd; 5th transverse, nearly  $1.5\times$  as long as 4th, and slightly wider than long; 6th slightly wider than 5th; 7th subequal to 6th in length and shape; 8th as

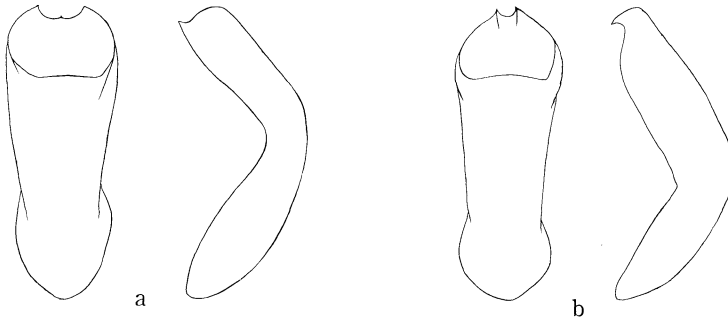


FIG. 17. Male genitalia: **a**, *Clytra unifasciata*; **b**, *C. unicolor*.

long as 7th but slightly narrower than 7th; 9th subequal to 8th in length and shape; 10th as long as 9th but slightly narrower; 11th elongate, slightly narrower and nearly 1.4× as long as 10th and its apex pointed. *Pronotum* transverse, nearly 1.3× as wide as long, convex, anterior margin widely rounded anteriorly and posterior margin slightly produced posteriorly at middle; lateral margin slightly rounded, widest at basal margin and narrowed toward anterior margin; surface shining, sparsely impressed with minute punctures. *Scutellum* subtriangular, smooth, shining, nearly impunctate. *Elytron* elongate, subparallel-sided, rounded at apex, surface smooth, shining, rather closely impressed with large punctures. *Length* 6.0–7.0 mm.

**Holotype** (BISHOP 12,124), LAOS: Wapikhamthong Prov, Khong Sedone, 18.IV.1965, J.A. Rondon. **Paratopotypes**: 1, same data as holotype (KIMOTO), 1, Khong Sedone, Wapi, 24.V.1967, native collr; **Paratypes**. LAOS: Vientiane Prov, Vientiane, 2 ex, 22.VII.1965, native collr; 1, Khammouan Prov, Phon Tiou, 16.VIII.1965, native collr (BISHOP). VIETNAM: 1, 30 km NW of Pleiku, 300 m, 10.V.1960, L.W. Quate (BISHOP); 1, 40 km SW of Pleiku, 300 m, 11.V.1960, L. Quate (BISHOP). THAILAND: 3, Phrae (BANGKHEN).

This new species closely resembles *Clytra unifasciata* (Pic), but is separable in having the elytron entirely reddish brown and the male aedeagus differently shaped.

***Clytra unifasciata* (Pic), new combination**

Fig. 13g, 17a

*Miochira unifasciata* Pic, 1941, *Échange* 57: 8 (India; ?PARIS); 1941, *Opusc. Mart.* 2: 15 (India).  
*Miochira unifasciata* var. *inhumeralis* Pic, loc. cit. (Malacca).

*Distribution*. India, Thailand, Malay Peninsula.

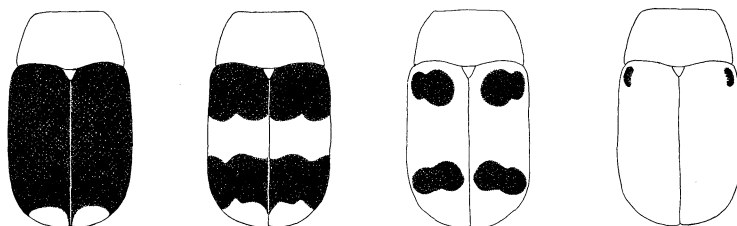
Except for the “type” of var. *inhumeralis* labelled by Pic, we could not find the type of this species in the Paris museum. In var. *inhumeralis*, the humerus of the elytron is not covered by a distinct blackish marking.

*Material examined*. THAILAND: 2, Fang, V.1965, K. Morimoto; 1, Chiang Dao, VI.1965, YM; 1, Mae Sa Waterfall, Chiang Mai Prov, VI.1965, YM (KU); 2, Chiang Mai Prov, Fang, 500–600 m, VI.1965, PDA; 1, Chiang Mai Prov, Tang Keo, VI.1965, PDA (BISHOP).

***Clytra variegata* (Lefèvre), new combination**

Fig. 16d

*Diapromorpha* (*Aetheomorpha*) *variegata* Lef., 1890, *Nouv. Arch. Mus. Paris ser. 3*, 2: 191 (Laos); 1904, *Mission Pavie Indochine* 3: 148 (Laos).

FIG. 18. *Physosmaragdina nigrifrons* (variation).

*Distribution.* Thailand, Laos, Vietnam.

This species is somewhat intermediate between *Clytra* and *Miochira* on the characteristics of the anterior tarsal segment. We have not seen the type of this species. Our identification is based on the specimens (Cochin-China, Hamond, 1877) identified by Lefèvre.

*Material examined.* THAILAND: 2, Fang, VI.1965, YM; 1, Nakhon Ratschasi, X.1970, SN (KU); 2, Chiang Mai, 960 m, IV.1939 (BANGKHE). LAOS: 5, Umgeb. Vientiane, III-VI.1963; 3, Umgeb. Paklay, 1963; 2, Umgeb. Pakse, 1963-64; 2, Umgeb. Vankay, 1963 (MÜNCHEN); Borikhan Prov, 4, Pakkading, 100 m, IV.1965, JLG; 1, Namkading, 100 m, IV.1965, JLG; Vientiane Prov, Ban Van Heua, 800 m, IV.1965, JLG; 1, Tha Ngone, X.1966, NC; 1, Wapikhamthong Prov, Khong Sedone, V.1965, NC; 1, Sayaboury Prov, Sayaboury, XII.1965, NC (BISHOP). VIETNAM: 5, 20 km N of Pleiku, 650 m, V.1960, SQ; 3, M'drak, E of Ban Me Thuot, 400-600 m, XII.1960, LWQ; 1, Ban Me Thuot, 500 m, V.1960, SQ & LWQ; 1, 4 km W of Dalat, 1560 m, mtn for., V.1960, REL; 1, 15-35 km NW of Phan Rang, XI.1960, CMY (BISHOP).

### Genus *Physosmaragdina* Medvedev

*Physosmaragdina* Medvedev, 1971, Zool. Zh. **50**(5): 693 (type: *Clytra nigrifrons* Hope, from China; as a subgenus of *Smaragdina*).

Medvedev described *Physosmaragdina* as a subgenus of *Smaragdina*. However, we treat this as a full genus, because the type-species of this genus is somewhat intermediate between *Clytra* and *Smaragdina*. This is a monobasic genus.

### *Physosmaragdina nigrifrons* (Hope), new combination

Fig. 12d, g, 18

*Clythra nigrifrons* Hope, 1842, Proc. Entomol. Soc. London **1842**: 51 (China; BMNH); 1943, Ann. Mag. Nat. Hist. ser. 1, **11**: 64 (E India); 1845, Trans. Entomol. Soc. London **4**: 12 (China: Chusan).—Lacordaire, 1845, Monogr. Phytoph. **2**: 393 (India or.).

*Clythra japonica* Baly, 1873, Trans. Entomol. Soc. London **1873**: 79 (Nagasaki; ?BMNH).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 99 (= *nigrifrons*).

*Clythra coreana* Kolbe, 1886, Arch. Naturgesch. **52**(1): 226 (Korea).—Masaki, 1936, Kontyû **10**(5): 262 (Korea).—Chûjô, 1940, Trans. Nat. Hist. Soc. Formosa **30**: 358 (= *japonica*).

*Coptocephala japonica*: Heyden, 1887, Dtsch. Entomol. Z. **31**: 295 (Pekin; with var. *immaculata*).

*Gynandrophthalma japonica* var. *mandarina* Weise, 1887, Horae Soc. Entomol. Ross. **23**: 579 (Shanghai, Hongkong); 1922, Tijdschr. Entomol. **65**: 43 (Fukien).

*Physauchenia kiotoensis* Pic, 1927, Échange **43**: 7 (Kioto; PARIS).—Chûjô & Kimoto, 1961, Pac. Insects **3**(1): 130 (= *nigrifrons*).

*Cyaniris japonica*: Chûjô, 1938, Mushi **11**(2): 160 (Laoshan); 1940, Trans. Nat. Hist. Soc. Formosa **30**(204): 358 (Korea).

*Physauchenia atripes* Pic, 1927, Échange **43**: 7 (China; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 100.

- Physauchenia submarginata* Pic, 1927, *Échange* **43**: 7 (Tonkin; PARIS).—Medvedev, 1970, *Verh. Naturforsch. Ges. Basel* **80**(2): 284 (= *nigrifrons*).
- Cyaniris japonica* var. *atrobasalis* Pic, 1932, *Mél. Exot. Entomol.* **59**: 13 (China).
- Cyaniris mandarina* var. *basidisjuncta*, *latereducta* Pic, 1932, *Échange* **50**: 20 (China).
- Cyaniris (Cyaniris) japonica* var. *formosana* Chûjô, 1934, *Arb. Morphol. Taxon. Entomol. Berlin-Dahlem* **1**(4): 284 (Formosa; TARI).
- Cyaniris japonica* ab. *mandarina*: Chûjô, 1938, *Mushi* **11**(2): 160 (Lao Shan).
- Cyaniris koltzoffi* Pic, 1938, *Ark. Zool.* **30A**(13): 17 (Kiangsi; STOCKHOLM).—Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 99 (= *nigrifrons*).
- Calyptorrhina (Gynandrophthalma) japonica*: Chûjô, 1942, *Mushi* **14**(2): 52 (Kwantung).
- Cyaniris (Cyaniris) nigrifrons*: Gressitt, 1942, *Lingnan Sci. J.* **20**(2-4): 328 (Kwangtung, Fukien, Kiangsi, Hupeh, Kweichow, Szechuan, Sikang).
- Gynandrophthalma japonica mandarina*: Chûjô, 1952, *Tech. Bull. Kagawa Agric. Coll.* **4**(2): 78 (Formosa).
- Smaragdina nigrifrons*: Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 94, 99 (China, Korea).—Medvedev, 1970, *Verh. Naturforsch. Ges. Basel* **80**(2): 284 (Annam; Hagiang Pa-kha).
- Smaragdina (Physosmaragdina) nigrifrons*: Medvedev, 1971, *Zool. Zh.* **50**(5): 693.

*Distribution.* Korea, Japan, Taiwan, China, Vietnam.

Head, underside and legs entirely black; coloration of dorsal surfaces variable: ground color of pronotum yellowish to reddish brown with or without a pair of black discal markings, in most dark-colored specimens discal markings merged and covering nearly entire surface, leaving only anterior and lateral margins brownish; elytron yellowish to reddish brown, with 2 large transverse bands black, one near base and other behind middle, sutural and lateral margins blackish, in pale-colored specimens elytral markings reduced and in some specimens entirely brownish, but in dark-colored specimens largely bluish black with subapical marking brownish; length 4.8–5.5 mm.

As treated by Medvedev (1970), *Physauchenia submarginata* Pic is a synonym of *nigrifrons*.

*Material examined.* VIETNAM: 1, 6 km S of Dalat, 1400–1500 m, VI–VII.1961, NRS (BISHOP).

### Genus *Smaragdina* Chevrolat

- Smaragdina* Chevrolat, 1837, in Dejean, *Cat. Coleopt.* ed. 3: 420; 1948, in d'Orbigny, *Diction. Univers. Hist. Nat.* **11**: 648 (type: *Clythra menetriesii* Faldermann = *unipunctata* Olivier; SE Europe).—Monrós, 1953, *Coleopt. Bull.* **7**(6): 46 (replacing *Gynandrophthalma*).—Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 93.—Kimoto, 1964, *J. Fac. Agric. Kyushu Univ.* **13**(1): 135.
- Cyaniris* Chevrolat, 1837 (nec Dalman, 1816), in Dejean, *Cat. Coleopt.* ed. 3: 420 (type: *Cryptocephalus collaris* Fabricius).—Bryant, 1923, *Ann. Mag. Nat. Hist. ser. 9*, **12**: 136 (homonym of *Cyaniris* Dalman).
- Necyomanthes* Gistel, 1837, *Syst. Insect.* **1**: 404.—Monrós & Bechyné, 1956, *Entomol. Arb. Mus. Frey* **7**: 1122 (= *Cyaniris* Chevrolat).
- Carmenis* Gistel, 1837, *Syst. Insect.* **1**: 404.—Monrós & Bechyné, 1956, *Entomol. Arb. Mus. Frey* **7**: 1122 (= *Smaragdina*).
- Calyptorrhina* Lacordaire, 1848, *Mon. Phytoph.* **2**: 81.—Lefèvre, 1872, *Ann. Soc. Entomol. Fr. ser. 5*, **2**: 320.—Chapuis, 1874, *Gen. Coleopt.* **10**: 130.—Jacoby & Clavareau, 1906, *Genera Insect.* **49**: 41.—Monrós, 1953, *Coleopt. Bull.* **7**(6): 46 (= *Smaragdina*; type: *Calyptorrhina chloris* Lacordaire).
- Gynandrophthalma* Lacordaire, 1848, *Monogr. Phytoph.* **2**: 256.—Jacquelin du Val, 1856, *Genera Coleopt. d'Eur.* **4**: 215.—Jacoby, 1908, *Fauna India, Coleopt.* **2**: 103 (type fixed as *Gynandrophthalma nigropunctata* Lacordaire).—Bryant, 1923, *Ann. Mag. Nat. Hist. ser. 9*, **12**: 136 (replaced *Cyaniris* Chevrolat).—Chûjô, 1952, *Tech. Bull. Kagawa Agric. Coll.* **4**(1): 45.—Monrós, 1953, *Coleopt. Bull.* **7**(6): 46 (= *Smaragdina*).
- Exomis* Weise, 1889, *Horae Soc. Entomol. Ross.* **23**: 577 (type: *Exomis peplopteroides* Weise).—Jacoby & Clavareau, 1906, *Genera Insect.* **49**: 48.—Gressitt & Kimoto, 1961, *Pac. Insects Monogr.* **1A**: 93 (= *Smaragdina*).

*Smaragdinella* Medvedev, 1971, Zool. Zh. **50**(5): 693 (type: *Smaragdina macilentata* Weise; as subgenus of *Smaragdina*).

*Monrosia* Medvedev, 1971, op. cit.: 654 (type: *Smaragdina cyanea* Fabricius; as subgenus of *Smaragdina*).

#### KEY TO SPECIES OF *Smaragdina*

1. Dorsal surfaces in part blackish, at least humeri blackish ..... 2  
 Dorsal surfaces entirely yellowish brown, with posterior ½ of elytron much paler than anterior ½, ventral surfaces yellowish brown, antenna black with basal segments brownish, legs yellowish brown with tarsi black; length 3–5 mm ..... **divisa**
- 2 ( 1). Pronotum ochraceous, elytron bluish black with or without apical portion ochraceous ..... 3  
 Not with above combination of characters ..... 4
- 3 ( 2). Elytron bluish black with apical portion ochraceous; head bluish black with clypeus ochraceous; pronotum ochraceous, scutellum bluish black; ventral surfaces of prothorax ochraceous, meso- and meta-thorax and abdomen black; antenna pitchy black with 3 or 4 basal segments brownish, legs pitchy black with basal portion of tibiae brownish; length 3.2–3.5 mm ..... **laosensis, n. sp.**  
 Elytron entirely bluish black; head ochraceous with vertex pitchy black in varying degrees, in most pale-colored specimens vertex entirely ochraceous; pronotum ochraceous; scutellum dark to reddish brown; antenna pitchy brown with 3 or 4 basal segments brownish; ventral surfaces dark brown; legs ochraceous with apical portion of tibiae infuscate; length 3.8–4.0 mm ..... **vietnamensis, n. sp.**
- 4 ( 2). Pronotum yellowish brown with a broad, longitudinal discal marking blackish, elytron yellowish brown, with or without small humeral marking ..... 5  
 Not with above combination of characters ..... 7
- 5 ( 4). Pronotum with a distinct transverse furrow before middle; elytron entirely yellowish brown; head entirely black; pronotum reddish brown with longitudinal discal markings black; ventral surfaces black; antenna blackish with basal segments brownish; legs largely blackish ..... 6  
 Pronotum without distinct transverse furrow before middle; elytron yellowish brown with humeral markings blackish; head entirely black; pronotum reddish brown with longitudinal discal markings black; ventral surfaces black; antenna blackish with basal segments brownish; legs reddish brown with dorsal surfaces of femora infuscate; 5 mm (Pic, 1927; Yunnan; Fig. 23e) ..... **guillebeau**
- 6 ( 5). Elytral punctuation finer, excavation of head not bifurcate; body length longer; length 6.5 mm ..... **jeanvoinei**

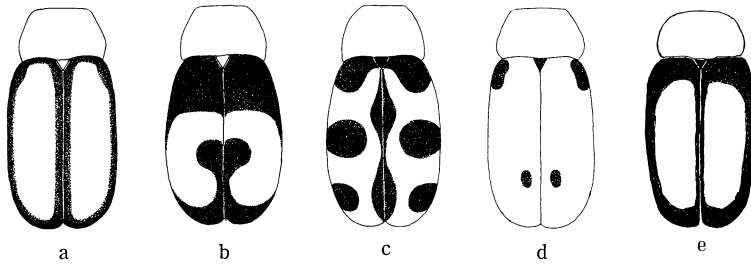


FIG. 19. a, *Smaragdina atrocincta*; b, *S. discoidalis*; c, *S. scalaris*; d, *S. duporti*; e, *S. dalatensis*.

- Elytral punctation stronger, excavation of head bifurcate; body length shorter; 4.0-4.5 mm ..... **laboissierei**
- 7 ( 4). Elytral margins narrowly to somewhat broadly bordered with black or blue; head yellowish with vertex and occiput black ..... 8
- Elytral margins not bordered with black or blue with disc pale ..... 9
- 8 ( 7). Elytron pale with basal, apical and outer ( $\pm$ ) borders broadly margined with bluish; pronotum pale or with a central pitchy spot; scutellum dark; metasternum dull; length 3.7-3.9 mm ..... **dalatensis, n. sp.**
- Elytron yellowish brown with all borders narrowly marginate with black; pronotum, scutellum, abdominal segments and legs yellowish brown; antenna yellowish brown with apical segments blackish; ventral surfaces of thorax blackish; length 3.0 mm ..... **atrocincta**
- 9 ( 7). Elytron with 1 or 2 sutural markings black ..... 10
- Elytron without any sutural markings ..... 11
- 10 ( 9). Elytron yellowish brown with basal marking covering nearly entire basal portion, mediosutural marking situated slightly behind middle, and apical marking black; pronotum, scutellum and ventral surfaces yellowish brown; head yellowish brown with vertex blackish; antenna mostly blackish; legs mostly yellowish brown and partly blackish; length 4 mm ..... **discoidalis**
- Elytron yellowish brown with basal, median and subapical markings and 2 elongate sutural markings black; pronotum yellowish brown, head blackish with anterior portion yellowish brown; antenna mostly blackish; scutellum and ventral surfaces of meso- and metathorax black, legs and abdominal segments mostly blackish and partly brownish; length 3.0-3.3 mm (Pic, 1927; Yunnan; Fig. 19c) .. **scalaris**
- 11 ( 9). Elytron with large basal and postmedian markings blackish ..... 12
- Elytron without large marking discally ..... 13
- 12 (11). Pronotum yellowish brown with a large median marking blackish; scutellum blackish; elytron yellowish brown with large basal and postmedian markings black, in some specimens these markings merging;

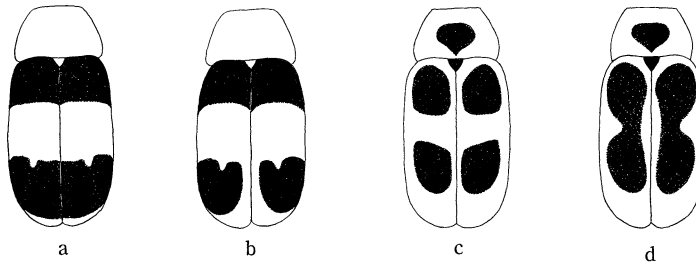


FIG. 20. a-b, *Smaragdina bicoloriceps*; c-d, *S. tonkinensis*.

head yellowish brown with vertex black; antenna dark brown with 4 basal segments paler; ventral surfaces black; legs yellowish brown; length 4 mm ..... **tonkinensis**

Pronotum entirely yellowish brown, scutellum yellowish brown; elytron yellowish brown with broad basal marking covering entire basal portion and large postmedian marking covering large part of posterior 1/2 of elytron; head yellowish brown with vertex blackish; antenna yellowish brown with apical segments brownish; ventral surfaces yellowish brown; legs yellowish brown with apical parts of tibiae and tarsi infusate; length 4.0-4.5 mm ..... **bicoloriceps**

13 (11). Scutellum short, subtriangular, unicolorous black or brown ..... 14

Scutellum elongate, subpentagonal, gradually narrowed posteriorly and its apex truncate; head ochraceous with vertex pitchy black, in some specimens blackish area reduced in varying degrees; pronotum ochraceous, in some specimens an ill-defined median marking blackish; elytron ochraceous with humeral and lateral markings blackish, in some specimens these markings reduced in size in varying degrees; scutellum blackish with apical portion brownish; ventral surfaces of abdominal segments blackish on basal segments and more brownish on apical segments; legs brownish with tarsi infusate; length 6.0-6.2 mm ..... **spenceri, n. sp.**

14 (13). Head black; elytron yellowish brown with humeral marking black; pronotum yellowish brown; scutellum and ventral surfaces blackish; antenna black with basal segments brownish; legs blackish with basal 1/4 of femora and basal 1/2 of tibiae yellowish brown; length 6.0 mm

..... **bicoloripes**

Head reddish brown; elytron yellowish brown with humeral and small postmedian markings blackish; pronotum yellowish brown; scutellum and ventral surfaces blackish; antenna blackish with basal segments brownish; legs yellowish brown with dorsoapical part of femora and dorsal part of tibiae blackish; length 5.5 mm ..... **duporti**



**Smaragdina atrocincta** (Pic)

Fig. 19a

*Cyaniris atrocincta* Pic, 1932, Mél. Exot. Entomol. **59**: 14 (Tonkin; PARIS).*Distribution.* N Vietnam.

No additional material.

**Smaragdina bicoloriceps** (Pic)

Fig. 20a-b

*Cyaniris bicoloriceps* Pic, 1929, Bull. Soc. Linn. Lyon **8**: 36 (Cochin China; PARIS).*Distribution.* S Vietnam.

No additional material.

**Smaragdina bicoloripes** (Pic)*Cyaniris bicoloripes* Pic, 1933, Mél. Exot. Entomol. **61**: 3 (Tonkin; PARIS).*Distribution.* N Vietnam.

No additional material.

**Smaragdina dalatensis** Kimoto & Gressitt, **new species**

Fig. 19c

Pale ochraceous with markings of black, blue or pitchy: head pale below and distally, black above frontoclypeus, including vertex, occiput and inner borders of eyes nearly to antennal insertions; antenna pitchy brown; prothorax pale; scutellum blue-black; elytron blue to pitchy blue for approximately basal  $\frac{1}{5}$  and apical  $\frac{1}{6}$  plus suture narrowly and external margin more broadly, with large discal area pale; ventral surfaces pale with metathorax largely pitchy brown; abdomen pale; legs pale with outer faces of tibiae and upper faces of distal tarsal segments brownish to reddish pitchy. Pronotum and elytron glabrous; head, antenna, venter and legs with fine to sparse silvery pubescence.

*Head* not quite as broad as prothorax, fairly flat and even between the very widely separated eyes; occiput shining, sparsely punctured; interocular black areas finely and closely punctured; frontoclypeus smooth, sparsely punctured, transversely raised across middle, emarginate apically. *Antenna* barely reaching base of elytron, strongly flattened and expanded beyond segment 3; segments 5-10 of similar width, each slightly broader than long; 4 and 11 slightly narrower, latter longer than broad. *Prothorax* 2× as broad as long, subtransverse anteriorly, subsinuate basally, evenly rounded at side and with disc subevenly convex and minutely punctulate. *Scutellum* triangular, a little longer than broad, smooth and nearly impunctate except at base. *Elytron* evenly rounded (conjointly) at apex, with sutural angle slightly rounded; surface rather deeply and strongly punctured, less markedly so toward apex. *Ventral surfaces* in large part finely and subclosely punctured. *Legs* with fore tibia very slightly longer than hind tibia; hind tarsal segment 1 slightly longer than 2, 3 nearly as long as 2 and last about as long as 1. *Length* 3.65 mm; breadth 1.95.

*Paratypes.* Two like holotype and 1 with a large pitchy spot on center of pronotum and elytral pale area a little smaller than in others. *Length* 3.7-3.9 mm; breadth 1.95-2.05.

*Holotype* (BISHOP 12,125), VIETNAM: Dalat, 1500 m, 26-27.IX.1960, C.M. Yoshimoto; 3 paratypes same data, (BISHOP, KIMOTO).

This species differs from *S. miyakei* Kimoto, of Taiwan, in having the pronotum almost impunctate, the head much more finely punctured between the eyes, and the elytra more closely punctured and completely bordered with dark; and from *S. atrocincta* (Pic) in being larger, with the prothorax more evenly rounded at side, the scutellum black instead of pale and the elytron with the base, apex and external

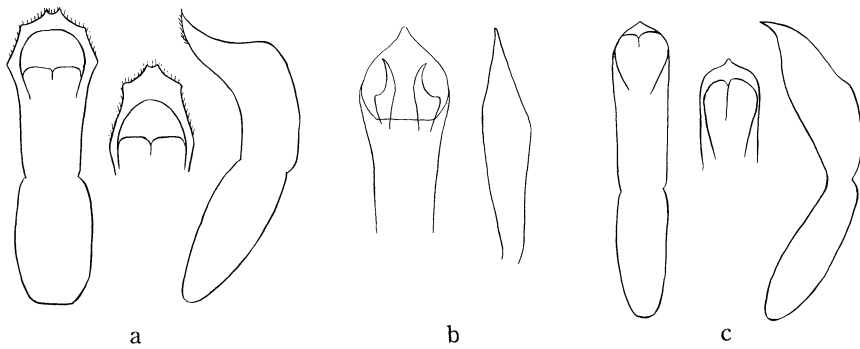


FIG. 21. Male genitalia: **a**, *Smaragdina divisa*; **b**, *S. laosensis*; **c**, *S. spenceri*.

margin more broadly bordered with dark (blue instead of black) and the suture more narrowly bordered.

***Smaragdina discoidalis* (Pic)**

Fig. 19b

*Cyaniris discoidalis* Pic, 1932, M  l. Exot. Entomol. **59**: 14 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Smaragdina divisa* (Jacoby)**

Fig. 21a

*Gynandrophthalma divisa* Jac., 1889, Ann. Mus. Civ. Genova **27**: 156 (Burma; GENOVA); 1908, Fauna India, Coleopt. **2**: 13 (Burma).

*Gynandrophthalma indica* Jacoby, 1895, Ann. Soc. Entomol. Belg. **39**: 263 (India: Belgaum); 1908, Fauna India, Coleopt. **2**: 117 (= *divisa*).

?*Smaragdina fuscicornis*: Ch  j  , 1964, Nat. Life SE Asia **3**: 261 (Thailand).

*Distribution.* India, Ceylon, Burma, Thailand.

We tentatively treat the record of *fuscicornis* Lacordaire from Thailand by Ch  j   (1964) under this species, because *fuscicornis* is not a species of *Smaragdina* but of *Aetheomorpha*.

*Material examined.* THAILAND: 10, Uthai Thani, IV.1963 (BANGKHEN); 1, Chiang Mai Prov, Chiang Dao, VI.1965, PDA (BISHOP).

***Smaragdina duporti* (Pic)**

Fig. 19d

*Cyaniris duporti* Pic, 1937, M  l. Exot. Entomol. **69**: 19 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Smaragdina jeanvoinei* (Pic)**

Fig. 23d

*Cyaniris jeanvoinei* Pic, 1932, M  l. Exot. Entomol. **59**: 13 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Smaragdina laboissierei* (Pic)**

Fig. 23c

*Cyaniris laboissierei* Pic, 1928, Mél. Exot. Entomol. **51**: 34 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Smaragdina laosensis* Kimoto & Gressitt, new species**

Fig. 21b, 23a

Head bluish black with frontoclypeus ochraceous; antenna pitchy black with 3 or 4 basal segments brownish; pronotum ochraceous, scutellum bluish black; elytron bluish black with apical portion ochraceous; ventral surfaces of prothorax ochraceous, meso- and metathorax and abdomen black; legs pitchy black with basal portion of tibiae brownish.

*Head* with vertex convex, with a distinct, elongate fovea at middle, surface smooth, shining, closely impressed with fine punctures. *Antenna* short, robust, with 3rd segment smallest, narrowest, hardly thickened apically; 4th distinctly widened apically, but clearly narrower and shorter than 5th; 5th much wider and longer than 4th, nearly 1.5× as wide as long, 5th to 7th subequal to each other in length and shape; 8th subequal to 7th in length but slightly narrower; 9th and 10th subequal to 8th in length but narrower; 11th slightly longer and narrower than 10th and its apex rounded. *Pronotum* transverse, about 1.6× as wide as long, anterior margin nearly straight, posterior margin slightly produced posteriorly at middle; lateral margin rounded, widest slightly behind middle, and narrowed anteriorly and posteriorly; surface generally convex, sparsely impressed with minute punctures, with slightly depressed area before middle of posterior margin where it is closely impressed with stronger punctures. *Scutellum* subtriangular, convex, sparsely impressed with minute punctures. *Elytron* elongate, subovate, slightly widened posteriorly and rounded at apex, surface convex, with 11 partly confused longitudinal rows of punctures, their interstices not raised and closely impressed with fine punctures. *Length* 3.2-3.5 mm.

Holotype (BISHOP 12,126), LAOS: Sedone Prov, Paksong, 17.V.1965, P.D. Ashlock. 1 paratopotype, same data as holotype (BISHOP). Paratypes: 2, same data as holotype but 18.V.1965; 1, Vientiane Prov, Tha Ngone, 30.IX.1965, native collr (BISHOP, KIMOTO).

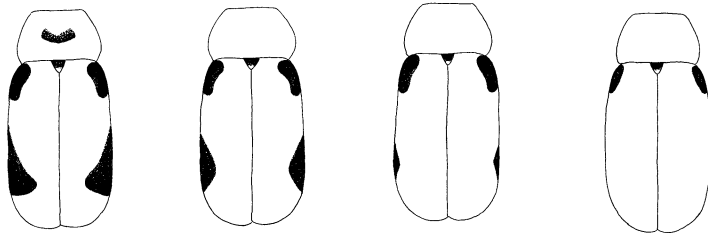
This new species somewhat resembles *Smaragdina laevicollis* (Jacoby), from S China but differs in having the elytron impressed by 11 partly confused longitudinal rows of punctures.

***Smaragdina spenceri* Kimoto & Gressitt, new species**

Fig. 21c, 22

Head ochraceous with vertex pitchy black, in some specimens blackish area reduced in varying degrees; antenna pitchy black with 3 basal segments reddish brown; pronotum ochraceous, in some specimens with ill-defined median marking blackish; scutellum pitchy black with apical 1/3 ochraceous; elytron ochraceous with humeral and lateral markings blackish, in some specimens markings reduced in varying degrees; ventral surfaces of abdominal segments blackish in basal segments and more brownish in apical segments; legs brownish with tarsi infusate.

*Head* with vertex slightly convex, surface very sparsely impressed with minute punctures at middle and covered with fine hairs and stronger punctures at interior part of ocular; frontoclypeus slightly depressed at anterior portion and impressed with pair of distinct oblique furrows posteriorly, more distinctly and closely punctate compared to vertex. *Antenna* short, robust, with 3rd segment smallest, narrowest, hardly thickened apically; 4th subtriangular, almost as long as wide; 5th subequal to 4th in length but slightly wider; 6th subequal to 5th in length but slightly narrower; 7th subequal to 6th in length and shape; 8th

FIG. 22. *Smaragdina spenceri* (variation).

as long as 7th but slightly narrower; 8th to 10th subequal to one another in length and shape; 11th elongate, deeply notched apically, and  $1.25\times$  as long as 10th and about  $1.6\times$  as long as wide. *Pronotum* transverse, nearly  $2\times$  as wide as long, anterior margin nearly straight, posterior margin slightly produced posteriorly at middle; lateral margin rounded, widest slightly behind middle, narrowed anteriorly and posteriorly; surface generally convex, sparsely impressed with minute punctures, with slight depressed area before middle of posterior margin. *Scutellum* elongate, subpentagonal, gradually narrowed posteriorly and its apex truncate, surface sparsely impressed with minute punctures and covered with fine hairs basally. *Elytron* elongate, subparallel-sided, rounded at apex, surface convex, impressed by 2 kinds of larger and smaller punctures on whole surface, their interstices smooth. *Length* 6.0–6.2 mm.

Holotype (BISHOP 12,127), CAMBODIA: Kiri Rom, 700 m, 31.III–7.IV.1960, N.R. Spencer. Paratopotypes: 2, same data as holotype (BISHOP, KIMOTO). Paratypes. LAOS: 2, Vientiane Prov, Ban Van Heua, 15.V.1965, native collr (BISHOP); 2, Ban Van Heua, 20 km E of Phou Khao Khoay, 15–31.V.1965, native collr; 1, same locality, 1–15.V.1965, J.A. Rondon (BISHOP). VIETNAM: Dalat, 1500 m, 29.IV–4.V.1960, L. & S. Quate (BISHOP); 1, 6 km S of Dalat, 1400 m, 9.VI.1961, 7.VII.1961, Spencer (BISHOP).

Jacoby's record of *Gynandrophthalma* sp. from Burma (1892) should be referred under this species. These specimens are now preserved in the Fea Collection in Geneva Civic Museum.

This new species somewhat resembles *Smaragdina octomaculata* (Chûjô), from Taiwan, but it differs in having the scutellum subpentagonal and the apex truncate and covered with fine hairs basally.

### *Smaragdina tonkinensis* (Lefèvre)

Fig. 20c–d

*Damia tonkinensis* Lef., 1891, C. R. Soc. Entomol. Belg. **35**: 254 (Tonkin; PARIS); 1893, Ann. Soc. Entomol. Fr. **62**: 114 (Tonkin).

*Gynandrophthalma mungphuensis* Jacoby, 1908, Fauna India, Coleopt. **2**: 109 (Sikhim; BMNH).—Kimoto, 1970, Khumbu Himal **3**: 413 (Nepal).

*Distribution.* Nepal, N India, Vietnam.

The type-specimen of *Damia tonkinensis* Lefèvre, preserved in the Paris museum, is labelled as "Sikhim" instead of Tonkin.

### *Smaragdina vietnamensis* Kimoto & Gressitt, new species

Fig. 23b

Head ochraceous with vertex pitchy black in varying degrees, in most pale-colored specimens vertex entirely ochraceous and in most dark-colored specimens almost entirely blackish; pronotum ochraceous;

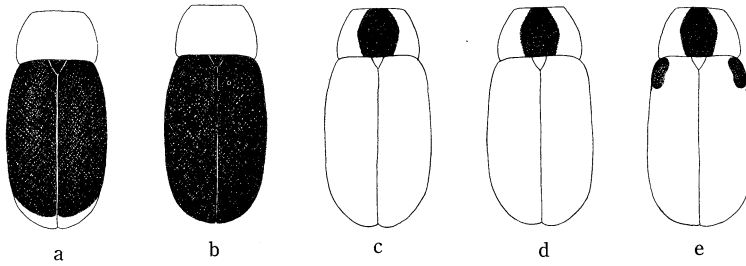


FIG. 23. a, *Smaragdina laosensis*; b, *S. vietnamensis*; c, *S. laboissieri*; d, *S. jeanvoinei*; e, *S. guillebeaui*.

scutellum dark to reddish brown; elytron entirely bluish black; ventral surfaces dark brown; antenna pitchy brown with 3 or 4 basal segments brownish; legs ochraceous with apical portion of tibiae infusate.

*Head* with vertex convex with a shallow longitudinal furrow at middle, surface smooth, sparsely impressed with fine punctures, especially on interior part of ocular. *Antenna* short, robust, with 3rd segment smallest, narrowest, hardly thickened apically; 4th distinctly widened apically, but clearly narrower and shorter than 5th; 5th much wider and longer than 4th, nearly 1.5× as wide as long, 5th to 7th subequal to each other in length and shape; 8th subequal to 7th in length but slightly narrower; 9th and 10th subequal to 8th in length but narrower; 11th slightly longer and narrower than 10th and its apex rounded. *Pronotum* transverse, about 1.6× as wide as long, anterior margin slightly rounded anteriorly, posterior margin slightly produced posteriorly at middle; lateral margin rounded, widest at 1/3 from basal margin, narrowed anteriorly and posteriorly; surface generally convex, sparsely impressed with minute punctures, with slightly depressed area before middle of posterior margin. *Scutellum* subtriangular, convex, sparsely impressed with minute punctures. *Elytron* elongate, subovate, slightly widened posteriorly and rounded at apex, surface convex, with 11 partly confused longitudinal rows of punctures, their interstices not raised but closely impressed with fine punctures. *Length* 3.8-4.0 mm.

**Holotype** (BISHOP 12,128), VIETNAM: Dak Song, 76 km SW of Ban Me Thuot, 870 m, 19-21.V.1960, S. & L.W. Quate. **Paratypes**: VIETNAM: 1, 7 km SE of Di Linh (Djiring), 990 m, 2.V.1960, R.E. Leech (BISHOP); 1, 50 km SE of Pleiku, 250 m, 14.V.1960, L. Quate (BISHOP); 3, 6 km S of Dalat, 1400-1500 m, 9.VI-7.VII.1961, N.R. Spencer (BISHOP); 2, Mt Lang Bian, 1500-2000 m, 19.V-8.VI.1961, Spencer (KIMOTO); 1, 76 km SW of Ban Me Thuot, 855 m, 20.V.1960, R.E. Leech (BISHOP).

This new species somewhat resembles *Smaragdina laosensis* Kimoto & Gressitt but differs in having a furrow at the middle of the vertex shallower and longer, the punctures much more sparsely impressed on the vertex, and the elytron entirely bluish black.

Subfamily CRYPTOCEPHALINAE

KEY TO GENERA OF CRYPTOCEPHALINAE

1. Posterior margin of pronotum sharply produced posteriorly at middle and pointed at apex; scutellum invisible from above or very small . . . . . 2
- Posterior margin of pronotum sometimes slightly produced posteriorly at middle but not sharply so and not pointed at apex; scutellum large, distinct, visible from above . . . . . 3
- 2 (1). Body roundish, prosternum with a pair of distinct ridges laterally; scutellum invisible from above . . . . . **Adiscus**

- Body oblong oval, prosternum without distinct ridges laterally; scutellum minute, but visible from above ..... **Bucharis**
- 3 (2). Eyes not very closely approximate, never touching ..... 4  
 Eyes very closely approximate, sometimes touching above ..... **Coenobius**
- 4 (3). Pronotum closely fitted to base of elytron; base of pronotum not marginate ..... 5  
 Pronotum not closely fitted to base of elytron; base of pronotum narrowly marginate (Redtenbacher, 1845; type: *Cryptocephalus hieroglyphicus* Laichart; Europe) ..... **Pachybrachys**<sup>6</sup>
- 5 (4). Antenna robust, preapical segments about as wide as long ... **Melixanthus**  
 Antenna slender, preapical segments more than 1.5× as long as wide ..... **Cryptocephalus**

### Genus *Adiscus* Gistel

- Adiscus* Gistel, 1857, Achthundert und zwanzig neue oder unbeschriebene wirbellose Thiere Vacuana **2**: 604 (orthotype: *Phaedon nigromaculatus* Redtenbacher).—Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey **7**: 1123.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 114.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(1): 141.
- Dioryctus* Suffrian, 1860, Linn. Entomol. **14**: 3.—Weise, 1903, Dtsch. Entomol. Z. **1903**: 33.—Jacoby, 1908, Fauna India, Coleopt. **2**: 176 (type: *Dioryctus porculus* Suffrian, from Ceylon).—Chûjô, 1954, Q. J. Taiwan Mus. **7**(3–4): 143.—Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey **7**: 1123 (= *Adiscus*).
- Atropidius* Chapuis, 1874, Genera Coleopt. **10**: 175 (orthotype: *A. improbus* nom. nud.).—Weise, 1895, Dtsch. Entomol. Z. **1895**: 327; 1903, op. cit.: 33 (= *Dioryctus*).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(1): 141 (*Arthropidius*; error).
- Falsodioryctus* Pic, 1955, Bull. Soc. Entomol. Mulhouse **1955**: 21 (orthotype: *F. sinensis* Pic; China).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 114 (= *Adiscus*).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(1): 141 (*Ealdodioryctus*; error).

### KEY TO SPECIES OF *Adiscus*

1. Dorsal surfaces entirely reddish brown, except for basal margin of elytron blackish ..... 2  
 Dorsal surfaces not entirely reddish brown ..... 3
- 2 (1). Head with anterior portion finely and closely punctate, vertex smooth, impunctate; reddish brown, antenna pitchy brown with basal 4 segments reddish brown; length 4.2 mm ..... **mouhoti**  
 Head finely and closely punctate; reddish brown, antenna reddish brown with 4 or 5 apical segments pitchy brown; length 2.5–3.0 mm .....  
 ..... **castaneus, n. comb.**
- 3 (1). Elytron not entirely black ..... 4  
 Elytron entirely shining black; reddish brown with terminal segments of antenna and ventral surfaces of abdominal segments, including pygidium, pitchy black; length 4.2–5.0 mm ..... **nigripennis**

6. Not yet recorded from the area of this study.

- 4 (3). Body length more than 3.0 mm ..... 5  
 Body length about 2.5 mm; elytron black with a round discal reddish brown marking, in some specimens discal marking enlarged, black area reduced in varying degrees and in most pale-colored specimens indicated only by some blackish spots; pronotum reddish brown with or without a pair of blackish markings somewhat ill-defined; reddish brown, antenna with apical segments pitchy brown ..... **nigroplagiatus**
- 5 (4). Elytron reddish brown with blackish markings (2:1) on disc, or sometimes these markings divided into smaller spots ..... 6  
 Dorsal surfaces reddish brown, elytron with humeri and basal portion blackish; reddish brown, with ventral surfaces in part blackish; length 3.0 mm ..... **humeralis**
- 6 (5). Pronotum reddish brown with anterior and basal markings blackish; reddish brown, ventral surfaces blackish with apical segment of abdomen and part of pygidium brownish; length 4.0 mm ..... **maculatithorax**  
 Pronotum reddish brown with basal markings blackish; elytron reddish brown with blackish markings somewhat variable (a, 3 black spots, 2 subbasal and 1 submedian; b, 4 spots, 2 subbasal and 2 submedian; c, black markings generally diminishing in size and divided into smaller spots, viz. subbasal spots consisting of 3 rather small spots and some minute spots, and submedian spots consisting of 1 smaller spot and some minute spots); ventral surfaces black; length 3.3-4.0 mm (Weise, 1912; Yunnan; Fig. 24b) ..... **maculata**

**Adiscus castaneus** (Jacoby), **new combination**

*Dioryctus castaneus* Jac., 1892, Ann. Mus. Civ. Genova **32**: 888 (Burma; GENOVA, BMNH); 1908, Fauna India, Coleopt. **2**: 179 (Burma).

*Distribution.* India, Thailand.

*Material examined.* THAILAND: 1, Doi Puli, 1300 m, VI.1965, Y. Miyatake (KU).

**Adiscus humeralis** (Pic)

Fig. 24a

*Dioryctus humeralis* Pic, 1922, Mél. Exot. Entomol. **35**: 14 (Yunnan; PARIS).

*Dioryctus auricacumen* Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 331, pl. 19, fig. 1 (China: Mt Omei; LINGNAN).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 117 (= *humeralis*).

*Adiscus humeralis*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 117, fig. 29a (China).

*Distribution.* China, Vietnam.

A part of the type series of *humeralis* Pic, in the Paris museum, is labelled as "Tonkin." No additional material.

**Adiscus maculatithorax** (Pic)

Fig. 24c

*Dioryctus maculatithorax* Pic, 1927, Mél. Exot. Entomol. **49**: 22 (Tonkin; PARIS).

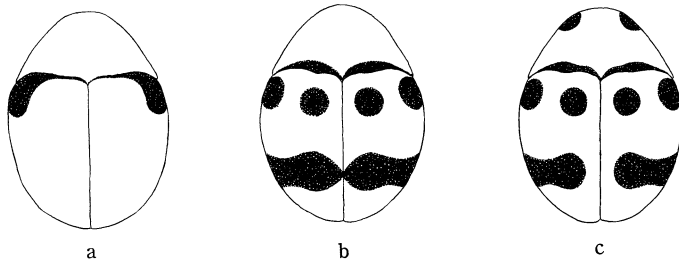


FIG. 24. a, *Adiscus humeralis*; b, *A. maculata*; c, *A. maculatithorax*.

*Distribution.* N Vietnam.

No additional material.

### *Adiscus mouhoti* (Baly)

*Dioryctus mouhoti* Baly, 1877, Trans. Entomol. Soc. London **1877**: 36 (Laos, Siam; BMNH).

*Dioryctus laetus* Weise, 1904, Arch. Naturgesch. **70**: 161 (China; ZMB). **New synonymy.**

*Dioryctus rubripennis* Pic, 1926, Mém. Exot. Entomol. **45**: 12 (China; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 118 (= *laetus*).

*Dioryctus grandis*: Hoffmann, 1937, Lingnan Sci. J. **16**(4): 632 (Hainan).—Gressitt, 1942, op. cit. **20**(2–4): 333 (Kwangtung).

*Adiscus laetus*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 118 (S China).

*Distribution.* Thailand, Laos, Hainan, S China.

No additional material.

### *Adiscus nigripennis* (Jacoby)

Fig. 26a

*Dioryctus nigripennis* Jac., 1890, Entomologist **23**: 89 (China; MCZ).

*Dioryctus major* Pic, 1927, Mém. Exot. Entomol. **45**: 12 (Tonkin; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 119 (= *nigripennis*).

*Falsodioryctus sinensis* Pic, 1955, Bull. Soc. Entomol. Mulhouse **1955**: 21 (China: Kuatun; STOCKHOLM).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 119 (= *nigripennis*).

*Adiscus nigripennis*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 115 (S China).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(1): 142 (Ryukyus).—Kimoto & Gressitt, 1966, Pac. Insects **8**(2): 495 (Ryukyus).

*Distribution.* S China, Vietnam, Ryukyu Is.

In the Ryukyu population, the male has the pronotum reddish brown and shiny black elytron, and the female has the pronotum reddish brown and yellowish brown elytron, with sutural, basal and lateral areas black.

No additional material.

### *Adiscus nigroplagiatus* (Jacoby)

Fig. 25

*Atropidius nigroplagiatus* Jac., 1903, Ann. Soc. Entomol. Belg. **47**: 92 (India; BMNH).

*Dioryctus nigroplagiatus*: Jacoby, 1908, Fauna India, Coleopt. **2**: 179 (India: Nilgiris).

*Distribution.* India, Thailand.



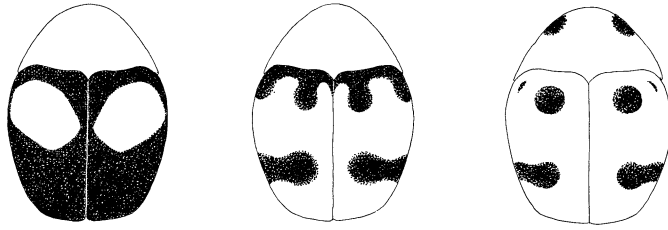


FIG. 25. *Adiscus nigroplagiatus* (variation).

The specimens taken from Doi Pui, Thailand are very variable in the markings of the dorsal surfaces. However, some of them do not differ in any way from the Indian specimen identified as "*nigroplagiatus* var." by Jacoby.

*Material examined.* THAILAND: 13, Chiang Mai Prov, Doi Pui, 1300 m, VI.1965, KM & YM (KV).

#### Genus *Bucharis* Baly

*Bucharis* Baly, 1865, Trans. Entomol. Soc. London ser. 3, 4(1): 61, pl. 3, fig. 6 (type: *Bucharis suffriani* Baly, from New Guinea, Mysol).—Chapuis, 1874, Genera Coleopt. 10: 178.—Weise, 1903, Dtsch. Entomol. Z. 1903: 33.—Gressitt, 1965, Pac. Insects 7(3): 399.

#### *Bucharis minor* (Pic), new combination

Fig. 26b

*Dioryctus minor* Pic, 1927, Mél. Exot. Entomol. 50: 3 (Tonkin; PARIS).

*Distribution.* Vietnam.

This species generally resembles species of *Coenobius*: subovate, convex, head with frontoclypeus strongly punctate, the narrowest width of interocular space nearly  $\frac{2}{3}$  as long as interantennal space; scutellum visible from above; antenna pitchy black with basal segments brownish; legs pitchy black with apical portion of tibiae and entire tarsi brownish; length 1.5–2.0 mm.

*Material examined.* VIETNAM: 9, 6 km SW of Dalat, 1550 m, IX.1960, on blossoms, JLG; 1, Di Linh (Djiring), IX.1960, JLG (BISHOP).

#### Genus *Coenobius* Suffrian

*Coenobius* Suffr., 1857, Linn. Entomol. 11: 61.—Chapuis, 1874, Genera Insect. 10: 177.—Jacoby, 1908, Fauna India, Coleopt. 2: 182 (type: *Coenobius triangulum* Suffrian, from Africa).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 119.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(1): 142.—Gressitt, 1965, Pac. Insects 7(3): 399.

*Inclica* Walker, 1859, Ann. Mag. Nat. Hist. ser. 3, 3: 53 (type: *Inclica solida* Walker; described as Byrrhidae).—Waterhouse, 1876, Trans. Entomol. Soc. London 1876: 15 (transferred to Chrysomelidae).—Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, 12: 137 (= *Coenobius*).

#### KEY TO SPECIES OF *Coenobius*

- |    |                              |   |
|----|------------------------------|---|
| 1. | Pronotum reddish brown ..... | 2 |
|    | Pronotum blackish .....      | 4 |

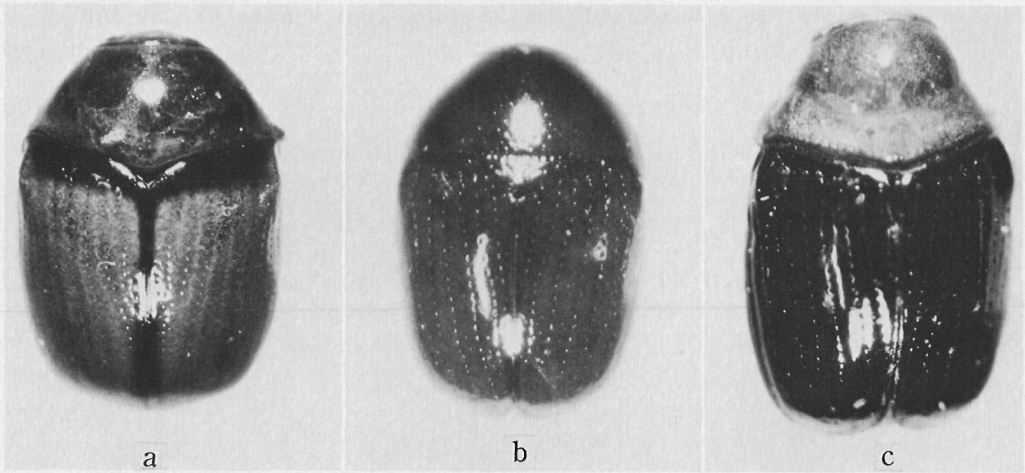


FIG. 26. a, *Adiscus nigripennis* (♀ from Ryukyus); b, *Bucharis minor*; c, *Coenobius birmanicus*.

- 2 (1). Elytron entirely blackish; pronotum with a pair of long, strong, transverse grooves laterally ..... 3  
 Elytron black with apical portion reddish brown, in some specimens reddish portion enlarged and ground color becomes reddish brown with blackish marking basally and interiorly; pronotum without a pair of strong transverse grooves; reddish brown with apical segments of antenna, scutellum and ventral surfaces of thorax black; legs reddish brown; length 3 mm ..... **subsemicinctus**
- 3 (2). Ventral surfaces pitchy black with prothorax and 5th abdominal segments reddish brown; head, pronotum and legs entirely reddish brown, antenna black with basal segments reddish; length 2.0–2.5 mm ..... **birmanicus**  
 Ventral surfaces entirely reddish brown; dorsum reddish brown, with elytron and scutellum shining black; antenna black with basal segments brownish and legs entirely reddish brown; length 2.3 mm .. **rubrithorax**
- 4 (1). Pronotum punctured throughout ..... 5  
 Pronotum nearly impunctate or sparsely impressed with distinct punctures at side and with a row of distinct punctures parallel to basal margin; black, head reddish brown to pitchy black; antenna yellowish brown with apical segments pitchy black; legs mostly reddish to yellowish brown; length 1.5–2.0 mm ..... **phungi**
- 5 (4). Pronotum extremely closely and strongly punctate, and diameter of punctures wider than their interstices; black, with labrum and legs yellowish brown; length 2.5 mm ..... **sculptatus**  
 Pronotum distinctly punctate, but diameter of punctures narrower than

their interstices; black, with labrum and basal segments of antenna yellowish brown; legs black; length 2 mm ..... **blaisei**

**Coenobius birmanicus** Jacoby

Fig. 26c

*Coenobius birmanicus* Jacoby, 1892, Ann. Mus. Civ. Genova **32**: 889 (Burma; GENOVA).

*Coenobius burmanicus* [sic]: Jacoby, 1908, Fauna India, Coleopt. **2**: 184 (Burma).

*Distribution.* Burma, Thailand, Vietnam.

*Material examined.* THAILAND: 1, Chiang Mai Prov, Doi Pui, 1300 m, VI.1965, KM (KU). VIETNAM: 2, Mt Lang Bian, 1500-2000 m, V-VI.1961, NRS; 1, 6 km S of Dalat, 1400-1500 m, VI-VII.1961, NRS (BISHOP).

**Coenobius blaisei** Pic

*Coenobius blaisei* Pic, 1926, Bull. Mus. Paris **50**: 76 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

**Coenobius phungi** Pic

*Coenobius phungi* Pic, 1927, Mél. Exot. Entomol. **50**: 4 (Tonkin; with var. *notaticollis* Pic; PARIS).

*Coenobius atriceps* Pic, 1932, Mél. Exot. Entomol. **59**: 12 (Tonkin; PARIS). **New synonymy.**

*Distribution.* Thailand, Vietnam.

*Material examined.* THAILAND: 20, Chiang Mai Prov, Doi Pui, 1685 m, VI.1965, YM; 2, Songkhla, VI.1965, YM (KU). VIETNAM: 2, Dalat, 1500 m, IX.1960, CMY; 3, Di Linh, IX-X.1960, CMY; 1, Dai Lanh, N of Nha Trang, XI-XII.1960, CMY (BISHOP).

**Coenobius rubrithorax** Pic

*Coenobius rubrithorax* Pic, 1940, Échange **56**: 4 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

**Coenobius sculptatus** Pic

*Coenobius sculptatus* Pic, 1932, Mél. Exot. Entomol. **59**: 12 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

**Coenobius subsemicinctus** Pic

*Coenobius subsemicinctus* Pic, 1943, Opusc. Mart. **11**: 15 (Indo-China; with var. *hanoiensis*, from Hanoi).

*Distribution.* Vietnam.

We could not trace the type-specimen of this species. This species is characterized in having the elytron bicolourous, black and red-brown.

No additional material.

Genus *Melixanthus* Suffrian

*Melixanthus* Suffr., 1854, Linn. Entomol. **9**: 8 (Orthotype: *M. intermedius* Suffr.; Borneo).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 169.

*Anteriscus* Weise, 1906, Dtsch. Entomol. Z. **1906**: 39 (type: *Cryptocephalus erythromelas* Suffrian).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 170.

KEY TO SPECIES OF *Melixanthus*

- |         |  |                            |
|---------|--|----------------------------|
| 1.      | Pronotum entirely brownish .....   | 2                          |
|         | Pronotum at least in part blackish .....   | 7                          |
| 2 ( 1). | Body length about 2 mm or shorter .....  | 3                          |
|         | Body length more than 3 mm .....   | 4                          |
| 3 ( 2). | Head pitchy black; general color pale yellowish brown, with humeri, metathorax, ventral surfaces of basal 4 segments of abdomen and basal margin of elytron pitchy brown; length 1.6–2.1 mm .....                            |                            |
|         | ..... <b>atricillus, n. comb.</b>  |                            |
|         | Head yellowish brown; general color pale yellowish brown, with humeri, metathorax and basal margin of elytron pitchy brown; in some specimens ventral surfaces of basal 4 segments of abdomen infuscate; length 1.6 mm ..... | <b>lutescens, n. comb.</b> |
| 4 ( 2). | Elytron entirely brownish except for margins .....   | 5                          |
|         | Elytron not entirely brownish .....  | 6                          |
| 5 ( 4). | Ventral surfaces entirely pale, elytron with basal margin black; ochraceous, antenna black with 4 or 5 basal segments brownish; length 3.0 mm .....  | <b>placidus</b>            |
|         | Ventral surfaces of thorax black, elytron with basal and sutural margins black; rufotestaceous, metathorax black; length 3 mm .....  | <b>atropectoralis</b>      |
| 6 ( 4). | Elytron yellowish brown with lateral stripe blackish; ochraceous, antenna black with 4 or 5 basal segments brownish; length 3.2 mm .....   | <b>adamsi</b>              |
|         | Elytron yellowish brown with large basal and apical markings black; yellowish brown, antenna black with 1st segment brownish, legs yellowish brown with apex of tibiae infuscate; length 5.0 mm .....                        | <b>innotaticollis</b>      |
| 7 ( 1). | Pronotum entirely black .....  | 8                          |
|         | Pronotum not entirely black, in part brownish .....  | 10                         |
| 8 ( 7). | Elytron without subapical pale-colored marking .....   | 9                          |
|         | Elytron black with basal, lateral and subapical markings brownish; in some specimens basal and lateral markings united; black, antenna with basal segments brownish; length 2.5 mm .....                                     | <b>siamensis</b>           |
| 9 ( 8). | Elytron brownish with basal and apical portions blackish; body black, antenna and legs entirely black; length 4.2–5.0 mm .....   | <b>laboissierei</b>        |
|         | Elytron brownish with humeral and postmedian transverse band   |                            |

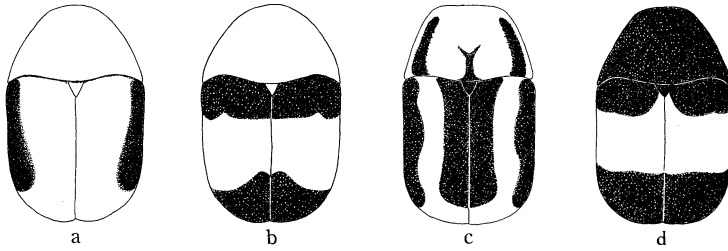


FIG. 27. a, *Melixanthus adamsi*; b, *M. innotaticollis*; c, *M. miyatakei*; d, *M. laboissierei*.

- black; body black, ventral surfaces of abdomen brownish, antenna black with 4 or 5 basal segments brownish; length 3.0 mm . . . . . **rufiventris** (part)
- 10 ( 7). Pronotum largely black with lateral portion brownish . . . . . 11
- Pronotum largely brownish with markings blackish . . . . . 12
- 11 (10). Ventral surfaces entirely blackish; shining black, prothorax black with lateral portion brownish, elytron yellowish brown with humeral and apical markings blackish, antenna black with 4 or 5 basal segments brownish; length 2.5 mm . . . . . **atriventris**
- Ventral surfaces of abdomen brownish; shining black, pronotum black with lateral portion brownish, elytron yellowish brown with humeral and subapical marking black; antenna black with 4 or 5 basal segments brownish; length 2.8-3.0 mm . . . . . **rufiventris** (part)
- 12 (10). Pronotum yellowish brown with a pair of lateral stripes and a median stripe blackish, the latter bifurcate at apex; elytron yellowish brown with broad lateral and sutural stripes pitchy black; head and ventral surfaces partly brownish and partly blackish; antenna pitchy brown with basal segments paler and legs entirely brownish; length 2.0 mm . . . . . **miyatakei, n. sp.**
- Pronotum brownish with a pair of large markings blackish; elytron black with a small scutellar marking brownish; black, anterior portion of head, basal segments of antenna, sides of abdomen, pygidium and legs brownish; length 3.5 mm . . . . . **mausonensis**

**Melixanthus adamsi** Baly

Fig. 27a

*Melixanthus adamsi* Baly, 1877, Trans. Entomol. Soc. London **1877**: 216 (Danes Is, Canton River; BMNH).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 170 (S China).

*Distribution.* S China, Vietnam.

*Material examined.* LAOS: Muong Sing, NW of Luang Prabang, 650 m, VI.1960, LWQ (BISHOP).

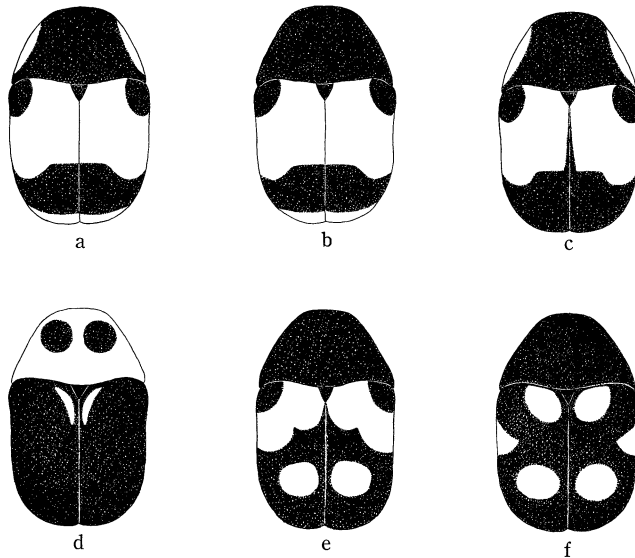


FIG. 28. a–b, *Melixanthus rufiventris*; c, *M. atriventris*; d, *M. mausonensis*; e–f, *M. siamensis*.

***Melixanthus atricillus* (Suffrian), new combination**

*Cryptocephalus atricillus* Suffr., 1854, Linn. Entomol. **9**: 80 (Siam).

*Distribution.* Thailand, Vietnam.

We could not trace the type-specimen of this species. It is evident from the original description that this species should be treated as a species of *Melixanthus*, because it has the preapical antennal segments widened.

*Material examined.* THAILAND: 1, Bangkok, I.1968, KB (KIMOTO). VIETNAM: 2, M'drak, E of Ban Me Thuot, 400-600 m, XII.1960, CMY (BISHOP).

***Melixanthus atriventris* Pic**

Fig. 28c

*Melixanthus atriventris* Pic, 1927, Bull. Soc. Linn. Lyon **6**: 6 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Melixanthus atropectoralis* Pic**

*Melixanthus atropectoralis* Pic, 1927, M el. Exot. Entomol. **50**: 6 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Melixanthus innotaticollis* Pic**

Fig. 27b

*Melixanthus innotaticollis* Pic, 1930, Bull. Soc. Zool. Fr. **54**: 612 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

### **Melixanthus laboissierei** Pic

*Melixanthus laboissierei* Pic, 1937, Mél. Exot. Entomol. **69**: 18 (Tonkin).

*Distribution.* Vietnam.

We could not trace the type-specimen of this species.

*Material examined.* VIETNAM: 1, Fyan, 1200 m, 11.VII-9.VIII.1961, N.R. Spencer (BISHOP).

### **Melixanthus lutescens** (Suffrian), **new combination**

*Cryptocephalus lutescens* Suffr., 1854, Linn. Entomol. **9**: 82 (Siam).

*Distribution.* Thailand, Laos, Vietnam.

We could not trace the type-specimen of this species. This species is closely related to *atricillus* Suffrian, from Thailand, and *tubu* Chûjô from Taiwan. There is a possibility that these species might prove to be the same.

*Material examined.* THAILAND: 1, Slika Falls, I.1968, KB (KIMOTO). LAOS: 1, Sedone Prov, Pakse, V.1967, NC (BISHOP). VIETNAM: 1, M'drak, E of Ban Me Thuot, 400-600 m, XII.1960, CMY; 1, Pleiku, 700 m, V.1960, LWQ (BISHOP).

### **Melixanthus mausonensis** Pic

Fig. 28d

*Melixanthus mausonensis* Pic, 1940, Échange **56**: 4 (Tonkin; PARIS).

*Distribution.* Vietnam.

No additional material.

### **Melixanthus miyatakei** Kimoto & Gressitt, **new species**

Fig. 27c

Head yellowish brown with interior portion of ocular, a longitudinal stripe on middle and top of vertex pitchy black; antenna pitchy brown with 5 or 6 basal segments yellowish brown; pronotum yellowish brown with a pair of longitudinal lateral stripes starting from basal margin and short longitudinal median stripe, which is bifurcate at apex, black; scutellum black; elytron yellowish brown with broad lateral and sutural stripes pitchy black; ventral surfaces largely pitchy black, but in some specimens median portion of abdominal segments brownish; legs entirely yellowish brown; pygidium mostly yellowish brown.

*Head* with vertex smooth, shining, strongly and closely punctate, and with longitudinal shallow sulcus on middle, frontoclypeus closely and distinctly punctate. *Antenna* robust, 1st segment longest, robust, slightly curved; 2nd robust, nearly 1.5× as long as wide, and about ½ as long as 1st; 3rd slightly shorter than 2nd, slenderer; 4th slightly longer than 3rd, slender; 5th subequal to 4th in length and shape; 6th subtriangular, slightly longer than 5th, 7th as long as 6th but more robust, 7th to 10th subequal to one another in length and shape; 10th nearly as long as or slightly longer than wide; 11th slightly longer than 10th and its apex pointed. *Pronotum* transverse, nearly 2× as wide as long, convex, smooth, shining, closely impressed with distinct punctures. *Scutellum* subtriangular, short, nearly as long as wide, surfaces smooth, shining, sparsely impressed with minute punctures. *Elytron* subparallel-sided, rounded at apex, surface closely and confusedly impressed with distinct punctures. *Pygidium* with apical margin widely rounded. *Length* 2.0 mm.

Holotype (KYUSHU UNIV. TYPE NO. 2185), THAILAND: Chiang Mai Prov, Doi Suthep, 1000 m, 18.VI.1965, Y. Miyatake. 1 paratopotype, same data as holotype (BISHOP).

This new species resembles *Melixanthus atricillus* Suffrian and *M. lutescens* Suffrian, but differs in having the elytral punctures confusedly impressed, not arranged in 11 longitudinal regular rows, and by having a pair of lateral and a median stripes on the pronotum and black broad lateral and sutural stripes on the elytron.

### **Melixanthus placidus** Baly

*Melixanthus placidus* Baly, 1877, Trans. Entomol. Soc. London **1877**: 217 (China; BMNH).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 170 (China).

*Melixanthus pallidipennis* Pic, 1922, Mém. Exot. Entomol. **37**: 8 (Tonkin).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 145 (= *Cryptocephalus brevebilineatus* Pic). **New synonymy.**

*Distribution.* Thailand, Vietnam, China.

Gressitt & Kimoto (1961) treated *pallidipennis* Pic as a synonym of *Cryptocephalus brevebilineatus* Pic; however, this treatment seems to be erroneous. We could not trace the location of the type of this species. However, we found the specimens identified by Pic in the Paris museum. These specimens are without doubt different from *Cryptocephalus brevebilineatus* Pic, as they have the preapical antennal segments wider and the scutellum shorter. Refer also to *Cryptocephalus brevebilineatus* Pic.

*Material examined.* THAILAND: 1, Chiang Mai Prov, Mae Sa Waterfall, VI.1965, KM (KU). VIETNAM: 1, Tonkin: Hoa Binh (FREY).

### **Melixanthus rufiventris** Pic

Fig. 28a–b

*Melixanthus rufiventris* Pic, 1926, Mém. Exot. Entomol. **45**: 11 (Tonkin; PARIS).

*Melixanthus rufiventris* var. *reductus* Pic, 1940, Échange **56**: 4 (Tonkin).

*Distribution.* Vietnam.

No additional material.

### **Melixanthus siamensis** Jacoby

Fig. 28e–f

*Melixanthus siamensis* Jac., 1905, Fasciculi Malayensis, Appendix 2: 3 (Siam: Malay State; BMNH).

*Distribution.* Thailand.

No additional material.

## **Genus *Cryptocephalus* Müller**

*Cryptocephalus* (Geoffroy, 1762, Hist. Insect. Paris **1**: 231; nom. nud.).—Müller, 1764, Fauna Insect. Fridrich.: 13.—Fabricius, 1801, Syst. Eleuth. **2**: 42.—Latreille, 1810, Considerations generales: 432 (type designated as *Chrysomela seticea* Linnaeus).—Marseul, 1875, Abeille **13**: 10.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 121.—Gressitt, 1965, Pac. Insects **7**(3): 407.—Silfverberg, 1978, Not. Entomol. **58**: 117 (nomenclature).

*Physicerus* Chevrolat, 1837, in Dejean, Coleopt. Cat. ed. 3: 444 (monotypic: *Cryptocephalus speciosus* Guérin).—Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey **7**: 1123 (as subgenus of *Cryptocephalus*).



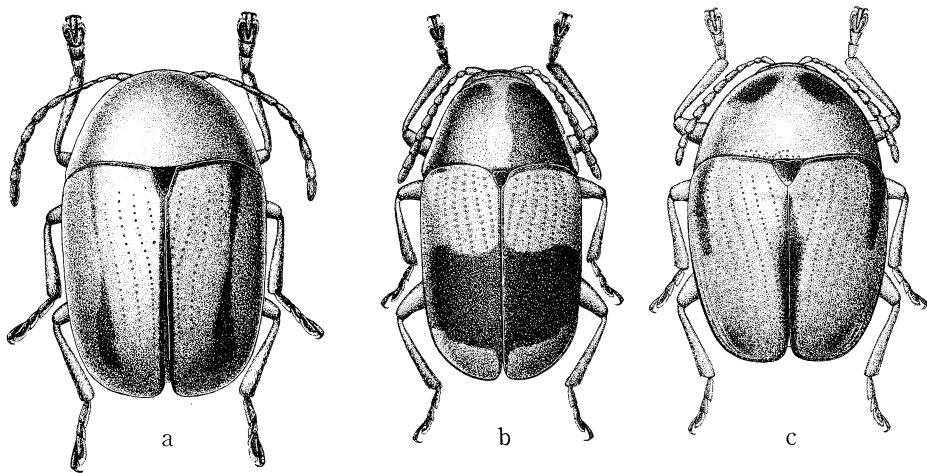


FIG. 29. a, *Cryptocephalus brevebilineatus*; b, *C. inhumeralis*; c, *C. lingnanensis*.

*Strigophorus* Chevrolat, 1837, op. cit.: 446.

*Homalopus* Chevrolat, 1837, op. cit.: 446.

*Disopus* Chevrolat, 1837, op. cit.: 449.—Stephens, 1839, Man. Br. Coleopt.: 304.—Redtenbacher, 1845, Gattung. Dtsch. Käferfauna: 118; 1849, Fauna Austriaca: 572.—Seidlitz, 1875, Fauna Baltica: 474.—Rey, 1883, Rev. d'Entomol. 2: 259.—Weise, 1885, Dtsch. Entomol. Z. 28: 424.—Burlini, 1955, Mem. Soc. Entomol. Ital. 34: 245.—Lopatin, 1965, Acta Entomol. Bohemoslov. 62(6): 452 (as subgenus of *Cryptocephalus*).

*Protophysus* Chevrolat, 1837, in Dejean, Coleopt. Cat. ed. 3: 449.—Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey 7: 1123 (type: *Cryptocephalus lobatus* Fabricius = *Cryptocephalus schaefferi* Schrank).

*Taxaris* Gistel, 1837, Syst. Insect.: 404.—Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey 7: 1123 (= *Disopus*).

*Mitocera* Saunders, 1842, Ann. Mag. Nat. Hist. ser. 1, 10: 70; 1945, Trans. Entomol. Soc. London 4(2): 151.—Gressitt, 1965, Pac. Insects 7(3): 417 (as subgenus of *Cryptocephalus*).

*Dicenopsis* Saunders, 1842, Proc. Entomol. Soc. London 1842: 45.

*Ochrosopsis* Saunders, 1842, op. cit.: 46; 1845, Trans. Entomol. Soc. London 4(2): 151.—Baly, 1877, Trans. Entomol. Soc. London 1877: 30.—Gressitt, 1965, Pac. Insects 7(3): 419 (as subgenus of *Cryptocephalus*).

*Idiocephala* Saunders, 1845, Trans. Entomol. Soc. London 4(2): 142 (type: *Cryptocephalus speciosus* Guérin).—Baly, 1877, Trans. Entomol. Soc. London 1877: 31.

*Proctophysus* Redtenbacher, 1845, Gattung. Dtschen Käferfauna: 118.—Weise, 1898, Arch. Naturgesch. 64: 187.—Burlini, 1955, Mem. Soc. Entomol. Ital. 34: 241.—Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey 7: 1123 (= *Protophysus*).—Lopatin, 1965, Acta Entomol. Bohemoslov. 62(6): 452 (type: *Cryptocephalus schaefferi* Schrank); 1977, Chrysomelidae Central Asia and Kazakhstan: 72 (as subgenus of *Cryptocephalus*).

*Canthostethus* Haldeman, 1849, J. Acad. Nat. Sci. Philadelphia (n. ser.), 1: 246.

*Mylassa* Stål, 1857, Öfvers. Vetensk.-Akad. Förh. 14: 60.—Baly, 1877, Trans. Entomol. Soc. London 1: 32.

*Mecostethus* Stål, 1857, op. cit. 14: 61.

*Euphyma* Baly, 1877, Trans. Entomol. Soc. London 1877: 224.

*Heterodactylus* L. Medvedev, 1963, Entomol. Res. Kirgiz. ser. B, 2: 38 (type: *Cryptocephalus macrodactylus* Gebler).—Lopatin, 1965, Acta Entomol. Bohemoslov. 62(6): 454; 1977, Chrysomelidae Central Asia and Kazakhstan: 77 (as subgenus of *Cryptocephalus*).

*Asiopus* Lopatin, 1965, Acta Entomol. Bohemoslov. 62(6): 452 (type: *Cryptocephalus flavicollis* Fabricius; as subgenus of *Cryptocephalus*); 1977, Chrysomelidae Central Asia and Kazakhstan: 86.

*Burlinius* Lopatin, 1965, op. cit.: 454 (type: *Cryptocephalus fulvus* Goeze; as subgenus of *Cryptocephalus*); 1977, op. cit.: 73.

KEY TO SPECIES OF *Cryptocephalus*

- |          |   |                               |
|----------|---|-------------------------------|
| 1.       | Elytron entirely black .....  | 2                             |
|          | Elytron not entirely black .....  | 4                             |
| 2 ( 1).  | Dorsal surfaces not entirely black, partly brownish .....   | 3                             |
|          | Entirely black with basal segments of antenna reddish; length 4 mm .....  | <b>nigricolor</b>             |
| 3 ( 2).  | Elytron entirely black; head, thorax, abdomen, antenna and legs entirely yellowish brown; length 5–6 mm .....   | <b>infraflavus</b>            |
|          | Elytron entirely black, pronotum black with a large discal band reddish brown; black, anterior portion of head, basal segments of antenna, ventral surfaces of thorax, base of tibiae and tarsus of anterior legs, a part of ventral surfaces of abdomen reddish brown; length 5.5 mm ..... | <b>vitticollis</b>            |
| 4 ( 1).  | Dorsal surfaces entirely reddish to brownish, in some specimens with elytral margin entirely or in part blackish .....  | 5                             |
|          | Dorsal surfaces not entirely reddish to brownish, but in part blackish .....  | 12                            |
| 5 ( 4).  | Elytral margins not entirely blackish .....   | 6                             |
|          | Elytron yellowish brown with basal, lateral, apical and sutural margins entirely black; head, pronotum ventral surfaces and legs reddish brown; antenna blackish with basal segments brownish; length 4.5 mm .....  | <b>laosensis</b>              |
| 6 ( 5).  | Ventral surfaces entirely black .....   | 7                             |
|          | Ventral surfaces entirely brownish .....  | 8                             |
| 7 ( 6).  | Dorsal surfaces entirely reddish brown with basal margin of elytron black; legs black with basal portion of tibiae brownish; length 6.0–7.5 mm .....  | <b>nigriceps</b>              |
|          | Dorsal surfaces reddish to yellowish brown with sutural margin of elytron black, legs pale to dark brown with femora pitchy black; length 3.0–3.5 mm .....  | <b>brevebilineatus</b> (part) |
| 8 ( 6).  | Legs entirely yellowish brown .....   | 9                             |
|          | Legs yellowish brown with tibiae black, pronotum wider than 2× as wide as long; entirely reddish brown; antenna brownish with apical segments blackish; length 6.0 mm .....   | <b>punctatobrunnescens</b>    |
| 9 ( 8).  | Elytron entirely reddish to yellowish brown .....   | 10                            |
|          | Apical ½ of elytron much paler than basal ½; yellowish to reddish brown; length 4.5–5.0 mm .....  | <b>bruneopunctatus</b>        |
| 10 ( 9). | Body length longer than 4.0 mm .....  | 11                            |

- Body length shorter; yellowish brown to reddish brown, basal margin of elytron blackish; length 2.2-2.5 mm ..... **nigrobasalis, n. sp.**
- 11 (10). Eyes as widely separated above as antennal insertions; length 4.5-7.0 mm ..... **gestroi**  
 Eyes less widely separated than antennal insertions; length 4-5 mm (Gressitt, 1942; S China, Hainan). ..... **subunicolor**
- 12 ( 4). Elytron with humerus and basal portion narrowly pitchy black; reddish to yellowish brown, with sutural, lateral and apical margins of elytron black; antenna dark brown with basal segments paler, legs yellowish to reddish brown; length 5 mm ..... **lineatotibialis**  
 Not with above combination of characters ..... 13
- 13 (12). Pronotum entirely black, elytron with a distinct transverse median black band ..... 14  
 Not with above combination of characters ..... 19
- 14 (13). Legs entirely black ..... 15  
 Legs brownish with posterior femora in part blackish ..... 17
- 15 (14). Elytron with transverse median band reaching both sutural and lateral margins ..... 16  
 Elytron with transverse median band not reaching sutural and lateral margins; head, ventral surfaces, antenna and legs black; length 5 mm ..... **externereductus**
- 16 (15). Elytron with a small black humeral marking; head, ventral surfaces and legs entirely black; antenna blackish with basal segments brownish; length 4 mm ..... **unifasciatus**  
 Elytron with a large black subbasal marking covering humeri; head black with a yellowish marking, antenna black with basal segments reddish; ventral surfaces and legs black; length 3.5-4.0 mm .. **vitalisi**
- 17 (14). Elytral humeri with distinct blackish marking ..... 18  
 Elytral humeri without distinct humeral marking; head black with labrum brownish; antenna and ventral surfaces black; legs yellowish brown with posterior femora in part blackish; length 4 mm ..... **humeroobliteratus**
- 18 (17). Elytral suture widely covered with blackish marking; head black, antenna black with basal segments brownish; ventral surfaces black; legs yellowish brown with posterior femora infuscate; length 3-4 mm ..... **sublunulatus**  
 Elytral suture not widely covered with blackish marking; head and ventral surfaces black; antenna black with basal segments brownish; legs yellowish brown with posterior femora blackish; length 3.5 mm ..... **baolacanus**
- 19 (13). Pronotum not entirely black ..... 20  
 Pronotum entirely black, elytron black with anterior and posterior

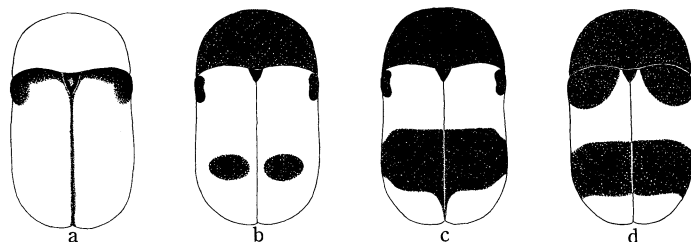


FIG. 30. a, *Cryptocephalus lineatotibialis*; b, *C. externereductus*; c, *C. unifasciatus*; d, *C. vitalisi*.

- markings reddish; anterior marking half-moon shaped; general color black; length 4 mm ..... **zersimus**
- 20 (19). Pronotum black with lateral portion brownish, elytron black with scutellar and lateroapical markings brownish; legs entirely black; head and ventral surfaces black; antenna black with basal segments brownish; length 8 mm ..... **crassipennis**
- Not with above combination of characters ..... 21
- 21 (20). Pronotum partly blackish and partly brownish, and elytron with a transverse median black band ..... 22
- Not with above combination of characters ..... 31
- 22 (21). Pronotum distinctly punctate ..... 23
- Pronotum nearly impunctate ..... 25
- 23 (22). Elytral humeri black ..... 24
- Elytral humeri not black; elytron yellowish brown with a transverse median black band; pronotum yellowish brown with a pair of large elongate black markings; head yellowish brown with vertex blackish; antenna black with basal segments brownish; ventral surfaces yellowish brown; legs yellowish brown with median portion of femora, apex of tibiae and tarsi infuscate; length 4 mm ..... **inhumeralis**
- 24 (23). Pronotum mostly blackish with basal portion narrowly brownish, scutellum black, elytron yellowish brown with basal and post-median markings blackish; rest of body black, legs in part reddish brown; length 2 mm (Pic, 1920; Yunnan, China; Fig. 34a) ..... **curtipennis**
- Pronotum reddish brown with median, lateral and basal markings blackish; scutellum black; elytron reddish brown with transverse subbasal, median and apical markings black, in some specimens elytral markings reduced and subbasal markings divided into humeral and interior markings; head reddish brown with vertex in part blackish; antenna pitchy black with basal segments paler; ventral surfaces black with prothorax brownish; legs black with basal 2/3 of femora reddish brown; length 4.5–5.5 mm ..... **trifasciatus**
- 25 (22). Pronotum with large blackish marking or largely blackish ..... 26

- Pronotum reddish brown with blackish marking minute, elytron reddish brown with a basal marking and a transverse median band black, in some specimens basal marking divided in 2; head reddish brown with vertex in part blackish; ventral surfaces black with basal portion of 1-4 basal segments yellowish brown; legs yellowish brown with basal portion of femora blackish; length 6 mm . . . . . **anceyi**
- 26 (25). Elytron yellowish to reddish brown with humeri and a median transverse basal band blackish . . . . . 27
- Elytron yellowish to reddish brown with blackish basal and median transverse bands . . . . . 29
- 27 (26). Legs entirely brownish or in part infusate . . . . . 28
- Legs entirely black; head black with labrum brownish; antenna and ventral surfaces mostly blackish; length 8 mm . . . . . **pallidilabris**
- 28 (27). Pronotum black with lateral portion yellowish brown; legs yellowish brown with median and posterior femora infusate; elytron yellowish brown, with black humeral spot and transverse band behind middle angularly widened at suture; ventral surfaces black with sides of abdominal segments brownish; length 4 mm . . . . . **angulatofasciatus**
- Pronotum brownish with a pair of elongate markings black; legs entirely yellowish brown; elytron yellowish brown with humeral and postmedian transverse band black; ventral surfaces pitchy black with lateral portion of each abdominal segment brownish; length 4.0-4.7 mm . . . . . **bifurcatus, n. sp.**
- 29 (26). Smaller than 5.0 mm . . . . . 30
- Larger than 5.0 mm; dorsal surfaces reddish brown, pronotum with a pair of large, elongate black markings; elytron with a large, sub-basal and a median band black; ventral surfaces largely black with pro-, mesothorax, anterior portion of metathorax, and middle of anterior portion of 1st abdominal segment yellowish to reddish brown; legs entirely reddish brown; length 7.5-8.2 mm . . . . . **magnus, n. sp.**
- 30 (29). Smaller than 3.0 mm; elytron yellowish brown with interior  $\frac{2}{3}$  of basal margin free from blackish subbasal band, and blackish median band situated slightly behind middle; legs entirely reddish brown; length 2.7-3.2 mm . . . . . **yoshimotoi, n. sp.**
- Larger than 4.0 mm; elytron yellowish brown with entire basal margin covered by a blackish basal band, and blackish median band situated almost at middle; legs entirely yellowish brown; length 4.0-5.0 mm . . . . . **crucipennis**
- 31 (21). Dorsal surfaces reddish to yellowish brown, elytron with a median transverse black band . . . . . 32

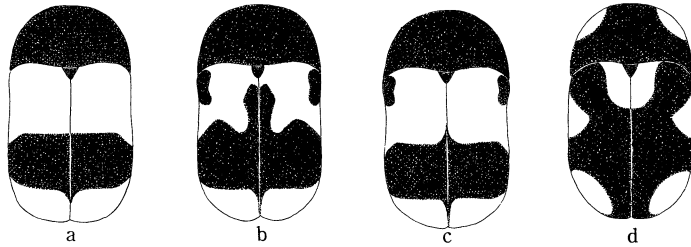


FIG. 31. a, *Cryptocephalus humerobliteratus*; b, *C. sublunulatus*; c, *C. baolacanus*; d, *C. crassipennis*.

- Not with above combination of characters ..... 33
- 32 (31). Elytron with humeral marking and a median transverse band blackish; reddish to yellowish brown; body yellowish brown, ventral surfaces mostly blackish; legs yellowish brown with posterior femur partly infuscate; length 4 mm ..... **bicoloricornis**
- Elytron with a blackish median transverse band; length 4 mm ..... **vietnamensis**
- 33 (31). Elytron brownish with a large basal marking and an apical marking black; pronotum brownish with a pair of black markings; in some specimens these markings joined in middle ..... 34
- Not with above combination of characters ..... 35
- 34 (33). Body longer; pronotum ochraceous with a pair of large black markings; elytron ochraceous with a large humeral marking, an apical marking, and sutural and lateral margins black; rest of body ochraceous, antenna pitchy black with 2 or 3 basal segments brownish, metathorax and legs mostly pitchy black; length 5 mm ..... **bimaculicollis, n. comb.**
- Body length shorter; pronotum yellowish brown, with a pair of blackish markings which are joined in middle; elytron yellowish brown with a basal and an apical marking together with sutural and lateral margins black; yellowish brown, head with middle of vertex, interior portion of eye black, metathorax pitchy black, ventral surfaces of abdomen dark brown with apex of 5th segment yellowish brown; legs with apical portion of tibia infuscate; length 3.0 mm ..... **luteofasciatus, n. comb.**
- 35 (33). Pronotum reddish to yellowish brown and elytron blackish with a large, round median brownish marking ..... 36
- Not with above combination of characters ..... 39
- 36 (35). Elytron with a large brownish marking in middle ..... 37
- Elytron black with a large reddish brown postscutellar marking; body rufotestaceous; length 5 mm ..... **tixieri**
- 37 (36). Elytral marking transverse or round, body longer than 4.0 mm .... 38

- Elytral marking oblique, legs entirely reddish brown; body reddish brown, antenna pitchy black with basal segments paler; length 3.5 mm ..... **taravellieri**
- 38 (37). Elytral marking transverse, legs black with basal portion of femora brownish; head, thorax, ventral surfaces yellowish brown; length 5.0 mm ..... **lateflavonotatus**
- Elytral marking round, ventral surfaces entirely yellowish brown; legs yellowish brown with tibiae and tarsi blackish; length 4.0 mm ..... **bioculatus**
- 39 (35). Pronotum reddish brown with a pair of fairly large black markings, elytron black with a large, round median reddish brown marking; body yellowish brown, head with labrum and interior portion of eye blackish; antenna black with basal segments brownish; ventral surfaces with meso- and metathorax blackish; legs mostly pitchy brown; length 4.0-4.5 mm ..... **bimaculicollis**
- Not with above combination of characters ..... 40
- 40 (39). Posterior 1/3 of elytral suture widely bordered by a black stripe; dorsal surfaces reddish to yellowish brown; pronotum finely but distinctly punctate ..... 41
- Not with above combination of characters ..... 43
- 41 (40). Elytron reddish to yellowish brown, with humeral, subbasal, postmedian markings black; pronotum finely but distinctly punctate .... 42
- Dorsal surfaces yellowish brown, with humeral marking and apical portion of sutural margin black; body reddish brown, ventral surfaces reddish brown with metathorax blackish; length 4 mm ..... **subsuturalis**
- 42 (41). Pronotum reddish brown with a pair of black markings; body reddish brown, elytron with humeral, subbasal and postmedian markings, lateral margin and sutural marking covering on posterior portion black; antenna black with 5 basal segments reddish brown; ventral surfaces black; legs reddish brown; length 5 mm ..... **guttifer**
- Pronotum entirely ochraceous; body ochraceous, elytron yellowish brown with humeral, subbasal and postmedian markings, sutural marking covering on apical 1/2 black; antenna pitchy black with basal segments brownish; legs entirely ochraceous; length 3.2-3.8 mm .. ..... **ngae**
- 43 (40). Elytron not entirely reddish, at least suture or humerus blackish ... 44
- Dorsal surfaces reddish to yellowish brown; pronotum with a pair of minute, round black markings; antenna pitchy black with 4 or 5 basal segments brownish; ventral surfaces and legs reddish brown; length 6.0-7.0 mm ..... **binotatithorax**
- 44 (43). Dorsal surfaces brownish, pronotum and elytron with several blackish round markings ..... 45

- Not with above combination of characters . . . . . 47
- 45 (44). Pronotum reddish brown with a pair of blackish markings . . . . . 46  
 Pronotum reddish brown with larger anteromedian and smaller basal markings black; elytron reddish brown with 2 basal and 2 median black markings; head reddish brown with middle of vertex blackish; antenna black with 4 or 5 basal segments reddish brown; ventral surfaces partly blackish and partly brownish; legs reddish brown with median portion of femora blackish; length 7.0–8.0 mm . . . . . **bissexsignatus**
- 46 (45). Elytron yellowish to reddish brown with humeral and lateromedian markings black; body reddish brown, ventral surfaces in part blackish; legs reddish brown; length 5.0–6.2 mm . . . . . **siamensis, n. sp.**  
 Elytron with 5 black markings (2:2:1); head black with brownish marking at middle; ventral surfaces black with lateral portion of abdominal segments brownish; legs reddish brown; length 4.0–4.5 mm . . . . . **triangularis**
- 47 (44). Pronotum entirely brownish, elytron brownish with several round markings blackish . . . . . 48  
 Dorsal surfaces differently marked . . . . . 52
- 48 (47). Elongate; elytron with lateral, sutural and apical margins not blackish . . . . . 49  
 Round; elytron yellowish brown with humeral and postbasal markings, basal, lateral, sutural and apical margins, black; body reddish to yellowish brown, antenna black with 4 or 5 basal segments reddish brown; legs entirely reddish brown; length 5.5–7.0 mm . . . . . **colon**
- 49 (48). Ventral surfaces reddish brown; smaller than 6.0 mm . . . . . 50  
 Ventral surfaces reddish brown with at least metathorax and abdomen blackish in part; body reddish brown, elytron with humeral and lateromedian markings black; legs entirely reddish brown; length 7.5–9.3 mm . . . . . **paulomaculatus, n. sp.**
- 50 (49). Elytron with discal markings besides humeral one . . . . . 51  
 Elytron with small, black humeral marking; body reddish brown; length 5.0 mm . . . . . **punctohumeralis**
- 51 (50). Elytron reddish brown with black subbasal, humeral, postmedian and lateroposterior markings smaller, in some specimens postmedian and lateroposterior markings lacking; body reddish brown, antenna with apical segments blackish; legs reddish brown; length 5.5–6.0 mm . . . . . **lacosus**  
 Elytron reddish brown with smaller humeral and subbasal and larger postmedian markings black; reddish brown with apical segments of antenna blackish; length 5 mm . . . . . **deyrollei**
- 52 (47). Pronotum reddish brown, ground color of elytron black with 5 yellowish markings, viz. humeral, scutellar, lateromedian, interome-



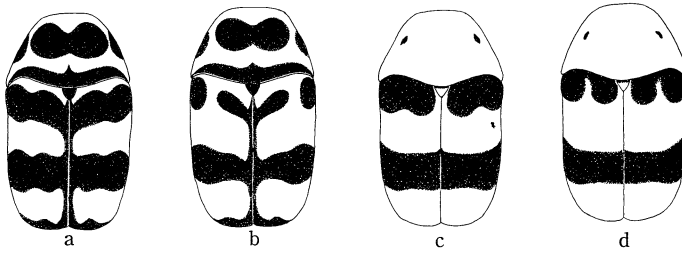


FIG. 32. a-b, *Cryptocephalus trifasciatus*; c-d, *C. anceyi*.

dian and apical markings; in some specimens these markings enlarged in varying degrees and blackish area reduced, and in most pale-colored specimens elytron yellowish brown with markings blackish; body reddish brown, antenna with apical segments blackish; length 4.0-5.0 mm

**luteosignatus**

Not with above combination of characters 53

53 (52).

Pronotum reddish to yellowish brown with a pair of blackish markings in middle, elytron reddish to yellowish brown with sutural portion and longitudinal lateral stripe starting from humeri black, in some specimens lateral stripe interrupted subapically or apical portion of stripe not appearing; head pitchy black with frontoclypeus and middle of vertex brownish, in some specimens brownish area enlarged; ventral surfaces pitchy black with lateral portion of abdominal segments brownish, and in pale-colored specimens abdominal segments entirely brownish; legs reddish brown; length 3.2-3.8 mm

**lingnanensis**

Coloration and markings of dorsal surfaces variable: prothorax reddish brown with margins blackish, elytron yellowish to reddish brown with longitudinal median stripe, humeri and broad transverse band connecting longitudinal stripe and sutural margin, and sutural and lateral margins blackish; in some specimens apical portion of lateral stripe lacking; in others transverse band not appearing (*binhana* type); or transverse band not appearing and longitudinal band much reduced or entirely not appearing; or blackish longitudinal stripe and transverse band expanded and yellowish areas much reduced, and becoming ground color of elytron black with subscutellar and apical portions narrowly yellowish (*subsemicinctus* type); or pronotum blackish with lateral portion and a pair of yellowish to reddish brown basimedial markings, elytron yellowish to reddish brown with sutural margin blackish. Head reddish brown, ventral surfaces and legs partly blackish, in some specimens mostly brownish or blackish; length 3.2-3.4 mm

**brevebilineatus**

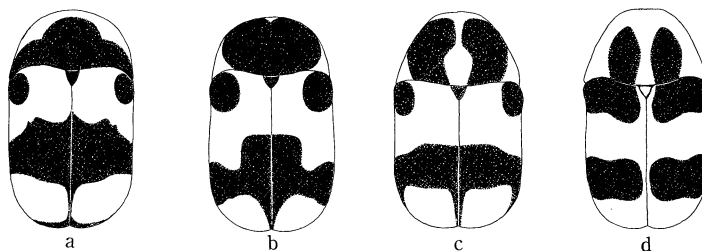


FIG. 33. a, *Cryptocephalus pallidilabris*; b, *C. angulatofasciatus*; c, *C. bifurcatus*; d, *C. magnus*.

### ***Cryptocephalus anceyi* Pic**

Fig. 32c–d

*Cryptocephalus anceyi* Pic, 1929, Mél. Exot. Entomol. **32**: 26 (Indo-China; PARIS).

*Distribution.* “Indo-China.”

No additional material.

### ***Cryptocephalus angulatofasciatus* Jacoby**

Fig. 33b

*Cryptocephalus angulatofasciatus* Jac., 1892, Ann. Mus. Civ. Genova **32**: 890 (Burma; GENOVA); 1908, Fauna India, Coleopt. **2**: 239 (Burma).

*Cryptocephalus atroscutus* Pic, 1920, Mél. Exot. Entomol. **32**: 28 (Indo-China; PARIS). **New synonymy.**

*Distribution.* Burma, Vietnam.

We have not made direct comparison of *angulatofasciatus* and *atroscutus* Pic. However, *atroscutus* is no doubt identical with *angulatofasciatus* Jacoby.

No additional material.

### ***Cryptocephalus baolacanus* Pic**

Fig. 31c

*Cryptocephalus baolacanus* Pic, 1920, Mél. Exot. Entomol. **32**: 27 (Indo-China; PARIS).

*Distribution.* Thailand, Laos, Vietnam.

*Material examined.* THAILAND: 1, Chiang Mai, VI.1965, KM; 1, Mae Klang Waterfall nr Chom Thong, VI.1965, YM (KV). LAOS: 2, Ile de Khong, VII.1965, 2, Ban Van Heua, IV.1965, NC (BISHOP). VIETNAM: 4, Trang Bom, 30 m, NW of Saigon, VIII.1932, M. Poilane (USNM).

### ***Cryptocephalus bicoloricornis* Pic**

Fig. 34d

*Cryptocephalus bicoloricornis* Pic, 1937, Mél. Exot. Entomol. **69**: 18 (Cambodia; PARIS).

*Distribution.* Cambodia.

No additional material.

### ***Cryptocephalus bifurcatus* Kimoto & Gressitt, new species**

Fig. 33c

Head yellowish brown with interior portion of eye and tip of vertex pitchy black; antenna pitchy black with 4 or 5 basal segments reddish brown; pronotum yellowish brown with pair of large, curved black markings; scutellum entirely black, elytron yellowish brown with humeral and postmedian transverse band, its apical margin and apical portion of sutural margin black; ventral surfaces mostly pitchy black with

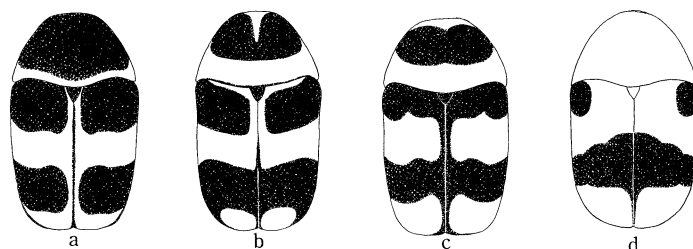


FIG. 34. **a**, *Cryptocephalus curtipennis* (Yunnan; Pic, 1920); **b**, *C. yoshimotoi*; **c**, *C. crucipennis*; **d**, *C. bicoloricornis*.

lateral portion of each abdominal segment brownish, but in some specimens abdominal segments mostly reddish brown; pygidium yellowish brown with basal portion blackish; legs entirely reddish brown.

*Head* with vertex smooth, shining, sparsely impressed with distinct punctures, interantennal space subequal to narrowest width of interocular space; frontoclypeus distinctly and more closely punctate compared with vertex. *Antenna* slender, filiform, 1st segment longest, robust, slightly curved; 2nd shortest, slightly longer than wide, nearly  $\frac{1}{2}$  as long as 1st; 3rd slender, nearly  $2\times$  as long as 2nd; 4th subequal to 3rd in length and shape; 5th nearly  $1.2\times$  as long as 4th, 5th to 8th subequal to one another in length but more robust in apical segments; 9th slightly shorter than 8th; 10th subequal to 9th in length and shape, 11th subequal to 10th in length but its apex pointed. *Pronotum* about  $1.5\times$  as wide as long, convex, smooth, shining, sparsely impressed with minute punctures. *Scutellum* subtriangular, surface smooth, closely and finely punctate, especially on median portion. *Elytron* subparallel-sided, with 11 regularly arranged longitudinal rows of punctures and their interstices smooth and hardly raised even in lateral portion. *Pygidium* with apical margin widely rounded. *Length* 4.0-4.7 mm.

Holotype (BISHOP 12,129), THAILAND: Dalat, 1500 m, 29.IV-4.V.1960, L.W. Quate. 2 paratypes, "Siam" (BANGKHEN, KIMOTO).

This new species resembles *C. angulatofasciatus* Jacoby but differs in having the pronotum yellowish brown with a pair of blackish markings and the legs entirely reddish brown.

### ***Cryptocephalus bimaculicollis* (Baly), new combination**

Fig. 35a

*Melixanthus* ? *bimaculicollis* Baly, 1865, Trans. Entomol. Soc. London ser. 3, 4(1): 65, pl. 3, fig. 1 (Penang; BMNH).

*Melixanthus bimaculicollis*: Jacoby, 1884, Notes Leyden Mus. 6: 12 (Sumatra); 1892, Ann. Mus. Civ. Genova 32: 888 (Burma).

*Melixanthus coomani* Pic, 1926, Mél. Exot. Entomol. 45: 11 (Tonkin; PARIS). **New synonymy.**

*Cryptocephalus moupinensis* Gressitt, 1942, Lingnan Sci. J. 20(2-4): 346 (SW China; NANKING).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 157 (S China, Malaya). **New synonymy.**

*Cryptocephalus pendleburyi* Bryant, 1954, Ann. Mag. Nat. Hist. ser. 12, 7: 450 (Malaya; BMNH).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 157 (= *moupinensis*).

*Distribution.* Burma, S China, Vietnam, Laos, Malay Peninsula, Sumatra.

*Material examined.* LAOS: 2, Dong Dok, VIII.1965, NC (BISHOP).

### ***Cryptocephalus binotatithorax* Pic**

Fig. 37c

*Cryptocephalus binotatithorax* Pic, 1920, Mél. Exot. Entomol. 32: 26 (Tonkin; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 145 (Yunnan).

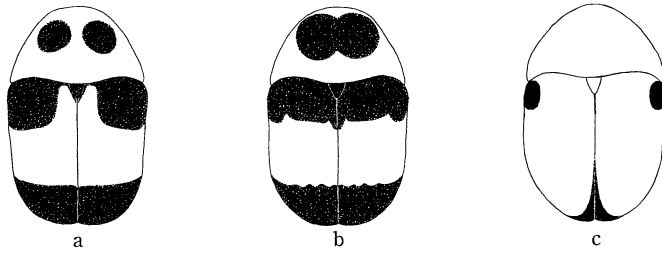


FIG. 35. **a**, *Cryptocephalus bimaculicollis*; **b**, *C. luteofasciatus*; **c**, *C. subsuturalis*.

*Distribution.* Laos, N Vietnam, SW China (Yunnan).

*Material examined.* LAOS: Vientiane Prov, 31, Ban Van Heua, SE of Phou Khao Khoay, IV.1965, JLG; 2, Phou Khao Khoay, 800 m, IV.1965, JLG; Sayaboury Prov, 1, Sayaboury, IV.1965, NC (BISHOP). VIETNAM: 1, W Tonkin: Hoa Binh, AC (FREY).

### *Cryptocephalus bioculatus* Lefèvre

Fig. 36c

*Cryptocephalus bioculatus* Lef., 1889, Ann. Soc. Entomol. Fr. ser. 6, **9**: 287 (Annam: Tourane; PARIS).

*Distribution.* Vietnam.

No additional material.

### *Cryptocephalus bissexsignatus* Suffrian

Fig. 37d

*Cryptocephalus bissexsignatus* Suffr., 1854, Linn. Entomol. **9**: 56 (Assam).—Jacoby, 1908, Fauna India, Coleopt. **2**: 242, fig. (Sikkim, Assam, Burma).

*Distribution.* N India, Burma, Laos.

*Material examined.* LAOS: 7, Umgeb. Vientiane, III–IV.1963; 3, Umgeb. Vanky, 1964; 1, Umgeb. Pakse, 1963 (MÜNCHEN); Borikhan Prov, 3, Pakkading, IV.1965, JAR & JLG; 1, VI.1966, NC; 2, Namkading, nr Pakkading, IV.1965, JLG; 1, Pon Hom, N of Pakkading, IV.1965, JAR; Sithandone Prov, 1, Ile de Khong, VII.1965, NC; Sedone Prov, 1, Pakse, VIII.1967, JAR; Khammouan Prov, 4, Phon Tiou, IV,V.1965; NC (BISHOP).

### *Cryptocephalus brevebilineatus* Pic

Fig. 29a, 41

*Cryptocephalus brevebilineatus* Pic, 1922, Mél. Exot. Entomol. **36**: 28 (Tonkin; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 145, fig. (China, N Vietnam).

*Cryptocephalus subsemicinctus* Pic, 1922, Mél. Exot. Entomol. **36**: 29 (Indo-China; with var. *hanoiensis* from Hanoi; PARIS). **New synonymy.**

*Cryptocephalus binhanus* Pic, 1922, Mél. Exot. Entomol. **37**: 9 (Tonkin; PARIS); 1927, op. cit. **5**: 4 (varr. *internefasciatus*, *subarcuatus*, *internelineatus*, from Tonkin); 1935, op. cit. **66**: 19 (abb. *namensis*, *reductehumeralis*, *disjunctehumeralis*, from Tonkin); 1937, op. cit. **69**: 18 (ab. *discoobliteratus*, from Tonkin).—Gressitt & Kimoto, 1961, Pac. Insects Mongor. **1A**: 145 (= *brevebilineatus*).

*Cryptocephalus monticola* Bryant, 1952, Ann. Mag. Nat. Hist. ser. 12, **7**: 452 (Burma; BMNH).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 145 (= *brevebilineatus*).

*Distribution.* Burma, Thailand, Laos, Cambodia, Vietnam, S China.

In Gressitt & Kimoto (1961) we treated *C. pallidipennis* Pic as a synonym of *breve-*

*bilineatus*. However, the former should be treated as a synonym of *Melixanthus placidus* Baly. Our 1961 treatment is based on the specimens labelled by Pic as "*Cryptocephalus pallidus* n. sp." and "*Cryptocephalus pallidipennis* Pic." These names seem to be nomina nuda. Refer also to *Melixanthus placidus* Baly.

*Material examined.* THAILAND: 9, Chiang Dao, VIII.1973, 10, Mae Taeng, VIII.1973, 7, Chiang Dao, Ban Tap Dua, VIII.1973, all sweeping paddy fields, Yano; 1, Chiang Mai, VI.1965, KM; 16, Chiang Mai, VIII.1973, 16, San Pa Tong, VIII.1973, 3, Rangsit nr Bangkok, VIII.1970, 2, Songkuare, nr San Pa Tong, VII.1970, 3, Saraphi, nr Chiang Mai, VII.1970, 1, Mae Rim, nr Chiang Mai, VII.1970, 1, Lam Phang, VII.1970, 1, Mae Chan, VII.1970, 2, Pan, VII.1970, 1, Fang, VIII.1973, all sweeping paddy fields, Yano; 1, Fang, VI.1965, KM; 1, Takhae, II.1965, Yasumatsu (KU); 1, Nakhon Nayok, I.1968, KB (KIMOTO). LAOS: 13, Sedone Prov, Pakse, V.1965, PDA; 1, Dong Dok, VIII.1965, NC; 1, Nongteveda, XI.1965, NC (BISHOP). CAMBODIA: 2, Kompong Chang, 7 m, IV.1961, NRS (BISHOP); 1, Phong Chisau, 40 km S of Pnom Penh, 20 m, IV.1961, NRS (BISHOP). VIETNAM: 80, 6 km S of Dalat, 1400-1500 m, VI-VII.1961, NRS; 50, 6 km S of Dalat, IV-V.1960, SQ & LWQ; 1, Nha Trang, XI.1960, CMY; 3, Fyan, 900-1000 m, VII-VIII.1961, NRS; 7 Di Linh, 920 m, IV.1960, LWQ; 1, SE of Di Linh, V.1960, REL (BISHOP).

### **Cryptocephalus bruneopunctatus** Pic

*Cryptocephalus bruneopunctatus* Pic, 1922, Mél. Exot. Entomol. **37**: 9 (Tonkin; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 146 (Tonkin, SW China).

*Distribution.* N Vietnam, SW China.

Chen (1942) indicated that this species was probably a synonym of *talianus*, but it differs considerably from *gestroi* Jacoby (= *talianus* Pic).

No additional material.

### **Cryptocephalus colon** Suffrian

Fig. 38c

*Cryptocephalus colon* Suffr., 1854, Linn. Entomol. **9**: 19 (Siam, Assam).—Baly, 1865, Trans. Entomol. Soc. London ser. 3, **4**(1): 69, pl. 2, fig. 1 (Tringanee, Siam).—Jacoby, 1908, Fauna India, Coleopt. **2**: 256, fig. (Assam, Siam).

*Melixanthus colon*: Weise, 1910, Verh. Naturforsch. Ver. Brunn **48**: 28 (genus).

*Distribution.* N India, Thailand, Laos, Tringanee.

*Material examined.* LAOS: 4, Umgeb. Vientiane, III-VI.1963 (MÜNCHEN); Vientiane Prov, 9, Ban Van Heua, SE of Phou Khao Khoay, 900 m, IV.1965, JLG; 1, Vientiane, VII.1965, NC; 9, Sayaboury Prov, Sayaboury, IV.1965, NC (BISHOP).

### **Cryptocephalus crassipennis** Pic

Fig. 31d

*Cryptocephalus crassipennis* Pic, 1922, Mél. Exot. Entomol. **37**: 9 (Tonkin).

*Cryptocephalus salvazai* Pic, 1928, op. cit. **52**: 25 (Laos; PARIS). **New synonymy.**

*Distribution.* Laos, N Vietnam.

We could not trace the type-specimen of *crassipennis* Pic. Judging from the original description, this seems to be conspecific with *salvazai*, a very distinct species.

No additional material seen other than the type-specimen of *salvazai* Pic.

### **Cryptocephalus crucipennis** Suffrian

Fig. 34c

*Cryptocephalus crucipennis* Suffr., 1854, Linn. Entomol. **9**: 64 (Bengal).—Jacoby, 1908, Fauna India, Coleopt. **2**: 200 (India).—Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, **12**: 136 (synonymy).

- Cryptocephalus birmanicus* Jacoby, 1889, Ann. Mus. Civ. Genova **29**: 159 (Burma; GENOVA).—Bryant, 1923, Ann. Mag. Nat. Hist. ser. 9, **12**: 136 (= *crucipennis*).—Chen, 1942, Sinensia **3**(1–6): 124 (China).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 145 (China, Hainan, N Vietnam).  
*Cryptocephalus burmanicus* [sic]: Jacoby, 1908, Fauna India, Coleopt. **2**: 240, fig. (Burma).—Gressitt, 1942, Lingnan Sci. J. **20**(2–4): 341 (China).  
*Cryptocephalus lajoyei* Pic, 1920, Mém. Exot. Entomol. **32**: 26 (Tonkin; PARIS).—Chen, 1942, Sinensia **12**(1–6): 124 (= *birmanicus*).  
*Cryptocephalus violaceocinctus* Pic, 1943, Échange **59**: 16 (China; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 145 (= *birmanicus*).

*Distribution.* India, Burma, Thailand, Laos, Vietnam, Hainan, China.

*Material examined.* THAILAND: 1, Nakhon Nayok, V.1963 (BANGKHEN). LAOS: Umgeb. Vanky, 1963 (MÜNCHEN). VIETNAM: 25, 6 km S of Dalat, 1400–1500 m, VI–VII.1961, NRS; 2, Nha Trang, XI.1965, CMY (BISHOP).

### **Cryptocephalus deyrollei** Pic

*Cryptocephalus deyrollei* Pic, 1920, Mém. Exot. Entomol. **32**: 28 (Cochinchina; PARIS).

*Distribution.* S Vietnam.

The type of this species in the Paris museum is not in good condition. No additional material.

### **Cryptocephalus externereductus** Pic

Fig. 30b

*Cryptocephalus externereductus* Pic, 1922, Mém. Exot. Entomol. **37**: 8 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

### **Cryptocephalus gestroi** Jacoby

- Cryptocephalus gestroi* Jac., 1892, Ann. Mus. Civ. Genova **32**: 890 (Burma; GENOVA); 1908, Fauna India, Coleopt. **2**: 214 (Burma).  
*Cryptocephalus talianus* Pic, 1915, Mém. Exot. Entomol. **16**: 12 (Yunnan; PARIS).—Gressitt, 1942, Lingnan Sci. J. **20**(2–4): 352 (China).—Chen, 1942, Sinensia **13**(1–6): 121 (China).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 166 (S China). **New synonymy.**  
*Cryptocephalus tarsalis* ab. *bisbicruciatu*s Pic, 1907, Échange **23**(Suppl.): 1 [pagination special] (Tibet; KUNOR; PARIS).

*Distribution.* Thailand, Laos, Vietnam, S and W China.

We consider the 2 species synonymized with *talianus* by Chen to be different. However, *C. talianus* becomes a junior synonym of *gestroi* Jacoby.

*Material examined.* THAILAND: 1, Chiang Mai, Doi Puli, 1300 m, V.1965, YM (KU); 1, NW Chiang Mai Prov, Chiang Dao, 450 m, IV.1958, JLG; 1, Chiang Mai, 1100–1500 m, 1966, JS (BISHOP). LAOS: 2, Khammouan Prov, Phon Tiou, V.1965, IV.1966, NC; 1, Sayaboury Prov, Nala, 400 m, XI.1967, FGH (BISHOP); 2, Umgeb. Pakse, 1963; 1, Umgeb. Vanky, 1963 (MÜNCHEN). VIETNAM: 7, 6 km S of Dalat, 1400–1500 m, VI, VII.1961, NRS; 2, Dalat, 1500 m, V–VI.1960, LWQ; 1, Di Linh, 1200 m, IV.1960, SQ (BISHOP).

### **Cryptocephalus guttifer** Suffrian

Fig. 37a

- Cryptocephalus guttifer* Suffr., 1854, Linn. Entomol. **9**: 22 (Bombay).—Jacoby, 1908, Fauna India, Coleopt. **2**: 259, fig. 102 (India).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 152 (Yunnan).

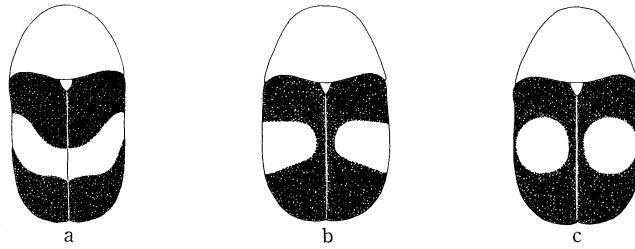


FIG. 36. **a**, *Cryptocephalus taravellieri*; **b**, *C. lateflavonotatus*; **c**, *C. bioculatus*.

*Cryptocephalus kashmirensis* Jacoby, 1908, Fauna India, Coleopt. **2**: 261 (Kashmir, Punjab, Khasia Hills; BMNH).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 152 (= *guttifer*).

*Distribution*. India, SW China.

No additional material.

### **Cryptocephalus humerobliteratus** Pic

Fig. 31a

*Cryptocephalus humerobliteratus* Pic, 1927, Mél. Exot. Entomol. **50**: 4 (Tonkin; PARIS); 1943, Échange **59**: 15 (Tonkin).

*Distribution*. N Vietnam.

This species closely resembles *C. baolacanus* Pic and might prove to be a synonym.

No additional material examined.

### **Cryptocephalus infraflavus** Pic

*Cryptocephalus infraflavus* Pic, 1922, Mél. Exot. Entomol. **37**: 9 (Tonkin; with var. *diversepleuris* Pic; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 153 (Tonkin, Hainan).

*Distribution*. N Vietnam, Hainan.

No additional material.

### **Cryptocephalus inhumeralis** Pic

Fig. 29b

*Cryptocephalus inhumeralis* Pic, 1922, Mél. Exot. Entomol. **37**: 8 (Tonkin; PARIS); 1926, op. cit. **45**: 12 (var. *coomani* from Tonkin).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 153, fig. (Tonkin).

*Distribution*. Thailand, N Vietnam.

*Material examined*. THAILAND: 3, Khao Yai, I.1968, KB (KIMOTO). VIETNAM: 6, Hoa-Binh, Tonkin, AC (FREY).

### **Cryptocephalus lacosus** Pic

Fig. 39a-c

*Cryptocephalus lacosus* Pic, 1922, Mél. Exot. Entomol. **37**: 9 (Tonkin; PARIS).

*Cryptocephalus innotaticollis* Pic, 1929, Bull. Soc. Zool. Fr. **54**: 139 (Tonkin; PARIS). **New synonymy**.

*Distribution*. Laos, Vietnam.

*Material examined*. LAOS: 1, Borikhan Prov, Pakkading, 100 m, IV.1965, JLG; 1, Vientiane Prov, Vien-

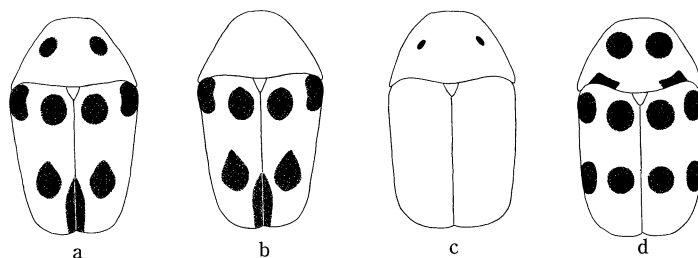


FIG. 37. a, *Cryptocephalus guttifer*; b, *C. ngae*; c, *C. binotatithorax*; d, *C. bissexsignatus*.

tiane, VII.1965, NC; 1, Ban Van Heua, 20 km E of Phou Khao Khoay, 800 m, V.1965, NC (BISHOP). VIETNAM: 1, W Tonkin: Hoa Binh, AC (FREY).

### ***Cryptocephalus laosensis* Pic**

*Cryptocephalus laosensis* Pic, 1928, Mél. Exot. Entomol. **52**: 25 (Laos; PARIS).

*Distribution.* Thailand, Laos.

*Material examined.* THAILAND: Chiang Mai Prov, Mae Sa, VI.1965, PDA (BISHOP).

### ***Cryptocephalus lateflavonotatus* Pic**

Fig. 36b

*Cryptocephalus lateflavonotatus* Pic, 1927, Mél. Exot. Entomol. **50**: 6 (Annam; PARIS).

*Distribution.* Vietnam.

No additional material.

### ***Cryptocephalus lineatotibialis* Pic**

Fig. 30a

*Cryptocephalus lineatotibialis* Pic, 1923, Bull. Soc. Zool. Fr. **48**: 271 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

### ***Cryptocephalus lingnanensis* Gressitt**

Fig. 29c

*Cryptocephalus lingnanensis* Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 344 (Kwangtung).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 127, 154 (S China).

*Distribution.* Thailand, Laos, Vietnam, S China.

*Material examined.* THAILAND: 3, Chiang Mai Prov, Chiang Mai (arboretum), 300 m, VI.1965, PDA (BISHOP). LAOS: 2, Sedone Prov, Paksong, V.1965, PDA; Vientiane Prov, 1, Vientiane, VI.1960, SQ & LQ; 2, Ban Van Heua, IV.1965, XII.1968, NC & JR; 11, Gi Sion, Tha Ngone, XII.1965, NC; 4, Borikhan Prov, Pakkading, VII.1965, JR (BISHOP). VIETNAM: 2, 6 km S of Dalat, 1400–1500 m, VI–VII.1961, NRS; 4, Dalat, 1500 m, IX.1960, CMY; 2, Mt Lang Bian, 1500–2000 m, V, VI.1961, NRS; 1, Ban Me Thuot, 500 m, V.1960, LWQ; 1, 19 km NE of Ban Me Thuot, V.1960, LWQ (BISHOP).

### ***Cryptocephalus luteofasciatus* Pic, new combination**

Fig. 35b

*Melixanthus luteofasciatus* Pic, 1926, Mél. Exot. Entomol. **45**: 11 (Tonkin; PARIS).



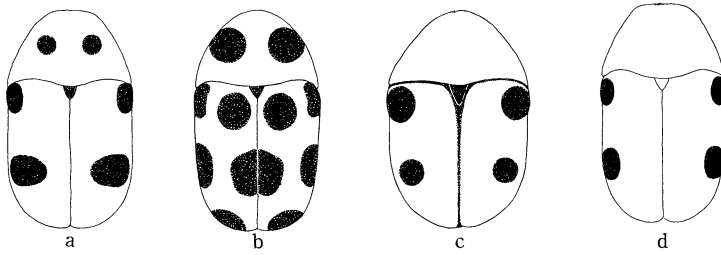


FIG. 38. a, *Cryptocephalus siamensis*; b, *C. triangularis*; c, *C. colon*; d, *C. paulomaculatus*.

*Distribution.* N Vietnam.  
No additional material.

### ***Cryptocephalus luteosignatus* Pic**

Fig. 40

*Cryptocephalus luteosignatus* Pic, 1922, Mél. Exot. Entomol. **35**: 10 (Tonkin; PARIS).—Chûjô, 1934, Arb. Morphol. Taxon. Entomol. Berlin-Dahlem **1**: 267 (Formosa).—Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 346 (S China).—Chûjô, 1954, Q. J. Taiwan Mus. **7**(3-4): 219 (Formosa).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 156 (S China, Hainan).

*Cryptocephalus multifenestratus* Pic, 1928, Mél. Exot. Entomol. **51**: 53 (China; PARIS).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 156 (= *luteosignatus*).

*Cryptocephalus luteodecymaculatus* Pic, 1943, Opusc. Mart. **11**: 16 (Tonkin; PARIS). **New synonymy.**

*Distribution.* S China, Hainan, Taiwan, N Vietnam.  
No additional material.

### ***Cryptocephalus magnus* Kimoto & Gressitt, new species**

Fig. 33d

Head reddish to yellowish brown, antenna yellowish brown, pronotum reddish brown with a pair of large, elongate markings, scutellum reddish brown with basal margin narrowly blackish; elytron reddish brown with subbasal and postmedian markings black; ventral surfaces largely black with pro- and mesothorax, anterior portion of metathorax, and middle of anterior portion of 1st abdominal segment yellowish to reddish brown; pygidium entirely black but in some specimens apical portion partly brownish; legs entirely reddish brown.

*Head* sparsely covered with fine hairs, vertex smooth, shining, sparsely impressed with minute punctures, and with a short longitudinal furrow in upper portion; interantennal space slightly wider than narrowest width of interocular space; frontoclypeus distinctly and more closely punctate compared with vertex. *Antenna* relatively robust among species of this genus; 1st segment longest, robust, slightly curved; 2nd shortest, almost as long as wide and nearly  $\frac{1}{4}$  as long as 1st; 3rd nearly  $2.25\times$  as long as 2nd; 4th subequal to 3rd in length and shape; 5th nearly  $1.2\times$  as long as 4th; 5th to 7th subequal to each other in length but more robust in apical segments; 8th slightly shorter than 7th and subequal to 4th in length but much more robust and nearly  $1.5\times$  as long as wide; 8th to 10th subequal to one another in length and shape; 11th  $1.33\times$  as long as 10th, its apex pointed. *Pronotum* nearly  $1.5\times$  as wide as long, smooth, shining, sparsely impressed with minute punctures. *Scutellum* subtriangular, smooth, shining, nearly impunctate, with large fovea basally. *Elytron* subparallel-sided, with 11 regularly arranged longitudinal rows of punctures and their interstices smooth and hardly raised even in lateral area. *Pygidium* with apical margin widely rounded, with a slightly raised longitudinal costa at middle. *Length* 7.5–8.2 mm.

**Holotype** (BISHOP 12,130), VIETNAM: 6 km S of Dalat, 1400–1500 m, 9.VI–7.VII.1961, N.R. Spencer. **Paratypes**: VIETNAM: 1, 18 km NW of Dalat, 1300 m,

4–5.V.1960, L.W. Quate (BISHOP). THAILAND: 3, "Siam," (BANGKHEN, KIMOTO). LAOS: 1, Sedone Prov, Paksong, 15.VII.1967, native collr/Rondon (BISHOP).

This new species somewhat resembles *Cryptocephalus bissexsignatus* Suffrian, but differs in having the vertex more finely and sparsely punctate, the head entirely brownish, the pronotal and elytral markings larger and united, and 1 subbasal and 1 postmedian elytral markings.

### **Cryptocephalus ngae** Gressitt

Fig. 37b

*Cryptocephalus ngae* Gressitt, 1942, Lingnan Sci. J. **20**(2–4): 347 (S China; LINGNAN).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 185 (China).

*Distribution.* S China, Laos, Vietnam.

*Material examined.* LAOS: 26, Sedone Prov, Paksong, V.1965, PDA; 4, Borikhan Prov, Pakkading, IX.1965; 2, Wapikhamthong Prov, Khong Sedone, VII.1965, NC (BISHOP). VIETNAM: 1, M'drak, E of Ban Me Thuot, 400–600 m, XII.1960, LWQ (BISHOP).

### **Cryptocephalus nigriceps** Allard

*Cryptocephalus nigriceps* Allard, 1891, Nouv. Arch. Mus. Paris ser. 3, **3**: 232 (LAOS; PARIS); 1904, Miss. Pavie Indochine **3**: 162, pl. 9, fig. 8, 8a.

*Cryptocephalus foveatoscutus* Pic, 1920, Mél. Exot. Entomol. **32**: 28 (Tonkin; PARIS; with var. *diversemaculatus* Pic, Saigon). **New Synonymy.**

*Distribution.* Laos, Vietnam.

*Material examined.* LAOS: 2, Umgeb. Vientiane, III.VI.1963 (MÜNCHEN).

### **Cryptocephalus nigricolor** Pic

*Cryptocephalus nigricolor* Pic, 1922, Mél. Exot. Entomol. **35**: 10 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

### **Cryptocephalus nigrobasalis** Kimoto & Gressitt, **new species**

Yellowish to reddish brown, antenna pitchy brown with 4 or 5 basal segments yellowish brown; dorsal surfaces yellowish to reddish brown with basal margin of elytron and scutellum narrowly black.

*Head* glabrous, vertex sparsely impressed with distinct punctures and with shallow longitudinal depression at middle of upper portion; interantennal space distinctly narrower than narrowest width of interocular space; frontoclypeus slightly raised, feebly depressed at anterior portion, more distinctly and more closely punctate compared with vertex. *Antenna* generally slender, long, filiform; 1st segment robust, longest, slightly curved; 2nd shortest, 1.5× as long as wide and nearly ½ as long as 1st; 3rd nearly 2× as long as 2nd; 4th subequal to 3rd in length and shape; 5th nearly 1.2× as long as 4th; 6th slightly longer than 5th; 6th to 10th subequal to one another in length and shape; 10th nearly 4× as long as wide; 11th subequal to 10th in length but its apex pointed. *Pronotum* transverse, about 1.6× as wide as long, convex, smooth, shining, sparsely impressed with small punctures. *Scutellum* subtriangular, surface sparsely impressed with fine punctures, without distinct fovea basally. *Elytron* subparallel-sided, with 11 regularly arranged longitudinal rows of small punctures, their interstices smooth and hardly raised even in lateral area. *Pygidium* subtriangular, with apical margin widely rounded. *Length* 3.0–3.8 mm.

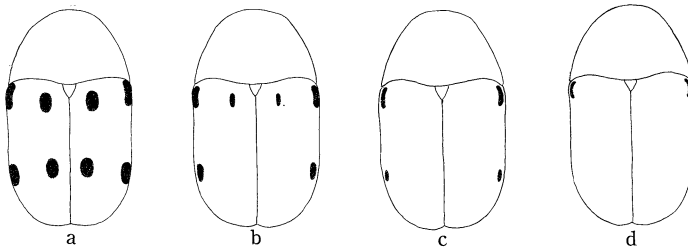


FIG. 39. a-c, *Cryptocephalus lacosus*; d, *C. punctohumeralis*.

Holotype (KYUSHU UNIV. TYPE NO. 2186), THAILAND: Chiang Mai Prov, Doi Puli, 1685 m, 17.VI.1965, Y. Miyatake. Paratopotype: 1, same data as holotype (BISHOP).

This new species somewhat resembles *C. bruneopunctatus* Pic, but differs in being shorter in body length and having the basal margin of the scutellum entire. Also from *C. laosensis* Pic, this new species differs in having the body length shorter, the elytral margin brownish except for the basal margin black, and the ventral surfaces entirely yellowish brown.

#### ***Cryptocephalus pallidilabris* Pic**

Fig. 33a

*Cryptocephalus pallidilabris* Pic, 1930, Mém. Exot. Entomol. **56**: 2 (Tonkin; PARIS).

*Distribution.* Vietnam.

This species seems to be very closely related to *C. crassipennis* Pic.

No additional material.

#### ***Cryptocephalus paulomaculatus* Kimoto & Gressitt, new species**

Fig. 38d

Head and prothorax reddish brown, scutellum yellowish brown with basal margin blackish; elytron reddish brown with small humeral and lateromedian markings black; antenna entirely reddish brown; ventral surfaces of thorax reddish brown with lateral portion of metathorax black, abdominal segments black with basal  $\frac{2}{3}$  of 1st segment reddish brown, in some specimens blackish area enlarged or reduced in varying degrees; legs entirely reddish brown; pygidium black, in some specimens apical portion brownish in varying degrees.

*Head* sparsely covered with fine hairs, vertex distinctly and rather closely punctate, with a slight longitudinal depression at middle and a pair of small tubercles behind antennal sockets, interantennal space distinctly wider than narrowest width of interocular space, frontoclypeus distinctly and more closely punctate compared with vertex. *Antenna* slender, 1st segment long, robust, slightly curved; 2nd shortest, nearly  $\frac{1}{2}$  as long as 1st, and nearly as long as wide; 3rd slender, nearly  $3\times$  as long as 2nd; 4th slightly shorter than 3rd; 5th subtriangular, nearly  $1.25\times$  as long as 4th; 5th to 10th subequal to one another in length and shape, and nearly  $2.5\times$  as long as wide; 11th nearly  $1.25\times$  as long as 10th and its apex pointed. *Pronotum* transverse, nearly  $1.5\times$  as wide as long, convex, smooth, shiny, sparsely impressed by minute punctures. *Scutellum* subtriangular, surface smooth, closely covered with minute punctures, especially on median portion, and with a distinct fovea basally. *Elytron* subparallel-sided, with 11 regularly arranged longitudinal rows, their interstices smooth and hardly raised even in lateral area. *Pygidium* with apical margin widely rounded. *Length* 7.5-9.3 mm.

Holotype (BISHOP 12,131), LAOS: Ban Van Heua, 20 km E of Phou Khao Khoay (Phou Kow Kuei), 800 m, 1–15.V.1965, J.A. Rondon. Paratopotypes: 7, same data as holotype (BISHOP, KIMOTO). Paratypes: THAILAND: 3, "Siam" (BANGKHEN); 1, Mae Klang Waterfall nr Chom Thong, 11.VI.1965, YM (KU). LAOS: Vientiane Prov, 5, Vientiane, IV–VI.1967; 3, Ban Van Heua, 15.V.1966, 15.V.1967, native collr (BISHOP); 3, Wapikhamthong Prov, Khong Sedone, IV–V.1965, native collr (BISHOP); 2, Sedone Prov, Pakse, 16.V.1967, 30.VI.1967, native collr; 12, Sayaboury Prov, Sayaboury, III.1966, native collr (BISHOP). VIETNAM: 4, 18 km NW of Dalat, 1300 m, 4–5.V.1960, L.W. Quate (BISHOP); 4, 6 km S of Dalat, 1400–1500 m, 9.V.1961, N.R. Spencer (BISHOP); 2, Dalat, 1500 m, 29.IV–4.V.1960, S. Quate; 2, 15 km S of Dalat, 29.IV–5.V.1960, S. Quate (BISHOP).

This new species resembles *C. siamensis* Kimoto & Gressitt, but differs in being longer, in having a distinct fovea near the basal margin of the scutellum, and the lateromedian marking of the elytron smaller.

### **Cryptocephalus punctobrunnescens** Pic

*Cryptocephalus punctobrunnescens* Pic, 1927, Mél. Exot. Entomol. **50**: 5 (Tonkin: Hoa-Binh; PARIS).

*Distribution.* N Vietnam.

No additional material.

### **Cryptocephalus punctohumeralis** Pic

Fig. 39d

*Cryptocephalus punctohumeralis* Pic, 1920, Mél. Exot. Entomol. **32**: 26 (Cochinchina; PARIS).

*Distribution.* S Vietnam.

It is possible that this species is only an infraspecific variation of *lacosus* Pic. However, more material is needed to determine this.

### **Cryptocephalus siamensis** Kimoto & Gressitt, **new species**

Fig. 38a

Head reddish brown; antenna reddish brown, in some specimens 4 or 5 apical segments slightly infusate; pronotum reddish brown with a pair of round discal black markings; scutellum entirely black; elytron yellowish to reddish brown with humeral and lateromedian markings black; ventral surfaces of pro- and mesothorax reddish brown and of metathorax mostly black; abdominal segments black with lateral portion of each segment and apical  $\frac{1}{2}$  of 5th segment reddish brown; pygidium black with apical portion reddish brown; legs entirely reddish brown.

*Head* with vertex smooth, shining, rather closely impressed with distinct punctures, and sparsely covered with fine hairs; frontoclypeus more strongly and closely punctate; interantennal space distinctly wider than narrowest width of interocular space. *Antenna* slender, 1st segment longest, robust, slightly curved; 2nd shortest, nearly  $\frac{1}{2}$  as long as 1st, and  $1.5\times$  as long as wide, 3rd slender, nearly  $2\times$  as long as 2nd, 4th subequal to 3rd in length and shape; 5th robust, subtriangular, nearly  $1.25\times$  as long as 4th; 6th slightly shorter than 5th; 6th to 10th subequal to one another in length and shape, and nearly  $2\times$  as long as wide; 11th  $1.25\times$  as long as 10th, its apex pointed. *Prothorax*  $\frac{5}{8}$  as long as broad, evenly convex, impunctate. *Scutellum* a little broader than long, rounded behind. *Elytron* slightly narrowed posteriorly, separately rounded behind, with 10 regular puncture-rows at middle. *Pygidium* rounded, closely punctured. *Length* 6.0 mm; breadth 3.5.

Holotype (BISHOP 12,132): THAILAND: Chiangmai Prov, Fang (Agric. Exp. Stn),

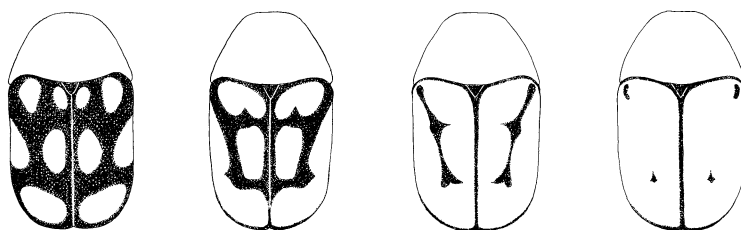


FIG. 40. *Cryptocephalus luteosignatus* (variation).

600 m, 14.VI.1965, P.D. Ashlock. Paratypes: THAILAND: 4, "Siam" (BISHOP, KIMOTO).

This new species somewhat resembles *Cryptocephalus magnus* Kimoto & Gressitt but differs from it in having the body shorter, and having pronotal, humeral and latero-medial markings smaller.

***Cryptocephalus sublunulatus* Pic**

Fig. 31b

*Cryptocephalus sublunulatus* Pic, 1920, Mél. Exot. Entomol. **32**: 28 (Indo-China; PARIS).

*Distribution.* "Indo-China."

No additional material.

***Cryptocephalus subsuturalis* Pic**

Fig. 35c

*Cryptocephalus subsuturalis* Pic, 1920, Mél. Exot. Entomol. **32**: 26 (Hanoi; PARIS).

*Distribution.* N Vietnam.

No additional material.

***Cryptocephalus taravellieri* Pic**

Fig. 36a

*Cryptocephalus taravellieri* Pic, 1922, Échange **38**: 19 (Saigon; PARIS).

*Distribution.* Vietnam.

*Material examined.* VIETNAM: 1, M'drak, E of Ban Me Thuot, XII.1960, 4-600 m, CMY (BISHOP).

***Cryptocephalus tixieri* Pic**

*Cryptocephalus tixieri* Pic, 1946, Échange **62**: 13 (Tonkin).

*Cryptocephalus biluteomaculatus* Pic, 1946, loc. cit. (Tonkin). **New synonymy.**

*Distribution.* N Vietnam.

We could not trace the types of these 2 species. However, the original description of *biluteomaculatus* Pic is completely the same as that of *tixieri* Pic, word for word. We have here treated *biluteomaculatus* Pic as a synonym of *tixieri* Pic.

No additional material.

**Cryptocephalus triangularis** Hope

Fig. 38b

*Cryptocephalus triangularis* Hope, 1831, in Gray, Zool. Misc.: 30 (Nepal; BMNH).—Kimoto & Takizawa, 1973, Kontyû 41(2): 173 (Nepal).

*Cryptocephalus sannio* Kollar & Redtenbacher, 1848, in Hügel, Reise Kashmir 4: 561 (Kashmir).—Suffrian, 1854, Linn. Entomol. 9: 64 (Kashmir); 1860, op. cit. 14: 31.—Jacoby, 1908, Fauna India, Coleopt. 2: 252, fig. (Kashmir).—Clavareau, 1913, Coleopt. Cat. 53: 191 (= *triangularis*).

*Cryptocephalus dodecaspilus* Suffrian, 1854, Linn. Entomol. 9: 63 (India, Tibet).—Jacoby, 1908, Fauna India, Coleopt. 2: 252, fig. (NW Himalaya; Tibet; = *triangularis*).—Weise, 1910, Verh. Naturforsch. Ver. Brünn 48: 28 (= *sannio*).

*Cryptocephalus interjectus* Baly, 1878, Cist. Entomol. 2: 372 (Murree); 1890, Second Yarkand Miss., Coleopt.: 26 (Murree).—Paiva, 1908–09, Rec. Indian Mus. 2: 406 (Murree).—Weise, 1910, Verh. Naturforsch. Ver. Brünn 48: 28 (= *sannio*, = *dodecaspilus*).

*Cryptocephalus pygidiomaculatus* Pic, 1928, Mél. Exot. Entomol. 52: 25 (Laos; PARIS). **New synonymy.**

*Distribution.* Kashmir, N India, Nepal, Laos, China (Tibet).

No additional material.

**Cryptocephalus trifasciatus** Fabricius

Fig. 32a–b

*Cryptocephalus trifasciatus* F., 1787, Mant. Insect. 1: 81 (China; KØBENHAVN).—Suffrian, 1854, Linn. Entomol. 9: 12 (China); 1860, op. cit. 14: 9 (China).—Baly, 1873, Trans. Entomol. Soc. London 1873: 88 (Japan).—Fairmaire, 1889, Ann. Soc. Entomol. Fr. ser. 6, 9: 70 (China).—Lefèvre, 1889, Ann. Soc. Entomol. Fr. ser. 6, 9: 289 (Annam: Tourane).—Weise, 1922, Tijdschr. Entomol. 65: 44 (China).—Chûjô, 1934, J. Soc. Tropic. Agric., Taiwan 4(3): 513, 524 (Formosa).—Gressitt, 1942, Lingnan Sci. J. 20(2–4): 353 (China).—Chen, 1942, Sinensia 13(1–6): 119 (China, Formosa, Japan).—Chûjô, 1954, Q. J. Taiwan Mus. 7(3–4): 239 (Taiwan).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 167 (China, Hainan, N Vietnam).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(1): 153 (Japan).

*Cryptocephalus orientalis* Hope, 1831, in Gray, Zool. Misc.: 30 (Nepal).—Lefèvre, 1889, Ann. Soc. Entomol. Fr. ser. 6, 9: 287 (= *trifasciatus*).

*Cryptocephalus fainanensis* Pic, 1928, Mél. Exot. Entomol. 5: 34 (Formosa; PARIS).—Chûjô, 1954, Q. J. Taiwan Mus. 7(3–4): 242 (Formosa).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 167 (= *trifasciatus*).

*Distribution.* China, Hainan, Taiwan, Vietnam, Nepal.

*Material examined.* VIETNAM: 1, Tonkin: Sept-Pagodes, Bowditch gift; 1, Tonkin (USNM); 4, Quang Nam Prov, Kim Lien, IX.1968, BWM (BISHOP).

**Cryptocephalus unifasciatus** Jacoby

Fig. 30c

*Cryptocephalus unifasciatus* Jacoby, 1889, Ann. Mus. Civ. Genova 27: 161 (Burma; GENOVA); 1908, Fauna India, Coleopt. 2: 196 (Burma).

*Cryptocephalus semimarginatus* Allard, 1891, Nouv. Arch. Mus. Paris ser. 3, 3: 232 (Laos; PARIS); 1904, Miss. Pavie Indochine 3: 162, pl. 9, fig. 9 (nec Jacoby).

*Cryptocephalus allardi* Clavareau, 1913, Coleopt. Cat. 53: 129 (n. n. for *C. semimarginatus* Allard, nec Jacoby, from Mexico). **New synonymy.**

*Distribution.* Burma, Thailand, Laos, Vietnam.

*Material examined.* THAILAND: Chiang Mai Prov, 1, Doi Suthep, 1000 m, VI.1965, YM; 1, Fang, VI.1965, YM (KU). LAOS: 1, Umgeb. Paklay, 1963 (MÜNCHEN). VIETNAM: 1, Ban Me Thuot, 500 m, VI.1960, SQ (BISHOP).

A specimen from Vietnam differs slightly in having a black transverse band on



FIG. 41. *Cryptocephalus brevebilineatus* (variation).

elytron slightly reduced. This might suggest the closeness or identity of this species with *C. externereductus* Pic. The type of *C. semimarginatus* Allard is preserved in the Paris museum and is no doubt identical with *unifasciatus* Jacoby.

### ***Cryptocephalus vietnamensis* Aslam**

*Cryptocephalus bicoloricornis* Pic, 1943, Échange **59**: 15 (Tonkin).

*Cryptocephalus vietnamensis* Aslam, 1968, J. Nat. Hist. **2**: 127 (n. n. for *bicoloricornis* Pic, 1943, nec *bicoloricornis* Pic, 1937, from Cambodge).

*Distribution.* Vietnam.

We could not trace the type of this species. Judging from the original description, this species seems to very closely resemble *C. bicoloricornis* Pic, 1937 (nec 1943), except in having "humeros luteo maculatis." In the original description of *bicoloricornis* Pic, 1937, it is described as "humeros nigromaculatis." However, it is possible that this species may prove to be an infraspecific variation of *bicoloricornis* Pic, 1937 (nec 1943).

### ***Cryptocephalus vitalisi* Pic**

Fig. 30d

*Cryptocephalus vitalisi* Pic, 1922, Échange **38**: 20 (Tonkin; PARIS).

*Distribution.* N Vietnam.

No additional material.

### ***Cryptocephalus vitticollis* Pic**

*Cryptocephalus vitticollis* Pic, 1941, Échange **66**: 5 (Tonkin).

*Distribution.* N Vietnam.

No additional material.

**Cryptocephalus yoshimotoi** Kimoto & Gressitt, new species

Fig. 34b

Head yellowish brown with clypeus, interantennal space, longitudinal sulcus at middle, and top of vertex black; antenna pitchy black with 3 or 4 basal segments more brownish; pronotum yellowish brown with a pair of large discal black markings, which are partly joined at middle, basal margin narrowly black; scutellum entirely black; elytron yellowish brown with subbasal and postmedian transverse or oblique markings, basal, apical, apical  $\frac{1}{2}$  of lateral and apical  $\frac{3}{4}$  of sutural margins black; ventral surfaces black with parts of pro- and mesothorax, metaepimeron, lateral portion of each abdominal segment and middle of anterior portion of 1st abdominal segment yellowish brown; pygidium black with apical portion yellowish brown; legs yellowish brown with tarsi pitchy black.

*Head* with vertex smooth, shining, sparsely impressed by distinct punctures, with a shallow longitudinal furrow on upper portion, and slightly raised short longitudinal costa and pair of slightly raised small convexities on interantennal space; interantennal space distinctly wider than narrowest width of interocular space; frontoclypeus distinctly raised, distinctly and more closely punctate compared with vertex. *Antenna* slender, 1st segment long, robust, slightly curved; 2nd shortest, slightly longer than wide, nearly  $\frac{1}{3}$  as long as 1st; 3rd  $1.75\times$  as long as 2nd, more slender; 4th subequal to 3rd in length and shape; 5th slightly longer and more robust than 4th, subtriangular; 6th  $1.33\times$  as long as 5th, nearly  $2\times$  as long as wide; 7th subequal to 6th in length and shape; 8th slightly longer than 7th, and 8th to 10th subequal to one another in length and shape; 11th  $1.33\times$  as long as 10th, its apex pointed. *Pronotum* transverse, nearly  $1.8\times$  as wide as long, convex, smooth, shining, sparsely impressed with minute punctures. *Scutellum* subtriangular, surface smooth, shining, nearly impunctate, with distinct fovea basally. *Elytron* subparallel-sided, with 11 regularly arranged longitudinal rows of punctures and their interstices smooth and slightly raised in lateral area. *Pygidium* with apical margin widely rounded. *Length* 2.7–3.2 mm.

Holotype (BISHOP 12,133), VIETNAM: S of Di Linh (Djiring), 1300 m, 6–13.X.1960, C.M. Yoshimoto. Paratopotypes: 6, same data as holotype (BISHOP, KIMOTO). Paratypes: VIETNAM: 2, Di Linh, 27.IX–14.X.1960, Yoshimoto (BISHOP); 3, Dalat, 1500 m, 26–27.IX.1960, Yoshimoto (BISHOP); 1, Dalat, 1550 m, 11.XI.1960, Gressitt (BISHOP); LAOS: 1, 18 km NW of Xieng Khouang, 1035 m, VIII.1960, R.E. Leech (BISHOP).

This new species resembles *Cryptocephalus crucipennis* Suffrian but is separable in having the body length shorter, the interior  $\frac{2}{3}$  of the basal margin of the elytron free from the blackish subbasal band, and the blackish median band situated slightly behind the middle.

**Cryptocephalus zersimus** Aslam

*Cryptocephalus subsuturalis* Pic, 1943, Opusc. Mart. **11**: 9 (Saigon).

*Cryptocephalus zersimus* Aslam, 1968, J. Nat. Hist. **2**: 127 (n. n. for *subsuturalis* Pic, 1943, nec *subsuturalis* Pic, 1920, from Hanoi).

*Distribution.* Vietnam.

We could not trace the type-specimen of this species. No additional material.

## Subfamily CHLAMISINAE

Genus **Chlamisus** Rafinesque

*Chlamys* Knoch, 1801 (nec Rödning in Bolten, 1798), Neue Beytr. Insectenk. **1**: 122.—Jacoby, 1908, Fauna India, Coleopt. **2**: 271 (type: *Bruchus gibbosa* Fabricius).—Achard, 1914, Genera Insect. **160**: 5.  
*Chlamisus* Raf., 1815, Anal. Nat. Tab. l'Univ. Corps Organ.: 16.—Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 84.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 171.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(1): 157.—Gressitt, 1965, Pac. Insects **7**(3): 445.—Medvedev, 1968, Rev. Entomol. URSS **47**: 563.



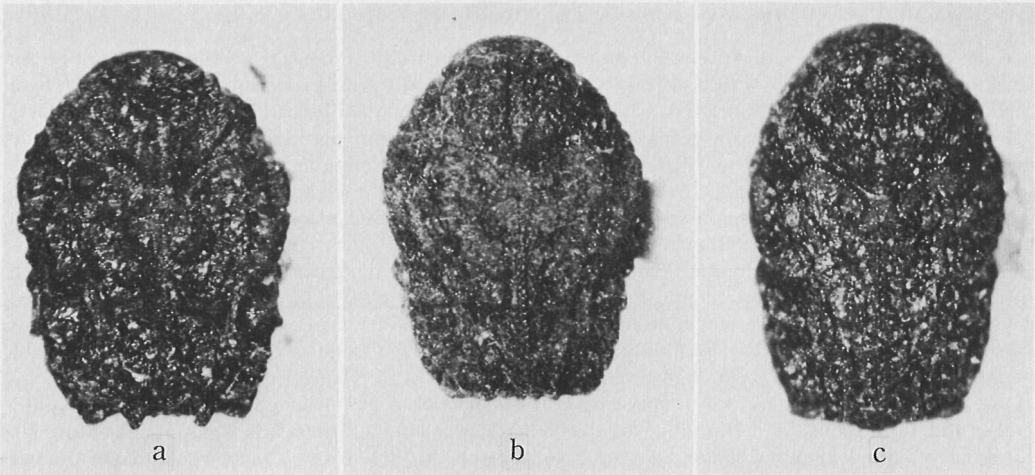


FIG. 42. a, *Chlamisus setosus*; b, *C. stercoralis*; c, *C. yunnanus*.

*Exema* Lacordaire, 1848, Monogr. Phytoph. **2**: 634, 844.—Jacoby, 1908, Fauna India, Coleopt. **2**: 278 (type: *Chlamys intricata* Kollar).—Achard, 1914, Genera Insect. **160**: 16.—Monrós, 1952, Acta Zool. Lilloana **10**: 645.—Chûjô, 1955, Tech. Bull. Kagawa Agric. Coll. **7**(1): 54 (= *Chlamisus*).  
*Myochlamys* Ihering, 1905 (nec Fairmaire, 1876), Rev. Mus. Paulista **6**: 642 (n. n. for *Chlamys* Koch, nec Röding, 1798).  
*Arthrochlamys* Ihering, 1907, Ann. Mus. Nac. Buenos Aires **14**: 251 (n. n. for *Myochlamys* Ihering, nec Fairmaire, 1878).  
*Boloschesis* Jacobson, 1924, Rev. Russe Entomol. **18**: 239 (n. n. for *Chlamys* Knoch, nec Röding, 1798).

KEY TO SPECIES OF *Chlamisus* [largely after Medvedev 1968]

- 1. Dorsal surfaces of body more or less rufous or yellow, not unicolorously black or bronze ..... 2
- Dorsal surfaces unicolorous, black or bronze ..... 4
- 2 ( 1). Ridges of pygidium indistinct; body pale rust-red, pronotum more or less darkened posteriorly; clypeus with a transverse median carina; length 3.3 mm ..... **kabakovi**
- Ridges of pygidium distinct; dorsal surfaces dark with more or less developed rufous or yellow markings ..... 3
- 3 ( 2). Black; head, antenna, legs and pronotum except base, apices of elytral tubercles and thorax orange rufous; length 5 mm ..... **semirufus**
- Bronze; labrum, antenna except apical portion, 2 small spots on head, a large spot on anterior margin of pronotum and legs in part yellow; length 3.3 mm ..... **hanoiensis**
- 4 ( 1). Pronotum with dense, elytron with sparse, yellow hairs; black with weak bronze luster; pygidium with a tooth on each side basally; length 4.3-4.6 mm ..... **setosus**
- Dorsal surfaces devoid of hairs ..... 5

- 5 ( 4). Pygidium with a tooth on each side basally ..... 6  
 Pygidium devoid of teeth ..... 7
- 6 ( 5). Fourth antennal segment cylindrical, slightly broader than 3rd; tubercles of pronotum very high; black, antenna, clypeus and legs in part rufous; length 3.6 mm ..... **bidentulus**  
 Fourth antennal segment triangularly broadened, much wider than 3rd; tubercles of pronotum moderately high; black, antenna, labrum and femora rufous; length 4.6–5 mm ..... **stercoralis**
- 7 ( 5). Median raised part of pronotum rather uniformly convex, appearing as a smooth arc in side view; its sculpture weak or in the form of slender low ridges ..... 8  
 Median part of pronotum irregularly convex with irregular coarse ridges and tubercles, appearing as a broken line in side view ..... 11
- 8 ( 7). Head and greater part of legs rufous; pronotum without distinct ridges; length 4.1 mm ..... **acutecostatus**  
 Anterior part of head and legs black; pronotum with distinct ridges ..... 9
- 9 ( 8). Head, pronotum, ventral surfaces and in part elytron reticulate, without distinct punctation; length 2.7 mm ..... **reticulatus**  
 Dorsal surfaces with distinct punctures, not reticulate ..... 10
- 10 ( 9). Pronotum with 4 rather regular ridges; antenna yellow; length 2.9–3.3 mm ..... **pallidicornis**  
 Pronotum with 6 curved ridges; antenna dark; length 2.8–3.3 mm ..... **yunnanus**
- 11 ( 7). Fifth antennal segment cylindrical, like 3rd and 4th segments; black, antenna and tarsi rufous; length 2.4–2.8 mm ..... **palliditarsis**  
 Fifth antennal segment triangular, similar to 6th segment ..... 12
- 12 (11). Head black; body bronzy black, antenna and tarsi yellow; length 4 mm ..... **tuberculithorax**  
 Head more or less rufous ..... 13
- 13 (12). Head completely rufous; convex part of pronotum rather even in side view; length 3.3–3.5 mm ..... **ruficeps**  
 Only anterior part of head rufous; convex part of pronotum very irregular in side view; length 3.8–4.3 mm ..... **capitatus**

**Chlamisus acutecostatus** (L. Medvedev)

*Chlamysus acutecostatus* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 562, 564 (Vietnam: N of Hanoi).

*Distribution.* N Vietnam.

No additional material.

**Chlamisus bidentulus** (L. Medvedev)

*Chlamysus bidentulus* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 562, 564 (Vietnam: N of Dong Hoi).

*Distribution.* N Vietnam.

No additional material.

**Chlamisus capitatus** (Bowditch)

Fig. 43a

*Chlamys capitata* Bowd., 1912, Trans. Am. Entomol. Soc. **39**: 18 (China: Ha-lang; mcz).—Chen, 1940, Sinensis **11**(3-4): 193, 197.

*Exema latiuscula* Chûjô, 1940, Trans. Nat. Hist. Soc. Formosa **30**: 284 (Taiwan; TARI).—Kimoto, 1969, Esakia **7**: 6 (= *capitatus*).

*Chlamys latiuscula*: Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 355, 361, pl. 22, fig. 1 (Hainan).

*Chlamisus capitatus*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 88.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 176.—Kimoto, 1969, Esakia **7**: 6 (Taiwan).

*Chlamisus latiusculus*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 87, 90.—Chûjô, 1956, Tech. Bull. Kagawa Agric. Coll. **7**(1): 162, fig. 22 (Taiwan).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 181 (Hongkong).

*Chlamysus latiusculus*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 564 (Vietnam: Bao Lac, Tam Dar, Hanoi, Hoan Bo).

*Distribution.* S China, Hainan, Taiwan, Vietnam.

No additional material.

**Chlamisus hanoiensis** (Bowditch)

*Chlamys hanoiensis* Bowd., 1913, Trans. Am. Entomol. Soc. **39**: 19 (Tonkin: Hanoi).

*Chlamysus hanoiensis*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 563 (Hanoi).

*Distribution.* N Vietnam.

No additional material.

**Chlamisus kabakovi** (L. Medvedev)

*Chlamysus kabakovi* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 561, 563 (Vietnam: 30 km N of Hon Gai).

*Distribution.* N Vietnam.

No additional material.

**Chlamisus pallidicornis** (Gressitt)

Fig. 43b

*Chlamys pallidicornis* Gress., 1942, Lingnan Sci. J. **20**(2-4): 355, 356, pl. 21, fig. 1 (Kwangtung; LINGNAN).

*Chlamisus pallidicornis*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 93.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 183.

*Chlamysus pallidicornis*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 564 (Vietnam: Con Cuong).

*Distribution.* S China, Vietnam, Thailand.

*Material examined.* THAILAND: 3, Mae Klang Waterfall, nr Chom Thong, VI.1965, KM (KU, BISHOP); 2 "Siam" (BANGKHEN, BISHOP). LAOS: 1, Vientiane, III.1966, JS (BISHOP).

**Chlamisus palliditarsis** (Chen)

*Chlamys palliditarsis* Chen, 1940, Sinensia **11**(3-4): 193, 196 (Kwangsi and Szechuan; AC.SIN.).

*Chlamisus palliditarsis*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 93.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 183.

*Chlamysus palliditarsis*: L. Medvedev, 1968, Rec. Entomol. URSS **47**: 564 (Vietnam: Con Cuong).

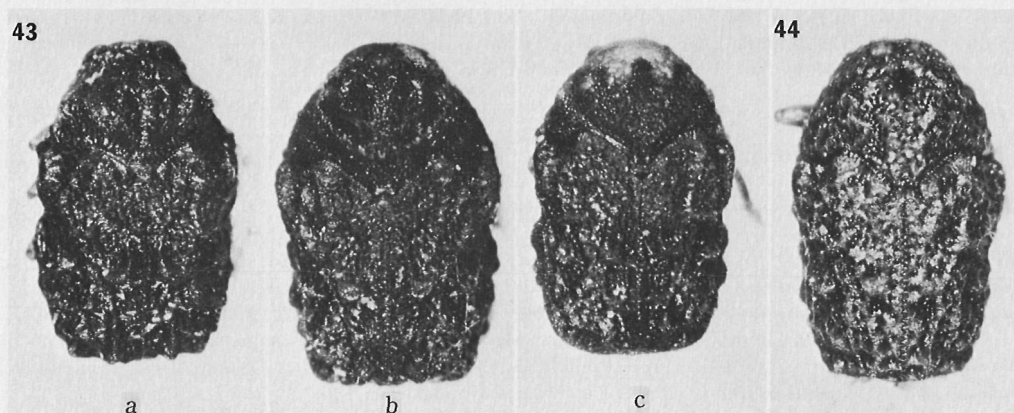


FIG. 43-44. 43: a, *Chlamisus capitatus*; b, *C. pallidicornis*; c, *C. semirufus*. 44, *Chlamisus chinensis* (China; Baly, 1877).

*Distribution.* S China, N Vietnam.

No additional material.

#### ***Chlamisus reticulatus* (L. Medvedev)**

*Chlamysus reticulatus* L. Medvedev, 1968, Rev. Entomol. URSS 47: 563, 564 (Vietnam: SW of Qui Chau).

*Distribution.* N Vietnam.

No additional material.

#### ***Chlamisus ruficeps* (Chen)**

*Chlamys ruficeps* Chen, 1941, Sinensia 11(3-4): 193, 198 (Kwangsi).

*Chlamisus ruficeps*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. 1A: 185.

*Chlamysus ruficeps*: L. Medvedev, 1968, Rev. Entomol. URSS 47: 564 (Vietnam: Sha Pa).

*Distribution.* S China, N Vietnam.

No additional material.

#### ***Chlamisus semirufus* (Chen)**

Fig. 43c

*Chlamys semirufa* Chen, 1940, Sinensia 11: 193, 199 (Tonkin).—Gressitt, 1942, Lingnan Sci. J. 20(2-4): 354, 370, pl. 22, fig. 3 (N Kwangtung).

*Chlamisus semirufus*: Gressitt, 1946, Ann. Entomol. Soc. Am. 39(1): 95 (Fukien, Kiangsi).

*Chlamysus semirufus*: L. Medvedev, 1968, Rev. Entomol. URSS 47: 563 (Vietnam: Hoa-Binh).

*Distribution.* N Vietnam, S China.

No additional material.

#### ***Chlamisus setosus* (Bowditch)**

Fig. 42a

*Chlamys setosa* Bowd., 1913, Trans. Am. Entomol. Soc. 39: 20 (Yunnan; mcz).—Chen, 1940, Sinensia 11(3-4): 193.

*Chlamisus setosus*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 95.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 185 (Yunnan).

*Chlamysus setosus*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 564 (Vietnam: Sha Pa, Dong-Pao).

*Distribution.* S China, N Vietnam.

No additional material.

***Chlamisus stercoralis* (Gressitt), resurrected from synonymy**

Fig. 42b

*Chlamys indica* Jacoby, 1901 (nec Guérin, 1840), Proc. Zool. Soc. London **1901**: 163, pl. 14, fig. 9 (India; BMNH); 1908, Fauna India, Coleopt. **2**: 277, fig. 109 (India).

*Chlamys stercoralis* Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 355, 371, pl. 22, fig. 5 (Hainan & Kwangtung; LINGNAN).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 186 (= *indica* Jacoby).

*Chlamisus stercoralis*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 96 (Fukien, Hainan).

*Chlamisus indicus*: Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 186.

*Chlamysus indicus*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 564 (Vietnam: Con Cuong, Hoa Binh, Qui Chau).

*Distribution.* S China, Hainan, Vietnam, Thailand, India.

Gressitt & Kimoto (1961) treated *Chlamys stercoralis* Gressitt as a synonym of *Chlamys indica* Jacoby. However, *indica* Jacoby is a junior homonym of *Chlamys indica* Guérin, 1840. Thus, *stercoralis* Gressitt becomes the valid name for this species.

*Material examined.* THAILAND: 1, "Siam" (BANGKHEN).

***Chlamisus tonkinensis* (Achard)**

*Chlamys tonkinensis* Achard, 1920, Bull. Soc. Entomol. Fr. **1920**: 111 (Tonkin).

*Distribution.* N Vietnam.

This species is not included in the key.

No additional material.

***Chlamisus tuberculithorax* (Gressitt)**

*Chlamys tuberculithorax* Gress., 1942, Lingnan Sci. J. **20**(2-4): 356, 374, pl. 22, fig. 6 (C. Hainan I; LINGNAN).

*Chlamisus tuberculithorax*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 97.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 188.

*Chlamysus tuberculithorax*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 564 (Vietnam: Shon Zuong).

*Distribution.* Hainan, N Vietnam.

***Chlamisus yunnanus* (Bowditch)**

Fig. 42c

*Chlamys yunnana* Bowd., 1913, Trans. Am. Entomol. Soc. **39**: 319 (Yunnan; MCZ).—Chen, 1940, Sinensia **11**(3-4): 195.

*Chlamys aterrima* Gressitt, 1942, Lingnan Sci. J. **20**(2-4): 355, 357, pl. 21, fig. 6 (Hainan; LINGNAN).—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 189 (= *yunnanus*).

*Chlamisus yunnanus*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 100.—Gressitt & Kimoto, 1961, Pac. Insects Monogr. **1A**: 189 (Hainan).

*Chlamisus aterrimus*: Gressitt, 1946, Ann. Entomol. Soc. Am. **39**(1): 88 (Hainan).

*Chlamysus yunnanus*: L. Medvedev, 1968, Rev. Entomol. URSS **47**: 564 (Vietnam).

*Distribution.* S China, Hainan, N Vietnam.

No additional material.

#### Subfamily LAMPROSOMATINAE

#### KEY TO GENERA OF LAMPROSOMATINAE [largely after L. Medvedev, 1968]

1. Claws simple; inner margin of eye with angular emargination ..... **Guggenheimia**
- ..... Claws each with a tooth ..... 2
- 2 (1). Inner margin of eye with weak acute emargination; marked sexual dimorphism: ♂ larger than ♀, with an erect process on outer surface of mandible; claws with a large tooth ..... **Scrophoomorphus**
- Inner margin of eye with distinct angular emargination, weak sexual dimorphism: ♂ smaller than ♀; claws each with a large or small tooth ..... **Oomorphoides**

#### Genus **Guggenheimia** Monrós

*Guggenheimia* Monrós, 1956, Rev. Agron. Noroeste Argent. **2**(1): 52 (type: *Guggenheimia sumatrana* Monrós, from Sumatra).

#### **Guggenheimia vietnamica** L. Medvedev

*Guggenheimia vietnamica* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 556 (Vietnam: Tam Dao; moscow).

*Distribution.* Vietnam.

Pitchy black, shining, antenna black, basal segments reddish with dorsal surface of 1st segment darkened; length 3.1 mm.

No additional material.

#### Genus **Scrophoomorphus** L. Medvedev

*Scrophoomorphus* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 558 (type: *Scrophoomorphus kabakovi* Medvedev).

#### **Scrophoomorphus kabakovi** L. Medvedev

*Scrophoomorphus kabakovi* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 558 (Vietnam: mts nr Sha Pa; MOSCOW).

*Distribution.* Vietnam.

Pitchy black, shining, antenna reddish brown, basal segments yellowish with dorsal surface of 1st segment blackish; length 3.8 mm.

No additional material.

#### Genus **Oomorphoides** Monrós

*Oomorphoides* Monrós, 1956, Rev. Agron. Noroeste Argent. **2**(1): 54 (type: *Lamprosoma cupreatum* Baly; Japan).—Chûjô, 1958, Entomol. Rev. Japan **9**(2): 55, 56.—Gressitt & Kimoto, 1961, Pac. Insects Monogr.

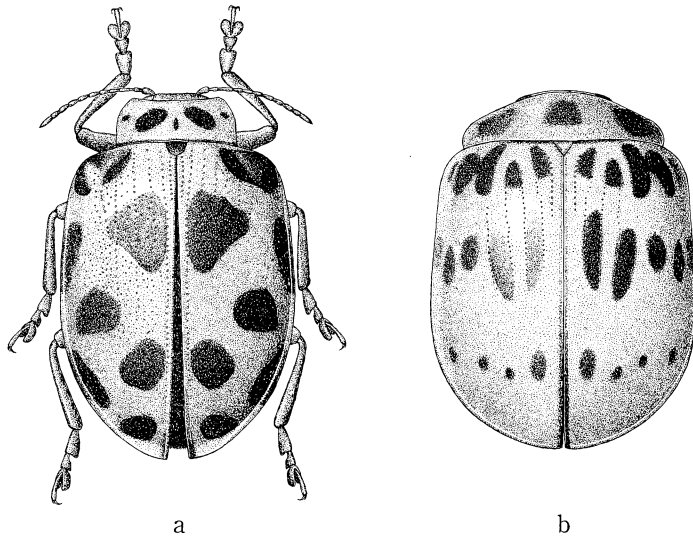


FIG. 45. a, *Agasta formosa*; b, *Paropsides duodecimpustulata*.

1A: 189.—Ohno, 1961, Entomol. Rev. Japan 13(2): 47, 48.—Kimoto, 1964, J. Fac. Agr. Kyushu Univ. 13(1): 162.—L. Medvedev, 1968, Rev. Entomol. URSS 47: 560.

#### KEY TO SPECIES OF *Oomorhoides*

1. Antenna entirely blackish; dorsal surfaces violaceous or bluish violaceous; punctation of pronotum coarse, same size as on elytron, dorsal surfaces without any microsculpture and with very fine punctures ..... **tonkinensis**
- Antenna with basal segments reddish ..... 2
- 2 (1). Femoral impression on 1st abdominal segment flanged most of length; general color dark violet with head greenish; occiput not shagreened; length 2.7 mm ..... **violaceus**
- Femoral impression on 1st abdominal segment flanged only on inside; bronze, occiput shagreened; length 3.4 mm ..... **kabakovi**

#### ***Oomorhoides kabakovi* L. Medvedev**

*Oomorhoides kabakovi* L. Medvedev, 1968, Rev. Entomol. URSS 47: 558 (Vietnam: mts NE of Cua Rao; MOSCOW).

*Distribution.* Vietnam.

No additional material.

#### ***Oomorhoides tonkinensis* (Chûjô)**

*Lamprosoma tonkinense* Chûjô, 1935, Rev. Fr. Entomol. 2: 94 (Tonkin).

*Oomorhoides tonkinensis*: L. Medvedev, 1968, Rev. Entomol. URSS 47: 560 (key).

*Distribution.* Vietnam, Laos.

*Material examined.* LAOS: 1, Attapeu Prov, Houei Khong, V.1965, JAR (BISHOP).

### **Oomorphoides violaceus** L. Medvedev

*Oomorphoides violaceus* L. Medvedev, 1968, Rev. Entomol. URSS **47**: 560 (Vietnam: Tam Dao).

*Distribution.* N Vietnam.

No additional material.

## Subfamily CHRYSOMELINAE

### KEY TO GENERA OF CHRYSOMELINAE

- |          |   |                       |
|----------|---|-----------------------|
| 1.       | Anterior coxal cavities open posteriorly .....  | 2                     |
|          | Anterior coxal cavities closed posteriorly .....  | 18                    |
| 2 ( 1).  | Tarsal claws simple .....   | 3                     |
|          | Tarsal claws appendiculate or bifid .....   | 15                    |
| 3 ( 2).  | Interior border of elytral epipleuron ciliate, at least posteriorly .....   | 4                     |
|          | Interior border of epipleuron not ciliate .....   | 7                     |
| 4 ( 3).  | Intercoxal process of metasternum not marginate anteriorly .....  | 5                     |
|          | Intercoxal process of metasternum margined anteriorly ....  | <b>Chrysolina</b>     |
| 5 ( 4).  | Base of pronotum margined .....   | 6                     |
|          | Base of pronotum not margined .....   | <b>Ambrostoma</b>     |
| 6 ( 5).  | Elytral puncturation in regular geminate series .....   | <b>Agrosteomela</b>   |
|          | Elytral puncturation in irregular rows, not geminate .....  | <b>Humba</b>          |
| 7 ( 3).  | Elytron with punctures confused or in irregular rows .....  | 8                     |
|          | Elytron with regular rows of punctures .....  | <b>Phaedon</b>        |
| 8 ( 7).  | Base of pronotum margined; tarsal segment 3 bilobed .....   | 9                     |
|          | Base of pronotum not margined; tarsal segment 3 not lobed .....   |                       |
|          | .....   | <b>Colaphellus</b>    |
| 9 ( 8).  | Tibial apices not armed with toothlike processes .....  | 10                    |
|          | Tibial apices each armed with a toothlike process .....   | <b>Gastrophysa</b>    |
| 10 ( 9). | Body convex; mesosternum shorter than prosternum between coxae .....  | 11                    |
|          | Body strongly flattened; mesosternum well developed, as long as prosternum between coxae .....  | <b>Gastrolina</b>     |
| 11 (10). | Elytral epipleuron concave, with outer border sharp .....   | 12                    |
|          | Elytral epipleuron flat .....   | 13                    |
| 12 (11). | Oblong; elytron with a lateral costa along lateral margin, starting from humerus and almost reaching apex; margination of anterior margin of pronotum interrupted at middle ..... | <b>Gastrolinoides</b> |
|          | Round; elytron without such a costa; margination of anterior margin of pronotum entire .....  | <b>Plagiodera</b>     |



- 13 (11). Antennal segment 3 as long as or barely longer than 4 ..... 14  
 Antennal segment 3 nearly as long as 4 + 5 ..... **Agasta**
- 14 (13). Pronotum with lateral callus separated by punctured depression; tarsal  
 segment 3 deeply emarginate; metasternum unmarginated anteriorly  
 (Linnaeus, 1758; type: *Chrysomela populi* Linn.; Europe) ... **Chrysomela**  
 Pronotum evenly convex and smooth, without callus; tarsal segment  
 3 shallowly emarginate; metasternum margined and truncate an-  
 teriorly ..... **Linnaeidea**
- 15 ( 2). Elytral epipleuron vertical; tarsal claws bifid ..... 16  
 Elytral epipleuron horizontal; tarsal claws appendiculate ..... 17
- 16 (15). Prosternum emarginate behind ..... **Paropsides**  
 Prosternum truncate behind ..... **Asiparopsis**
- 17 (15). Tibiae angularly dilated apically; tarsal segment 3 not lobed .....  
 ..... **Gonioctena**  
 Tibiae not angularly dilated apically; tarsal segment 3 bilobed; (Chev-  
 rolat, 1837; type: *Chrysomela vulgatissima* Linnaeus, Europe) .....  
 ..... **Phratora**
- 18 ( 1). Tarsal claws bifid or appendiculate ..... 19  
 Tarsal claws simple ..... **Potania**
- 19 (18). Tarsal claws appendiculate ..... 20  
 Tarsal claws bifid ..... **Lycaria**
- 20 (19). Clypeus subtriangular, depressed; antenna monoliform ... **Phyllocharis**  
 Clypeus trapezoidal, not depressed; antenna subfiliform ..... **Phola**

### Genus **Chrysolina** Motschulsky

- Atechna* Chevrolat, 1837, in Dejean, Cat. Coleopt., ed. 3: 427.—Silfverberg, 1980, Bull. Zool. Nomencl. **27**(1): 57 (type designated as *Chrysomela vulpina* Fabr.; requested not to be given priority over *Chrysolina* Motsch.).
- Chrysolina* Motsch., 1860, Schrenck's Reisen Amurl. **2**: 210 (type: *Chrysomela staphylea* Linnaeus, Europe).—Marseul, 1886, Abeille **24**: 29.—Chūjō, 1958, Q. J. Taiwan Mus. **11**(1-2): 42.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 264.—Silfverberg, 1980, Bull. Zool. Nomencl. **3**(1): 57 (placed in Official List of Generic Names in Zoology).
- Polysticta* Hope, 1840, Coleopt. Man. **3**: 164 (type: *Chrysomela guttata* Fabr.); (nec Eyton, 1836, Aves).
- Anopachys* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 202.
- Bittotaenia* Motschulsky, 1860, op. cit.: 206.
- Centoptera* Motschulsky, 1860, op. cit.: 207.
- Chalcoidea* Motschulsky, 1860, op. cit.: 209.
- Chrysomorpha* Motschulsky, 1860, op. cit.: 204.
- Colaphodes* Motschulsky, 1860, op. cit.: 212.
- Colaphoptera* Motschulsky, 1860, op. cit.: 215.
- Colaphosoma* Motschulsky, 1860, op. cit.: 216.
- Craspeda* Motschulsky, 1860, op. cit.: 191.
- Dlochrysa* Motschulsky, 1860, op. cit.: 203.—Marseul, 1886, Abeille **24**: 164.
- Helioctola* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 190.
- Hoplasoma* Motschulsky, 1860, op. cit.: 211.
- Lithoptera* Motschulsky, 1860, op. cit.: 210.
- Ovomorpha* Motschulsky, 1860, op. cit.: 213.

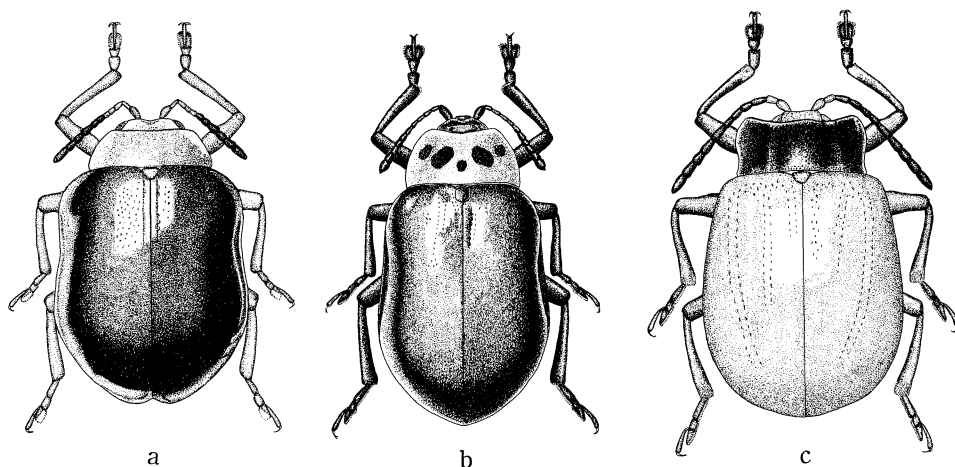


FIG. 46. **a**, *Linaeidea aeneipennis* (China; Baly, 1859); **b**, *L. maculicollis* (China; Jacoby, 1896); **c**, *Agrostomela indica*.

*Ovosoma* Motschulsky, 1860, op. cit.: 214.—Marseul, 1886, Abeille **24**: 137.

*Ovostoma* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 215.

*Pelurosticha* Motschulsky, 1860, op. cit.: 191.—Marseul, 1886, Abeille **24**: 64.

*Stichoptera* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 209.—Marseul, 1886, Abeille **24**: 113.

*Stichosoma* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 208.—Marseul, 1886, Abeille **24**: 28.

*Taeniossticha* Motschulsky, 1860, op. cit.: 207.

*Timarchoptera* Motschulsky, 1860, op. cit.: 118.—Marseul, 1886, Abeille **24**: 106.

*Threnosoma* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 213.—Marseul, 1886, Abeille **24**: 9.

*Zeugotaenia* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 206.—Marseul, 1886, Abeille **24**: 59.

*Crostitops* Marseul, 1883, Abeille **21**: 105.

*Hypericia* Bedel, 1892, Faune Coleopt. Bassin Seine **5**: 258, nota (as a division of *Chrysomela*).

*Sphaeromela* Bedel, 1892, op. cit.: 260, nota (as a division of *Chrysomela*).

*Timarchomela* Achard, 1924, Fragm. Entomol. **1922**: 17.

*Minchia* Strand, 1935, Folia Zool.-Hydrobiol. **7**: 292 (n. n. for *Hoplosoma* Motschulsky, nec Agassiz, 1846).

*Lithopteroides* Strand, 1935, op. cit.: 295 (n. n. for *Lithoptera* Motschulsky, nec Müller, 1858).

*Allochrysolina* Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 133 (as a subgenus of *Chrysolina*).

*Allohypericia* Bechyné, 1950, op. cit.: 159 (as a subgenus of *Chrysolina*).

*Caudatochrysa* Bechyné, 1950, op. cit.: 149 (as a subgenus of *Chrysolina*).

*Chrysocrosita* Bechyné, 1950, op. cit.: 90 (as a subgenus of *Chrysolina*).

*Chrysolinopsis* Bechyné, 1950, op. cit.: 82 (as a subgenus of *Chrysolina*).

*Erythrochrysa* Bechyné, 1950, op. cit.: 91 (as a subgenus of *Chrysolina*).

*Euchrysolina* Bechyné, 1950, op. cit.: 83 (as a subgenus of *Chrysolina*).

*Ghesquierita* Bechyné, 1950, op. cit.: 171 (as a subgenus of *Chrysolina*).

*Maenadochrysa* Bechyné, 1950, op. cit.: 116 (as a subgenus of *Chrysolina*).

*Melasomoptera* Bechyné, 1950, op. cit.: 141 (as a subgenus of *Chrysolina*).

*Menthastriglia* Bechyné, 1950, op. cit.: 74 (as a subgenus of *Chrysolina*).

*Parkanoiola* Bechyné, 1950, op. cit.: 130 (as a subgenus of *Chrysolina*).

*Pierryvettia* Bechyné, 1950, op. cit.: 68 (as a subgenus of *Chrysolina*).

*Taeniochrysea* Bechyné, 1950, op. cit.: 87 (as a subgenus of *Chrysolina*).

*Timarcholina* Bechyné, 1950, op. cit.: 66 (as a subgenus of *Chrysolina*).

*Timarchomima* Bechyné, 1950, op. cit.: 65 (as a subgenus of *Chrysolina*).

*Palaesticta* Bechyné, 1952, op. cit. **3**: 383 (as a subgenus of *Chrysolina*).

*Polystictella* Bechyné, 1952, op. cit. **3**: 384 (as a subgenus of *Chrysolina*).

*Oreina*: Monrós & Bechyné, 1956, op. cit. 7: 1129 (*Chrysolina* as a subgenus of *Oreina*).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 307.

KEY TO SPECIES OF *Chrysolina*

- |        |   |                    |
|--------|---|--------------------|
| 1.     | Proepimeron swollen or keeled . . . . .   | 2                  |
|        | Proepimeron flat, not keeled or swollen, at most with a groove parallel to epimeral suture . . . . .  | 3                  |
| 2 (1). | Elytron with punctures in part arranged in rows or entirely confusedly impressed; coloration of dorsal surfaces varies purplish to bronzy blue; length 7-10 mm . . . . .  | <b>aurichalcea</b> |
|        | Elytron with regularly arranged geminate rows of punctures; bluish black; length 6.0-6.5 mm . . . . .   | <b>gracilis</b>    |
| 3 (1). | Claw segment of tarsus untoothed . . . . .  | 4                  |
|        | Claw segment of tarsus feebly toothed beneath . . . . .   | 6                  |
| 4 (3). | Elytron with surface smooth, shining . . . . .  | 5                  |
|        | Elytron with surface opaque, finely reticulate, punctures partly arranged 12-14 longitudinal rows, their interstices sparsely punctate; bronze with slightly greenish luster; length 7 mm . . . . .   | <b>vitalisi</b>    |
| 5 (4). | Bluish black with or without greenish luster; elytron reddish brown; length 6-8 mm . . . . .  | <b>bowringi</b>    |
|        | Blue-black, prothorax golden green with lateral portion blue-black, elytron entirely golden green; ventral surfaces with metasternum and abdomen golden green; length 7.5-8.5 mm . . . . .  | <b>auriventris</b> |
| 6 (3). | Punctures on pronotum and elytron unusually large for a species of this genus; diameter of punctures sometimes as wide as their interstices especially on lateral portion; bronzy black with or without greenish luster; length 7.5-10.0 mm . . . . . | <b>aurata</b>      |
|        | Punctures on pronotum and elytron distinct but not unusually large, partly arranged in longitudinal rows; bronzy black; length 8.0-8.5 mm . . . . .   | <b>annamensis</b>  |

***Chrysolina annamensis* Chen**

*Chrysolina annamensis* Chen, 1934, Rech. Chrysol. Chine: 36 (Annam; PARIS); 1936, Ann. Soc. Entomol. Fr. 105: 148.

*Chrysolina (Pierryvettia) annamensis*: Bechyné, 1950, Entomol. Arb. Mus. Frey 1: 71 (Annam).

*Distribution.* Vietnam.

No additional material.

***Chrysolina aurata* (Suffrian)**

Fig. 47a

*Chrysomela aurata* Suffr., 1851, Linn. Entomol. 5: 102 (India).

*Chrysomela separata* Baly, 1860, J. Entomol. 1: 96 (India; BMNH).—Maulik, 1926, Fauna India, Chrysol. & Halt.: 41 (=aurata).

- Chrysomela grutii* Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, **10**: 22 (Rangoon).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 41 (=aurata; BMNH).
- Chrysomela foveopunctata* Fairmaire, 1888, Ann. Soc. Entomol. Belg. **1888**: 39 (Yunnan).
- Chrysomela siamensis* Jacoby, 1900, Mem. Soc. Entomol. Belg. **7**: 119 (Siam; BMNH). **New synonymy.**
- Chrysomela tonkinae* Fairmaire, 1888, Ann. Soc. Entomol. Fr. **1888**: 372 (Tonkin).—Chen, 1934, Rech. Chrysomel. Chine: 35 (=aurata); 1936, Ann. Soc. Entomol. Fr. **105**: 148.
- Chrysolina aurata*: Maulik, 1926, Fauna India, Chrysomel. & Halt.: 41 (India, Burma).—Chen, 1934, Rech. Chrysom. Chine: 35 (China); 1936, Ann. Soc. Entomol. Fr. **105**: 148.
- Chrysolina foveopunctata*: Chen, 1934, Rech. Chrysomel. Chine: 34 (Yunnan); 1936, Ann. Soc. Entomol. Fr. **105**: 146.
- Chrysolina (Pierryvetia) aurata*: Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 70 (India).
- Chrysolina (Pierryvetia) aurata grutii*: Bechyné, 1950, loc. cit. (Tenasserim).
- Chrysolina (Pierryvetia) aurata foveopunctata*: Bechyné, 1950, loc. cit. (Yunnan, Laos, Tonkin).
- Chrysolina (Pierryvetia) aurata indochinensis* Bechyné, 1950, loc. cit. (Tonkin, Annam).
- Chrysolina (Pierryvetia) tonkinae*: Bechyné, 1950, op. cit.: 73 (Tonkin).
- Oreina (Chrysolina) aurata*: Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 313.
- Oreina (Chrysolina) aurata foveopunctata*: Gressitt & Kimoto, 1963, op. cit.: 314 (China).

*Distribution.* China, Laos, Vietnam, Thailand, Burma, India.

*Material examined.* THAILAND: 1, Chiang Mai, IV.1953 (BHANGKHEN). LAOS: 1 Umgeb. Pakse, 1963 (MÜNCHEN); 11, Sayaboury Prov, Sayaboury, II,V,IX,XII.1965, III,IV.1966, NC; Vientiane Prov, 32, Vientiane, IX.1965, NC; 10, Ban Van Heua, V,IX,XI.1965, NC; 1, Tha Ngone, Gi Sion Vill., X.1965, NC; 3, Khammouan Prov, Phon Tiou, IX.1965, NC; 1, Tonpheng, IX.1965 (BISHOP). VIETNAM: 1, Agric. Stn, Haut Donai, 800 m, VII.1933, MP (USNM).

### **Chrysolina aurichalcea** (Mannerheim)

- Chrysomela aurichalcea* Mann., 1825, in Hummel, Essais Entomol. **4**: 39 (Altai).—Weise, 1887, Archiv. Naturgesch. **53**(1): 181 (Japan, Amur).
- Chrysomela asclepiadis* Villa, 1833, Coleopt. Eur. Dupl.: 36 ("Europe"; no locality name cited).—Weise, 1887, Insect. Dtschl. **6**, **3**: 418 (C Europe); 1887, Arch. Naturgesch. **53**(1): 182, 185 (as *aurichalcea* var.).
- Chrysomela villae* Cristofori, 1833, Consp. Meth.: 82 (It. bor.).—Weise, 1916, Coleopt. Cat. **68**: 60 (=aurichalcea).
- Chrysomela gibbipennis* Falderman, 1835, Mem. Acad. Petersb. **2**: 441 (Irkutzk).—Weise, 1887, Arch. Naturgesch. **53**(1): 182 (=aurichalcea var.).
- Chrysomela elevata* Suffrian, 1851, Linn. Entomol. **5**: 189 (? London).—Weise, 1887, Arch. Naturgesch. **53**(1): 182 (=aurichalcea var.).
- Chrysomela stali* Baly, 1860, J. Entomol. **1**: 95 (N China).—Weise, 1887, Arch. Naturgesch. **5**(1): 182 (=aurichalcea var.).
- Chrysomorpha quadrangulata* Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 226, pl. 11, fig. 10 (Amur).—Weise, 1887, Arch. Naturgesch. **53**(1): 182 (=aurichalcea var.).
- Anopachys violaceicollis* Motschulsky, 1861, Etud. Entomol. **10**: 21 (Japan).—Weise, 1887, Arch. Naturgesch. **53**(1): 182 (=aurichalcea var.).
- Chrysomela wallacei* Baly, 1862, Ann. Mag. Nat. Hist. ser. 3, **10**: 21 (Manchuria).—Chen, 1934, Rech. Chrysomel. Chine: 41 (=aurichalcea); 1936, Ann. Soc. Entomol. Fr. **105**: 153.
- Chrysomela cyaneopurpurea* Ballion, 1878, Bull. Moscow **53**(2): 379 (Kuldsha).—Wiese, 1887, Arch. Naturgesch. **53**: 182 (=aurichalcea var.).
- Chrysomela aurichalcea eurina* Frivald, 1883, Természettud. Fü. **7**: 17 (Mehadia).
- Chrysomela amethystina* Kolbe, 1886, Arch. Naturgesch. **52**(1): 228 (Korea).—Chen, 1934, Rech. Chrysomel. Chine: 41 (=aurichalcea); 1936, Ann. Soc. Entomol. Fr. **105**: 153.
- Chrysomela cupraria* Kolbe, 1886, Arch. Naturgesch. **52**: 228 (Korea).—Weise, 1887, Arch. Naturgesch. **53**(1): 182 (=aurichalcea).

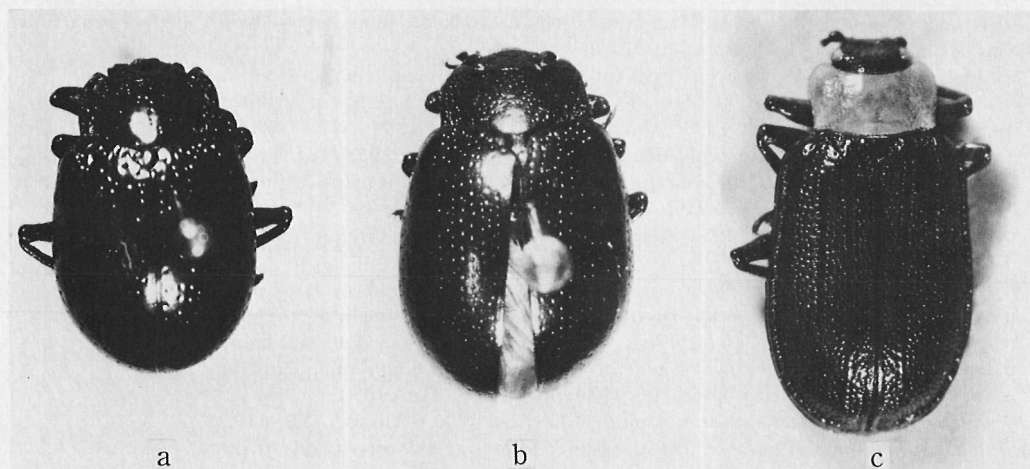


FIG. 47. a, *Chrysolina aurata*; b, *C. vitalisi*; c, *Gastrolina tonkinea*.

- Chrysomela quadrangulata*: Kolbe, 1886, Arch. Naturgesch. **52**(1): 228 (Korea).—Weise, 1916, Coleopt. Cat. **68**: 59 (=aurichalcea var. *violaceicollis*).
- Chrysomela aurichalcea* var. *japana* Marseul, 1886, Abeille **24**: 41 (nec Baly, 1874; Japan).
- Chrysomela pekinensis* Fairmaire, 1887, Rev. Entomol. **6**: 331 (China).—Chen, 1934, Rech. Chrysomel. Chine: 41 (=aurichalcea); 1936, Ann. Soc. Entomol. Fr. **105**: 153.
- Chrysomela aurichalcea* var. *lineella* Weise, 1887, Arch. Naturgesch. **53**(1): 182 (Amur).
- Chrysomela aurichalcea* var. *recticollis* Weise, 1887, Arch. Naturgesch. **53**(1): 182, 185 (Japan). See var. *collaris*, below.
- Chrysomela aurichalcea* var. *nigricans* Jacobson, 1900, Horae Soc. Entomol. Ross. **35**: 100 (Siberia).
- Chrysomela yezoensis* Matsumura, 1911, J. Coll. Agric. Tohoku Imp. Univ. Sapporo **4**: 149 (S Sachalin, Japan).
- Chrysomela aurichalcea* var. *collaris* Weise, 1916, Coleopt. Cat. **68**: 56 (n. n. for *aurichalcea* var. *recticollis* Weise).
- Chrysomela asclepiadis schatzmayri* Müller, 1916, Entomol. Bl. **12**: 96, fig. 1-6 (Istria).
- Chrysomela asclepiadis thurmtaxisi* Schatzmayr, 1927, Boll. Soc. Adriat. Sci. Trieste **29**(2): 151 (Istria).
- Chrysolina aurichalcea*: Chen, 1934, Rech. Chrysomel. Chine: 41 (Siberia, Korea, Japan, Manchuria, China, Tonkin); 1936, Ann. Soc. Entomol. Fr. **105**: 153.—Bechyné, 1950, Entomol. Arb. Mus. Frey. **1**: 146 (C & S Europe, Siberia, Mongolia, China, Korea, Japan, Annam, Laos).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 266 (Japan).—Brovdij, 1977, Fauna Ukraina, Chrysomel.: 146, fig. (Ukraine).
- Chrysomela asclepiadis bohemana* Müller, 1948, Atti Mus. Civ. Storia Nat. Trieste **17**: 95 (C Europe).
- Chrysolina (Anopachys) aurichalcea collaris*: Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 146 (Japan; with ab. *kiotensis*, *relator*, p. 147).
- Chrysolina (Anopachys) aurichalcea yezoensis*: Bechyné, 1950, op. cit.: 147 (Japan).
- Chrysolina (Anopachys) aurichalcea amethystina*: Bechyné, 1950, op. cit.: 147 (Korea; with ab. *uvida*).
- Chrysolina (Anopachys) aurichalcea pekinensis*: Bechyné, 1950, op. cit.: 147 (China).
- Chrysolina (Anopachys) aurichalcea kwanghsiensis* Bechyné, 1950, op. cit.: 147 (China).
- Chrysolina (Anopachys) aurichalcea omisiensis* Bechyné, 1950, op. cit.: 147 (China).
- Chrysolina (Anopachys) aurichalcea fokiensis* Bechyné, 1950, op. cit.: 147 (China).—Chûjô, 1958, Q. J. Taiwan Mus. **11**(1-2): 54 (Formosa).
- Chrysolina (Anopachys) aurichalcea yunnanica* Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 148 (China, Laos).
- Chrysolina aurichalcea vagesplendens* Bechyné, 1950, op. cit.: 148 (Annam).
- Chrysolina (Anopachys) aurichalcea asclepiadis*: Bechyné, 1950, op. cit.: 148 (Europe centrale; with ab. *viridisplendens*).

*Chrysolina (Anopachys) aurichalcea thurntaxisi*: Bechyné, 1950, op. cit.: 148 (Istrie).

*Chrysolina (Anopachys) aurichalcea schatzmayri*: Bechyné, 1950, op. cit.: 148 (Italie).

*Chrysomela aurichalcea problematica* Kaszab, 1960, Rovart. Kozl. **15**(3): 55 (Hungary).

*Oreina (Chrysolina) aurichalcea*: Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 311, 314 (China).

*Distribution.* C Europe, Siberia, Mongolia, China, Korea, Japan, Ryukyus, Taiwan, Vietnam, Laos.

No additional material.

### **Chrysolina auriventris** Bechyné

*Chrysolina (Pierryvettia) auriventris* Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 74 (Laos, Annam; FREY).

*Distribution.* Laos, Vietnam.

No additional material.

### **Chrysolina bowringi** (Baly)

*Chrysomela bowringi* Baly, 1860, J. Entomol. **1**: 96 (China; BMNH).

*Chrysomela niobe* Stål, 1860, Öfvers. Vetensk.-Akad. Förh. **17**: 463 (Hongkong).—Baly, 1861, J. Entomol. **1**: 301 (= *bowringi*).

*Chrysolina bowringi*: Chen, 1934, Rech. Chrysomel. Chine: 37 (China, Tonkin); 1936, Ann. Soc. Entomol. Fr. **105**: 149.

*Chrysolina (Pierryvettia) bowringi*: Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 72 (Annam; with var. *rubicans*).—Chûjô, 1958, Q. J. Taiwan Mus. **11**(1–2): 47 (Formosa).

*Distribution.* China, N Vietnam.

No additional material.

### **Chrysolina gracilis** Bechyné

?*Chrysolina nikkoensis*: Chen, 1934, Rech. Chrysomel. Chine: 39 (China, Tonkin); 1936, Ann. Soc. Entomol. Fr. **105**: 151.

*Chrysolina (Hypericia) gracilis* Bechyné, 1950, Entomol. Arb. Mus. Frey. **1**: 157 (China; FREY).

*Oreina (Chrysolina) gracilis*: Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 319 (China).

*Distribution.* China, Vietnam.

No additional material.

### **Chrysolina vitalisi** Bechyné

Fig. 47b

*Chrysolina (Pierryvettia) vitalisi* Bechyné, 1950, Entomol. Arb. Mus. Frey **1**: 71 (Annam; FREY).

*Distribution.* Laos, Vietnam.

*Material examined.* LAOS: 2, Khammouan Prov, Phon Tiou, IX.1965, NC (BISHOP).

## Genus **Ambrostoma** Motschulsky

*Ambrostoma* Motsch., 1860, Schrenk's Reisen Amurl. **2**: 205 (type: *Chrysomela quadriimpressa* Motsch., 1845; Mongolia).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 327.

*Parambrostoma* Chen, 1936, Sinensia **7**(6): 718 (type: *Ambrostoma sublaevis* Chen; ?Korea).

No species of the typical subgenus have been recorded from this area as yet.

KEY TO SUBGENERA OF *Ambrostoma*

Elytral epipleuron ciliated for posterior  $\frac{1}{3}$  . . . . . **Parambrostoma**  
 Elytral epipleuron ciliated for entire length . . . . . **Ambrostoma**

Subgenus **Parambrostoma** Chen**Ambrostoma (Parambrostoma) laosensis** Kimoto & Gressitt, **new species**

♂. Elongate-oblong. Brilliant metallic; banded and striped: head metallic green to golden, golden-coppery on each side of middle of interocular area, dark blue behind eye and on anterior border; antenna purplish to brown on scape, somewhat steely blue on following segments and pitchy to bluish on distal segments; pronotum golden-coppery with a purplish tinge on anterior  $\frac{2}{3}$  of disc, with anterior margin green, external margin blue and basal  $\frac{1}{3}$  blue-green; scutellum purplish to blue; elytron with 3 broad bands of purplish copper-red with narrower intervening bands blue to green and with borders including suture blue or green; ventral surfaces brown with metallic reflections; middle of 1st abdominal sternite green to purplish; femora purplish with part of swollen portions green; tibiae purple; tarsi purple-blue.

*Head* broad, smooth, very finely punctured, transversely grooved near anterior margin, slightly grooved medially. *Antenna*  $\frac{1}{3}$  as long as body; scape ovate, thick; pedicel nearly as broad as long; following segments slender: 3-6 fairly slender, 7-11 stouter; 8th as broad as long, 9-11 longer than broad. *Pronotum* 2.2× as broad as long, subparallel-sided, slightly concave anteriorly, convex posteriorly; disc convex, distinctly and irregularly punctured, grossly punctured on parts of side. *Scutellum* fairly smooth, rounded behind. *Elytron* subovate, slightly widened behind middle, arcuate posteriorly; disc convex, widely depressed postbasally, with numerous punctures partly in very irregular rows, heavier in postbasal depression. *Ventral surfaces* smooth to wrinkled or frosted; last abdominal sternite arcuately lobed and deeply emarginate at each side of middle of apical portion. *Legs* fairly stout, shiny, sparsely punctured; hind tarsus with segment 1 nearly as long as 2 + 3. *Length* 9.8 mm; breadth 5.6.

♀. Last sternite feebly emarginate on each side of middle of apex. Length 10.9 mm; breadth 6.3.

*Paratypes*: Coloration consistent. Length 10.0-11.2 mm; breadth 5.6-6.8.

Holotype ♂ (BISHOP 12,134), LAOS: Vientiane Prov, Ban Van Eue [Heua], 20 km E of Phou Kau Khoay, 1000 m, 16.III.1966, native collr for Rondon & Gressitt; allotype ♀ (BISHOP), same data; 6 paratopotypes same data, (BISHOP, KIMOTO).

This new species somewhat resembles *A. mahesa* Hope from Nepal in having the elytron with a short row of strong punctures at base from inner edge of humerus to transverse impression, but it differs in having distinctly and closely impressed punctures on the basal portion of the transverse impression and punctures on the pronotum and elytron much stronger and closer. Besides the cilia of the elytral epipleuron, this new species is separable from *A. quadriimpressum* (Motsch.) in having the elytral punctures not arranged in rows and from *A. fortunei* Baly in having the punctures of the dorsal surfaces closer and stronger.

Genus **Agrosteomela** Gistel

*Agrosteomela* Gistel, 1857, Achthundert und zwanzig neue oder unbeschriebene wirbellose Thiere 2: 605 (type: *Chrysomela caschmirensis* Redtenbacher, Kashmir).—Gressitt & Kimoto, 1963, Pac. Insects Monogr.

**1B**: 331.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 268.

*Paralina* Baly, 1859, Trans. Entomol. Soc. London ser. 2, **5**: 155 (type: *Chrysomela indica* Hope).—Chen, 1935, Ann. Soc. Entomol. Fr. **104**: 154.

**Agrosteomela indica** (Hope)

Fig. 46c

*Chrysomela indica* Hope, 1831, in Gray, Misc. Zool.: 39 (Nepal; BMNH).

*Chrysomela caschmirensis* Redtenbacher, 1843, in Hügel, Reise Kashmir 4: 558 (Thibet).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 47 (=indica).

*Lina elata* Stål, 1857, Öfvers. Vetensk.-Akad. Förh. 14: 60 (Thibet).—Maulik, 1926, Fauna India: 47 (=indica).

*Paralina indica*: Baly, 1859, Trans. Entomol. Soc. London (n. s.) 5: 155 (Nepal).—Duvivier, 1891, C. R. Soc. Entomol. Belg. 35: 43 (Kurseong).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 47, fig. 16 (Nepal, Bhutan, Sikkim, N India, China).—Chen, 1936, Notes Entomol. Chin. 3(5): 76 (Japan).—Chûjô, 1958, Q. J. Taiwan Mus. 11(1-2): 40 (Taiwan).—Gotô, 1961, Entomol. Rev. Jpn. 13(2): 46 (Japan).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(2): 268 (Japan).

*Paralina impressiuscula* Fairmaire, 1878, Ann. Soc. Entomol. Fr. ser. 5, 8: 135 (C China).—Chen, 1934, Rech. Chrysomel. Chine: 46, fig. 40; 1936, Ann. Soc. Entomol. Fr. 105: 152, fig. 40 (China).

*Paralina chinensis* Weise, 1922, Tijdschr. Entomol. 65: 54 (Fukien; STOCKHOLM).—Chen, 1934, Rech. Chrysomel. Chine: 46 (China); 1936, Ann. Soc. Entomol. Fr. 105: 158.

*Agrosteomela indica*: Monrós & Bechyné, 1956, Entomol. Arb. Mus. Frey 7(3): 1130.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 331 (Himalayas, N India).

*Agrosteomela indica chinensis*: Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 331 (S China).

*Agrosteomela indica impressiuscula*: Gressitt & Kimoto, 1963, op. cit.: 332 (S China, Tonkin).

*Distribution.* N India, Nepal, Bhutan, Vietnam, S China, Taiwan, ? Japan.

Body elongate-oval. General color metallic deep blue or dark green, with elytron bright reddish to yellowish brown, ventral surfaces bluish with 3 apical segments brownish, but in most dark-colored specimens ventral surfaces with 5th abdominal segment brownish; antenna bluish black with 3 or 4 basal segments brownish, legs entirely bluish black. Length 13–14 mm.

The records of this species from Japan need further verification.

No additional material.

**Genus Humba** Chen

*Eumela* Baly, 1875 (nec Stål, 1867), Trans. Entomol. Soc. London 1875: 23 (type: *Chrysomela cyanicollis* Hope).

*Humba* Chen, 1934, Rech. Chrysomel. Chine: 47 (n. n. for *Eumela* Baly).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 332.

*Eumelaella* Strand, 1935, Folia Zool.-Hydrobiol. 7: 289 (n. n. for *Eumela* Baly).

**Humba cyanicollis** (Hope)

*Chrysomela cyanicollis* Hope, 1831, in Gray, Zool. Misc.: 29 (Nepal).

*Chrysomela pyrrophyga* Stål, 1857, Öfvers. Vetensk. Akad. Förh. 14: 60 (India orientalis; STOCKHOLM). **New synonymy.**

*Sphaerolina davidis* Fairmaire, 1878, Ann. Soc. Entomol. Fr. 1878: 134 (China).—Chen, 1934, Rech. Chrysomel. Chine: 47 (=cyanicollis); 1936, Ann. Soc. Entomol. Fr. 105: 159.

*Eumela tonkinensis* Weise, 1902, Dtsch. Entomol. Z. 1902: 110 (Tonkin).—Chen, 1934, Rech. Chrysomel. Chine: 47 (=cyanicollis); 1936, Ann. Soc. Entomol. Fr. 105: 159.

*Eumela cyanicollis*: Maulik, 1926, Fauna India, Chrysomel. & Halt.: 50, fig. 17 (Sikkim, India, Burma, Ceylon).

*Humba cyanicollis*: Chen, 1934, Rech. Chrysomel. Chine: 47 (China, Tonkin); 1936, Ann. Soc. Entomol. Fr. 105: 159.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 333 (China).—Kimoto, 1967, Esakia 6: 69 (Darjeeling, Sikkim).

*Distribution.* China, Vietnam, Laos, Thailand, Burma, N India.



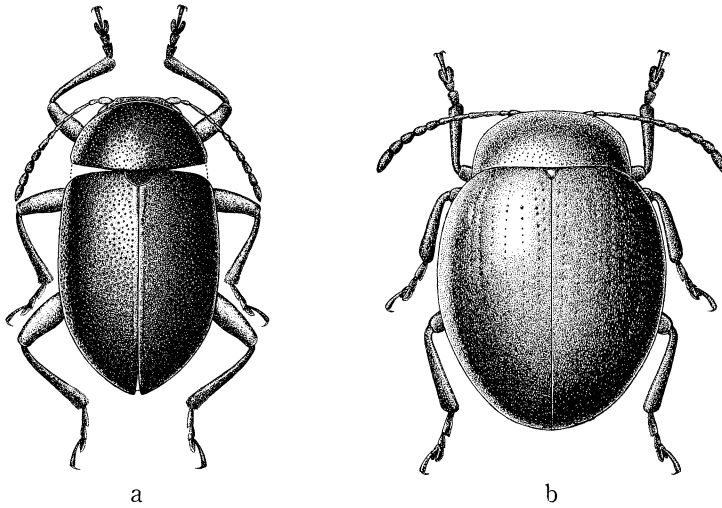


FIG. 48. **a**, *Colaphellus bowringi*; **b**, *Phaedon fulvescens*.

Body oblong-oval, convex. Color generally metallic blue, with or without greenish luster, elytron and ventral surfaces of abdominal segments pale yellowish brown to dark brownish red, with 1st segment bluish black; antenna and legs bluish black; length 14–15 mm.

*Material examined.* THAILAND: 5, Doi Hua Mot (N), VIII.1934, HMS (USNM); 1, Chiang Mai, lot 319 (BANGKHEN): 1, Chiang Mai Prov, Doi Suthep, 1000 m, VI.1965, PDA (BISHOP). LAOS: 2, Umgeb. Vientiane, III–VI.1963 (MÜNCHEN); 1, Sedone Prov, Paksong, VI.1965, NC; 1, Xieng Khouang Prov, Ban Sam Thong, VI.1965, NC; 1, Vientiane Prov, Ban Thon Pheng, IX.1965, NC (BISHOP). VIETNAM: 3, Agric. Stn, Haut Donai, Col de Blau (Annam), 800 m, VII.1933, MP (USNM).

### Genus *Phaedon* Latreille

*Phaedon* Latr., 1829, in Cuvier, Règne Anim. ed. 2, 5: 151.—Dejean, 1837, Cat. Coleopt. ed. 3: 429.—

Maulik, 1926, Fauna India, Chrysom. & Halt.: 59 (type: *Chrysomela armoraciae* L.; Europe, N Asia, N America).—Chûjô, 1958, Q. J. Taiwan Mus. 11(1–2): 10.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 333.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. 13(2): 269.

*Alitene* Gistel, 1857, Achthundert und zwanzig neue oder unbeschriebene wirbellose Thiere 2: 530.

*Orthosticha* Motschulsky, 1860, Schrenck's Reisen Amurl. 2: 196 (type: *Plagioderma bonariense* "Sahlberg").

*Emmetrus* Motschulsky, 1860, loc. cit.: 221 (type: *Chrysomela betulae* "Fabricius").

### KEY TO SPECIES OF *Phaedon*

1. Bluish black; pronotum finely and subevenly punctured; elytral interspaces smooth and hardly punctured; length 3.8 mm ..... **brassicae**  
Pitchy to bronzy reddish; pronotum subrugosely punctured, punctures partly about as large as interspaces; elytral puncture rows fairly coarse, with interspaces in part finely punctured; length 4.3 mm ..... **fulvescens**

### *Phaedon brassicae* Baly

*Phaedon brassicae* Baly, 1874, Trans. Entomol. Soc. London 1874: 174 (Japan; BMNH).—Chen, 1934, Rech. Chrysomel. Chine: 48, fig. 41 (China, Tonkin); 1936, Ann. Soc. Entomol. Fr. 105: 161, fig. 41.—Chûjô,

1958, Q. J. Taiwan Mus. **11**(1-2): 13 (Formosa).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 334 (China).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 269 (Japan).

*Phaedon incertus* Baly, 1874, Trans. Entomol. Soc. London **1874**: 175 (Japan; BMNH).—Chen, 1934, Rech. Chrysomel. Chine: 48 (= *brassicae*); 1936, Ann. Soc. Entomol. Fr. **105**: 161.

*Phaedon baolacensis* Achard, 1926, Fragm. Entomol. **1926**: 139 (Tonkin).—Chen, 1934, Rech. Chrysomel. Chine: 48 (= *brassicae*); 1936, Ann. Soc. Entomol. Fr. **105**: 161.

*Phaedon nigritus* Chûjô, 1951, Trans. Shikoku Entomol. Soc. **2**(3): 38, fig. 2 (Japan).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 269 (= *brassicae*).

*Distribution.* Japan, Ryukyu, Taiwan, China, Vietnam.

No additional material.

### **Phaedon fulvescens** Weise

Fig. 48b

*Phaedon fulvescens* Weise, 1922, Tijdschr. Entomol. **65**: 55 (Tonkin; STOCKHOLM).—Chen, 1934, Rech. Chrysomel. Chine: 49; 1936, Ann. Soc. Entomol. Fr. **105**: 162 (China, Tonkin).—Chûjô, 1958, Q. J. Taiwan Mus. **11**(1-2): 13 (Formosa).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 336 (China).

*Distribution.* China, Taiwan, Vietnam.

No additional material.

### Genus **Colaphellus** Weise

*Colaphus* Redtenbacher, 1845 (nec Chevrolat), Gatt. Dtsch. Käferf.: 116 (type: *Chrysomela sophiae* Schaller).—Weise, 1882, Insect. Dtschl. **6**(2): 303.

*Colaphellus* Weise, 1916, Coleopt. Cat. **68**: 113 (n. n. for *Colaphus* Redtenbacher).—Chen, 1934, Rech. Chrysomel. Chine: 50; 1936, Ann. Soc. Entomol. Fr. **105**: 162.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 337.

### **Colaphellus bowringi** (Baly)

Fig. 48a

*Colaphus bowringi* Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, **15**: 35 (N China).

*Colaphellus bowringi*: Chen, 1934, Rech. Chrysomel. Chine: 50, fig. 42 (Chine, Tonkin); 1936, Ann. Soc. Entomol. Fr. **105**: 163.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 338 (China, Tonkin).

*Colaphellus grouvellei* Achard, 1926, Fragm. Entomol. **1926**: 130 (Chine).

*Distribution.* China, N Vietnam.

Oblong-oval; bluish black with slight greenish luster; pronotum and elytron strongly and closely punctate; length 4.5–5.5 mm.

No additional material.

### Genus **Gastrophysa** Chevrolat

*Gastrophysa* Chevrolat, 1837, in Dejean, Cat. Coleopt. ed. 3: 429; 1943, in d'Orbigny, Diction. Univ. Hist. Nat. **3**: 656 (type: *Chrysomela polygoni* L.).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 339.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 270.

*Gastroeidea* Hope, 1840, Coleopt. Man. **3**: 164 (type: *Chrysomela polygoni* L.).

*Gastroeidea* Gemminger & Harold, 1874, Cat. Coleopt. **11**: 3403 (emend.).

### **Gastrophysa atrocyanea** Motschulsky

*Gastrophysa atrocyanea* Motsch., 1860, Schrenck's Reisen Amurl. **2**: 222, pl. 11, fig. 3 (E Siberia).—Chûjô, 1958, Q. J. Taiwan Mus. **11**(1-2): 19 (Taiwan).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 339 (China).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 270 (Japan).

*Gastroidea atrocyanea*: Chen, 1934, Rech. Chrysomel. Chine: 52 (China, Tonkin, Siberia, Japan); 1936, Ann. Soc. Entomol. Fr. **105**: 164.

*Gastroidea tonkinea* Achard, 1926, Fragm. Entomol. **1926**: 134 (Tonkin).—Chen, 1934, Rech. Chrysomel. Chine: 52 (= *atrocyanea*).

*Distribution*. E Siberia, Korea, Japan, China, Taiwan, Vietnam.

Oblong; bluish black with slight purplish luster; pronotum and elytron strongly and closely punctate; length 5.0–5.5 mm.

No additional material.

### Genus *Gastrolina* Baly

*Gastrolina* Baly, 1859, Ann. Mag. Nat. Hist. ser. 3, **4**: 61 (type: *G. depressa* Baly).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 341.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 270.—Chen, 1974, Acta Entomol. Sinica **17**(2): 195.

*Linastrica* Motschulsky, 1860, Schrenk's Reisen Amurl. **2**: 200 (type: *Chrysomela pelloidea* Gebler).

### *Gastrolina tonkinea* Chen

Fig. 47c

*Gastrolina tonkinea* Chen, 1931, Bull. Soc. Entomol. Fr. **1931**: 128, fig. 1b (Tonkin); 1934, Rech. Chrysomel. Chine: 54 (Tonkin); 1936, Ann. Soc. Entomol. Fr. **105**: 166; 1974, Acta Entomol. Sinica **17**(2): 196, 197 (S Yunnan, N Vietnam).

*Distribution*. SW China, Vietnam.

Bluish black; pronotum always entirely yellowish brown; antenna and legs entirely black; length 5.0–6.5 mm.

This species is separable from other known species in having the claw segments of the tarsi very feebly bidentate ventrally at the bases of the claws.

*Material examined*. VIETNAM: 1, "Annam," 1927 (BASEL). 7, "Indo-China: Yunyan-Quan," 1906–1907 (BASEL).

### Genus *Gastrolinoides* Chûjô & Kimoto

*Gastrolinoides* Chûjô & Kimoto, 1960, Niponius, Takamatsu **1**(4): 7 (type: *Melasoma japonica* Harold; Japan).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 271.

### *Gastrolinoides nigripes* Kimoto

Fig. 50a

*Gastrolinoides nigripes* Kimoto, 1969, Esakia **7**: 21 (Taiwan; KU).

*Distribution*. Taiwan, "Indo-China."

Oblong-oval, depressed; pronotum convex and distinctly and closely punctate, especially on lateral portion; elytron closely and distinctly punctate; reddish to yellowish brown with head, median portion of scutellum, legs, and sides of meso- and metathorax black, antenna black with 2nd segment and apical 1/3 of 1st segment brownish; length 4.5–5.5 mm.

*Material examined*. 1, "Indo-China," Hagiang Pak-Kha (BASEL).

### Genus *Plagioderia* Chevrolat

*Plagioderia* Chevrolat, 1837, in Dejean, Cat. Coleopt. ed. 3: 404.—Motschulsky, 1860, Schrenk's Reisen Amurl. **2**: 197 (type: *Chrysomela armoricae* Fabricius = *Chrysomela versicolora* Laicharting).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 343.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 272.

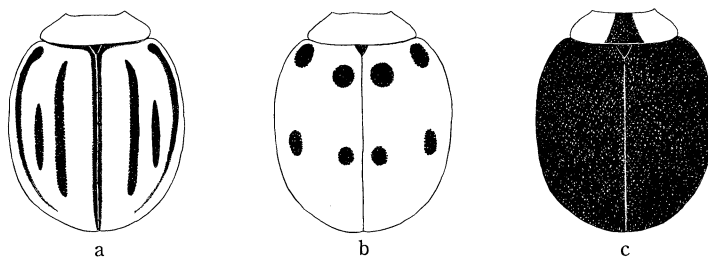


FIG. 49. **a**, *Plagioderma septemvittata*; **b**, *P. octomaculata*; **c**, *P. maculicollis* (China; Chen, 1934).

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

*Linamorpha* Motschulsky, 1860, loc. cit.: 197 (type: *Lina erythroptera* "Esch.").

*Plagiomorpha* Motschulsky, 1860, loc. cit.: 200 (type: *Chrysomela californica* Roger).

KEY TO SPECIES OF *Plagioderma*

- 1. First abdominal segment lacking prominent carinae ..... 2  
    First abdominal segment with a prominent carina near each coxa; subapical antennal segments much wider than long; general color reddish brown; elytron metallic green with bronzy tinge; antenna with apical segments blackish; length 5 mm ..... **yunnanica**
- 2 (1). Dorsal surfaces brownish with blackish markings ..... 3  
    Head and pronotum reddish brown; elytron metallic blue, sometimes slightly greenish, except for dark reddish lateral margin; length 3.8–4.5 mm ..... **hanoiensis**
- 3 (2). Dorsal surfaces yellowish brown, elytron with 4 black small spots; antenna with apical segments blackish; length 3.3 mm ..... **octomaculata**  
    Dorsal surfaces yellowish brown, elytron with suture and 3 stripes blackish blue; length 4.0–4.5 mm ..... **septemvittata**

**Plagioderma hanoiensis** Chen

*Plagioderma hanoiensis* Chen, 1934, Rech. Chrysomel. Chine: 58 (Tonkin; PARIS); 1936, Ann. Soc. Entomol. Fr. 105: 170.—Bechyné, 1954, Entomol. Arb. Mus. Frey 5: 668 (Shanghai; with ab. *rufivestis*).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. 1B: 344.—Chûjô, 1965, Pan-Pac. Entomol. 41: 54 (S China).

*Distribution.* Vietnam, Thailand, S China.

*Material examined.* Lot 478, XI.1937 (BANGKHEN).

**Plagioderma octomaculata** Chen

Fig. 49b

*Plagioderma octomaculata* Chen, 1934, Rech. Chrysomel. Chine: 57 (Tonkin; PARIS); 1936, Ann. Soc. Entomol. Fr. 105: 169.

*Distribution.* Vietnam.

No additional material.

**Plagioder a septemvittata** Stål

Fig. 49a

*Plagioder a septemvittata* Stål, 1858, Öfvers. Vetensk.-Akad. Förh. **15**: 252 (Hong Kong; STOCKHOLM).—Chen, 1934, Rech. Chrysomel. Chine: 57, fig. 44 (China, Tonkin); 1936, Ann. Soc. Entomol. Fr. **105**: 169.—Chújô, 1958, Q. J. Taiwan Mus. **11**(1-2): 25, fig. 11 (Taiwan).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 345.

*Plagioder a septemvittata* var. *trilineata* Chen, 1934, Stylops **3**: 67 (Philippines).

*Distribution.* S China, Taiwan, Vietnam, Philippines.

No additional material.

**Plagioder a yunnanica** Chen

*Plagioder a rufescens* var. *yunnanica* Chen, 1934, Rech. Chrysomel. Chine: 60 (Yunnan, Tonkin; PARIS); 1936, Ann. Soc. Entomol. Fr. **105**: 172, fig. 45.

*Plagioder a yunnanica*: Chen, 1936, Notes Entomol. Chin. **3**(5): 80 (Yunnan, Tonkin).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 346.

*Distribution.* SW China, Vietnam, Laos.

*Material examined.* LAOS: 1, Umgeb. Pakse, 1963 (MÜNCHEN).

Genus **Agasta** Hope

*Agasta* Hope, 1840, Coleopt. Man. **3**: 177 (type: *A. formosa* Hope; SE Asia).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 353.

KEY TO SPECIES OF *Agasta*

1. Elytron not unicolorous ..... 2  
Elytron cupreous with slightly greenish luster; yellowish brown; antenna with apical segments blackish; length 9.0–9.5 mm ..... **marginipennis**
- 2 (1). Dorsal surfaces yellowish brown, pronotum with a pair of larger markings on middle, a pair of smaller markings laterally and a smaller marking before scutellum violaceous blue; elytron with 7 large violaceous blue markings; scutellum violaceous blue; head yellowish brown with a bluish marking on vertex; ventral surfaces yellowish brown with lateral portion of mesosternum, most of metasternum and median band of each abdominal segment blackish; antenna and legs mostly reddish to yellowish brown; length 10.0–11.5 mm ..... **formosa**  
Pronotum pitchy brown with anterior and lateral portions narrowly brownish; elytron greenish blue with interior portions of basal margin, basal portion of sutural margin, a smaller lateromarginal marking and an irregular apical marking yellowish brown; ventral surfaces bluish black; antenna pitchy black with basal segments brownish; legs bluish black with dorsal surfaces of tibiae brownish basally; length 8.5–11.0 mm ..... **annamica, n. sp.**

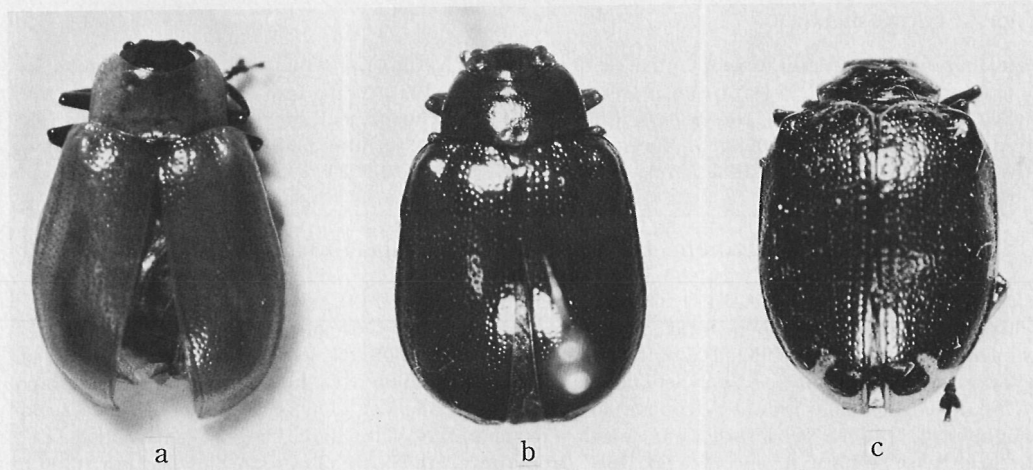


FIG. 50. a, *Gastrolinoides nigripes*; b, *Agasta marginipennis*; c, *A. annamica*.

### *Agasta annamica* Kimoto & Gressitt, new species

Fig. 50c

Oblong-oval, convex. Head pitchy brown with labrum and anterior portion of frontoclypeus ochraceous; pronotum pitchy brown with anterior and lateral portions narrowly brownish; scutellum pitchy black; elytron greenish blue with interior portions of basal margin, basal portion of sutural margin, a smaller lateromarginal marking and an irregular apical marking yellowish brown; ventral surfaces bluish black; antenna pitchy black with basal segments brownish; legs bluish black with dorsal surface of tibiae brownish basally.

*Head* with vertex slightly depressed at middle and with a longitudinal shallow sulcus, surface finely wrinkled, distinctly but sparsely punctate laterally and finely so medially; frontoclypeus slightly depressed, delimited from behind by a pair of oblique shallow grooves which extend to middle. *Antenna* robust, not extending to middle of body; 1st segment large, robust; 2nd distinctly longer than wide, and nearly  $\frac{2}{3}$  as long as 1st; 3rd nearly  $1.5\times$  as long as 2nd, 4th nearly  $\frac{2}{3}$  as long as 3rd; 5th slightly shorter than 4th, subtriangular; 6th to 10th gradually incrassate, nearly as long as wide in subapical segments; 11th  $1.5\times$  as long as 10th and nearly  $1.5\times$  as long as wide. Pronotum transverse,  $2\times$  as wide as long, anterior margin widely emarginate, lateral margin rounded, widest almost at middle, gradually narrowed anteriorly and posteriorly, posterior margin distinctly rounded posteriorly at middle, anterior and posterior corners rounded at apex and without any seta, dorsal surface smooth, shining, distinctly and closely punctate at lateral portion, with a pair of shallow depressions laterally and a shallow longitudinal sulcus medially. *Scutellum* subtriangular and apex rounded, surface finely wrinkled especially at central portion. *Elytron* distinctly wider than pronotum at base and slightly widened posteriorly, apex rounded; surface strongly and confusedly punctate, in part arranged in longitudinal rows, lateromarginal area distinctly convex and shining. *Length* 8.5–11.0 mm.

*Holotype* (USNM), VIETNAM: Annam: Prov Haut Donai, Col de Blao, 900 m, 10.X.1932, M. Poilane. *Paratypes*: 1, same data as holotype: 3, same data as holotype but 23.IX.1932; 3, same data but Agric. Stn Blao, 800 m, 2.VII.1933; M. Poilane (USNM, BISHOP, KIMOTO).

This new species can be separated from *A. formosa* Hope by the characteristic markings of the dorsal surfaces.

**Agasta formosa** Hope

Fig. 45a

*Agasta formosa* Hope, 1840, Coleopt. Man. **3**: 177, pl. 2, fig. 3 (China).—Baly, 1867, Trans. Entomol. Soc. London ser. 3, **4**(2): 298 (Java, Singapore, Siam).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 56, fig. 19 (Himalaya, Burma, Java, Siam).—Chen, 1934, Rech. Chrysomel. Chine: 64, fig. 48 (China); 1938, Ann. Soc. Entomol. Fr. **106**: 283.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 353 (China).  
*Agasta fleutiauxi* Laboissière, 1932, Ann. Assoc. Nat. Levallois-Perret **20**: 130 (Cochin China; HAMBURG, PARIS). **New synonymy.**

*Distribution.* China, Vietnam, Laos, Thailand, Burma, India, Java.

*Material examined.* THAILAND: 1, Chiang Mai, Doi Suthep, 1278 m, III-IV.1958, TCM (BISHOP); 1, Chiang Mai Prov, Doi Suthep, Tankeo, 800 m, VI.1965, YM; 1, Chiang Dao, VI.1965, KM (KU); 1, Kanchanaburi, 400 m, V.1952; 1 Tak, IX.1959 (BANGKHEN). LAOS: 37, Khammouan Prov, Phon Tiou, IV,V,VII,V.1965, IV.1966, NC; 2, Sedone Prov, Paksong, VI.1965, NC; 4, Sayaboury Prov, Sayaboury, V.1965, NC; Vientiane Prov, 1, Vientiane, IV.1965, NC; 6, Ban Van Heua, 800 m, V.1965, NC; 4, Ban Thonpheng, X.1965, NC (BISHOP); 13, Umgeb. Vientiane, III-VI.1963; 12, Umgeb. Paklay, 1963-64; 3, Umgeb. Pakse, 1963; 2, Umgeb. Vanky, 1963 (MÜNCHEN). VIETNAM: 1, 16 km S of Di Linh, 1300 m, X.1960, CMY; 1, 20 km S of Pleiku, 650 m, V.1960, SQ; 1, 18 km SE of Ban Me Thuot, 500 m, V.1960, LWQ (BISHOP).

**Agasta marginipennis** (Jacoby), **new combination**

Fig. 50b

*Plagioderia marginipennis* Jac., 1889, Ann. Mus. Civ. Genova **27**: 188 (Burma; GENOVA).—Maulik, 1926, Fauna India, Chrysom. & Halt.: 62 (Burma).

*Distribution.* Burma, Laos.

*Material examined.* LAOS: 6, Ile de Khong, II,V.1965, NC (BISHOP).

Genus **Linæidea** Motschulsky

*Linæidea* Motsch., 1860, Schrenck's Reisen Amurl. **2**: 199 (type: *Chrysomela aenea* L.; Europe).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 351.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 275. *Macromela* Chûjô, 1958, Q. J. Taiwan Mus. **11**(1-2): 31 (type: *Chrysomela maculicollis insularis* Chûjô, Taiwan; as a subgenus of *Chrysomela*). **New synonymy.**

Chûjô (1958) treated *Linæidea* Motschulsky as a genus related to *Chrysolina*, *Agrosteomela* (= *Paralina*), *Ambrosotoma* and others, in having the interior border of the elytral epipleuron "ciliate." However, this statement is not correct and should be corrected to read "not ciliate." Also, it seems unnecessary to separate *Macromela* Chûjô from *Linæidea* Motschulsky.

**Linæidea seximpressa** (Chen)

*Chrysomela seximpressa* Chen, 1931, Bull. Soc. Entomol. Fr. **1931**: 127 (Laos ou Cambodge).  
*Chrysomela (Linæidea) seximpressa*: Chen, 1936, Note Entomol. Chin. **3**(5): 81.

*Distribution.* Laos or Cambodia.

Body oblong oval, convex, shining. Head, pronotum and ventral surfaces of body reddish brown; elytron obscure golden green; antenna reddish brown with 5 apical segments blackish; length 8-10 mm.

We could not trace the type-specimen of this species. No additional material.

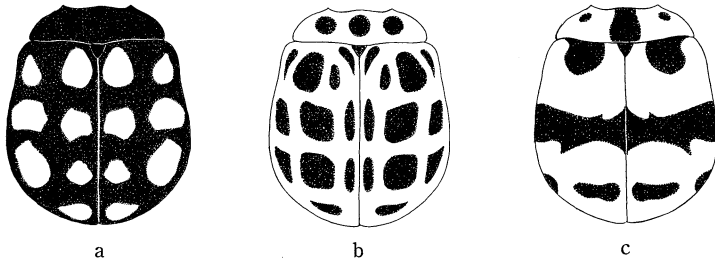


FIG. 51. a-b, *Paropsides duodecimpustulata*; c, *P. bouvieri*.

Genus **Paropsides** Motschulsky

*Paropsides* Motsch., 1860, Schrenck's Reisen Amurl. **2**: 192 (type: *Paropsis duodecimpustulata* Gebler; Siberia).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 353.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 276.

KEY TO SPECIES OF *Paropsides*

- 1. Pronotum at least in part brownish ..... 2  
 Pronotum entirely black; ground color of elytron black with 7 brownish markings, in many specimens these markings are united to each other and reduced in number; length 6–10 mm ..... **duodecimpustulata**
- 2 (1). Pronotum reddish brown with broad longitudinal stripe at middle and a pair of small lateral markings blackish; elytron reddish brown with round subbasal marking, and transverse median and subapical bands blackish, in some specimens transverse band divided; antenna and legs reddish brown; length 10 mm ..... **bouvieri**  
 Pronotum reddish brown with 3 large subquadrate markings blackish; elytron reddish brown with many discal markings blackish; length 6–10 mm ..... **duodecimpustulata** (including forms *melli* and *hieroglyphica*)

**Paropsides bouvieri** Chen

Fig. 51c

*Paropsides bouvieri* Chen, 1931, Bull. Mus. Paris **1931**: 110 (Tonkin; PARIS); 1934, Rech. Chrysomel. Chine: 68, fig. 50 (Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 287.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 354 (Tonkin).

*Distribution.* Vietnam.  
No additional material.

**Paropsides duodecimpustulata** (Gebler)

Fig. 45b, 51a–b

*Paropsis duodecimpustulata* Gebl., 1825, in Hummel, Essai Entomol. **4**: 54 (Siberia).  
*Paropsis duodecimpustulata* var. *hieroglyphica* Gebler, 1825, op. cit.: 55 (Siberia).  
*Paropsides maculicollis* Jacoby, 1889, Entomologist **23**: 118, pl. 1, fig. 10 (China; mcz).—Chen, 1934, Rech. Chrysomel. Chine: 66 (as var. of *duodecimpustulata*); 1938, Ann. Soc. Entomol. Fr. **106**: 285.  
*Paropsides duodecimpustulata*: Jacobson, 1893, Horae Soc. Entomol. Ross. **27**: 124, figs. 1–13 (Siberia).—Reineck, 1922, Dtsch. Entomol. Z. **1922**: 370 (China; with var. *melli*, f. *sexmaculata*).—Maulik, 1926,



Fauna India, Chrysomel. & Halt.: 73 (Assam, Burma).—Chen, 1934, Rech. Chrysomel. Chine: 66, fig. 49 (E Siberia, China; with varr. *decempustulata*, *suturalis*); 1936, Notes Entomol. Chin. **3**: 84 (Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 285.—Chûjô, 1941, Trans. Nat. Hist. Soc. Formosa **31**(219): 460 (Korea).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 355 (China).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 276 (Japan).

*Paropsides duodecimpustulata yuasai* Ohno, 1958, Kontyû **26**(1): 34, figs. (Japan).

*Distribution.* E Siberia, China, Korea, Vietnam, Burma, India.

No additional material.

### Genus *Asiparopsis* Chen

*Asiparopsis* Chen, 1934, Rech. Chrysomel. Chine: 69 (type: *Paropsides pardalis* Jacoby, from Burma).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 356.

Chen (1934, 1938) treated *convexa* Weise as an infraspecific variation of *pardalis* Jacoby, originally described from Burma. However, these 2 should be treated as independent species.

#### KEY TO SPECIES OF *Asiparopsis*

1. Interstices of elytral punctate striae closely and distinctly punctate; reddish brown, elytron with basal, median and subapical bands black; in some specimens elytron without any blackish marking; ventral surfaces with middle of metathorax infusate; antenna and legs entirely brownish; length 8–9 mm ..... **convexa**
- Interstices of elytral punctate striae finely punctate; reddish brown, elytron with 6 round markings pale brown; ventral surfaces with metathorax blackish; 7–8 mm (Jacoby, 1892; Burma, Assam; Fig. 52c) ..... **pardalis**

#### *Asiparopsis convexa* (Weise)

Fig. 52b

*Pyrgo convexa* Weise, 1902, Dtsch. Entomol. Z. **1902**: 368 (Tonkin: Montes Mason).

*Asiparopsis pardalis* var. *convexa*: Chen, 1934, Rech. Chrysomel. Chine: 70, fig. 51 (Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 288.

*Asiparopsis pardalis* var. *unicolor* Chen, 1934, Rech. Chrysomel. Chine: 70 (S China, Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 289.

*Pyrgo masonensis* Achard, 1934, Bull. Soc. Entomol. Fr. **1934**: 72 (S China, Tonkin).—Chen, 1936, Notes Entomol. Chinoise **3**(5): 85 (= *pardalis* var. *convexa*).

*Distribution.* Laos, Vietnam, S China.

*Material examined.* LAOS: 4, Vientiane Prov, Ban Van Heua, XI.1965, malaise trap, JLG, V.1965, VII.1966, XI.1966, NC (BISHOP).

### Genus *Gonioctena* Chevrolat

*Gonioctena* Chevr., 1837, in Dejean, Cat. Coleopt. ed. 3: 403.—Motschulsky, 1860, Schrenck's Reisen Amurl. **2**: 180 (type: *Chrysomela viminalis* Linnaeus, from Europe).—Monrôs & Bechyné, 1956, Entomol. Arb.

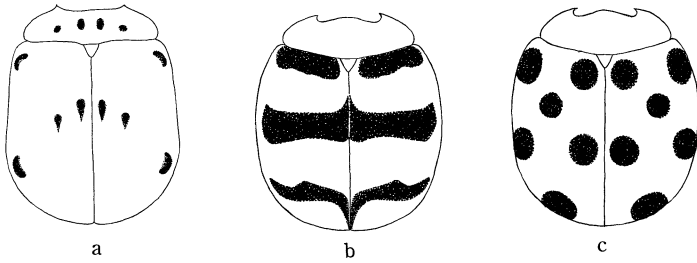


FIG. 52. a, *Paropsides nigropunctata* (Burma; Jacoby, 1892); b, *Asiparopsis convexa*; c, *A. pardalis*.

Mus. Frey 7(3): 1131.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 356.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 227.  
*Phytodecta* Kirby, 1837, Fauna Boreali-Am. **4**: 213 (type: *Chrysomela rufipes* DeGeer, from Europe).

KEY TO SUBGENERA OF *Gonioctena*

- 1. Prothorax lacking setigerous punctures on sides of anterior or posterior corners; preapical antennal segments flat, broader than long ..... 2
- Prothorax with setigerous punctures on sides of posterior, or anterior and posterior, corners ..... 3
- 2 (1). Punctures of elytron arranged in well-defined longitudinal rows; lateral margin of prothorax not visible from above ..... **Brachyphytodecta**
- Punctures of elytron subregularly arranged, or entirely confused; lateral margin of prothorax barely visible ..... **Asiphytodecta**
- 3 (1). Setigerous punctures present on posterior angle of side of prothorax ... 4
- Setigerous punctures present on both angles of side of prothorax; preapical antennal segments as long as broad, not very flat; anterior margin of frontoclypeus sinuous, not strongly raised ..... **Sinomela**
- 4 (3). Body strongly convex; lateral margin of prothorax barely visible from above; preapical antennal segments as long as broad, not very flat ..... **Gonioctena**
- Body rather flat, oblong; lateral margin of prothorax distinctly visible from above; preapical antennal segments broader than long ..... **Platyphytodecta**

No species of *Sinomela*, *Gonioctena* or *Platyphytodecta* have been recorded from this area to date.

Subgenus **Brachyphytodecta** Bechyné

*Brachyphytodecta* Bechyné, 1948, Sb. Nar. Muz. Praze **3B**: 101 (type: *Spartophila fulva* Motschulsky, from Amur).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 363.—Kimoto, 1964, J. Fac. Agr. Kyushu Univ. **13**(2): 280.

KEY TO SPECIES OF SUBGENUS *Brachyphytodecta*

1. Legs at least partly black ..... 2  
 Legs entirely yellowish red; head and pronotum deep red, latter narrowly margined with black at side, rather broadly at base; elytron with black humeral spot and 2 black transverse bands, 1 situated before middle and extending along suture towards base, other behind middle, being black along suture toward apex; length 5 mm ..... **coccinella**
- 2 (1). Femora red, tibiae and tarsi black; general color of body red; length 12 mm ..... **lesnei**  
 Legs entirely or almost entirely black; general color reddish to yellowish brown; scutellum brown or dark brown; length 5.5-7 mm .. **flavipennis**

**Gonioctena (Brachyphytodecta) coccinella** Chen

Fig. 53a

*Phytodecta coccinellus* Chen, 1931, Bull. Mus. Paris ser. 2, **3**: 111 (Tonkin; PARIS); 1934, Rech. Chrysomel. Chine: 72 (Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 291.

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

*Distribution.* N Vietnam.

No additional material.

**Gonioctena (Brachyphytodecta) flavipennis** (Jacoby)

*Phytodecta flavipennis* Jac., 1888, Proc. Zool. Soc. London **1888**: 347 (China; BMNH, MCZ).

*Phytodecta scutellaris* var. *flavipennis*: Chen, 1934, Rech. Chrysomel. Chine: 73 (China, Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 290, 292 (China, Tonkin).

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

*Gonioctena (Brachyphytodecta) flavipennis*: Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 363 (China, Tonkin).

*Distribution.* China, Vietnam.

No additional material.

**Gonioctena (Brachyphytodecta) lesnei** (Chen)

*Phytodecta lesnei* Chen, 1931, Bull. Mus. Paris **1931**: 111 (Yunnan, Tonkin); 1934, Rech. Chrysomel. Chine: 72 (Yunnan, Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 291.

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

*Gonioctena (Brachyphytodecta) lesnei*: Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 364 (China, Tonkin).

*Distribution.* China, N Vietnam.

No additional material.

Subgenus **Asiphytodecta** Chen

*Asiphytodecta* Chen, 1935, Chin. J. Zool. **1**: 126 (type: *Phytodecta tredecimmaculatus* Jacoby).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 356.

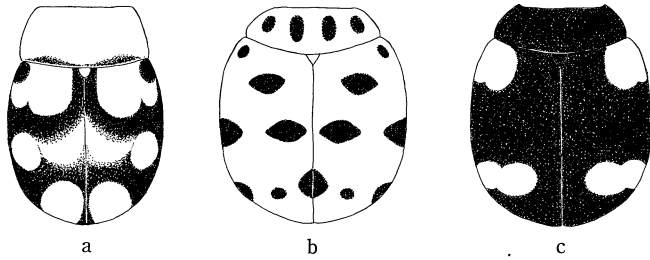


FIG. 53. **a**, *Gonioctena (Brachyphytodecta) coccinella*; **b**, *G. (Asiphytodecta) chrysoloides* (Burma; Jacoby, 1889); **c**, *G. (A.) flavoplagiata*.

KEY TO SPECIES OF SUBGENUS *Asiphytodecta*

- 1. Antenna entirely yellowish red; elytral puncturation confused or almost confused; pronotum with black spots in a transverse line; 3 spots on pronotum, 10 on elytron, of which 2 common to both and placed across suture below middle; length 6.0–8.5 mm . . . . . **tredecimmaculata**
- Antenna with at least 4 or 5 apical segments black or piceous; elytral puncturation more or less arranged in paired rows . . . . . 2
- 2 (1). Ground color of dorsal surfaces not black or piceous . . . . . 3
- Dorsal surfaces piceous or black, each elytron with 2 transverse flavous spots, 1 on shoulder and other near apex; apical segments of antenna very strongly dilated and flattened; length 6.5–7.0 mm . . . . **flavoplagiata**
- 3 (2). Head and pronotum black, elytron uniformly red; antenna and ventral surfaces entirely black; length 8.5 mm . . . . . **cambodiana**
- Head and pronotum reddish brown, the latter with margins narrowly blackish; elytron with 11 isolated patches, 3 touching suture; ventral surfaces and legs almost entirely reddish brown; length 5.5–6.5 mm . . . . . **subgeminata**

***Gonioctena (Asiphytodecta) cambodiana* (Chen)**

*Phytodecta cambodianus* Chen, 1934, Rech. Chrysomel. Chine: 76 (Cambodge); 1938, Ann. Soc. Entomol. Fr. **106**: 295.

*Asiphytodecta cambodiana*: Chen & Young, 1941, Sinensia **12**(1–6): 208 (key).

*Distribution.* Cambodia.

No additional material.

***Gonioctena (Asiphytodecta) flavoplagiata* (Jacoby)**

Fig. 53c

*Phytodecta flavoplagiatus* Jacoby, 1890, Entomologist **23**: 117, pl. 1, fig. 8 (China).—Chen, 1934, Rech. Chrysomel. Chine: 76, fig. 54 (China, Tonkin, Annam); 1938, Ann. Soc. Entomol. Fr. **106**: 295.

*Phytodecta eburoides* Achard, 1924, Casopsis **121**: 34 (Annam, China).—Chen, 1934, Rech. Chrysomel. Chine: 75 (= *flavoplagiata*); 1938, Ann. Soc. Entomol. Fr. **106**: 295.

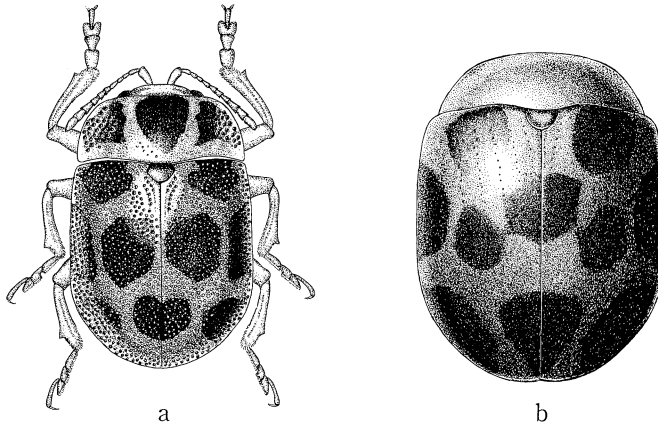


FIG. 54. **a**, *Gonioctena (Asiphytodecta) tredecimmaculata*; **b**, *G. (A.) subgeminata*.

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

*Gonioctena (Asiphytodecta) flavoplagiata*: Gressitt & Kimoto, 1963, *Pac. Insects Monogr.* **1B**: 365 (China).

*Distribution.* China, N Vietnam.

No additional material.

### ***Gonioctena (Asiphytodecta) subgeminata* (Chen)**

Fig. 54b

*Phytodecta subgeminatus* Chen, 1934, *Rech. Chrysomel. Chine*: 75, fig. 53 (China); 1938, *Ann. Soc. Entomol. Fr.* **106**: 294, fig. 53.

*Phytodecta subgeminatus* var. *tonkinensis* Chen, 1934, op. cit.: 76 (Tonkin); 1938, op. cit.: 295.

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

*Phytodecta (Asiphytodecta) subgeminata*: Chûjô, 1958, *Q. J. Taiwan Mus.* **11**(1-2): 67 (Taiwan).

*Gonioctena (Asiphytodecta) subgeminata*: Gressitt & Kimoto, 1963, *Pac. Insects Monogr.* **1B**: 365 (China).

*Distribution.* China, Taiwan, Vietnam.

No additional material.

### ***Gonioctena (Asiphytodecta) tredecimmaculata* Jacoby**

Fig. 54a

*Gonioctena tredecimmaculatus* Jac., 1888, *Proc. Zool. Soc. London* **1888**: 347 (China; BMNH, MCZ).

*Phytodecta tredecimmaculatus*: Chen, 1934, *Rech. Chrysomel. Chine*: 74 (China, Tonkin); 1938, *Ann. Soc. Entomol. Fr.* **106**: 293.

*Paropsides nigrosparus* Fairmaire, 1888, *Ann. Soc. Entomol. Fr.* **1888**: 373 (Tonkin).—Jacoby, 1890, *Entomologist* **23**: 118 (= *tredecimmaculata*).

*Phytodecta tredecimmaculatus* var. *cinctipennis* Achard, 1924, *Cas. Ceske Spol. Entomol.* **21**: 33 (Tonkin, China).

*Phytodecta tredecimmaculatus* var. *taiwanensis* Achard, 1924, op. cit.: 34 (Formosa).

*Phytodecta (Asiphytodecta) tredecimmaculatus*: Chûjô, 1958, *Q. J. Taiwan Mus.* **11**(1-2): 64 (Taiwan).

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

*Gonioctena (Asiphytodecta) tredecimmaculata*: Gressitt & Kimoto, 1963, *Pac. Insects Monogr.* **1B**: 356 (China).

*Distribution.* China, Taiwan, Vietnam.

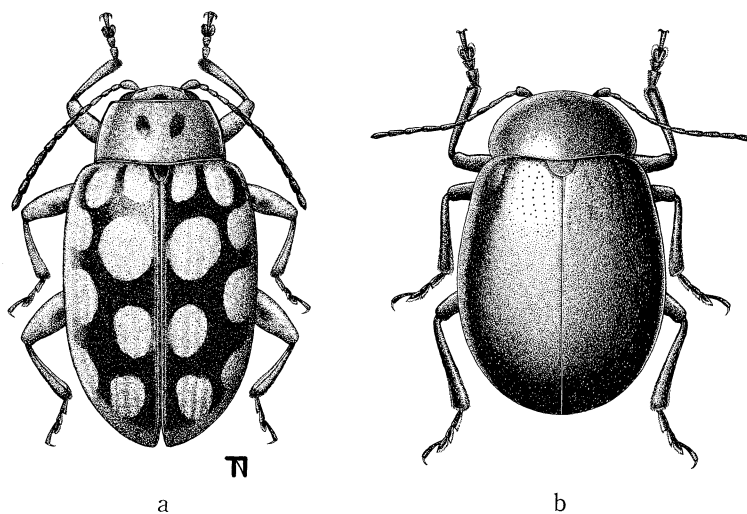


FIG. 55. **a**, *Phola octodecimguttata*; **b**, *Potaninia assamensis*.

*Material examined.* THAILAND: 1, Chiang Mai, Fang, 500 m, IV.1958, TCM (BISHOP). LAOS: 1, Khammouan Prov, Phon Tiou, VII.1965, NC (BISHOP).

### Genus *Potaninia* Weise

*Potaninia* Weise, 1899, Horae Soc. Entomol. Ross. **23**: 603 (type: *P. polita* Ws.; Szechuan).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 374.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 285. *Suizona* Chen, 1931, Bull. Soc. Entomol. Fr. **1931**: 130 (type: *S. laboissierei* Chen).

#### *Potaninia assamensis* (Baly)

Fig. 55b

*Entomoscelis assamensis* Baly, 1879, Cist. Entomol. **2**: 437 (Assam; BMNH).

*Entomoscelis metallica* Baly, 1888, Entomol. Mon. Mag. **25**: 85 (Sikkim).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 95 (= *assamensis*).

*Potaninia polita* Weise, 1889, Horae Soc. Entomol. Ross. **23**: 604 (China).—Chen, 1934, Rech. Chrysomel. Chine: 84 (China, Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 303; 1936, Notes Entomol. Chin. **3**: 90 (= *assamensis*).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 375 (China).

*Potaninia collaris* Weise, 1905, Dtsch. Entomol. Z. **1905**: 215 (Darjeeling).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 94 (= *assamensis*).

*Potaninia assamensis*: Maulik, 1926, op. cit.: 93, fig. 33 (Assam, Darjeeling).

*Distribution.* N India, Sikkim, China, N Vietnam.

Body ovate. General color reddish piceous; ventral surfaces piceous; antenna and legs black; length 7–8 mm.

No additional material.

### Genus *Lycaria* Stål

*Lycaria* Stål, 1857, Öfvers. Vetensk.-Akad. Förh. **14**: 59 (type: *Lycaria westermanni* Stål).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 372.

**Lycaria westermanni** Stål

Fig. 56a

*Lycaria westermanni* Stål, 1857, Öfvers. Vetensk.-Akad. Förh. **14**: 59 (Assam; STOCKHOLM).—Maulik, 1926, Fauna India, Chrysomel. & Halt.: 85, fig. 30 (Assam, Burma, Siam, Indochina).—Chen, 1934, Rech. Chrysomel. Chine: 79 (Tonkin, Cambodia, Cochinchina, Siam, Burma, India); 1938, Ann. Soc. Entomol. Fr. **106**: 298.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 372.—Chûjô, 1954, Nat. Life SE Asia **3**: 283 (Thailand).

*Distribution.* Vietnam, Cambodia, Thailand, Burma, India.

Body oval, very convex. General color reddish to yellowish brown; antenna yellowish brown with 6 apical segments blackish; legs entirely reddish to yellowish brown; length 7.5–8.0 mm.

*Material examined.* THAILAND: 3, Mae Klang Waterfall, nr Chom Thong, V,VI.1965, KM; 7, Fang, VI.1965, YM; 2, Fang, VI.1965, KM (KU); 20, Kanchanaburi, 350 m, V.1962, VIII.1963; 26, Chiang Mai, VIII.1951; 1, Kamphaeng Phet, IX.1963; 2, Phu Khae, VII.1964; 2, Bangkhen, IX.1964; 1, Bangkok, VII.1964; 1, Nakhongnayok, IX.1964; 3, Nakhon Sawan, IX.1963; 1, Pak Chong, XII.1963; 1, Chanthaburi, VI.1963; 1, Kalasin, X.1963; 1, Sarabouri, VII,IX.1964 (BANGKHEN); 2, Payao, IX.1951 and 1, Doi Suthep, VIII.1951, DT & ET (USNM); 2, Banna, Nakhon, V.1958, TCM, IX.1958, JLG; 1, Loey Prov, Loey, IX.1966, JSB; 1, Chiang Mai, 1100–1500 m, 1966, JS; 2, Chiang Mai Prov, Mae Sa, VI.1965, PDA; 3, Mae Klang, 340 m, VI.1965, PDA; 1, Fang Agric. Exp. Stn, 600 m, VI.1965, PDA (BISHOP); 1, Mae Sa, VII.1970, sweeping paddy field, KY (KU). LAOS: 25, Umgeb. Vientiane, III–VI.1963, III–VI.1964; 13, Umgeb. Vanky, 1963, 1964; 2, Umgeb. Pakse, 1963, 1964; 22, Umgeb. Paklay, 1963, 1964 (MÜNCHEN); 361, Sayaboury Prov, Sayaboury, VII–IX,XII.1965, I,IV,V,VIII,IX–XII.1966, NC; Wapikhamthong Prov, 6, Khong Sedone, VII.1965, NC; 3, Phon Tiou, IV.1965, NC; Borikhan Prov, 7, Pakkading, VII.1965, IV.1966, NC; 2, Paksane, VIII,IX.1965, NC; Vientiane Prov, 1, Vientiane, V.1960, LQ, 38, VII.1965, III.1966, V.1967, NC; 22, Ban Van Heua, II,V,VII.1965, V.1966, JAR & NC; 8, Phou Khao Khoay, VII.1965, NC; 3, Dong Dok, VIII.1965, NC; 2, Ban Thonpheng, IV,VI.1966, NC; 10, Nong Thevada, VIII.1965, JAR; 8, Savannaket Prov, Savannaket, IV.1965, NC (BISHOP).

**Genus Phyllocharis** Dalman

*Phyllocharis* Dalm., 1824, Ephem. Entomol.: 20 (type: *Chrysomela cyanicornis* Fabricius).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 372.

**Phyllocharis undulata** (Linnaeus)

Fig. 56b

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

*Phyllocharis undulata*: Baly, 1867, Trans. Entomol. Soc. London ser. 3, **4**: 283 (Java, Singapore, Malacca, Timor).—Chen, 1934, Rech. Chrysomel. Chine: 80, fig. 55 (Tonkin); 1938, Ann. Soc. Entomol. Fr. **106**: 299, fig. 55.—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 372 (SE Asia).

*Phyllocharis undulata* ab. *interrupta* van Ooststroom, 1947, Tijdschr. Entomol. **88**: 544 (Indo-China, Java).

*Phyllocharis undulata* abb. *heurnii* and *obscura* van Ooststroom, 1947, loc. cit. (Java).

*Phyllocharis undulata* abb. *timorensis* and *sexmaculata* van Ooststroom, 1947, loc. cit. (Timor).

*Distribution.* Laos, Cambodia, Vietnam, Malay Peninsula, Java, Timor.

Body oblong, subparallel-sided. Head reddish brown with vertex mostly bluish black; pronotum bluish black with lateroanterior portion broadly reddish brown, elytron bluish black with oblique humeral, large transverse median and smaller subapical markings reddish brown; ventral surfaces bluish black with meso- and metathorax and 2 apical segments of abdomen reddish brown; antenna and legs bluish black; length 7.5 mm.

No additional material.

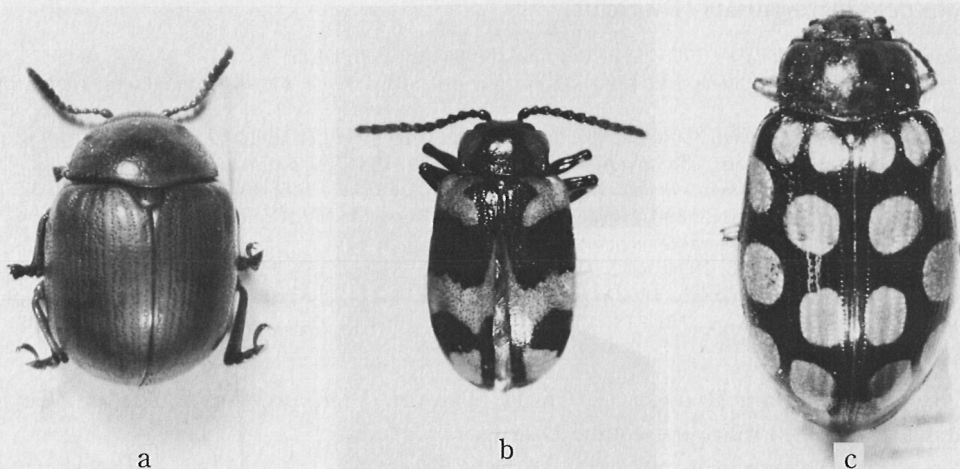


FIG. 56. a, *Lycaria westermanni*; b, *Phyllocharis undulata*; c, *Phola sedecimpustulata*.

### Genus *Phola* Weise

*Phola* Ws., 1890, Horae Soc. Entomol. Ross. **24**: 482 (type: *P. keyserlingi* Ws. = *Chalcolampra octodecimguttata* Fabricius; Szechuan).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 372.—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 285.

*Phyllophila* Stål, 1857, Öfvers. Vetensk.-Akad. Förh. **14**: 59 (type: *Phyllophila sedecimpustulata* Stål).

#### KEY TO SPECIES OF *Phola*

1. Body length longer than 7 mm; pronotum entirely reddish brown, ground color of elytron blackish with 8 well-defined round markings, together with apex and lateral margin narrowly, brownish; ventral surfaces reddish brown with lateral portion of meso- and metathorax blackish in varying degrees; antenna blackish with 4 basal segments largely brownish; legs reddish brown with apex of femora and base of tibiae infuscate; length 7–8 mm ..... **sedecimpustulata**
- Body length shorter than 6 mm; pronotum yellowish brown with a pair of blackish markings on middle; ground color of elytron blackish with 8 round markings, together with apex and lateral margin widely brownish, in many specimens brownish areas enlarged in varying degrees and ground color becomes brownish with ill-defined irregular black markings; antenna blackish with 3 or 4 basal segments brownish; legs yellowish brown, in some specimens base of tibiae infuscate; length 5.5–6.0 mm ..... **octodecimguttata**



**Phola octodecimguttata** (Fabricius)

Fig. 55a

*Chrysomela octodecimguttata* F., 1775, Syst. Entomol.: 100 ("nova Hollandia").

*Chalcolampra* (*Phyllophila*) *cybele* Stål, 1860, Öfvers. Vetensk-Akad. Förh. **17**: 464 (Hongkong; STOCKHOLM).

**New synonymy.**

*Chalcolampra octodecimguttata*: Maulik, 1926, Fauna India, Chrysomel. & Halt.: 87 (Ceylon, Burma, India).

*Chalcolampra viticis* Fairmaire, 1888, Ann. Soc. Entomol. Belg. **1888**: 39 (China).—Chen, 1934, Rech. Chrysomel. Chine: 81 (= *octodecimguttata*); 1938, Ann. Soc. Entomol. Fr. **106**: 300.

*Chalcolampra keyserlingi* Weise, 1890, Horae Soc. Entomol. Ross. **24**: 482 (China).—Jacoby, 1896, Ann. Soc. Entomol. Belg. **40**: 254 (= *octodecimguttata*).

*Phola octodecimguttata*: Chen, 1934, Rech. Chrysomel. Chine: 81, fig. 56 (China); 1938, Ann. Soc. Entomol. Fr. **106**: 300, fig. 56.—Chüjō, 1958, Q. J. Taiwan Mus. **11**(1-2): 81 (Formosa).—Gressitt & Kimoto, 1963, Pac. Insects Monogr. **1B**: 372 (China).—Kimoto, 1964, J. Fac. Agric. Kyushu Univ. **13**(2): 285 (Japan).

*Distribution.* Japan, Ryukyu Is, China, Taiwan, Vietnam, Burma, India, Ceylon, Malay Peninsula, Philippines, New Guinea.

No additional material.

**Phola sedecimpustulata** (Stål)

Fig. 56c

*Phyllophila sedecimpustulata* Stål, 1857, Öfvers.-Vetensk. Akad. Förh. **14**: 59 (Pulo Penang; STOCKHOLM).

*Distribution.* Thailand, Laos, Vietnam, Malay Peninsula.

Weise (1916) treated this species as a synonym of *Phola octodecimguttata* (Fabricius). However, this species should be treated as an independent species.

*Material examined.* THAILAND: 12, Uthai Thani, IV.1963 (BANGKHEN); 1, Chiang Mai, Fang, 500 m, IV.1958, TCM (BISHOP); 1, Fang, VI.1965, YM (KU). LAOS: 2, Umgeb. Vanky, 1963; 2, Umgeb. Vientiane, III-VI.1963 (MÜNCHEN); 1, Sayaboury Prov, Sayaboury, II.1966, NC (BISHOP). VIETNAM: 1, 30 km NE of Di Linh, IV.1960, LWQ (BISHOP).

## SUPPLEMENT TO PART I

## Subfamily MEGALOPODINAE

Genus **Temnaspis** Lacordaire**Temnaspis squalida** Allard

*Temnaspis squalida* All., 1891, Nouv. Arch. Mus. Paris ser. 3, **3**: 232 (Indo-China; PARIS); 1904, Mission Pavie Indo-Chine **3**: 162 (Cambodge).—Kimoto & Gressitt, 1979, Pac. Insects **20**(2-3): 211 (Indo-China).

*Temnaspis discolineata* Pic, 1938, Bull. Soc. Zool. Fr. **63**: 356 (Siam; PARIS).—Kimoto & Gressitt, 1979, Pac. Insects **20**(2-3): 209 (Thailand, Laos). **New synonymy.**

*Distribution.* Thailand, Laos.

No additional material.

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### **BOOK NOTICE**

## **SYSTEMATICS OF THE COLLETIDAE BASED ON MATURE LARVAE WITH PHENETIC ANALYSIS OF APOID LARVAE (HYMENOPTERA: APOIDEA)**

**By Ronald J. McGinley**

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