

HISPINE BEETLES (Chrysomelidae) FROM NEW GUINEA¹

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Abstract: This third paper on this fauna, and the first major one to deal exclusively with New Guinea, enumerates 161 species from New Guinea proper. Of these, 63 are described as new in this paper. Immature stages are described for 40 species, in addition to those of 39 species described earlier. Keys are presented to all categories, both for adults and larvae, as far as known.

Introduction: This is the second supplement to a paper (Gressitt, 1957) which concerned this subfamily for the Pacific area east of Borneo and the Philippines, except for much of Australia. The first supplement (Gressitt, 1960) concerned a more restricted scope—from the Moluccas to New Caledonia and Norfolk I. The present paper has a still narrower scope, covering only New Guinea and immediately adjacent islands like Misoöl, Waiyeu, Biak, Japen and Normanby. One species from Manus and one from New Britain are included in the keys, to make them more complete. Some additional material at hand is set aside for a later supplement pending acquisition of further material.

Specialized collecting, required for many of the Papuan genera, is bringing to light many additional species. Sixty-three new species are added here, bringing the total for New Guinea proper to 161 species. An attempt has been made to obtain immature stages whenever possible. It has not always been possible to associate these for certain, as often 2 or 3 species of one genus may occur on one host plant at the same locality. At least partial immature stages for 40 species are newly described here, and most of these are in some degree illustrated. Immature stages were described earlier for 39 species. Keys are presented to genera and species, both for adults and larvae as far as known. Many of the host plants have not been accurately identified, as it is difficult to identify New Guinea plants, particularly monocotyledons.

Zoogeography: The New Guinea fauna in this subfamily proves to be highly endemic, both as to species and genera. New Guinea also proves to be the area of principal development of some genera known earlier primarily from other areas. Of the total of 161 New Guinea species, 149 appear to be limited to New Guinea as defined in the first paragraph. Only 2 of the 17 New Guinea genera are limited to the island, and an additional 2 occur only in the Bismarcks or N. Australia in addition to New Guinea. The other gen-

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1. Partial results of the project "Zoogeographical studies of New Guinea insects, particularly the family Chrysomelidae", supported in part by a grant from the National Science Foundation (GB-518). Material was collected on several grants from the National Science Foundation, under the program "Zoogeography and evolution of Pacific insects", and also on a Guggenheim fellowship and a Fulbright fellowship.

era extend as far as Lord Howe I., Norfolk I., Tonga, Samoa, the Caroline Is., N. Australia, SE Asia, India and Mauritius. The faunal relationships are primarily with genera in the Malayan and Philippine subregions and in the Solomons and New Caledonia, rather than with the true Australian genera, which seem to have no close relatives. Seven genera occurring in the Solomons or Bismarcks have not yet been found on New Guinea. One genus only known from northern Queensland is closely related to a New Guinea genus.

Speciation: The numbers of species coming to light on the island of New Guinea indicate considerable speciation in this group. Obviously many species remain to be discovered. It appears that active speciation is currently in process. Populations of a particular genus in different parts of the island, even in not distant localities, appear at least slightly different. There are often several related species of a genus in one locality. Some populations appear to be quite low, and this may be related to rapid evolution. The reasons for the low populations are not apparent, as natural enemies are not much in evidence, and many appropriate niches appear to be unoccupied. Much of New Guinea being very young geologically, the changing environment has probably fostered change of populations. Probably some diverging populations were brought again into contact when the former islands were united to form New Guinea. It appears as if some genera are pushing higher into the new mountains of the interior. It is planned to treat this subject in greater detail when collections are more complete and ecological aspects better understood.

Synonymy: Since the additions to the fauna are new species, full synonymy is not repeated for the old species. This is to be found in the 1957 paper. In the abbreviated references presented here, only author, year, page, and figure, are given, referring to items in the bibliography. In general, only original descriptions, synonyms, new combinations and illustrations, are cited.

Material: Nearly all the material reported here was taken by members of Bishop Museum's field teams. A small part was taken on the Netherlands Indies-American Expedition (Third Archbold Expedition), of 1938-39 (L. J. Toxopeus), and a small part is from the California Academy of Sciences.

All material discussed here is in Bishop Museum unless otherwise stated. Specimens illustrated are types unless otherwise indicated. Following are abbreviations of museums in which material is deposited. AM—Australian Museum; ANIC—Australian National Insect Collection (C. S. I. R. O., Canberra); BMNH—British Museum (Nat. Hist.); BOGOR—Museum Zoologicum Bogoriensis, Java; CAS—California Academy of Sciences, San Francisco; DASF—Dept. of Agriculture, Stock & Fisheries, Port Moresby; LEIDEN—Museum van Natuurlijkes Historie, Leiden; SAM—South Australian Museum; USNM—United States National Museum.

Acknowledgements: I am grateful to W. W. Brandt, E. J. Ford, Jr., Margaret Gressitt, T. C. Maa, C. D. Michener, L. Quate, Stella Quate, J. Sedlacek and N. Wilson, who collected part of the material reported here. I am very grateful to T. Nagatani, Carol Nakashige, Phyllis Habeck, Dorothy Rainwater, T. Marsh, Margaret Gressitt, Maria Szent-Ivany and R. Iso for illustrations and other help for this paper. I am much indebted to E. B. Britton, B. J. Selman, Z. Kaszab, D. Guiglia, G. Colas, Mme Bons, and F. Hieke for kindness in connection with museum visits or loan of specimens.

KEY TO TRIBES (ADULTS)

1. Sides of prothorax and elytron without spines..... 2
Sides of prothorax and elytron with spines.....Hispini
- 2 (1). Body rarely very broad, rarely smooth and flattened; elongate or tuberculate and broadened behind 3
Body very broad, smooth and flattened; prothorax very broad and distinctly and evenly margined laterally, a seta arising from each basal angle Callispini
- 3 (2). Tarsal claws paired, divaricate 4
Tarsal claws single; prothorax subcylindrical, convex anteriorly; elytron acutely produced apically..... Eurispini
- 4 (3). Prothorax generally narrowed anteriorly, subparallel-sided basally, sometimes widened at anterolateral angles, without a seta from each basal angle; elytron generally with an extra scutellar row of punctures; head generally with an interantennal process 5
Prothorax generally constricted before and behind middle, or irregular, generally with a seta arising from each basal angle; elytron generally without an extra scutellar row of punctures 6
- 5 (4). Body generally flattened, long and slender, generally parallel-sided..... Cryptonychini
Body subtriangular; elytron broadened and angulate posteriorly; prothorax parallel-sided..... Chaeridionini
- 6 (4). Prothorax somewhat constricted before and behind middle, generally as broad at apex as at base, without a distinct margin 7
Prothorax irregular, often broadened at middle and narrowed at apex, often with a partly prominent margin; elytron generally with a few prominent costae Gonophorini
- 7 (6). Antenna with segments often irregular in length, in part fused or reduced in number; hind femur not very long Coelaenomenoderini
Antenna with segments normal, 11 in number; hind femur fairly long; elytron regular, without distinct carinae Promecothecini

KEY TO GENERA (LARVAE)

1. Body not oval with a continuous margin; head visible from above 2
Body oval in outline, with an even continuous margin formed of broad expansions of thoracic and abdominal tergites; head hidden by pronotum in dorsal view..... **Hispodonta**
- 2 (1). Last abdominal segment with a caudal process; not leaf-mining 3
Last abdominal segment lacking a prominent caudal process; leaf-miners 9
- 3 (2). Meso- and metathoracic segments lacking lateral processes 4
Meso- and metathoracic segments with lateral processes 6
- 4 (3). Caudal process with arms widely separated basally, thickened or strongly angulate posteriorly.....5
Caudal process with arms narrowly separated basally, tapering apically and fairly straight; lateral process lacking or nearly so on most segments..... **Eurispia**
- 5 (4). Lateral processes long and slender; spiracle of last segment broad, nearly round **Octodonta**

- Lateral processes short and blunt, rarely last 2 longer; spiracle of last segment elliptical **Brontispa**
- 6 (3). Lateral process of last segment generally about $1/3$ as long as caudal process; body generally about $5\times$ as long as broad, excluding lateral processes..... 7
- Lateral process of last segment stout, short, less than $1/5$ as long as caudal process; body generally about $3\times$ as long as broad..... **Callistola**
- 7 (6). Spiracle of last segment elliptical..... 8
- Spiracle of last segment nearly round..... **Octodonta**
- 8 (7). Caudal process with apices of arms truncate and projecting transversely or obliquely inward..... **Plesispa**
- Caudal process with apices of arms more or less evenly tapering, arched inward **Ceratispa**
- 9 (2). Abdominal segments without slender lateral processes..... 10
- Abdominal segments with slender lateral processes..... **Freycinetispa**
- 10 (9). Body tapering posteriorly, generally lacking processes on last segment 11
- Body more or less parallel-sided, or widest in middle; last segment generally with processes (Hispidini)..... 14
- 11 (10). Head capsule not much longer than broad, not constricted behind apical $1/4$ (Gonophorini) 12
- Head capsule much longer than broad, constricted near end of basal $1/4$ 13
- 12 (11). Head capsule widest posteriorly, with a pigmented oval ring above **Aspidispa**
- Head capsule widest near middle, about as broad as long... **Gonophora (Micrispa)**
- 13 (11). Pronotum not deeply emarginate anteriorly; head largely hidden (Promecothecini)..... **Promecotheca**
- Pronotum deeply emarginate anteriorly; head considerably exposed (Coelae-nomenoderini)..... **Enischispa**
- 14 (10). Processes of last abdominal segment not close together 15
- Processes of last segment close; abdominal segments angularly produced at sides..... **Dactylispa**
- 15 (14). Body subparallel-sided; abdominal segments angularly produced; last segment with a pair of slender, widely spaced posteriorly pointing processes... **Dicladispa**
- Body broadly oval; lateral processes slender, subacute, those of last segment short, projecting laterally..... **Platypria**

Tribe CALLISPINI

Genus **Hispodonta** Baly, 1858

KEY TO ADULTS

1. Elytron entirely pale, orange-testaceous; length more than 11 mm..... 2
- Elytron partly or largely blackish or metallic; length generally less than 11 mm... 3
- 2 (1). Scutellar area of elytron with a slight irregular row of punctures; inner puncture-rows regular to apex **1. delkeskampi**
- Scutellar area of elytron with dense irregular punctures; inner puncture-rows irregular in posterior $1/4$ **2. grandis**
- 3 (1). Elytral disc entirely or almost entirely metallic or black 4

- Elytral disc pale in approximately basal 1/2..... 8
- 4 (3). Prothorax about as wide as 1/3 length of elytron; elytron fairly straight at side, with an oblique raised stripe near base; antenna pitchy in apical 1/2; length generally more than 8.5 mm 5
- Prothorax wider than 1/3 length of elytron; elytron convex at side, without an oblique raised stripe near base; antenna largely pale; length generally less than 8.5 mm.....6
- 5 (4). Interocular area grooved medially; elytron entirely steel blue except apical margin narrowly pale.....**7. sagu**
- Interocular area irregularly depressed; elytron purplish with external margin broadly pale and a narrow pale stripe on basal 1/5 of suture.....**6. discalis**
- 6 (4). Prothorax rather strongly rounded anteriorly; elytral external margin dark at least anteriorly; suture entirely dark 7
- Prothorax suboblong, nearly transverse anteriorly; elytral external margin largely pale; basal 1/3 of suture broadly pale..... **8. metroxylona**
- 7 (6). Interocular area even, nearly flat; elytron almost entirely steely blue-black, with apical margin only narrowly pale; prothorax not (or weakly) narrowed basally **9. palmella**
- Interocular area grooved and slightly depressed in center; elytron dark blue to purplish dark red-brown, with margin pale behind middle; prothorax distinctly narrowed between middle and base.....**10. subrotunda**
- 8 (3). Pronotal disc largely dark; length less than 8.5 mm 9
- Pronotal disc pale; length more than 9 mm.....10
- 9 (8). Interocular area grooved medially; pronotum almost entirely black; prothorax not strongly narrowed between middle and base **11. chapuisi**
- Interocular area hardly grooved; pronotum bordered and medially striped with pale; prothorax strongly narrowed between middle and base **14. saccis**
- 10 (8). Body subovate; elytron broadened behind middle, with side partly dark 11
- Body somewhat parallel-sided; elytron not or hardly broadened behind middle, with side pale or partly pale.....12
- 11 (10). Less than apical 1/2 of elytron black; interocular area foveate near eye; prothorax subrounded anteriorly; pronotal punctures mostly basal; length 11.25 mm..... **12. depressa**
- More than apical 1/2 of elytron black; interocular area transversely subcarinate near eye; prothorax subtruncate anteriorly; pronotal punctures scattered; length 9.5 mm..... **13. loriae**
- 12 (10). Prothorax oblong, nearly straight at side; eye feebly concave posteriorly..... 13
- Prothorax sinuate at side, rounded anteriorly; eye distinctly concave posteriorly; length 8.5 mm **4. palmicola**
- 13 (12). Prothorax much broader than long, slightly narrowed toward base; elytral margin, including apex, pale; length 10.5 mm..... **5. vicina**
- Prothorax nearly as long as broad, not narrowed toward base; elytral margin black on posterior 2/5; length 11.5 mm **3. bicolor**

KEY TO LARVAE

1. Last abdominal tergite somewhat gradually and evenly broadened posteriorly..... 2

- Last abdominal tergite broadened near apex, generally subparallel-sided in central portion 3
2. Last 2 abdominal tergites sinuate in anterolateral outline; pronotum vermiculate-rugose, with a grooved ridge medially; sides of terga rather closely punctured...
..... 9. **palmella**
- Last 2 abdominal tergites subangulate in anterolateral outline; pronotum weakly rugose, without a median ridge; sides of terga in general sparsely punctured...
..... 7. **sagu**
3. Tergites without fine sparse granules over much of surfaces, at most with rather few granules.....4
- Tergites with fine sparse granules over much of surfaces except for central portions of anterior and middle segments which are vermiculate-rugose; sides of tergites also with coarse shallow punctures.....4. **palmicola**
4. Last 2 abdominal tergites rounded anteriorly; lateral portions of tergites rather closely punctured; median portions of tergites not very strongly vermiculate..... 5
- Last 2 abdominal tergites with somewhat rounded angles anteriorly and anterolaterally; lateral portions of tergites not very closely punctured; median portions of tergites strongly vermiculate 11. **chapuisi**
5. Middle tergites quite smooth mediad from spiracles; middle of front of pronotum slightly cleft and lateral ridge subcarinate..... 6. **discalis**
- Middle tergites uneven and subrugose mediad from spiracles; middle of front of pronotum not cleft and lateral ridge not subcarinate..... 8. **metroxylona**

1. **Hispodonta delkeskampi** Uhmann, 1951 : 346 (Sattelberg; ZMB).

DISTRIBUTION: NE New Guinea.

2. **Hispodonta grandis** Gressitt, n. sp. Fig. 1a.

Male: Shiny black to pitchy brown and testaceous: head largely black, pitchy brown on neck and parts of undersides; pronotum shiny black except at extreme anterior and basal margins; scutellum pitchy black; elytron uniformly testaceous to somewhat ochraceous; ventral surfaces and legs pitchy reddish brown to blackish; antenna pitchy black but more reddish on segment 1. Body glabrous above, feebly clothed on antenna; ventral surfaces with minute pale hairs, which become longer on posterior margin of last abdominal segment.

Head distinctly narrower than prothorax, smooth and shiny above, very weakly depressed along middle of interocular area; frons small and forming a vertical anterior projection between antennal insertions, about 1/3 as long as antennal segment 1; labrum moderately large, convex, slightly roughened; eye large, entire, sub-semicircular; gena fairly narrow. **Antenna** 3/5 as long as body, sub-cylindrical, feebly depressed apically; segment 1 somewhat enlarged apically but feebly produced beyond base of segment 2, which is about as broad as long and less than 1/2 as long as 1; 3 nearly 2× as long as 1+2; 4th 3/5 as long as 3; 4-10 decreasing gradually in length; 11 slightly shorter than 4. **Prothorax** 5/6 as long as broad, weakly convex at sides and nearly as broad anteriorly as posteriorly, moderately convex on anterior margins and sinuate on basal margin but truncate at middle opposite scutellum; disc moderately convex, slightly raised along median line in

posterior 2/3, largely covered with irregularly spaced but subequal distinct punctures except on anterior 1/3 of central portion, the interspaces varying from smaller than to 2-3 \times as large as punctures. *Scutellum* nearly as long as broad, rounded apically and not distinctly punctured. *Elytron* more than 3 \times as long as head and prothorax combined, subparallel-sided but slightly widened a little behind middle and narrowed in apical 1/3; marginal portion somewhat expanded and punctured except near base and apex; disc with numerous fine punctures, rather close and irregular in scutellar area and on much of outer 1/2-3/4 but with about 4 regular rows from near base to well behind middle and originating near middle of base but curving close to suture just anterior to middle. *Ventral surfaces* rather smooth and weakly punctured, a few more distinct punctures along sides. *Legs* short, rather flat and broad, with sparse minute punctures; fore tarsus slightly longer than hind tarsus. Length 11.5 mm; breadth 5.3.

Female: *Elytron* relatively a little longer; ventral surfaces blacker but with hind margins of abdominal segments 2-4 pale. Length 13.2 mm; breadth 5.7.

Paratypes: Length 12.5-13.0 mm; breadth 5.4-5.6.

Holotype ♂ (BISHOP 3477), Waris, 450-500 m, S of Hollandia (Kota Bahru), NW New Guinea, 24-31. VIII. 1959, T. C. Maa; allotype ♀ (BISHOP) and 2 paratypes (BISHOP, USNM), same data. Four paratypes (LEIDEN, BOGOR, AMNH), Rattan Camp, 1200 m, upper Mamberamo R., II-III. 1939, L. J. Toxopeus, Third Archbold Expedition.

Differs from *delkeskampii* Uhm. in being more parallel-sided, in having more dorsal punctures, with close irregular punctures in scutellar area of elytron and longitudinal rows bending closer to suture and becoming irregular on posterior 1/3, and in having antennal segment 3 longer in proportion to 4.

DISTRIBUTION: NW New Guinea.

3. *Hispidonta bicolor* Gressitt, n. sp. Fig. 1b.

Orange ochraceous to purplish black; head, prothorax and scutellum orange ochraceous; antenna reddish ochraceous with apices of segments 3-10 briefly pitchy; elytron orange ochraceous with posterior 2/5 (except extreme margin) purplish black; ventral surfaces largely shiny black, ochraceous on pro- and mesosterna; fore leg ochraceous; mid and hind femora largely pitchy black and hind tibia largely pitchy.

Head 2/3 as broad as prothorax, largely smooth and impunctate; occiput flat with a

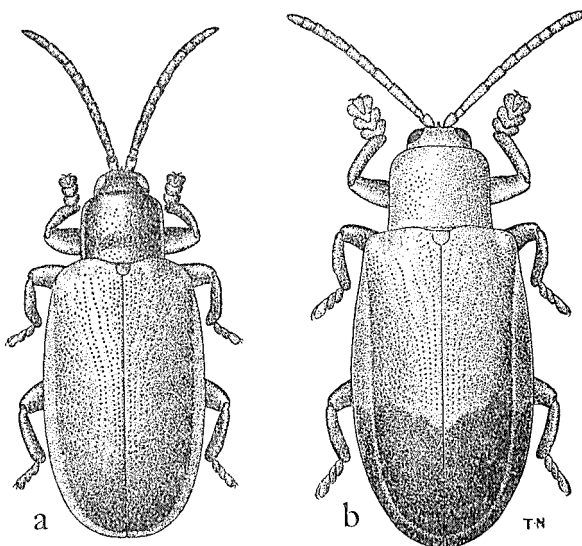


Fig. 1. a, *Hispidonta grandis* n. sp.; b, *H. bicolor* n. sp.

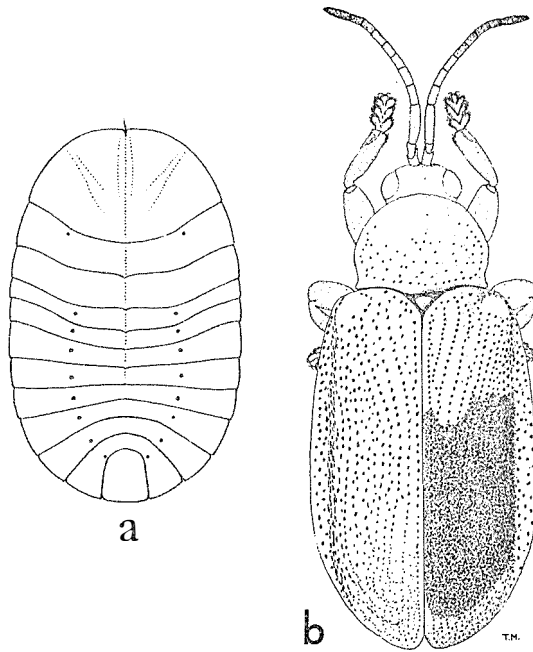


Fig. 2. *Hispodonta palmicola* Gr.: a, dorsal view of larva; b, dorsal view of adult.

very feeble median groove; rostrum about $1/5$ as long as scape, strongly flattened vertically; frons almost obliterated, forming a transverse ridge connected to rostrum. *Antenna* not quite $1/2$ as long as body, cylindrical; segment 1 about $2\times$ as long as broad, subcylindrical, oblique apically; 2 distinctly broader than long; 3 about $1.5\times$ as long as 1+2; 4 just over $1/2$ as long as 3, slightly longer than 5; 5-10 decreasing slightly in length; 11 nearly $2\times$ as long as 10, distinctly flattened, rounded apically. *Prothorax* about $5/7$ as long as broad, subrectangular, anterior angle moderately rounded; sides nearly parallel; disc weakly and evenly convex, sparsely punctured on anterior $1/3$ and irregularly punctured across middle except very few punctures on median area, punctures slightly larger and denser towards base. *Scutellum* subsemicircular. *Elytron* $3.3\times$ as long as broad, subparallel-sided but slightly narrowed toward base and very weakly widened behind middle, gradually narrowed and subrounded apically with a very weak emargination near sutural angle; expanded margin fairly narrow, extremely narrow apically; disc fairly smooth and even, with about 6 subregular oblique rows of fine punctures on basal $1/3$ and 4 longitudinal rows at middle occupying only inner $1/4$ of disc with outer area in large part less regularly punctured, with rows largely confused; punctures continuing to apex but becoming finer and less regular apically. *Ventral surfaces* smooth and shiny, largely impunctate. *Legs* shiny and somewhat flattened. Length 11.5 mm; breadth 4.8.

Holotype ♀ ? (BISHOP 3478), Nabire, S. end Geelvink Bay, 4. IX. 1962, NW New Guinea, J. Sedlacek, from a large-leaved ginger.

Differs from *vicina* in being longer, more parallel-sided, with prothorax much longer

and more rectangular, and elytron with punctures finer and more numerous and those in regular lines occupying less width; also only apical 2/5 of elytron is blackish, though most of expanded margins and apex are dark.

HOST: Ginger?

DISTRIBUTION: NW New Guinea.

4. *Hispodonta palmicola* Gressitt, 1960: 6 (Biak; BISHOP). Fig. 2.

HOSTS: *Metroxylon* and other palms.

DISTRIBUTION: NW New Guinea (Biak I.).

5. *Hispodonta vicina* Gressitt, n. sp. Fig. 3a.

Orange ochraceous to bluish black: head pale orange ochraceous; antenna ochraceous, becoming reddish beyond segment 3 and largely pitchy beyond segment 6; prothorax and scutellum orange ochraceous; elytron ochraceous with slightly more than posterior 1/2 of disc black with a steely blue tinge, the dark area extending farther forward just external to median line and narrowly forward a short distance close to suture; ventral surfaces and legs yellowish ochraceous. Dorsum glabrous; ventral surfaces and legs very sparsely clothed but with distinct goldish hairs on sides of apical portion of abdomen.

Head not quite 3/4 as wide as prothorax; occiput medially grooved and minutely punctured and slightly depressed on each side of middle; frontal area small, produced forward horizontally and narrowly forming an anterior projection between antennal insertions; labrum projecting forward; eye large, about 2X as deep as wide and feebly concave posteriorly. *Antenna* 1/2 as long as body; segment 1 slightly produced forward beneath at apex; 2 nearly 1/2 as long as 1; 3rd 1/3 longer than 1+2; 4 just over 1/2 as long as 3; 4-10 decreasing slightly in length; 11 about as long as 4 and distinctly compressed. *Prothorax* 3/4 as long as broad, nearly transverse anteriorly, somewhat sinuate basally and

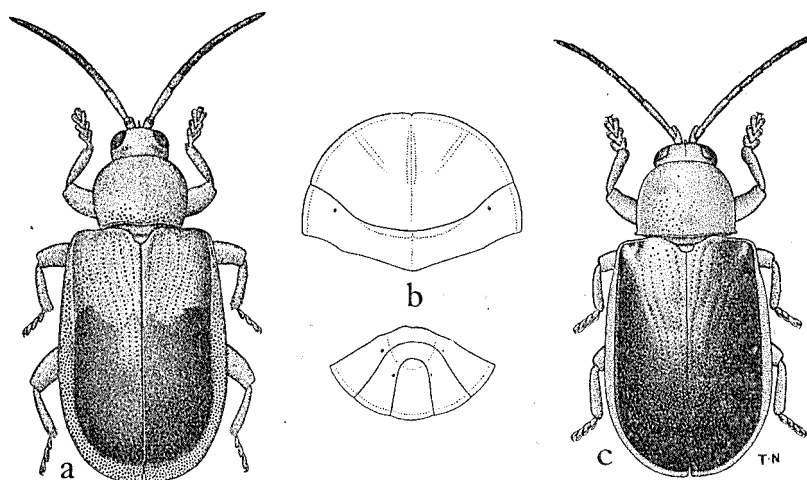


Fig. 3. a, *Hispodonta vicina* n. sp.; b, *H. discalis* Gr., anterior and posterior portions of larva; c, same, dorsal view of adult.

weakly convex at each side; disc fairly smooth, with distinct punctures scattered mostly on basal $2/3$ with interspaces mostly from $2-5\times$ as large as punctures. *Scutellum* broader than long, obtusely rounded apically. *Elytron* fully $3\times$ as long as head and prothorax combined, subparallel-sided, slightly sinuate externally and narrowed on apical $1/4$, with margin somewhat expanded except near base and apex; disc fairly shiny, with about 6 subregular rows of punctures, oblique on basal $1/2$ and finer postmedially, becoming irregular towards apical declivity, and with much denser and less regular punctures on outer $1/2$. *Ventral surfaces* and legs largely impunctate; fore tarsus slightly longer than hind tarsus. Length 10.6 mm; breadth 5.4.

Holotype (BISHOP 3479), Maprik, 150 m, SW of Wewak, NE New Guinea, 20. XII. 1959–17. I. 1960, T. C. Maa.

Differs from *palmicola* Gr. in being larger, in having eye less concave posteriorly, prothorax more transverse and more oblong, elytron more convex, more broadly pigmented and suture paler for a longer distance.

DISTRIBUTION: NE New Guinea.

6. *Hispodonta discalis* Gressitt, 1957: 212, fig. 1 (Maffin Bay; CAS); 1960: 5 (Maprik). Fig. 3 b–c.

Larva: Elongate oblong-elliptical, more broadly rounded anteriorly and slightly narrowed postmedially; dorsum fairly smooth. Pronotum weakly rugose in central portion, moderately to sparsely punctured on anterior and lateral portions, with some concentrically arranged striae or grooves; median line weakly raised in center and finely grooved, more carinate and more weakly grooved anteriorly; oblique sublateral ridge moderately raised and in part subcarinate. Meso- and metatergite moderately vermiculate in central portions, moderately to sparsely punctured at middle and side; central portions of abdominal tergites weakly vermiculate, mostly in a subtransverse direction but becoming quite smooth toward spiracles, moderately and not very closely punctured external to spiracles and smoother and sublongitudinally striate near to lateral margins which are transversely striate; spiracles distinctly elliptical, moderately raised; last 2 tergites distinctly rounded anteriorly; last tergite weakly broadened posteriorly. Antenna slender, tapering, acute and nearly $1/2$ as long as a leg. Middle abdominal sternites finely striate transversely near margin, longitudinally striate internal to margin and finely punctured on remainder with a few larger depressions near inner ridge of expansion. Length 10.7 mm; breadth 6.7.

NW NEW GUINEA: Several, Genjam, 40 km W of Hollandia, 100–200 m, 1–10. III. 1960, T. C. Maa; several, Hollandia-Binnen, 10 m, 30. X. 1958, Gressitt. NE NEW GUINEA: 1, Wewak, 3 m, 26. VI. 1961, M. & L. Gressitt; 2, Maprik, 150 m, 20. VI. 1961, M. & L. Gressitt; 1, Dreikikir, 25. VI. 1961, M. & L. Gressitt, on sago palm (BISHOP).

HOST: *Metroxylon* spp.

DISTRIBUTION: NC New Guinea (NW, NE).

7. *Hispodonta sagu* Gressitt, n. sp. Fig. 4.

Orange testaceous to black with a greenish to purplish tinge: head, pronotum and scutellum orange testaceous; antenna orange basally, reddish on segments 2–3, pitchy on segments 4–6, pitchy black on remainder; elytron black with bluish tinge internally and

purplish tinge externally and with apical margin testaceous; ventral surfaces and legs entirely orange testaceous, somewhat more reddish on legs. Dorsum glabrous; venter largely glabrous but with pale hairs on margins of abdomen.

Head $2/3$ as broad as prothorax, distinctly grooved medially in interocular area; eye large, distinctly concave posteriorly. *Antenna* nearly $1/2$ as long as body, flattened apically; segment 1 produced apically beneath and nearly reaching apex of 2 which is about $1/2$ as long as 1; 3 about $2\times$ as long as $1+2$; 4 about as long as $1+2$; 4-10 decreasing in length; 11 about as long as 4. *Prothorax* just over $2/3$ as long as broad, subtransverse anteriorly, distinctly rounded at side and widest near middle, posterior angles slightly projecting, basal margin slightly sinuate; disc subevenly convex, depressed just anterior to middle of base, with scattered distinct punctures, mostly on basal $1/2$ and near lateral margin. *Scutellum* rounded-triangular. *Elytron* more than $3\times$ as long as broad, subparallel-sided, narrowed and rounded apically; disc with about 5 rows of fairly regular punctures on inner $1/2$ becoming finer and irregular towards apical declivity and with fairly large and dense punctures on inner $1/2$ becoming much smaller posteriorly. *Ventral surfaces* shiny and largely impunctate with a few fine punctures near margins of abdominal sternites. Length 10 mm; breadth 4.6.

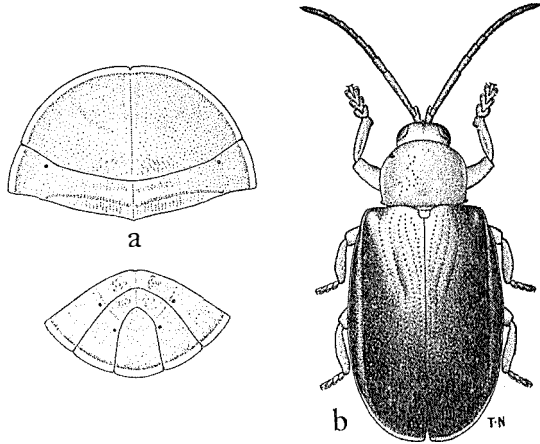


Fig. 4. *Hispodonta sagu* n. sp.: a, anterior and posterior portions of dorsum of larva; b, dorsal view of adult.

Paratypes: Elytral discs sometimes partly purplish brown. Length 9.0-10.2 mm; breadth 3.9-5.0.

Holotype (BISHOP 3480), Dreikikir, 150 m, W of Maprik, NE New Guinea, on *Metroxylon sagu*, 23. VI. 1961, M. Gressitt & L. Gressitt, 4 paratopotypes (BISHOP, ANIC), same data.

Differs from *discalis* Gr. in having interocular area deeply grooved medially instead of irregularly depressed, and in having elytron entirely steel blue except apical margin testaceous.

Larva: Broadly ovate, distinctly narrowed posteriorly, subcircular anteriorly. Pronotum less than $1/3$ as long as body, weakly rugose in central portion and irregularly punctured on side, partially granulose towards margin; median line finely grooved posteriorly and moderately raised anteriorly; oblique sublateral ridge rather broad and weakly raised. Meso- and metatergite rather shallowly vermiculate on central portion and more rugose-punctate towards margins. Abdominal tergites relatively smooth medially, weakly vermiculate along median portions, mostly in a subtransverse direction, and weakly wrinkled sublongitudinally toward spiracles, rather weakly and sparsely punctured between spiracles and margins; last 2 tergites somewhat rounded-angulate anteriorly and anterolaterally; last tergite distinctly broadened posteriorly. Middle abdominal sternites weakly striate longi-

tudinally near sides and feebly punctured and weakly vermiculate internally. Length 15.5 mm; breadth 10.6.

HOST: *Metroxylon sagu* (sago palm).

DISTRIBUTION: NE New Guinea.

8. *Hispodonta metroxylona* Gressitt, 1960: 5 (Madang; BISHOP). Fig. 5.

HOST: *Metroxylon* sp.

DISTRIBUTION: NE New Guinea.

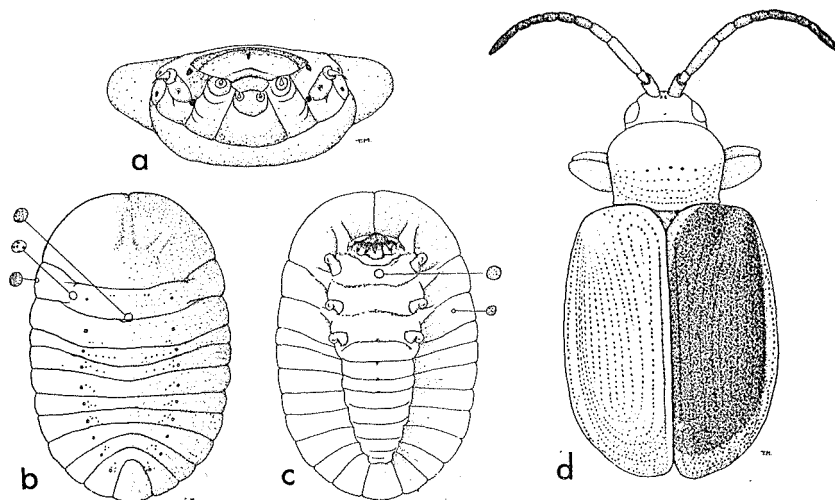


Fig. 5. *Hispodonta metroxylona* Gr.: a, anteroventral view of head of larva; b, dorsal view of larva; c, ventral view of larva; d, dorsal view of adult.

9. *Hispodonta palmella* Gressitt, n. sp. Fig. 6 a-b.

Yellowish testaceous to bluish black: head, pronotum and scutellum yellowish testaceous; antenna ochraceous, slightly paler basally; elytron black with a slightly bluish to purplish tinge and with only extreme apical margin pale; ventral surfaces pale to base of abdominal segment 1 and pitchy black to pitchy brown on remainder; legs pale. Body glabrous above; ventral surfaces largely glabrous but with fine pale hairs mostly on apical portion of last sternite.

Head $2/3$ as broad as prothorax; interocular area shallowly grooved medially and minutely punctured on each side; interantennal projection narrow and about $2/5$ as long as antennal segment 1; eye fairly narrow, weakly concave posteriorly. *Antennae* $1/2$ as long as body, fairly slender; segment 1 somewhat produced beneath at apex, $2\times$ as long as 2; 3 nearly $2\times$ as long as 1+2, $2\times$ as long as 4; 4-10 decreasing gradually in length; 11 slightly longer than 4 and distinctly compressed. *Prothorax* nearly $2/3$ as long as broad, somewhat rounded anteriorly, distinctly rounded at side and widest near middle, sinuate basally; disc rather strongly and evenly convex, feebly raised along median line, with scattered punctures mostly near side and near base, the punctures mostly as large as elytral punctures. *Scutellum* rounded-triangular, minutely punctulate. *Elytron* less than $3\times$ as

long as broad, with lateral margin expanded and punctured; disc fairly convex, depressed anterior to middle, with about 6 rows of fine punctures which continue to near top of apical declivity and fairly large punctures at side in basal 2/3 and much smaller ones apically. *Ventral surfaces* largely impunctate. *Legs* rather flat and short. Length 7.7 mm; breadth 4.3.

Paratypes: Length 6.5–7.5 mm; breadth 3.7–4.

Holotype (BISHOP 3481), Dreikikir, 150 m, W of Maprik, NE New Guinea, 23.VI.1961, on palm with long fronds and pinnae, with larvae, M. & L. Gressitt; 7 paratypes (BISHOP, CAS, USNM, BMNH, ANIC, DASF), same data; paratype, Wewak, 3 m, 26.VI.1961, palm 3744, Gressitt & Gressitt; 2 paratypes, Waris, 450–550 m, S of Hollandia, 8.VIII.1959, T. C. Maa.

Differs from *metroxylona* Gr. in being shorter, in having prothorax rounded anteriorly, not oblong, and elytron largely dark on margin.

Larva: Elliptical-oblong, broadly and subequally rounded anteriorly and posteriorly, subparallel-sided in central portion. Pronotum 1/3 as long as body, subfinely vermiculate-rugose on central portion and punctured to somewhat striate on remainder, hardly ridged but finely grooved medially and with an oblique weakly raised ridge toward anterolateral portion. Meso- and metatergite each about as long as abdominal segments 1+2 united; tergites distinctly vermiculose medially and punctured laterally, each with a transverse ridge from median line to spiracle; spiracles oval and distinctly raised; last 2 tergites rounded anteriorly and sinuate at side. Middle sternites transversely striate near external margin, longitudinally striate interior to margin and rather finely punctured on remainder of lateral portion. Length 12.5 mm; breadth 7.5.

HOST: Pinnate palm with large fronds.

DISTRIBUTION: NC New Guinea (NW, NE).

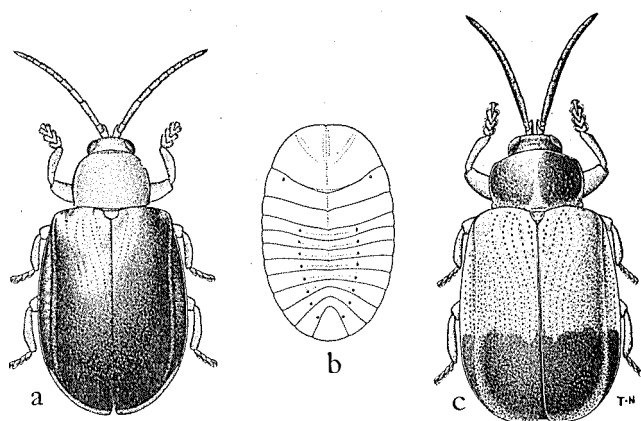


Fig. 6. a, *Hispodonta palmella* n. sp.; b, same, dorsal view of larva; c, *Hispodonta saccac* n. sp.

10. *Hispodonta subrotunda* Gressitt, n. sp.

Yellowish testaceous and ochraceous to pitchy brown and purplish: head largely yellowish testaceous; pronotum ochraceous, becoming paler anteriorly and basally; antenna testaceous basally, ochraceous on remainder, becoming slightly duller apically; scutellum testaceous; elytron dark steely blue with a slight purplish tinge, testaceous on external and apical margins behind middle; ventral surfaces and legs yellowish testaceous. Body nearly glabrous above, largely glabrous beneath with pale hairs on last abdominal sternite.

Head 2/3 as broad as prothorax, interocular area wide and grooved medially; rostrum rounded, 1/3 as long as scape; eye deep and fairly narrow, slightly concave posteriorly.

Antenna not quite $1/2$ as long as body, fairly slender and flattened apically; segment 1 produced apically beneath and reaching to about middle of segment 2; 2 fully $1/2$ as long as 1; 3 about $1/2$ again as long as 1+2; 4 nearly $2/3$ as long as 3; 4-10 decreasing gradually in length; 11 about as long as 4. *Prothorax* $3/4$ as long as broad, weakly convex anteriorly and strongly rounded at side with anterolateral portion evenly rounded and basal angle slightly projecting; basal margin somewhat sinuate; disc subevenly convex, with widely scattered punctures mostly near posterolateral portion. *Scutellum* broadly rounded behind. *Elytron* nearly $3\times$ as long as broad with 5 or 6 subregular rows of punctures on inner $1/2$ and slightly larger irregular punctures on outer $1/2$ which become finer and more irregular posteriorly. *Ventral surfaces* nearly impunctate. Length 8.3 mm; breadth 4.2.

Paratypes: Elytron dark reddish brown with purplish tinge. Length 8.3-8.6 mm; breadth 4.2-4.6.

Holotype (BISHOP 3482), Nabire, 2 m, S. end of Geelvink Bay, NW New Guinea, 4. VII. 1962, Gressitt, on palm 4005; 2 paratypes (LEIDEN, BISHOP), Hollandia (Kota Baru), VII. 1938, L. J. Toxopeus, Netherlands Indian-American New Guinea Expedition (Third Archbold Exped.).

Differs from *metroxylona* Gr. in having prothorax rounded anteriorly, elytral external margin dark anteriorly, and suture entirely dark.

DISTRIBUTION: NW New Guinea.

11. *Hispodonta chapuisi* Gestro, 1885: 156 (Andai; GENOVA).—Gressitt, 1960; 4, fig. 1a-b (Fak Fak).

One, Waris, S of Hollandia 450-550 m, NW NG, 16-23. VIII. 1959, T. C. Maa; 2, Dawai R., Japen I., X. 1962, N. Wilson (BISHOP).

HOST: *Pinanga*, ?*Heterospathe*.

DISTRIBUTION: New Guinea (NW, SW) (Vogelkop).

12. *Hispodonta depressa* Gestro, 1906: 130 (New Guinea; PARIS); 1913: 14 (? W New Guinea).

DISTRIBUTION: W New Guinea.

13. *Hispodonta loriae* Gestro, 1913: 13 (Purari R.; GENOVA).

DISTRIBUTION: SE New Guinea (Papua).

14. *Hispodonta saccsac* Gressitt, n. sp. Fig. 6c.

Testaceous to ochraceous marked with pitchy to purplish black: head ochraceous with most of interocular area shiny black and a slightly pitchy area on each side of post-occiput; antenna dark reddish brown tinged with pitchy on segments 3-11, testaceous at base; prothorax pale ochraceous, with a large squarish black area on each side of disc covering most of pronotum except for margins and medial strip; scutellum pale ochraceous; elytron pale ochraceous with most of posterior $2/5$ purplish black, external margin very narrowly pale and apical margin more broadly testaceous; ventral surfaces testaceous on most of thorax and pitchy on most of abdomen and on side of metasternum; legs yellowish testaceous. Dorsum glabrous; venter and legs largely glabrous but with minute hairs on abdomen, becoming denser on apical margin of last sternite.

Head $3/5$ as broad as prothorax, feebly depressed along middle of interocular area; frons very small, forming a narrow interantennal projection which is about $1/3$ as long as antennal segment 1; eye large, convex anteriorly and weakly concave posteriorly. *Antenna* $3/5$ as long as body, fairly stout; segment 1 nearly $2\times$ as long on ventral surface as on upper surface, nearly reaching to apex of segment 2 which is slightly longer than broad; 3rd $1/2$ again as long as $1+2$; 4 fully $2/3$ as long as 3; 4-10 decreasing somewhat regularly in length; 11 longer than 4. *Prothorax* $5\times$ as long as broad, transverse anteriorly, sinuate basally, evenly arcuate at side; disc weakly convex and smooth, with about 15 scattered punctures at each side mostly near middle of lateral $1/2$ in basal portion. *Scutellum* rounded triangular. *Elytron* about $3\times$ as long as head and prothorax combined, subevenly convex at side but somewhat straighter in central portion; disc with about 6 regular oblique rows on basal portion coming closer to suture and covering less than inner $1/2$ at middle and continuing to posterior declivity, remaining area with closer and less regular rows of punctures. *Ventral surfaces* largely impunctate; fore tarsus slightly longer than hind tarsus. Length 8.2 mm; breadth 4.3.

Holotype (BISHOP 3483), Cape Rodney (Otomata), alt. 10 m, E of Port Moresby, SE New Guinea (Papua), on sago, 4. XI. 1960, Gressitt; paratopotype (BISHOP), same data.

Differs from *chapuisi* Gestro in having head partly pale, pronotum bordered and medially striped with pale, venter darker, body more oblong, prothorax more rounded at side, and elytron more strongly punctured and broader apically.

HOST: *Metroxylon sagu* (sago palm; sagsac).

DISTRIBUTION: SE New Guinea (Papua).

Tribe EURISPINI

Genus **Eurispa** Baly, 1858

KEY TO ADULTS

Prothorax nearly $2\times$ as long as breadth at anterior end; body black with pronotum and elytron pale testaceous, elytron slightly rusty apically; length 9.25 mm... **15. loriae**
Prothorax $5/6$ as broad as long; largely pale; pronotum shiny, closely punctured; occiput and pronotum with fine hairs; length 7-8 mm..... **16. normalis lamingtona**

15. Eurispa lorae Gestro, 1892: 1016 (Hula; GENOVA).

DISTRIBUTION: SE New Guinea.

16. Eurispa normalis lamingtona Gressitt, 1957: 215 (NE Papua; AM).

DISTRIBUTION: SE New Guinea

Tribe CRYPTONYCHINI

KEY TO GENERA

1. Prothorax with anterior corner rounded or toothed, not obliquely truncate or narrowed.....2

- Prothorax with anterior corner obliquely truncate or narrowed..... 4
2. Central portion of head broader than long, oblong; body less than 5× as long as broad..... 3
- Central portion of head longer than broad, widened at apex and base and deeply grooved throughout; body more than 6× as long as broad **Ischnispa**
3. Anterior and posterior corners of pronotum each with 2 teeth..... **Octodonta**
- Anterior corner of pronotum rounded and expanded; posterior corner simple or with 1-2 small teeth or angles **Brontispa**
4. Rostrum normal, interantennal..... 5
- Rostrum flat, inferior, protruding beneath antennal insertions **Palmispa**
5. Rostrum longer than, or at least nearly as long as, scape in ♂ 6
- Rostrum much shorter than scape in both sexes; alternate elytral interstices more or less raised throughout **Callistola**
6. Rostrum no longer than scape; pedicel nearly as long as scape; central portion of head widened anteriorly, raised; length less than 10 mm..... **Plesispa**
- Rostrum often longer than scape; pedicel much shorter than scape; central portion of head narrowed anteriorly, or parallel-sided; length generally more than 10 mm **Ceratispa**

Genus **Palmispa** Gressitt, 1960

KEY TO ADULTS

- Antenna and legs testaceous; ventral surfaces brown; dorsum dull pitchy black with apical elytral margin brown; antennal segments 1-2 subovate..... **17. parallela**
- Body entirely shiny black except for pale tarsi; antennal segments 1-2 cylindrical; dorsal punctures larger..... **18. korthalsivora**

17. *Palmispa parallela* Gressitt, 1960: 9 (Maprik; BISHOP). Fig. 7a.

NW NEW GUINEA: Several, Waris, S of Hollandia, 450-550 m, 8-31.VIII.1959, T. C. Maa; 1, Nabire, S. Geelvink Bay, 4.VII.1962, J. Sedlacek, on *Calamus*.

HOST: *Korthalsia Beccarii*, *Calamus* (rattans).

DISTRIBUTION: New Guinea (NW, NE).

18. *Palmispa korthalsivora* Gressitt, 1960: 10, fig. 1c (Lae; BISHOP).

HOST: *Korthalsia Beccarii*.

DISTRIBUTION: NE New Guinea.

Genus **Octodonta** Chapuis, 1875

The status of the members of this genus is not sufficiently clear at present. Possibly *maffinensis* is the same as *subparallela*, or perhaps several species or subspecies exist in New Guinea.

KEY TO ADULTS

1. Rostrum much less than 1/2 as wide as long; antennal segments 2-4 not widened

- externally..... 2
 Rostrum more than 1/2 as wide as long; antennal segments 2-4 slightly widened
 externally..... **21. korthalsiae**
 2. Anterior thoracic tooth narrower than its distance from lateral margin; space be-
 tween posterolateral, and posterior, tooth less than width of an elytral puncture-
 row **19. subparallela**
 Anterior thoracic tooth as wide as its distance from lateral margin; space between
 posterolateral, and posterior, tooth as great as width of an elytral puncture-row...
 **20. maffinensis**

KEY TO LARVAE

1. Lateral processes of abdominal segments 1, 2, 8 minute, or short and stout; caudal
 process with arm feebly toothed at side, with outer distal tooth much smaller than
 inner, and emargination shallow 2
 Lateral process of abdominal segments 1, 2, 8 long and slender; caudal process with
 arm strongly arched, strongly toothed at side, with outer distal tooth nearly as
 large as inner tooth, and emargination fairly deep **21. korthalsiae**
 2. Lateral process of abdominal segment 8 minute; caudal process with arm bearing
 very small teeth, and outer distal tooth quite small **19. subparallela**
 Lateral process of abdominal segment 8 stout and short; caudal process with arm
 bearing moderate lateral teeth, and outer distal tooth nearly 1/2 as large as inner
 **20. maffinensis**

- 19. *Octodonta subparallela*** Spaeth, 1936: 289 (Kokoda, SE; BMNH).—Gressitt, 1957: 217,
 figs. 2 b-d, f, g; 1960: 11. Fig. 7b.

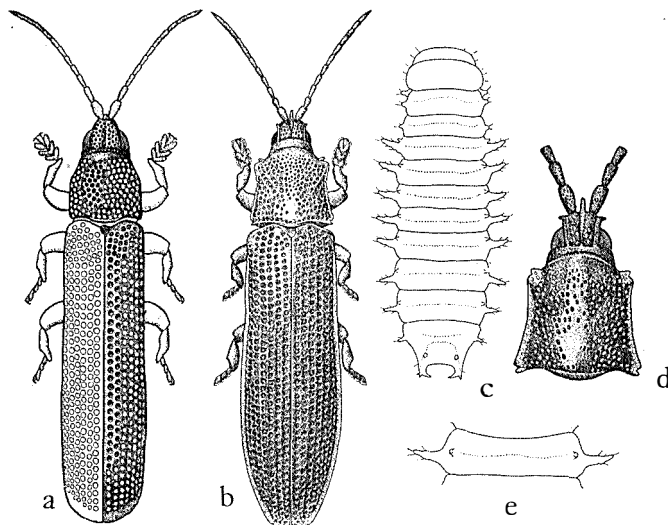


Fig. 7. a, *Palmispa parallela* Gr., paratopotype; b, *Octodonta subparallela* Spaeth, Oriomo, Papua; c, *O. maffinensis* Gr., larva, Nabire; d, same, head and pronotum; e, same, abdominal tergite 3 of larva.

A series from Oriomo, W. Papua, 26–28. X. 1960, Gressitt from *Calamus* and *Metroxylon*, is questionably referred here.

HOSTS: *Calamus* spp., *Korthalsia Beccarii*, *Metroxylon* sp.

DISTRIBUTION: New Guinea (NE, SE), New Britain, New Ireland, New Georgia, Malaita.

20. *Octodonta maffinensis* Gressitt, 1957: 219, fig. 2 a, e (Maffin Bay; CAS); 1960; 11, fig. 2 a, b. Fig. 7 c–e.

Several, Wewak, 25. VI. 1959, Gressitt, on rattan; Maprik, NE NG 29. XII–17. I. 1960, Maa; Eramboe, nr. Merauke, SW NG, 20. I. 1960, Maa on *Cocos*; Hollandia-Binnen, NW New Guinea, 20. X. 1958, Gressitt, on *Metroxylon*; Nabire, Geelvink Bay, NW NG, X. 1962, N. Wilson.

Larva: The larva illustrated in the 1960 paper was immature.

HOSTS: *Calamus* and other rattans, *Metroxylon*, *Cocos*.

DISTRIBUTION: New Guinea (NW, SW, NE).

21. *Octodonta korthalsiae* Gressitt, 1960: 12, fig. 2 c–e (Lae; BISHOP).

Larva: Mature larva, apparently of this species, lacks lateral processes on meso- and metathorax.

HOST: *Korthalsia Beccarii*.

DISTRIBUTION: NE New Guinea.

Genus *Brontispa* Sharp, 1903

KEY TO ADULTS

1. Antenna not serrate 2
- Antenna serrate on mid antennal segments 22. *serricornis*
- 2 (1). Central portion of head gradually widened anteriorly; pronotum convex; body relatively stout and deep; side of thorax weakly concave 3
- Central portion of head generally parallel-sided; pronotum flattish; body quite flat and narrow; side of thorax distinctly concave 7
- 3 (2). Elytral punctures in 10 rows postmedially 4
- Elytral punctures in 8 rows throughout; elytron pale on basal 1/3, dark on remainder; anterolateral angle of prothorax weakly projecting 32. *cyperaceae*
- 4 (3). Pronotum with about 10–12 punctures along median line; elytral costae 2 & 3 merging near top of apical declivity 5
- Pronotum with about 15 punctures along median line; elytral costae 2 & 3 merging well before top of apical declivity 6
- 5 (4). Prothorax red; elytron entirely shiny black; pronotal punctures mostly smaller than interspaces 28. *eversii*
- Prothorax orange; elytron with an orange stripe on basal 1/2 or more; pronotal punctures mostly larger than interspaces 29. *simonthomasi*
- 6 (4). Rostrum longer than scape in ♂, broadened apically; pronotal punctures mostly about as large as interspaces 30. *lateralis*
- Rostrum shorter than scape in ♂, not distinctly broadened apically; pronotal

- punctures mostly larger than interspaces.....**31. lateralis sacchari**
- 7 (2). Central portion of head longer than broad, or as broad as long, in ♂, rarely broader in ♀ 8
- Central portion of head broader than long in both sexes..... 9
- 8 (7). Scape less than 2× as long as broad; anterior angle of prothorax about 1/6 as wide as its distance from anterolateral angle; elytral punctures much wider than longitudinal interspaces (transversely); reddish brown..... **23. minor**
- Scape more than 2× as long as broad; anterior angle of prothorax about 1/4 as wide as its distance from anterolateral angle; elytral punctures partly hardly wider than longitudinal interspaces; largely testaceous.....**24. palmivora**
- 9 (7). Rostrum generally less than 1/2 as long as scape in both sexes; pronotum largely punctured 10
- Rostrum more than 1/2 as long as scape in both sexes; pronotum shiny, with several large impunctate areas.....**25. longissima**
- 10 (9). Pronotum feebly widened basally, parallel-sided behind anterior 1/4, almost entirely punctured**26. linearis linearis**
- Pronotum distinctly widened basally, with a few small impunctate areas, and punctures finer..... **27. linearis archontophoenicia**

KEY TO LARVAE

1. Lateral processes of abdomen longer posteriorly, 8th longer than greatest width of an arm of caudal process; emargination of caudal process longer than broad..... 2
 - Lateral processes of abdomen subequal, 8th shorter than greatest width of an arm of caudal process; emargination of caudal process generally broader than long..... 3
 2. Pronotum and base of caudal process largely pigmented; mesothoracic spiracle prominent.....**28. eversi**
 - Pronotum and base of caudal process pale (except pronotum dark in young larvae); mesothoracic spiracle very short, not projecting beyond thoracic margins...
..... **29. simonthomasi**
 3. Arms of caudal process parallel-sided externally, at least in central portion..... 4
 - Arms of caudal process distinctly arched externally, subtransverse apically; head, pronotum and caudal process pitchy.....**31. lateralis sacchari**
 4. Emargination of caudal process reaching about 1/2 way from apices of arms to spiracles.....5
 - Emargination of caudal process not reaching 1/2 way to spiracles, much broader than long; arm subtruncate apically with an internal spine..... **32. cyperaceae**
 5. Emargination of caudal process not much broader than long6
 - Emargination of caudal process much broader than long; arm truncate apically; abdominal processes subequal..... **27. linearis archontophoenicia**
 6. Emargination of caudal process broadly oval, widest in middle; arm curved and subacute apically; 8th abdominal process shorter than preceding.....**25. longissima**
 - Emargination of caudal process widest behind middle; arm obliquely truncate and spined apically; abdominal processes subequal **24. palmivora**
- 22. Brontispa serricornis** Gressitt, 1957; 227, fig. 5a (Koitaki, SE; BISHOP).
- DISTRIBUTION: SE New Guinea.

23. *Brontispa minor* Gressitt, 1957: 222, fig. 3a (Hollandia; BISHOP).

One, Ifar, 500 m, Cyclops Mts., NW New Guinea, 28. VI. 1962, Gressitt, on palm with broad pinnae.

HOST: Pinnate palm.

DISTRIBUTION: NW New Guinea.

24. *Brontispa palmivora* Gressitt, n. sp. Fig. 8.

Male: Largely pale testaceous, in part brown to pitchy black: head ochraceous, darker on neck and mouthparts, paler on interocular area; antenna dark reddish brown on segment 1, pitchy black on remainder; prothorax testaceous, ochraceous just behind head; scutellum pale ochraceous; elytron testaceous with suture narrowly brownish and apex pale brown; ventral surfaces dull testaceous to slightly pitchy brown; legs pale pitchy brown, darker on central portions of tibiae.

Head nearly $1/2$ as broad as prothorax; central portion about as broad as long, very slightly narrowed anteriorly, grooved medially and moderately punctured on each side except on anterior $2/5$; rostrum slightly longer than broad, subacute, $1/3$ as long as scape; neck moderately punctured; frons smooth and even, finely pubescent. *Antenna* $2/5$ as long as body; segment 1 moderately stout, not quite $2\times$ as long as broad; 2 more slender, thickened apically, nearly $2\times$ as long as broad; 3 a little longer than 2, subequal to 4-6; 7 slightly larger; 8-10 each slightly smaller, pubescent; 11 as long as 1, pubescent. *Prothorax* barely longer than broad, weakly convex on anterior margin with anterior angle obtuse, about $1/4$ as wide as its distance from anterolateral angle, which is fairly prominent; side distinctly concave anterior to middle and straight from here to base, which is slightly incised at posterior angle; basal margin weakly sinuate; disc weakly convex, fairly even, with numerous deep punctures which are mostly larger than interspaces. *Scutellum* slightly longer than broad, obtuse apically. *Elytron* fully $6\times$ as long as broad, subparallel-sided, but slightly widened at the end of basal $1/5$ and then slightly narrowed and weakly widened

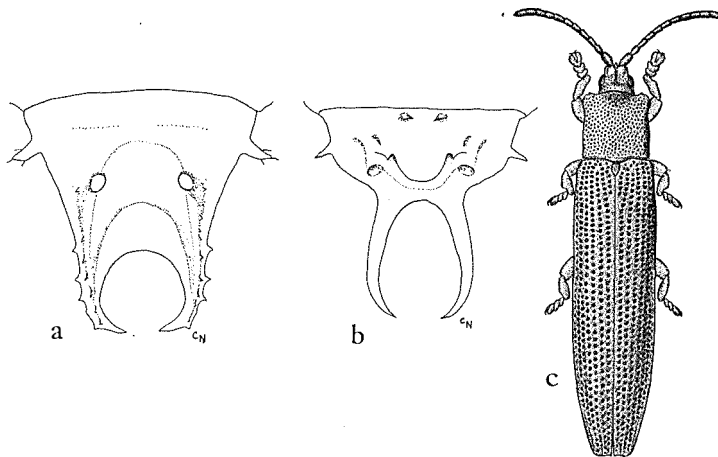


Fig. 8. *Brontispa palmivora* n. sp.: a, caudal tergite of larva; b, same for pupa; c, adult.

ed again postmedially; apex rounded externally, emarginate near suture and slightly projecting at suture; disc with regular rows of strong punctures, 8 rows anteriorly and 10 rows postmedially, punctures mostly larger than interspaces longitudinally and partly barely wider than interspaces transversely. *Ventral surfaces* largely punctate, with close punctures on side of metasternum and a few shallow punctures on sides of abdominal sternites; last sternite broadly emarginate apically. *Legs* short; hind femur hardly reaching apex of abdominal segment 1. Length 7.4 mm; breadth 1.4.

Female: Central portion of head slightly wider than long, rostrum very short; coloration ochraceous. Length 8.2 mm; breadth 1.5.

Paratypes: Length 7.5–8.5 mm; breadth 1.3–1.6.

Holotype ♂ (BISHOP 3484), Wau, 1500 m, Morobe Distr., NE New Guinea, from small palm, G-3727, 16. VI. 1961, J. Sedlacek & Gressitt; allotype ♀ (BISHOP) same data; 16 paratypes, same data, with larvae, or 1, 28. III. 1963, Sedlacek.

Differs from *minor* Gr. in being paler in color, with longer antenna, with scape more slender, central portion of head as broad as long, and elytral punctures slightly smaller.

Larva: Pale orange testaceous; head nearly 2× as broad as long, obtuse apically; moderately depressed medially and micro-granulose; antenna about as long as broad; eyespots non-pigmented, about 5 in number but partly fused; pronotum vermiculate-truncate; thorax without lateral processes; processes of abdominal segments short, subequal, slightly tapered but blunt apically with few subterminal setae; caudal process nearly 2× as long as broad, subparallel-sided on central portion, with arms curved slightly inward toward apex and then with a strong oblique inward projecting tooth at apex and a very small tooth beneath; outer edge of each arm with about 6 small tubercles above and about 4 beneath; emargination about as deep as wide, broadest near apex and subtruncate in middle of anterior end. Length 9 mm.

Pupa: Pale yellowish testaceous; rostrum about as broad as long; anterolateral process of head fairly long, sinuate postmedially and bent downward, acute apically; pronotum distinctly broadened apically and basally, transversely corrugated and medially grooved on central portion; mesal abdominal segment with 12 distinct tubercles, each with a small black tip and with tuft of setae on a weak process at middle of side; caudal process with arms evenly tapering, moderately arched and acute apically, pointing posteriorly and subparallel-sided. Length 8.8 mm.

HOST: Small palm, G-3727.

DISTRIBUTION: NE New Guinea.

25. *Brontispa longissima* (Gestro), 1885: 162.—See Gressitt, 1957: 224 for full synonymy.

NW NEW GUINEA: Genjam, 40 km W of Hollandia, 1–10. III. 1960, T. C. Maa, on coconut; Sarmi, W of Hollandia, 20. VI. 1959, Maa; Biak I., 26. XI. 1958, Gressitt; Hol Mafin, 10. VII. 1959, Maa; Nabire, 1962, Gressitt (BISHOP). NE NEW GUINEA: Siaute, nr. Torricelli Mts., 9–17. XI. 1958, Konini, Torricelli Mts., 26–29. XI. 1958, W. W. Brandt; We-wak Gressitt; Dreikikir, W of Maprik, 23. VI. 1961, M. & L. Gressitt; Madang, 28. X. 1958, Gressitt; Bubia, Lae, 22. VII. 1958, Gressitt (BISHOP). SE NEW GUINEA: Aroa Estate, W of Port Moresby, 1. X. 1958, Gressitt; Otomata Estate, Cape Rodney, 2. XI. 1960, Gressitt, mostly on coconut (BISHOP).

HOSTS: *Cocos nicifera*; rarely other pinnate palms.

DISTRIBUTION: Java, Celebes, Moluccas, New Guinea (NW, NE, SW), Cape York (?), Bismarcks, Solomons, New Hebrides, Tahiti (recent introduction).

26. *Brontispa linearis linearis* Spaeth, 1936: 288 (NW NG; BMNH),—Maulik, 1938: 61.

One, somewhat questionably this species, Maprik, 25. X. 1957, Gressitt, from palm similar to *Metroxylon* (BISHOP).

HOST: Palms, including *Areca catechu*.

DISTRIBUTION: N New Guinea (NW, NE).

27. *Brontispa linearis archontophoenicia* Gressitt, 1960: 15, fig. 3 b-e (*B. archontophoenicia*, Bulolo, Wewak, Sentani; BISHOP). n. status.

Maprik, 14. X. 1957, Gressitt; Dreikikir, W of Maprik, 24. VI. 1961, M. & L. Gressitt; Gabumi, Saidor, Finisterre Mts., VIII. 1958, Brandt (BISHOP).

HOSTS: *Archontophoenix*, *Arenga* and other palms.

DISTRIBUTION: New Guinea (NW, NE).

28. *Brontispa eversi* Gressitt, 1960: 17, fig. 4 a-b (Biak; BISHOP).

HOST: Sedge.

DISTRIBUTION: Biak I.

29. *Brontispa simonthomasi* Gressitt, 1960: 21, fig. 6 a-b (Hollandia; BISHOP). Fig. 9 a-d.

NE NEW GUINEA: Maprik, 12. I. 1960, T. C. Maa, on sedge; Mobitei, 750 m, Tor-

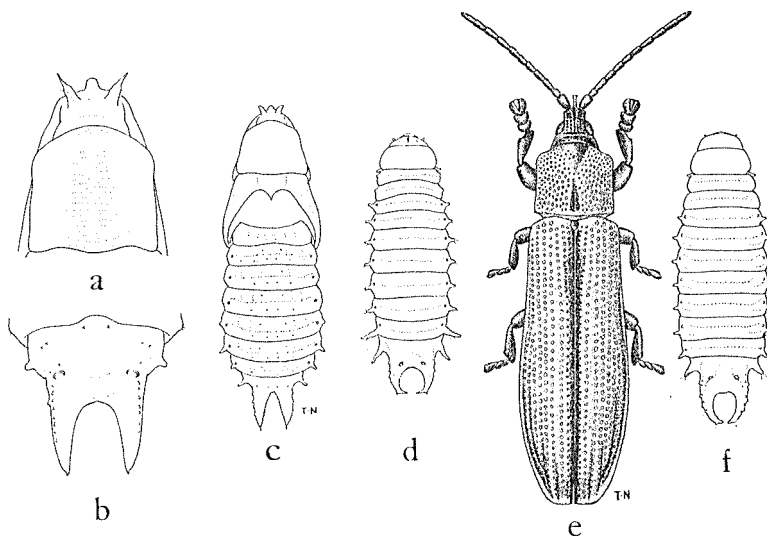


Fig. 9. a-d, *Brontispa simonthomasi* Gr.: a, head and pronotum of pupa; b, last tergite of pupa; c, dorsal view of pupa, Maprik; d, dorsal view of larva, Maprik. e, *B. lateralis lateralis* Uhm., Karimui; f, same, dorsal view of larva, Wau.

ricelli Mts., 1-15. IV. 1959, W. W. Brandt.

HOST: Small sedge.

DISTRIBUTION: N New Guinea (NW, NE).

30. *Brontispa lateralis lateralis* Uhmann, 1953: 873 (Zenab, NE; BMNH). Fig. 9 e-f.

Larva: Lateral processes short and blunt, caudal process rounded and tuberculate externally.

NE NEW GUINEA: Karimui, 1000 m, S of Goroka, 3. VI. 1961, M. & L. Gressitt, in sedge; Wau, 1200 m, 20. VI. 1961, Sedlacek, in sedge; Feramin, 150 m, 1-6. VI. 1959, Brandt.

HOSTS: *Saccharum*, sedges.

DISTRIBUTION: NE New Guinea.

31. *Brontispa lateralis sacchari* Gressitt, 1960: 23, fig. 6 c-d (NW NG; BISHOP).—" *B. lateralis* "; Gr., 1957: 225, fig. 4 a-d. n. status.

This form is highly variable in color, from largely testaceous to pure black, often striped medially.

NW NEW GUINEA: Araboebivak, X, XI. 1939, Leiden Mus. Exped.; Enarotadi, 10. VIII. 1962, Moanemani, VIII. 1962, Sedlacek, from sedge; Bokondini, 1300 m, N of Baliem, 5-11. XI. 1961, S. & L. Quate, grasses. SW NEW GUINEA: Bomberi-Kalimati, nr. Fak Fak, 10. VI. 1959, Gressitt, on sedge.

HOSTS: Sedges, *Eulalia*, *Saccharum*.

DISTRIBUTION: New Guinea (NW, SW).

32. *Brontispa cyperaceae* Gressitt, n. sp. Fig. 10.

Male: Reddish ochraceous to pitchy black: head dark reddish tinged with pitchy particularly on anterior portion of neck and between eyes; antenna dark pitchy brown, somewhat reddish on central portion; pronotum reddish ochraceous, duller reddish on anterior part of central portion; scutellum ochraceous; elytron reddish ochraceous in basal 1/3, darker reddish on remainder, becoming black apically; ventral surfaces reddish ochraceous to end of abdominal segment 1 and dark reddish to blackish on remainder of abdomen; legs ochraceous, darker on tibiae.

Head slightly longer than broad, sparsely punctured on top of neck; central portion slightly longer than broad, distinctly widened anteriorly, finely grooved medially and with a few punctures on basal 1/2 of each side; rostrum just over 1/2 as long as scape, subparallel-sided and truncate apically; frons strongly narrowed between middle of eyes, swollen in broadened preapical portion. *Antenna* 2/5 as long as body; segment 1 stout, subcylindrical, less than 2X as long as broad; 2 as long as 1, much more slender but slightly thickened in middle; 3 barely as long as 2; 3-10 decreasing slightly in length with 8-10 broader and somewhat flattened; 11 nearly as long as I. *Prothorax* barely broader than long, strongly convex on anterior margin, slightly produced at anterolateral angle and subparallel-sided in basal 1/2; basal margin nearly straight; disc moderately convex, smooth, with scattered fairly large punctures mostly somewhat anterior to middle and on basal 1/2

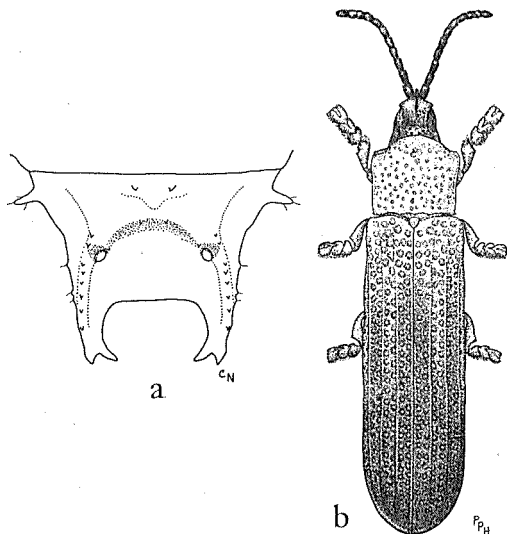


Fig. 10. *Brontispa cyperaceae* n. sp.: a, last tergite of larva; b, adult.

between middle and side, mostly smaller than interspaces. *Scutellum* small, subrounded posteriorly. *Elytron* slightly less than $6\times$ as long as broad, subparallel-sided, slightly narrowed at end of basal $1/3$, slightly widened postmedially; apex broadly rounded with sutural angle slightly withdrawn; disc with 8 rows of strong punctures throughout with alternate interstices distinctly raised and with punctures larger than interspaces longitudinally. *Ventral surfaces* with only a few weak punctures along sides and with a depression near side on abdominal segments 2-4. *Legs* short; hind femur barely exceeding end of abdominal segment 1. Length 7.7 mm; breadth 1.7.

Female: Rostrum $1/2$ as long as scape. Length 8.8 mm; breadth 1.8.

Paratype: Length 7.2 mm; breadth 1.6.

Holotype ♂ (BISHOP 3485), Oriomo Govt. Agric. Sta., alt. 5 m, Oriomo R., N of Daru, W. Distr., SW New Guinea (Papua), 29. X. 1961, Gressitt, from sedge G-3631; allotype ♀ (BISHOP), same data except 26. X; paratype ♂, same data as allotype, with larvae.

Differs from *eversii* Gr. in having elytron partly red, body a little more slender, and elytron with only 8 rows of punctures throughout.

Larva: Pale testaceous; head less than $2\times$ as broad as long, grooved medially and micropunctulate; antenna slightly longer than broad, eye-spots non-pigmented, about 5 in number but not distinct; pronotum depressed medially, micropunctulate; thorax without lateral processes; abdominal processes short, subequal, slightly stouter posteriorly, slightly thickened in middle and blunt apically; caudal process less than $2\times$ as long as broad, with arms fairly straight, very slightly incurved towards apex and with a fairly strong inward projecting tooth and a short apical tooth; each arm with about 8 small tubercles on upper edge and none beneath; emargination broader than deep; widest behind middle and weakly convex at middle anteriorly. Length 7.5 mm.

HOST: Sedge (G-3631).

DISTRIBUTION: SE New Guinea.

Genus *Ischnispa* Gressitt, n. gen.

Head elongate with central portion longer than broad and deeply grooved for entire length, widened anteriorly and posteriorly; a slight swelling behind eye; rostrum longer than broad, truncate apically; frons much longer than broad and densely hairy; prothorax longer than broad, strongly constricted in middle, rounded anteriorly and matched before

basal angle; elytron extremely narrow and subparallel-sided, rounded apically; legs very short, hind femur not nearly reaching apex of abdominal segment 1. Body more than 6× as long as broad.

Type species: *Ischnispa sulcata* Gressitt, n. sp., here designated.

Range: New Guinea.

Differs from *Brontispa* and *Octodonta* in having the body much more slender, at least 7× as long as broad, with central portion of head longer than broad, broadened apically and basally, and concave and medially grooved, and with prothorax longer than broad and narrowed in middle, elytron extremely long, and legs very short. As yet nothing is known of the biology of the genus.

KEY TO SPECIES

- Head with broad median groove and distinct projection just behind eye; alternate elytral interstices strongly raised, partly red..... 33. ***sulcata***
 Head with narrow median groove and weak swelling behind eye; elytral interstices subequally raised 34. ***nigra***

33. *Ischnispa sulcata* Gressitt, n. sp. Fig. 11a.

Male: Orange ochraceous to dull pitchy; head, antenna, prothorax, and scutellum orange ochraceous, slightly paler at sides of pronotum; elytron reddish ochraceous, becoming pitchy beyond basal 1/3 with suture, external margin and costae pitchy blackish but interstices and extreme apex reddish pitchy; ventral surfaces and legs orange ochraceous, slightly pitchy at sides of abdominal sternites 4 and 5.

Head 3/4 as broad as prothorax, longer than broad; central portion longer than broad, concave, angularly broadened anteriorly and gradually broadened posteriorly with a complete deep median groove; rostrum not quite 2× as long as broad, 2/3 as long as scape, rounded-truncate apically and entirely concave and continuous with median groove; a distinct swelling immediately behind eye with posterior margin of eye emarginate; frons much longer than broad, very hairy in central portion but glabrous on under side of rostrum. *Antenna* not quite 1/3 as long as body, not very stout; scape 2.5× as long as broad, broadest preapically; 2 more than 2× as long as broad and just over 1/2 as long as 1; 3 distinctly longer than 2 and more cylindrical; 4 slightly shorter than 3 and 5; 5–10 subequal in length; 11 slightly longer than 10. *Prothorax* distinctly longer than broad, nearly as broad anteriorly as posteriorly; anterior margin weakly convex; anterior angle broadly rounded; side strongly constricted in middle and evenly concave; posterior angle double, with rounded border of lateral margin followed by a slight indentation and then a more angulate basal angle; disc convex along middle, impressed with scattered large punctures and intervening spaces with minute punctures, median line with some fused punctures forming a sublongitudinal depression near base; lateral margins distinctly elevated somewhat anterior to middle. *Scutellum* small, with raised portion somewhat ovate. *Elytron* 10× as long as broad, subparallel-sided but slightly constricted at end of basal 1/3, weakly widened near middle and then slightly narrowed posteriorly; lateral margin hardly expanded; apex rounded with margin expanded but somewhat declivous; disc with 6 fairly regular rows of punctures, but rows 5 and 6 somewhat merging at constriction beside hind

leg; sutural puncture-row with about 7 punctures; interstices 2 and 4 distinctly raised,

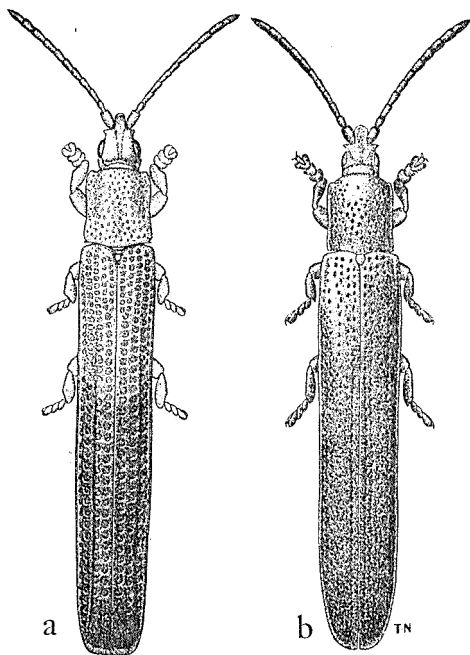


Fig. 11. a, *Ischnispa sulcata*, n. sp.; b, *I. nigra* n. sp. (drawing shows the insect too broad and central portion of head too short).

costa 1 becoming carinate posteriorly and costa 2 carinate for most of its length and interstice 1 with a short but pronounced apical costa. *Ventral surfaces* largely frosted, with a few punctures at sides of sternites. *Legs* very short; hind femur not nearly reaching apex of abdominal segment 1. Length 7.6 mm; breadth 0.95.

Holotype ♂ ? (BISHOP 3486), Waris, 450–500 m, S of Hollandia, NW New Guinea, 1–7. VIII. 1959, T. C. Maa.

Differs from *Brontispa longissima* (Gestro) in being very much narrower, with different head-structure, narrower prothorax and more carinate elytron.

DISTRIBUTION: NW New Guinea.

34. *Ischnispa nigra* Gressitt, n. sp. Fig. 11b.

Female (?): Entirely black above; mouth-parts reddish pitchy; abdomen largely pitchy brown; apices of tibiae reddish.

Head $3/4$ as broad as prothorax, longer than broad; central portion slightly longer than broad, broadened anteriorly and posteriorly, concave with a deep median groove and slightly rugose on each side of groove; rostrum slightly longer than broad, $5/6$ as long as scape; frons about $2\times$ as long as broad, broadened apically and with a dense tuft of hairs near mouth and moderately hairy on remainder. *Antenna* just over $1/4$ as long as body, distinctly thickened apically; segment 1 slightly more than $2\times$ as long as broad, stoutest just beyond middle; 2 not quite $2\times$ as long as broad, about $2/3$ as long as 1; 3 more slender, thickened apically and more than $2\times$ as long as broad; 4 shorter than 3; 5 nearly as long as 3 and subequal to 6; 7 nearly $2\times$ as long as 6; 8 shorter, subequal to 9 and 10; 11 slightly longer than 7. *Prothorax* distinctly longer than broad, distinctly constricted in middle; anterior margin strongly convex; anterior angle projecting slightly forward after curving inward from widest portion in anterior $1/2$ near end of apical $1/5$; basal angle not prominent, with a very slight indentation just before angle; disc convex along median portion, with rather coarse deep punctures which are irregularly arranged but sparser apically and mostly about as large as interspaces or slightly larger. *Scutellum* small, raised portion about as long as broad and rounded behind. *Elytron* $10\times$ as long as broad, distinctly narrowed in basal $2/5$ and then gradually narrowed towards apex which is rounded and narrowed toward sutural angle; lateral margin extremely narrow; apical margin flattened and considerably produced; elytron with fairly regular oblong punctures arranged in about 7 rows at end of basal $1/4$, in 6 rows for a short distance at area of lateral con-

broad, broadened anteriorly and posteriorly, concave with a deep median groove and slightly rugose on each side of groove; rostrum slightly longer than broad, $5/6$ as long as scape; frons about $2\times$ as long as broad, broadened apically and with a dense tuft of hairs near mouth and moderately hairy on remainder. *Antenna* just over $1/4$ as long as body, distinctly thickened apically; segment 1 slightly more than $2\times$ as long as broad, stoutest just beyond middle; 2 not quite $2\times$ as long as broad, about $2/3$ as long as 1; 3 more slender, thickened apically and more than $2\times$ as long as broad; 4 shorter than 3; 5 nearly as long as 3 and subequal to 6; 7 nearly $2\times$ as long as 6; 8 shorter, subequal to 9 and 10; 11 slightly longer than 7. *Prothorax* distinctly longer than broad, distinctly constricted in middle; anterior margin strongly convex; anterior angle projecting slightly forward after curving inward from widest portion in anterior $1/2$ near end of apical $1/5$; basal angle not prominent, with a very slight indentation just before angle; disc convex along median portion, with rather coarse deep punctures which are irregularly arranged but sparser apically and mostly about as large as interspaces or slightly larger. *Scutellum* small, raised portion about as long as broad and rounded behind. *Elytron* $10\times$ as long as broad, distinctly narrowed in basal $2/5$ and then gradually narrowed towards apex which is rounded and narrowed toward sutural angle; lateral margin extremely narrow; apical margin flattened and considerably produced; elytron with fairly regular oblong punctures arranged in about 7 rows at end of basal $1/4$, in 6 rows for a short distance at area of lateral con-

striction, and 8 rows postmedially; interstices all slightly raised and alternate ones a little more strongly so but none costate except for interstice 2 on apical declivity, with interstice 4 slightly raised just before apex. *Ventral surfaces* frosted with a few weak punctures along sides. *Legs* short and stout; hind femur not reaching apex of abdominal segment 1. Length 6.7 mm; breadth 0.94.

Holotype ♀ ? (BISHOP 3487), Mt. Kainai, 1050 m, NE New Guinea, 26.IX.1962, J. Sedlacek.

Differs from *sulcata* in being less parallel-sided, more narrowed posteriorly, with rostrum relatively broader, frons wider, prothorax narrower and less constricted, and elytron more narrowed, less carinate, and with apex much narrower.

DISTRIBUTION: NE New Guinea.

Genus *Plesispa* Chapuis, 1875

KEY TO ADULTS

1. Anterior angle of prothorax even, not projecting forward; feed in Gramineae..... 2
Anterior angle of prothorax projecting forward; feed in Palmaceae..... 3
- 2 (1). Rostrum at least 2/3 as long as scape in ♂; prothorax about as long as broad **40. saccharivora**
Rostrum less than 1/2 as long as scape in ♂; prothorax broader than long; body relatively broad..... **41. montana**
- 3 (1). Prothorax narrower at anterolateral angles than at base 4
Prothorax about as broad at anterolateral angles as at base..... 5
- 4 (3). Prothorax distinctly broader than long, blackish; underside of rostrum gradually narrowed posteriorly **38. palmarum**
Prothorax as long as broad, reddish; underside of rostrum somewhat suddenly widened between antennal insertions..... **37. hagenensis**
- 5 (3). Length more than 6 mm; head pitchy; elytron largely or entirely blackish..... 6
Length less than 5.5 mm; dorsum largely reddish; fore tarsus uniformly colored **39. palmella**
- 6 (5). Central portion of head with 8 longitudinal ridges posteriorly; prothorax sub-parallel-sided, fully as long as broad; body slender **36. korthalsiae**
Central portion of head rugose-punctate; prothorax with angles slightly projecting, slightly broader than long **35. reichei**

KEY TO LARVAE

1. Lateral processes mostly fairly long, several times as long as broad; emargination of caudal process transversely suboval 2
Lateral processes all short, not much longer than broad; emargination of caudal process nearly round; most of processes dark..... **41. montana**
2. Lateral processes pale, slender distally; mesothoracic process much longer than mesothoracic spiracle; caudal process dark, with apical spines directed transversely, their tips rather close..... **40. saccharivora**
3. Emargination of caudal process transverse at middle of anterior edge 4
Emargination of caudal process convex at middle of anterior edge; about 8 teeth

- on upper edge of arm..... 36. *korthalsiae*
4. Mesothoracic spiracle less than 1/2 as long as mesothoracic process..... 5
- Mesothoracic spiracle more than 1/2 as long as mesothoracic process; arms of caudal process subparallel-sided externally 38. *palmarum*
5. Arms of caudal process strongly arched; width of emargination about as great as distance between spiracles (at centers) 35. *reichei*
- Arms of caudal process weakly arched; width of emargination greater than distance between spiracles 39. *palmella*

35. *Plesispa reichei* Chapuis, 1875: 290 (Malacca; BRUXELLES).—Gressitt, 1957: 229, fig. 6, a, c.

Oxycephala papuana Gestro, 1897a: 450 (NE NG; BUDAPEST).

Many, Bomberi, 700–900 m, nr. Fak Fak, Vogelkop, 6–8. VI. 1959, on *Daemonorops*, *Calamus*, *Arenga*, Gressitt & Maa. Many, Enarotadi, 1850–2050 m, Wisselmeren, 5–6. VIII. 1962, J. Sedlacek, from rattan.

HOSTS: *Cocos*, *Areca*, *Metroxylon*, *Arenga*, *Archontophoenix*, *Calamus*, *Daemonorops*, *Korthalsia*, *Flagellaria*.

DISTRIBUTION: Malaya, Indonesia, Philippines, New Guinea, New Britain, Cape York Peninsula.

36. *Plesispa korthalsiae* Gressitt, n. sp. Fig. 12 a–c.

Male: Orange ochraceous to pitchy black: head dark rusty brown, paler reddish brown at side; antenna reddish brown basally, pitchy black in apical 1/2; pronotum orange ochraceous; scutellum slightly more reddish; elytron pitchy black, slightly reddish on extreme basal margin and slightly pitchy reddish on external margin; ventral surfaces ochraceous, more reddish brown along central portion of abdomen; legs pale ochraceous; fore tarsus dark on outer 1/2.

Head 2/3 as long as prothorax; central portion broader than long, slightly widened anteriorly with about 10 longitudinal ridges at posterior 2/3 and a slightly raised flattish area on each side of shallow median groove in anterior portion; rostrum 3/4 as long as scape, slightly widened and truncate apically with a shallow median groove, its underside weakly sinuate in lateral view; frons narrow and finely sinuate; neck rather strongly punctured. *Antenna* slightly over 2/5 as long as body; segment 1 stout, less than 2× as long as broad; 2 nearly as long as 1, more slender, slightly longer than 3; 3 slightly longer than 4; 4–6 subequal; 7 nearly as long as 2; 8 shorter; 9 and 10 each longer than 8 and shorter than 7; 11 as long as 1. *Prothorax* barely longer than broad, subparallel at side, very weakly narrowed to anterolateral angles which are hardly projecting; disc weakly convex, rather strongly and closely punctured. *Scutellum* obtuse behind. *Elytron* 5.4× as long as broad, subparallel-sided but very weakly narrowed at end of basal 2/5 and slightly widened post-medially; apex rounded-truncate; disc strongly and regularly punctured with alternate interstices distinctly raised. *Ventral surfaces* largely impunctate but with few strong punctures at side of metasternum and a depressed area on each side of abdominal sternites 1–4. *Legs* distinctly punctured. Length 6.7 mm; breadth 1.6.

Female: Length 6.6 mm; breadth 1.55.

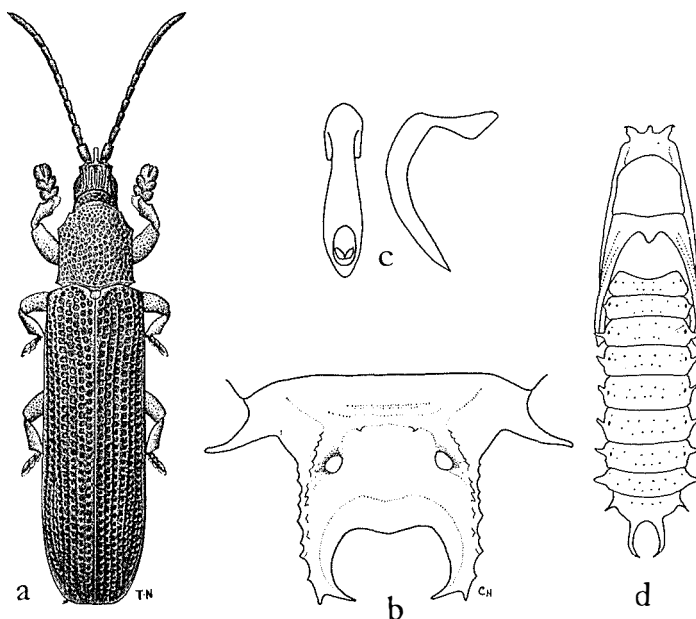


Fig. 12. a-c, *Plesispa korthalsiae* n. sp.: a, adult; b, last tergite of larva; c, aedeagus of holotype. d, *P. sp.*, pupa, dorsal view, Bodem, nr. Sarmi (Maa).

Paratypes: Length 6–6.8 mm; breadth 1.5–1.7.

Holotype ♂ (BISHOP 3488), Oriomo Gov't. Sta., Oriomo River, N of Daru, W. Papua, 26–28. X. 1960, Gressitt; allotype ♀ (BISHOP), same data; paratypes, 26–30. X. 1960, Gressitt, on *Korthalsia*, *Calamus*, palm similar to *Heterospathe*.

Differs from *reichei* Chapuis in having central portion of head with longitudinal ridges instead of irregular rugose punctures, with prothorax slightly broader than long, and subparallel-sided with angles hardly projecting.

Larva: Head finely granulose, grooved medially; antenna barely longer than broad; 5 eye-spots, but 2 hardly pigmented; pronotum minutely granulose, barely grooved medially; middle abdominal tergite smooth, not distinctly tuberculate; 10 lateral processes subequal except 2 on thorax slightly shorter, each unevenly tapered and subacute apically; caudal process slightly longer than broad, with arms slightly incurved basally and apically, with small tubercles above and very brief ones beneath, on outer edge; apex with a short stout tubercle externally and a long curved spine internally.

HOSTS: *Korthalsia*, *Calamus*, palm similar to *Heterospathe*.

DISTRIBUTION: SE New Guinea.

37. ***Plesispa hagenensis*** Gressitt, 1960: 25, fig. 7a (NE NG; BISHOP).

HOST: ?*Heterospathe* palm.

DISTRIBUTION: NE New Guinea.

38. *Plesispa palmarum* Gressitt, 1960 : 29, fig. 9 (Swart Valley; BISHOP).

Egg: Pale testaceous; oblong-oval, nearly parallel-sided, more than $3\times$ as long as broad; cemented to leaf with some frass adhering. Length 2 mm; breadth 0.6.

HOST: ?*Rhopaloblaste* palm.

DISTRIBUTION: NW New Guinea.

39. *Plesispa palmella* Gressitt, n. sp. Fig. 13 a-c.

Male: Pale reddish brown to pitchy black: head reddish brown above, slightly darker on neck and more reddish beneath; antenna reddish brown basally, becoming pitchy black in middle and shiny black apically; pronotum and scutellum ochraceous; elytron reddish ochraceous basally becoming blackish on apical portion of disc, with posterior $4/5$ and suture pitchy black and posterior $2/3$ of lateral declivity dull pitchy brown; ventral surfaces pale ochraceous brown, dull reddish brown on most of last abdominal sternite; legs reddish ochraceous.

Head $2/3$ as long as prothorax; central portion slightly broader than long, straight at side and broader anteriorly than posteriorly with a moderate median groove, basal $2/3$ rugose-punctate, and a flattish area anteriorly on each side of median groove; rostrum $2/3$ as long as scape, slender, parallel-sided, blunt apically, its ventral surface slightly sinuate in lateral view; frons narrow and finely ciliate; neck heavily punctured. *Antenna* $2/5$ as long as body; segment 1 stout, about $2\times$ as long as broad; 2 about $4/5$ as long as 1, slightly thickened preapically; 3 slightly longer than 2 and distinctly longer than 4; 4-10 subequal; 11 about as long as 1. *Prothorax* barely longer than broad, subparallel-sided with anterolateral and basal angles weakly projecting; disc evenly convex with close strong irregular punctures. *Scutellum* subtriangular. *Elytron* $5\times$ as long as broad, slightly widen-

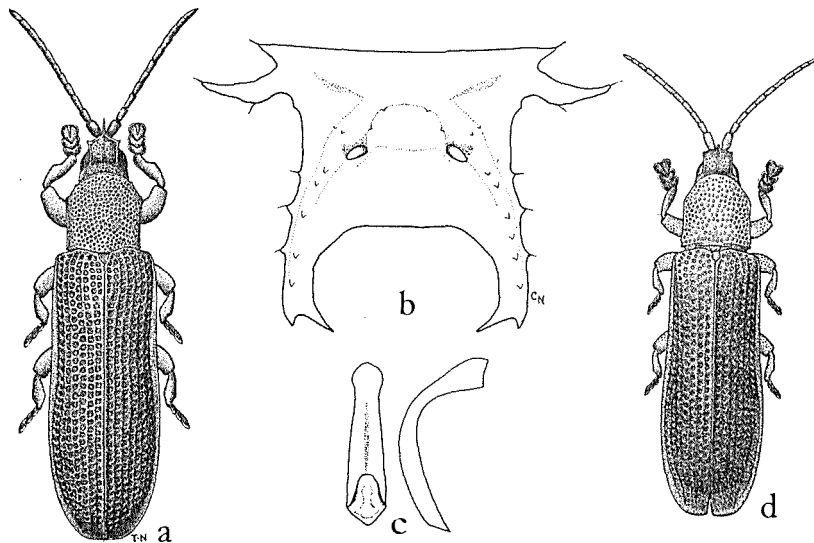


Fig. 13. a-c, *Plesispa palmella* n. sp.: a, adult; b, last tergite of larva; c, aedeagus of holotype. d, *P. saccharivora* Gr., Mapirk.

ed at end of basal $1/5$, then slightly narrowed and broadened again behind middle; apex broadly rounded-truncate; disc with regular rows of large partly squarish punctures, 2nd interspace only slightly larger than 1st and 4th and 6th much more distinctly raised. *Ventral surfaces* largely impunctate but with a few heavy punctures on side of metathorax and a depressed area with a few punctures on each side of abdominal sternites. *Legs* short and stout with fore tarsus larger than mid or hind tarsus. Length 5.2 mm; breadth 1.2.

Female: Rostrum very slender, $2/5$ as long as scape. Length 6 mm; breadth 1.5.

Paratypes: Length 5–6 mm; breadth 1.4–1.6.

Holotype ♂ (BISHOP 3489), nr. Cape Rodney, 25 m, SE New Guinea (Papua), 2–4. XI. 1960, Gressitt, on small palm, G-3632; allotopotype ♀ (BISHOP), same data; 2 paratopotypes (BISHOP, ANIC). Numerous specimens from near Lae, NE NG, 22. VII. 1959, Gressitt, on *Metroxylon*, *Archontophoenix*, *Phoenix*, *Korthalsia*; Bubia, nr. Lae, 23. IX. 1956, E. J. Ford, Jr., on *Calamus*; Lae, 22. X. 1956, Ford, on *Areca*. Also numerous from Dreikikir, W of Maprik, Sepik Distr., 24. VI. 1961, M. & L. Gressitt, on *Areca*; Maprik, 15. X. 1957, Bainyik, 21. VI. 1961, Wewak, 13. X. 1957, Gressitt. The specimens from NE NG are not designated paratypes. Most of them have elytron more extensively dark than the type series.

Differs from *reichi* Chapuis in being shorter, largely reddish, and with rostrum narrower and elytron broader. The fore tarsus is uniformly colored, whereas in the other species treated here it is darkened on outer $1/2$.

Larva: Lateral processes fairly slender, not very long (from larval skin adhering to pupa). Caudal process longer than broad, widest near middle, with upper portion of base narrowed basally; arm slightly incurved apically and fairly broad at tip with a stout outer tooth and a long curved oblique inner spine; emargination about $1.6\times$ as wide as deep, and convex at middle of basal margin; spiracle nearly round.

Pupa: Pale testaceous. Rostrum longer than broad, tapering slightly, truncate apically; anterolateral cephallic process unevenly narrowed, flattened and bent downward in middle, acuminate apically; pronotum weakly striate transversely; middle abdominal tergite with 12 tubercles and short spiracle; lateral process $2\times$ as long as broad, thickened and weakly tuberculate in middle; caudal process with arms weakly divergent, subevenly tapering, acute apically.

HOSTS: *Metroxylon*, *Archontophoenix*, *Phoenix*, *Korthalsia*, *Areca*.

DISTRIBUTION: New Guinea (SE, NE).

40. *Plesispa saccharivora* Gressitt, 1957: 230, fig. 6 a, c (Fly R.; BISHOP). Fig. 13d.

Numerous specimens, tentatively assigned to this species; Wanuma, 800–1000 m, Adelbert Mts., 26. X. 1958, Gressitt, *Saccharum*; Waris, 8–15. VIII. 1959, T. C. Maa; Archbold Lake, 760 m, 26. XI. 1961, Quate; Dreikikir, 300 m, Sepik Distr., 23. VI. 1961, M. & L. Gressitt, Maprik, 20. VI. 1961, M. & L. Gressitt, *Saccharum*; River Tor, nr. Hol Maffin, 2. VII. 1959, Maa, *Saccharum*; Araucaria Camp, 800 m, Neth. Ind.-American NG Exped., 17. III. 1939, L. J. Toxopeus.

HOST: *Saccharum officinarum* (sugar cane).

DISTRIBUTION: New Guinea (SE, NE, NW).

41. *Plesispa montana* Gressitt, 1960: 27, fig. 8 (Swart Valley; BISHOP).

HOST: *Saccharum officinarum*.

DISTRIBUTION: NW New Guinea.

Genus *Ceratispa* Gestro, 1895

Ceratispa is close to *Xiphispa* Chapuis, 1878. Uhmann, 1958, following Spaeth, 1936, placed *Ceratispa* as a subgenus of *Plesispa*. However, they are different in niche and biology, as well as structural characters of adults and larvae. Some of the characters used by Spaeth break down, as he had seen representatives of only two of the three groups of *Ceratispa*. *Plesispa* species feed among folded or adpressed leaves, whereas *Ceratispa* species apparently all feed between the main stem and petiole bases (or in the petioles) in rattans and other palms. Two new subgenera are characterized below to place the relationships in more proper perspective.

KEY TO ADULTS

1. Elytron with interspaces 2 and 4 not much larger than others 2
 Elytron with interspaces 2 and 4 much larger than others; rostrum generally slightly tapering, sometimes broadened apically in ♂, acute in ♀; body just over 3× as long as broad, subparallel-sided, generally truncate apically and striped (*Ceratispa* s. str.) 3
- 2 (1). Body well over 3× as long as broad, generally parallel-sided; rostrum generally long and slightly broadened in middle in ♂, tapering and blunt in ♀; antenna nearly 1/2 as long as body (*Papuispa*) 8
 Body only about 3× as long as broad, generally broadened postmedially; rostrum shorter than scape and more or less parallel-sided in both sexes; antenna barely 2/5 as long as body (*Metallispa*) 21
- 3 (1). Elytral apex truncate with outer corner rounded 4
 Elytral apex truncate or emarginate with outer corner angulate 5
- 4 (3). Cephalic process of ♂ very long, dichotomous apically; head with an angular process on side behind antennal insertion in ♂ and ♀ 42. **furcirostris**
 Cephalic process of ♂ moderately long, tapered apically; head lacking lateral process 46. **cyclops**
- 5 (3). Pronotum not striped medially 6
 Pronotum striped medially 7
- 6 (5). Cephalic process fairly long and slightly tapered in ♂; elytral apex obliquely emarginate, angulate externally 44. **loriae**
 Cephalic process of ♂ barely reaching to apex of antennal segment 2, parallel-sided and rounded apically; in ♀ strongly tapered; elytral apex weakly obliquely emarginate, but subrounded externally 47. **palmicola**
- 7 (5). Cephalic process extending beyond antennal segment 2 in ♂, gradually tapering in ♀; elytral apex considerably produced 45. **spiniceps**
 Cephalic process reaching apex of segment 2 in ♂, suddenly tapering in ♀; elytral apex slightly produced 43. **biroi**
- 8 (2). Pronotum largely black or pitchy; elytron black; body extremely narrow 9

- Pronotum pale or largely pale; elytron rarely entirely black; body sometimes quite narrow 11
- 9 (8). Body less than 4× as long as broad; pronotum not pale at side; dorsum slightly shiny 10
- Body more than 4× as long as broad; pronotum pale at side; dorsum mat, not shiny; cephalic process widest near apex **48. calami**
- 10 (9). Elytron truncate apically with both angles distinct; anterolateral corner of prothorax strongly projecting **49. piceonigra**
- Elytron subobliquely truncate with outer angle rounded; anterolateral corner of prothorax not strongly projecting **50. brandti**
- 11 (8). Cephalic process fairly broad, often flattened horizontally, in ♂ 12
- Cephalic process narrow, laterally compressed (♀?); frons convex in lateral view at base of cephalic process; length 9 mm **61. buergersi**
- 12 (11). Central portion of head not more than 2× as long as eye; elytron more or less truncate apically 13
- Central portion of head more than 2× as long as eye; cephalic process parallel-sided, truncate apically; elytron rounded apically **60. pinangae**
- 13 (12). Prothorax distinctly broader than long; elytron at least pale at extreme base... 14
- Prothorax not distinctly broader than long; elytron sometimes completely black... 17
- 14 (13). Cephalic process broadened preapically, exceeding antennal segment 2; elytron fairly short, pale on basal 2/5–2/3 15
- Cephalic process not broadened preapically or not reaching apex of antennal segment 2; elytron largely pale or largely dark 16
- 15 (14). Rostrum of ♂ deeply and broadly concave above; prothorax weakly narrowed and somewhat convex at side; basal 2/5 of elytron pale **57. kolbei**
- Rostrum of ♂ narrowly concave above; prothorax trapeziform; basal 3/5 of elytron pale **58. papuensis**
- 16 (15). Cephalic process long, subparallel-sided, rounded apically; elytron largely pale with suture black and apex brown **54. sedlaceki**
- Cephalic process not reaching apex of antennal segment 2, widened in middle and tapered apically; elytron largely dark with base pale **52. wilsoni**
- 17 (13). Head not strongly constricted just anterior to eye; outer corner of elytral truncation subangulate 18
- Head strongly constricted just anterior to eye; outer corner of elytral truncation subrounded; anterolateral angle of prothorax very weak; elytron very slender **51. mejerei**
- 18 (17). Elytron almost entirely black; groove of cephalic process fairly broad to middle of central portion of head 19
- Elytron generally reddish on basal 1/2 or so; groove of cephalic process strongly narrowed anterior to middle of central portion of head 20
- 19 (18). Cephalic process of ♂ widest in middle, narrowed and rounded apically; pronotum entirely pale **55. palmivora**
- Cephalic process of ♂ broadened and truncate apically; pronotum with a preapical black spot **53. rotana**
- 20 (18). Cephalic process broad in ♂, distinctly tapered or parallel-sided in ♀; pro-

- thorax not distinctly emarginate just anterior to posterior angle ... **59. latirostris**
 Cephalic process broadly ovate in both sexes, obtuse apically in ♀; prothorax
 distinctly emarginate just anterior to posterior angle..... **56. normanbyensis**
- 21 (2). Highly metallic bluish to green or purple; cephalic process at apex almost as
 broad as scape..... 22
 Slightly metallic, black to greenish black; cephalic process narrow at apex... .. 23
- 22 (21). Pronotum with about 18–21 punctures in a row along middle; elytron produced
 apically, largely steel blue..... **62. metallica metallica**
 Pronotum with about 13–16 punctures in a row along middle; elytron hardly
 produced apically, largely purplish blue..... **63. metallica purpurea**
- 23 (21). Prothorax feebly narrowed anteriorly; elytral interstices equally raised except
 posteriorly **64. atra**
 Prothorax distinctly narrowed anteriorly to anterolateral angles; alternate
 elytral interstices slightly more strongly raised throughout (New Britain)... **legalis**

KEY TO LARVAE

1. Caudal process with arms strongly tapering, generally with emargination less
 than 1/2 length of last segment, with or without teeth internally 2
 Caudal process with arms long, very stout and somewhat rounded in cross-
 section, with emargination occupying more than 1/2 length of segment;
 usually in small palms (*Ceratispa* s. str.) 3
- 2 (1). Caudal process with emargination toothed; in rattans and other palms (*Papu-
 ispa*) 5
 Caudal process with emargination untoothed; in rattan palms (*Metallispa*) 12
- 3 (1). Caudal process with arms quite slender, very strongly arched, with inner dia-
 meter of emargination wider than width of segment at base 4
 Caudal process with arms stout, shorter, with inner diameter of emargination
 narrower than width of segment at base **43. biroi**
- 4 (3). Caudal process with arms evenly arched, with space between apices of arms
 1/3 as wide as widest point of emargination **44. cyclops**
 Caudal process with arms almost recurved apically, with space between apices
 of arms 1/4 as wide as widest point of emargination **45. spiniceps**
- 5 (2). Caudal process not extremely broad and flat; its internal teeth not widened
 apically..... 6
 Caudal process extremely broad and flat; arms slender and acute apically;
 teeth of emargination broadened apically **60. pinangae**
- 6 (5). Emargination of caudal process not secondarily cleft, with or without teeth 7
 Emargination of caudal process with a deep, often narrow cleft in middle,
 and toothed in addition 8
- 7 (6). Emargination of caudal process deep, with 3 stout teeth on each inner side...
 **55. ? palmivora**
 Emargination relatively shallow, much wider than deep, with 2 or 3 very weak
 teeth on each inner side **48. ?calami**
- 8 (6). Emargination of caudal process with a moderate secondary cleft and general-
 ly with 2–5 small teeth on each side (inner side of arm) 9
 Emargination of caudal process with a large inner emargination with a strong

- tooth on each side of opening; apex of each arm dichotomous... **49. piceonigra**
- 9 (8). Caudal process with arms long; emargination deeper than wide 10
 Caudal process with arms shorter; emargination wider than deep; median cleft
 of emargination about as deep as wide, with 3 distinct teeth on each side
 **53. ? rotana**
- 10 (9). Caudal process with arms strongly arched 11
 Caudal process with arms nearly straight except near apex; space between
 apices of arms about 3/4 as wide as widest point; secondary cleft quite deep
 and with 4-5 small teeth on each side **52. ?wilsoni**
- 11 (10). Caudal process with inner cleft of emargination generally about as wide as
 deep, with 2-4 teeth on each side; space between apices of arms about 2/3
 as wide as at widest point; 7-8 teeth on upper outer edge of each arm ...
 **59. latirostris**
 Caudal process with inner cleft of emargination generally deeper than wide,
 with 3 teeth on each side; space between apices of arms about 1/2 as wide
 as at widest point; about 5 teeth on upper outer edge of each arm... **57. kolbei**
- 12 (2). Caudal process without a tooth in emargination; arms not recurved 13
 Caudal process with emargination slightly toothed at center; tip of each arm
 with a recurved hook; emargination fully 3× as wide as deep
 **63. metallica purpurea**
- 13 (12). Space between tips of arms of caudal process 3/4 or more of greatest with..... 14
 Space between tips of arms of caudal process 1/2 as wide as greatest width
 of emargination; arm strongly arched, strongly acuminate and bearing short
 bristles on tubercles **62. metallica metallica**
- 14 (13). Spiracles very briefly cylindrical apically; caudal process with arms curving
 somewhat inward apically; space between tips of arms about 3/4 as wide
 as at widest point..... **64. atra**
 Spiracles distinctly cylindrical in distal halves; caudal process with arms
 short, directed almost backwards; space between tips of arms about 4/5 as
 wide as at widest point (New Britain)..... **legalis**

Subgenus **Ceratispa** s. str.

42. Ceratispa (Ceratispa) furcistrostris Gressitt, n. sp. Fig. 14a.

Male: Pale yellowish testaceous to dark pitchy brown: head pale testaceous with a brown spot on each side behind eye; antenna bluish ochraceous basally, gradually becoming brighter red and then slightly pitchy red apically; prothorax pale testaceous with a pitchy brown lateral stripe and a less distinct median reddish pitchy stripe; scutellum dark pitchy brown; elytron testaceous with 2 principal costae brighter yellowish and with sutural stripe dull reddish brown and humeral stripe pitchy in basal 2/3 and reddish brown on remainder; ventral surfaces testaceous, becoming more ochraceous posteriorly; legs pale with tarsi reddish ochraceous.

Head nearly as long as prothorax; central portion much broader than eyes, with a short acute tubercle on side behind antennal insertion; interantennal area grooved medially and swollen and punctured on each side; cephalic process longer than remainder of

head, swollen above between antennal insertions, flattened and subparallel preapically with apex bifurcating. *Antenna* not quite $1/2$ as long as body, subcylindrical; scape $2/3$ as long as cephalic process, slightly thickened apically; segment 2 slightly broader than long; 3 slightly longer; 4-8 slightly longer than 3; 9-10 slightly shorter; 11 longer than 5, slightly compressed. *Prothorax* slightly broader than long, weakly convex at sides and widest somewhat behind middle, oblique anteriorly with anterolateral and basal angles very slightly projecting; disc rather even, with punctures moderately small and quite close, mostly larger than interspaces. *Scutellum* subequilaterally triangular. *Elytron* slightly constricted at end of basal $1/3$, narrowed preapically and broadly rounded-truncate apically; disc fairly even but with interstices 2 and 4 broadened and raised, wider than other interspaces and puncture-rows, most of punctures slightly larger than spaces between them longitudinally. *Ventral surfaces* moderately punctured at sides of sternites. *Legs* short and stout. Length 13.2 mm; breadth 2.85.

Female: Head similarly broad and with an acute tubercle on side behind antennal insertion; interantennal process tapered apically, $3/5$ as long as antennal segment 1. Length 12 mm; breadth 2.9.

Paratypes: Length 9-13 mm; breadth 2.5-3.3.

Holotype ♂ (BISHOP 3490), 8 km inland from Cape Rodney, 10-15 m, SE New Guinea (Papua), 2-4. XI. 1960, Gressitt, from a small palm (3632); allotype ♀ (BISHOP), same data; several paratopotypes (BISHOP, CAS, USNM, BMNH, ANIC), same data; 2 paratypes, Mosom, 750 m, Salawaket Range, Huon Peninsula, 20. IX. 1956, E. J. Ford, Jr.; 5 paratypes (SAM), Mt. Lamington, 400 m, NE Papua, C. T. McNamara; 1 paratype (AM), Mt. Lamington, X. 1929, McNamara. One, Fort Algnan, 11. VIII. 1891, A. S. Meek.

Differs from other species in having the cephalic process very long and greatly broadened apically. Similar in some respects to *Xiphispa coquerellii* (Fairm.) of Madagascar.

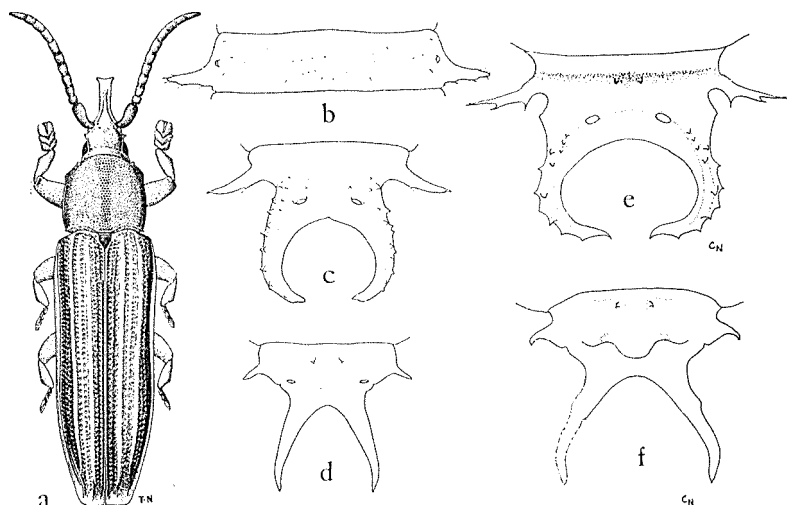


Fig. 14. a, *Ceratispa* (C.) *furcirostris* n. sp.; b, *C. (C.) biroi* Gestro, abdominal tergite 3 of larva; c, same, last tergite of larva; d, same, last tergite of pupa; e, *C. (C.) spiniceps* (Ws.), last tergite of larva; f, same, last tergite of pupa.

HOST: Small palm (G-3632).

DISTRIBUTION: SE New Guinea.

43. *Ceratispa* (*Ceratispa*) *biroi* Gestro Fig. 14 b-d

Ceratispa Birói Gestro, 1897a: 451 (Tamara, NE NG; BUDAPEST).—Spaeth, 1936: 280.—Maulik, 1937: 147.—Gressitt, 1957: 232, pl. 15c; 1960: 32, fig. 10a.—*Xiphispa papuana* Weise, 1909: 119, pl. 3, fig. 4.—*Xiphispa weisei* Gestro, 1913: 8, 10.—*Pleisispa* (*Ceratispa*) *biroi*: Uhmman, 1952: 76.

NW NEW GUINEA: Waris, 450 m, 24–31. VIII. 1959, Maa; Bodem, 16. VII. 1959, Maa; Above Ifar, 350 m, 21. VIII. 1957, D. E. Hardy; 500–750 m, Cyclops, 4. XI. 1958, 23. VI. 1959, Gressitt, palm 3496; W. Sentani-Cyclops, 150–250 m, 17. VI. 1959, Gressitt, palm 3476; Nabire, 5 m, S. Geelvink Bay, 4. VII. 1962, Gressitt, palms 4004, 4005. NE NEW GUINEA: Many, Dreikikir, Sepik, 24. VI. 1961, M. & L. Gressitt, in betel palm.

Biology: Immature stages occur between petiole-bases and main stems of small palms, sometimes boring into the petiole-bases, or even petiole shafts; adults feed on undersides of new fronds.

Larva: Lateral processes slender, with 3 or 4 fine hairs; caudal process with arms fairly stout, somewhat evenly tapering, subacute apically with tips bent slightly upward; each arm with about 8 tubercles on upper edge and 9 on lower; emargination wider than deep, fairly even, slightly indented at middle of base, with space between ends of arms about 1/3 as wide as at middle. Length 12.5 mm.

HOSTS: *Areca catechu* and other small palms, more rarely rattans.

DISTRIBUTION: N. New Guinea (NW, NE).

44. *Ceratispa* (*Ceratispa*) *loriae* Gestro, 1895: 703 (Moroka; GENOVA).

Xiphispa loriae: Weise, 1911: 70.—*Pleisispa* (*Ceratispa*) *loriae*: Spaeth, 1936: 280.—Uhmman, 1958: 203.

DISTRIBUTION: SE New Guinea.

45. *Ceratispa* (*Ceratispa*) *spiniceps* (Weise) Fig. 14 e-f.

Xiphispa spiniceps Ws., 1911: 174 (Bivak, SW NG; AMSTERDAM, ZMB).—*Pleisispa* (*Ceratispa*) *spiniceps*: Uhmman, 1952: 76, fig. 1.—*Ceratispa spiniceps*: Gressitt, 1957: 232.

The specimens I reported in 1957 and 1960 (p. 32) appear not to be this species. The following are assigned here with question. This species might be the same as *loriae*.

One, Maffin Bay, 20. VI. 1944, E. S. Ross (CAS); 2, Bomberi, nr. Fak Fak, 700–900 m, 9. VI. 1959, Gressitt, *Pinanga* 3467; 2, Mist Camp, 1800 m, Neth. Ind.-Amer. Exped., 12. I. 1930, Toxopeus.

Larva (Bomberi): Lateral processes slender, each with 3 oblique dorsal bristles and an apical one extending obliquely downwards; caudal process with arms very strongly arched, bending strongly inward apically and each with an obliquely upward directed tubercle at apex and with 6 or 7 small tubercles on both upper and lower edges; emargination very large, much wider than deep, with a weak notch at middle of base; space be-

tween ends of arms about $1/4$ as wide as widest point of emargination. Length 13.5 mm.

Pupa (♂): Rostrum longer than rest of exposed portion of top of head, somewhat gradually tapered, slightly thickened just beyond middle, acute apically; lateral process of head subevenly tapered, slender and acuminate apically, bent downward; pronotum irregularly corrugated; abdomen with lateral processes unevenly tapered; caudal process with arms fairly slender, subevenly tapered, strongly divergent, nearly straight but arched subapically. Length 13.5 mm.

HOST: *Pinanga* sp.

DISTRIBUTION: New Guinea (NW, SW).

46. *Ceratispa* (*Ceratispa*) *cyclops* Gressitt, n. sp. Figs. 15, 16a.

Male: Orange ochraceous to dark pitchy brown: head ochraceous; antenna ochraceous on segment 1, reddish on 2-8, pitchy on 9-11; pronotum orange with median pitchy black stripe and fainter, lateral reddish brown stripes; scutellum pitchy; elytron with suture and humeral stripe dark pitchy brown; ventral surfaces and legs orange testaceous, more ochraceous near apex of abdomen.

Head $3/4$ as long as prothorax; central portion slightly broader than long, grooved medially near side and punctured in between; cephalic process slightly longer than central portion of head, slightly tapered and rounded apically, deeply grooved above. *Prothorax* slightly broader than long, slightly narrowed anteriorly with sides nearly straight and with

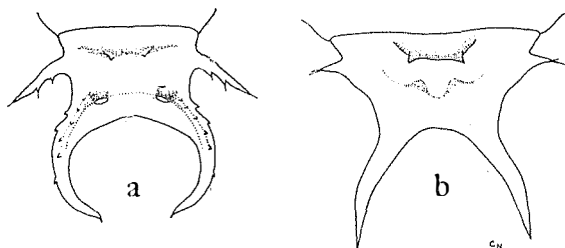


Fig. 15. *Ceratispa* (*C.*) *cyclops* n. sp.: a, last tergite of larva; b, last tergite of pupa.

anterolateral angle somewhat projecting and basal angle acute; disc evenly convex, with fairly deep and dense punctures mostly slightly larger than interspaces. *Scutellum* rounded-triangular. *Elytron* distinctly narrowed at end of basal $1/3$ and evenly narrowed and subrounded apically with inner portion of apex weakly emarginate-truncate; disc with punctures quite regular and interspaces 2 & 4 larger than others and somewhat raised. *Ventral sur-*

faces distinctly punctured at sides. Length 11.5 mm; breadth 3.3.

Female: Central portion of head subsquarish, rounded at anterior angles; rostrum nearly reaching to apex of antennal segment 2, weakly tapering to near apex and then suddenly tapering and acute. Length 12 mm; breadth 3.5.

Paratypes: Length 11.0-12.5 mm; breadth 3.0-3.7.

Holotype ♂ (BISHOP 3491), Hollandia-Binnen, 100 m, NW New Guinea, 1. XI. 1958, Gressitt, from palm G-3234; allotype ♀ (BISHOP), between Lake Sentani and W. end of Cyclops Mts., 200 m, 19. VI. 1959, Gressitt; paratypes (BISHOP, CAS, USNM, BMNH, ANIC), same data as holotype or allotype; also Ifar, 550 m, E. end of Cyclops Mts., 20, 23. VI. 1959, 28. VI. 1962, Gressitt, from palms, including G-3475. Six, Dawai River, nr. Sumberbaba, Japen I., 8. XI. 1962, N. Wilson, from rotan.

Differs from *biroi* Gestro in having cephalic process less evenly tapered in both sexes, and elytral apex rounded externally instead of angulate.

Larva: Lateral processes (2 thoracic; 8 abdominal) long, fairly slender, each with a strong postmedian dorsal bristle on a fairly distinct tubercle, and also weaker postbasal and preapical ones which are similar; all 3 tubercles much stouter on last process, which is also stouter; caudal process with arms strongly arched, much wider apart at widest point than at base, each arm gradually narrowing to a somewhat abrupt apex with a small tubercle beneath and a longer one projecting upward, and 7 or 8 moderate tubercles in an approximate row on both upper and lower edges; emargination very large, wider than deep, even, but weakly notched at middle of base; space between ends of arms about 1/3 as wide as widest point of emargination. Length 14 mm.

Pupa (♂): Rostrum as long as rest of exposed portion of top of head, subparallel-sided, slightly narrowed and blunt apically; lateral spine of head slender, bent downward and slightly twisted; pronotum transversely corrugated; abdomen with lateral processes each bearing a strong short terminal bristle; last process much smaller than others; caudal process with arms slender, subevenly tapering but slightly constricted near middle, acute apically, widely divergent and feebly arched. Length 15 mm.

HOST: Palms (G-3234, 3475, rattan).

DISTRIBUTION: NW New Guinea.

47. *Ceratispa* (*Ceratispa*) *palmicola* Gressitt, n. sp. Fig. 16b.

Male: Shiny yellowish testaceous marked with reddish to pitchy black: head yellowish testaceous with borders of rostrum slightly reddish; antenna reddish on segments 1-4, shiny black on remainder; pronotum shiny pale yellow with a broad blackish stripe on each side; scutellum dusky; elytron testaceous with interstices 2 and 4 quite pale yellowish, suture and humeral stripe pitchy black basally and reddish apically; ventral surfaces and legs testaceous, becoming slightly reddish towards apex of abdomen.

Head 3/4 as long as prothorax; central portion slightly wider than long and slightly broader basally than apically, grooved medially and swollen and slightly punctured at side; rostrum slightly longer than central portion of head, reaching end of antennal segment 2, subparallel-sided but slightly broadened at base and rounded at apex, deeply grooved above. *Antenna* 2/5 as long as body; segment 1 cylindrical; 2 as broad as long; 3-10 subequal in length; 11 as long as 1. *Prothorax* slightly broader than long, narrowed anteriorly with side nearly straight and anterolateral angle quite weak; disc smooth, somewhat finely and closely punctured with most of punctures larger than interspaces. *Scutellum* parallel-sided basally and obtusely rounded posteriorly. *Elytron* distinctly narrowed postbasally, slightly narrowed before apex which is obliquely slightly emarginated with outer side rounded; disc with interspaces 2 & 4 strongly raised and widened, punctures deep and larger than interspaces longitudinally. *Ventral surfaces* moderately punctured at sides; last abdominal sternite arcuately emarginate. *Legs* short and stout, strongly punctured. Length 11.4 mm; breadth 3.

Female: Head with rostrum slightly shorter than central portion of head, somewhat strongly and evenly tapering to near apex and then more suddenly tapering and acute, deeply grooved above; last abdominal sternite evenly rounded. Length 11.6 mm; breadth

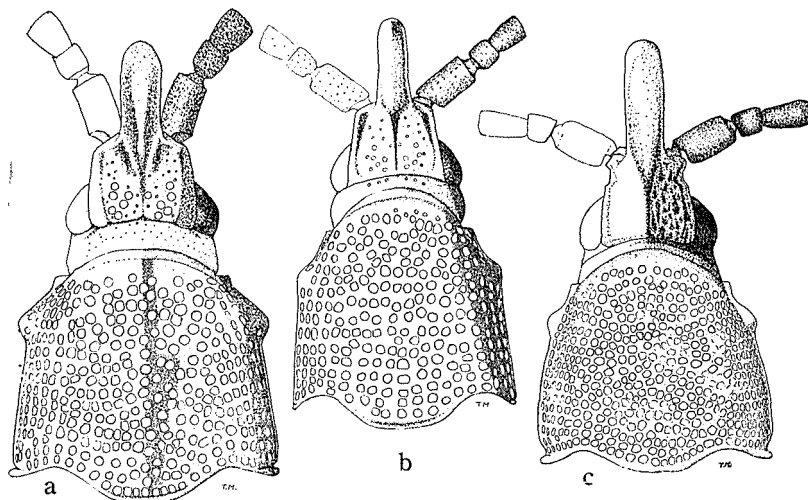


Fig. 16. a, *Ceratispa* (*C.*) *cyclops* n. sp., head and pronotum; b, *C. (C.) palmicola* n. sp.; c, *C. (Papuista) sedlaceki* n. sp.

3.3.

Paratypes: Length 10.5–11.6 mm; breadth 2.6–3.1.

Holotype ♂ (BISHOP 3492), Wau, 1250 m, Morobe Distr., NE New Guinea, 4. II. 1963, J. Sedlacek, from small palm; allotype ♀ (BISHOP), same data; numerous paratypes (BISHOP, CAS, USNM, BMNH, ANIC, DAS), same data.

Differs from *biroi* Gestro in being paler, more shiny, without median stripe of pronotum, with cephalic process shorter, and elytral apex rounded externally.

HOST: Small pinnate palm.

DISTRIBUTION: NE New Guinea.

Subgenus *Papuista* Gressitt, n. subgen.

(Hispiinae: Cryptonychini: *Ceratispa*) Body generally quite slender, flattish, more than 10 mm in length; head with rostrum generally extending beyond end of antennal segment 2 in ♂, often quite broad and flat above, generally short, tapering and blunt in ♀; antenna often nearly 1/2 as long as body; prothorax obliquely narrowed apically; elytron generally somewhat widened behind middle, with regular puncture-rows, in 8 rows before middle and 10 rows behind middle; last abdominal sternite emarginate in ♂, subtruncate in ♀; legs quite short.

Type species: *Oxycephala latirostris* Gestro, 1885, by present designation.

Range: New Guinea, Waigeu, Biak, Normanby I.

This subgenus is known only from New Guinea and its immediate vicinity, even though it appears to have speciated considerably. It can be distinguished from *Ceratispa* s. str. by having elytral interspaces regular, and not partly much stronger, and in having the rostrum long, flat and generally widest in middle; differs from *Metallisa* in having a

much more slender body with rostrum much longer. The larva may be distinguished from that of *Ceratispa* s. str. in having the arms of caudal process more parallel-sided, more weakly arched, and generally with clefts and/or teeth in emargination; and from the larva of *Metallispa* in having the arms longer, with emargination generally longer than broad and with teeth and often an inner cleft also.

48. *Ceratispa* (*Papuispa*) *calami* Gressitt Fig. 17a.

Ceratispa calami Gr., 1960: 39 (nr. Fak Fak, SW; BISHOP).

Larva (The larva earlier associated with *calami* probably belongs instead to an undescribed species of *Metallispa*; the following is more likely the larva of this species): Lateral processes rather small and short, gradually increasing slightly in size from mesothorax to last abdominal segment and each bearing a tubercle on posterior side; caudal process stout, dark reddish brown, with emargination wider than deep, broadly oval, its inner end slightly closer to spiracles than to tips of arms; inner edge with 1 or 2 weak humps or tubercles on each side; each arm strongly arched, stout, with 3 partial rows of tubercles on outer side, and apex rather abrupt, with a weak tubercle beneath and a strong upward pointing one; space between apices of arms about 1/2 as wide as at widest point. Length 13 mm.

HOST: *Calamus* sp.

DISTRIBUTION: SW New Guinea.

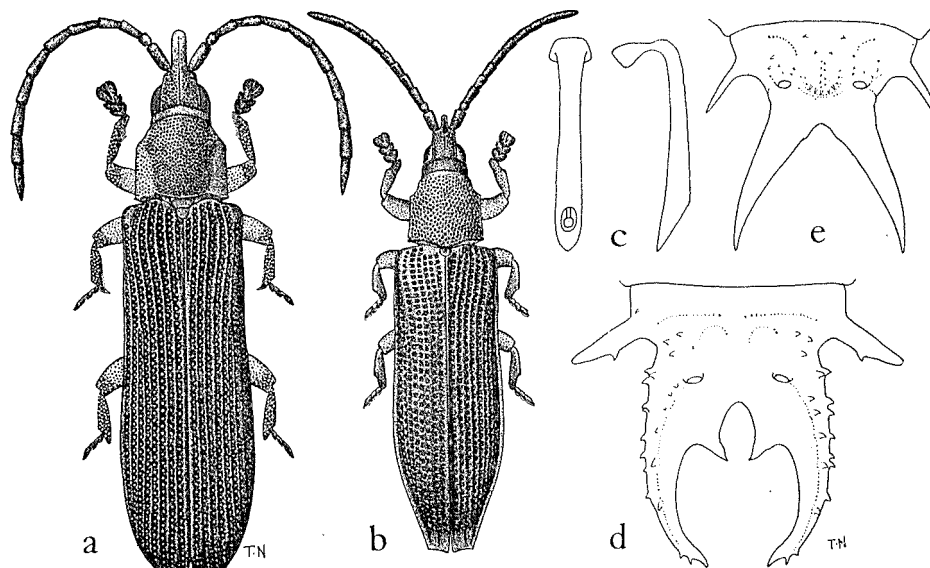


Fig. 17. a, *Ceratispa* (*Papuispa*) *calami* Gr.; b, *C. (P.) piceonigra* n. sp.; c, same, aedeagus of paratype, Mt. Lamington; d, same, last tergite of larva; e, same, last tergite of pupa.

49. *Ceratispa (Papuista) piceonigra* Gressitt, n. sp. Fig. 17 b-e.

Female: Pitchy black to slightly reddish: head dark pitchy black above; antenna pitchy black tinged with dark reddish; pronotum black to pitchy reddish; elytron black tinged with pitchy reddish at apex and posterior portion of external margin; ventral surfaces reddish brown, pitchy at sides; legs reddish brown to pitchy.

Head $2/3$ as long as prothorax; central portion raised, slightly longer than broad and slightly narrowed apically, medially grooved on anterior $2/3$ and rather densely and irregularly punctured; rostrum $2/3$ as long as central portion of head, $3/4$ as long as scape, slightly narrowed and rounded apically, deeply grooved medially. *Antenna* $2/5$ as long as body; segment 1 subcylindrical, $2\times$ as long as 2; 3 nearly as long as 1, distinctly longer than 4; 5-10 each nearly as long as 3; 11 as long as 1. *Prothorax* nearly as long as broad, moderately narrowed anteriorly and nearly straight at side but with anterolateral angle prominent; basal angle emarginate forming 2 teeth; disc moderately convex, very densely punctured. *Scutellum* short, rounded-obtuse behind. *Elytron* nearly $3\times$ as long as head and prothorax combined, subparallel basally and widened behind middle; apex narrowed and produced, obliquely subtruncate with sutural angle hindmost; disc with regular rows of strong punctures, mostly larger than interspaces. *Ventral surfaces* distinctly punctured at sides, apex of last abdominal segment with a broad arcuate emargination. *Legs* moderately stout, closely punctured. Length 11.8 mm; breadth 2.9.

Male: Central portion of head distinctly narrowed anteriorly; cephalic process nearly as long as central portion, not reaching to apex of antennal segment 2, broadly concave medially, the groove extending to middle of central portion of head. Length 11 mm; breadth 2.5.

Paratypes: Length 10.5-11.0 mm; breadth 2.3-2.5.

Holotype ♀ (BISHOP 3493), Popondetta, 25 m, NE Papua, 10. VI. 1961, Gressitt, on *Calamus*; allotype ♂ (AM), Mt. Lamington, NE Papua, X. 1929, C. T. McNamara; 2 ♂ paratypes (AM, BISHOP), same data as allotype.

Differs from *brandti* Gr. in having cephalic process narrower and shorter in both sexes, pronotum paler, and elytral apex obliquely truncate or subemarginate instead of transverse.

Larva: Lateral processes stout basally, strongly tapered and acute, with few fine hairs and with a tubercle on posterior side of each, becoming quite strong on process of last segment, which is quite stout; processes of thorax quite small; caudal process very long, with arms slightly arched; emargination longer than wide, with a large inner cleft bounded on each side by a very strong tooth; each arm with at least 8 teeth on outer side, with small lower and larger upper apical teeth.

HOST: *Calamus* sp.

DISTRIBUTION: SE New Guinea.

50. *Ceratispa (Papuista) brandti* Gressitt Fig. 18a.

Ceratispa brandti Gr., 1960: 34 (Normanby I.; BISHOP).

HOST: Palm.

DISTRIBUTION: Normanby I. (SE New Guinea).

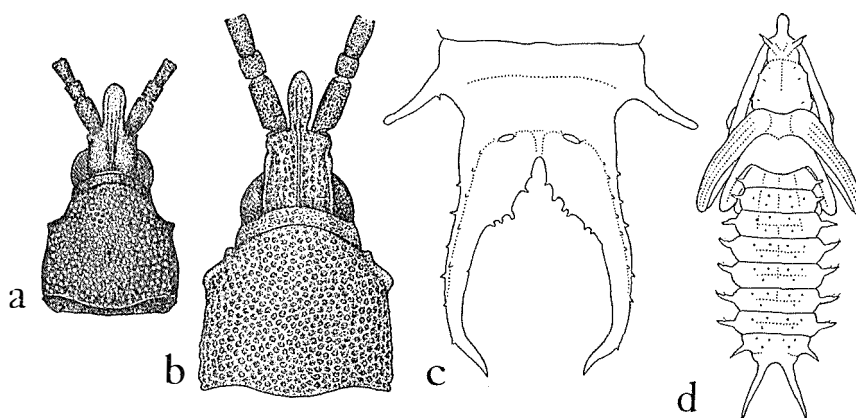


Fig. 18. a, *Ceratispa (Papuista) brandti* Gr.; b, *C. (P.) wilsoni* n. sp.; c, same, last tergite of larva; d, same, dorsum of pupa.

51. *Ceratispa (Papuista) meijerei* (Weise)

Xiphispa Meijerei Ws., 1911: 175 (Biak; AMSTERDAM).—*Plesispa (Ceratispa) meijerei*: Uhmann, 1952: 76.—*Ceratispa meijerei*: Gressitt, 1957: 235, fig. 7c (Waigeu).

HOST: Palm.

DISTRIBUTION: Biak, Waigeu (NW).

52. *Ceratispa (Papuista) wilsoni* Gressitt, n. sp. Fig. 18 b–d.

Male: Pale orange testaceous to blackish: head pitchy brown, more reddish beneath than at side; antenna dark reddish pitchy brown, more blackish apically; pronotum pale ochraceous; scutellum and extreme base of elytron ochraceous; elytral apex dark reddish; ventral surfaces dull to reddish ochraceous; legs ochraceous tinged with reddish.

Head $3/4$ as long as prothorax; central portion slightly longer than broad, slightly narrowed from base to apex and nearly straight-sided, surface finely grooved medially and near each side and with dense rugose punctures; rostrum slightly longer than central portion of head, widest near middle and rounded apically, fairly flat above. *Antenna* $1/2$ as long as body; segment 1 cylindrical, rounded apically, more than $2\times$ as long as 2; 3 slightly shorter than 1; 3–10 subequal in length; 11 barely longer than 1 and somewhat compressed. *Prothorax* nearly broader than long, slightly narrowed anteriorly with side nearly straight and anterolateral angle rounded-obtuse and fairly prominent; posterolateral angle slightly notched and anterior angle prominent; disc densely covered with fairly deep subrounded punctures. *Scutellum* obtusely rounded behind. *Elytron* fully $5\times$ as long as broad, narrowed at end of basal $1/3$ and widened postmedially; apex somewhat produced and obliquely truncate with sutural angle hindmost and outer angle obtusely rounded; disc with fairly large subsquarish punctures mostly about as large as interspaces. *Ventral surfaces* with a few scattered punctures at sides. *Legs* short and not very stout. Length 13.6 mm; breadth 3.5.

Female: Rostrum slightly longer than scape, narrowed and subacute apically, grooved medially. Length 13 mm; breadth 3.3.

Paratypes: Coloration sometimes paler with basal 2/3 or more of elytron reddish brown gradually merging to pitchy black posteriorly. Length 11–13.5 mm; breadth 1.8–3.5.

Holotype ♂ (BISHOP 3494), Dawai River, 5 m, nr. Sumberbaba, Japen I., NW New Guinea, 8. XI. 1962, Nixon Wilson, from rattan; allotype ♀ (BISHOP), same data; many paratypes (BISHOP, CAS, USNM, BMNH, ANIC), same data. Named for the collector, Dr. Nixon Wilson of Bishop Museum.

Differs from *meijerei* Weise in being larger, less slender, with prothorax broader, and elytron pale basally. Distinguished from others in key.

Larva (not associated for certain): Lateral processes slender, blunt apically, increasing in size from anterior to posterior; spiracles moderately prominent, raised on anterior sides; caudal process long, with arms nearly straight except near apex; emargination deeper than wide, with a strong cleft at middle and with 4–5 moderate teeth on each side; each arm with about 20 small teeth on outer side and with apex produced acutely and obliquely upward, with a small tooth beneath. Length 15 mm.

HOST: Rattan.

DISTRIBUTION: NW New Guinea.

53. *Ceratispa (Papuista) rotana* Gressitt, n. sp. Fig. 19.

Male: Pale orange testaceous to black: head largely reddish brown above, paler on process and on neck, partly reddish beneath; antenna dark reddish brown becoming pitchy apically; pronotum pale orange, with an apical subtriangular pitchy black spot; scutellum testaceous; elytron black except for extreme edge beside scutellum slightly pale and extreme apex reddish; ventral surfaces testaceous, becoming pitchy black on sides of abdominal sternites; legs testaceous partly tinged with pale reddish.

Head nearly as long as prothorax; central portion about as long as broad, distinctly narrowed anteriorly and slightly constricted behind antennal insertions, with surface deeply grooved medially and with irregular deep punctures on remainder; cephalic process about as long as central portion, widened towards middle anteriorly and rounded-truncate apically with upper surface broadly concave. **Antenna** fully 1/2 as long as body; segment 1 subcylindrical, 2.5× as long as 2; 3 nearly as long as 1, slightly longer than 4–6 separately; 7–10 subequal to 3; 11 slightly longer than 1. **Prothorax** 4/5 as long as broad, distinctly narrowed anteriorly, nearly

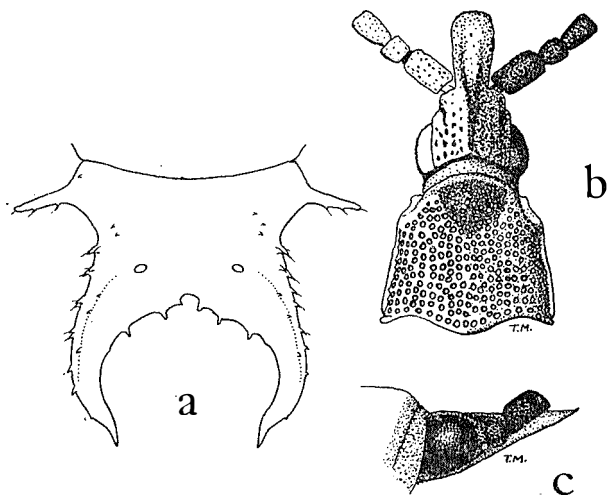


Fig. 19. *Ceratispa (Papuista) rotana* n. sp.: a, last tergite of larva (not associated for certain); b, head and pronotum of adult; c, right side of head of adult.

straight at side with anterior angle slightly protruding, anterolateral angle obtusely rounded but hardly projecting and basal angle preceded by an indentation; disc densely punctured, the punctures mostly larger than interspaces. *Scutellum* rounded-obtuse behind. *Elytron* 5.5× as long as broad, subparallel basally and distinctly widened postmedially; apex transversely truncate with outer angle obtusely angulate; disc with deep subrounded punctures which are mostly smaller than interspaces and with fine punctures and irregularities on interspaces. *Ventral surfaces* with distinct punctures at sides; last abdominal sternite deeply emarginate. *Legs* small and not very stout, closely punctured. Length 11 mm; breadth 2.5.

Female: Rostrum 3/5 as long as central portion of head, gradually tapered in basal 2/3 and more suddenly tapered and subacute apically, deeply grooved in basal 3/5. Last abdominal sternite very weakly emarginate. Length 11.6 mm; breadth 3.1.

Paratypes: Length 10.0–10.5 mm; breadth 2.3–2.5.

Holotype ♂ (BISHOP 3495), Dawai River, 5 m, nr. Sumberbaba, Japen I., NW New Guinea, 8. XI. 1962, Nixon Wilson, from rotan; allotopotype ♀ (BISHOP), same data; several paratopotypes (BISHOP, CAS, USNM, BMNH, ANIC), same data. One, Boden, 100 m, 11 km SE of Oerberfaren, NW NG, 5. VII. 1959, T. C. Maa, from rotan; 1, Djoebaren, 80 m, 90 km SE of River Tor, 17. VII. 1959, Maa.

Differs from *meijerei* Weise in having head weakly constricted anterior to eye, outer corner of elytral truncation subangulate, and in being a little less slender, and with black pronotal spot.

Larva (not associated for certain): Body slender; lateral processes small, subequal, posterior ones with a distinct tubercle on posterior side; spiracles quite prominent, tapering, erect, with forward edge produced upward; caudal process with arms relatively short, not very stout, dichotomous apically with teeth subequal; emargination slightly wider than deep, with a moderate cleft at middle with 3 distinct teeth on each side; each arm with about 15 small teeth on outer side; space between apices of arms about 3/4 as great as at widest point. Length 13 mm.

HOST: Rattan palms.

DISTRIBUTION: NW New Guinea.

54. *Ceratispa* (*Papuispa*) *sedlaceki* Gressitt, n. sp. Fig. 16c.

Male: Pale testaceous to pitchy black: head largely reddish brown, paler in depression on rostrum, and on neck; antenna chestnut brown, becoming pitchy black apically; pronotum and scutellum pale ochraceous; elytron ochraceous basally becoming reddish brown apically and with a black sutural stripe not reaching base or apex; ventral surfaces testaceous anteriorly and reddish on abdomen with a few pitchy splotches; legs testaceous.

Head 4/5 as long as prothorax; central portion slightly longer than broad and slightly narrowed anteriorly with a narrowing median groove, fairly distinct ridge at side and remainder with dense rugose punctures; rostrum distinctly longer than central portion of head, feebly widened at middle and largely parallel-sided but rounded at apex with a broad median groove. *Antenna* 1/2 as long as body; segment 1 subcylindrical, 2.5× as long as 2; 3 somewhat shorter than 1, subequal to each 4–10; 11 as long as 1. *Prothorax* slightly broader than long, slightly sinuate at side and moderately narrowed anteriorly with anterolateral angle obtuse and barely projecting, basal angle preceded by a slight indenta-

tion; disc very closely punctured. *Scutellum* obtuse apically and finely punctured. *Elytron* nearly $5\times$ as long as broad, distinctly narrowed after basal $1/3$, widened preapically; apex obliquely subtruncate with outer angle hindmost and obtusely rounded; disc with regular strong punctures, mostly slightly larger than interspaces. *Ventral surfaces* largely smooth with a few distinct punctures at sides. *Legs* short and moderately stout. Length 11 mm; breadth 3.2.

Female: Central portion of head subparallel-sided; cephalic process $3/5$ as long as central portion, gradually tapering and acute apically with deep groove in basal $1/2$ continuous with that on occiput. Length 11.5 mm; breadth 3.2.

Paratypes: Elytron with apical $1/4$ sometimes pitchy. Length 11.0–11.5 mm; breadth 2.9–3.0.

Holotype ♂ (BISHOP 3496), Mt. Misim, 1320, nr. Wau, NE New Guinea, 2. II. 1963, J. Sedlacek, on rattan; allotopotype ♀ (BISHOP), same data; paratypes (BISHOP, USNM, ANIC), same data. Named for the collector, Joseph Sedlacek of the Bishop Museum field station in New Guinea.

Differs from *kolbei* (Gestro) in having rostrum more slender and elytron largely quite pale, with a partial sutural stripe and apex only slightly darkened.

HOST: Rattan palms.

DISTRIBUTION: NE New Guinea.

55. *Ceratispa (Papispa) palmivora* Gressitt Fig. 20 a-b.

Ceratispa palmivora Gr., 1960: 38 (Maprik, NE; BISHOP).

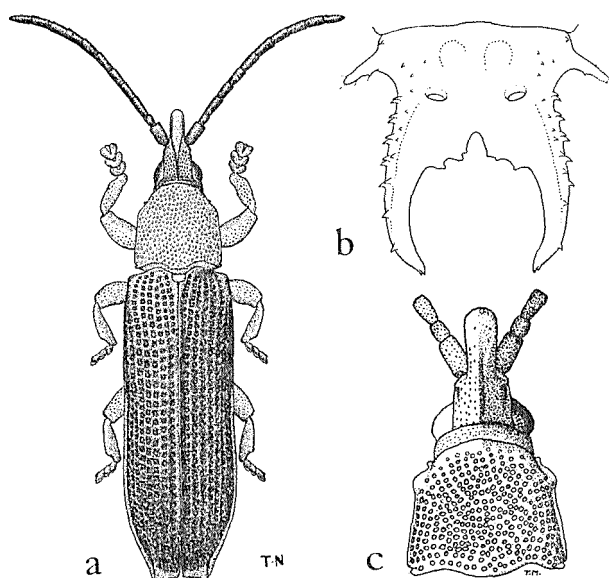


Fig. 20. a, *Ceratispa (Papispa) palmivora* Gr., topotype; b, probably same, last tergite of larva, Dreikikir; c, *C. (P.) normanbyensis* Gress., paratopotype.

NW NEW GUINEA: Many, Waris, 450–550 m, S of Hollandia, 8–15. VIII. 1959, T. C. Maa; Bodem, 16. VII. 1959, Maa; Nabire, S. Geelvink Bay, 12. X. 1962, N. Wilson, on rotan; Dawai R., Japen I., 9. XI. 1962, Wilson, rotan. NE NEW GUINEA: Bainyik nr. Maprik, 200 m, 20. VI. 1961, M. & L. Gressitt, on slender-leaflet rotan; Dreikikir, nr. Maprik, 150 m, 23. VI. 1961, M. & L. Gressitt (larvae).

HOST: *Calamus* spp.

DISTRIBUTION: N New Guinea (NW, NE).

56. *Ceratispa (Papispa) normanbyensis* Gressitt Fig. 20c.

Ceratispa normanbyensis Gr., 1960: 35 (Normanby I.;

BISHOP).

HOST: Palm.

DISTRIBUTION: Normanby I. (SE New Guinea).

57. *Ceratispa* (*Papuispa*) *kolbei* (Gestro)

Xiphispa kolbei Gestro, 1913: 11 (Ramu R.; ZMB, GENOVA).—*Oxycephala kolbei*: Weise, 1913: 282.—*Plesispa* (*Ceratispa*) *kolbei*: Uhmann, 1952: 74.—*Ceratispa kolbei* Gressitt, 1957: 235; 1960: 34, fig. 11a.

NW NEW GUINEA: Nabire, S. Geelvink Bay, 10 m, 24.VIII.1962, J. Sedlacek, rattan; Waris, 450–550 m, 8–15.VIII.1959, Maa; Hollandia-Binnen, 100 m, 1.XI.1958, Gressitt, on *Metroxylon*. NE NEW GUINEA: Yalu, nr. Bubia, Markham Vall., 19.IX.1955, Gressitt; Maprik, 160 m, 15.X.1957, Gressitt, on *Calamus*; Bainyik, 150 m, 20.VI.1961, M. & L. Gressitt; Wewak, 5 m, 25.VI.1959, Gressitt, rattan; Madang, 5 m, 22.X.1958, Gressitt; Lae, 6–20 m, 22.VII.1959, Gressitt, *Calamus*.

HOSTS: *Calamus* spp.

DISTRIBUTION: N. New Guinea (NW, NE).

58. *Ceratispa* (*Papuispa*) *papuensis* Gressitt, n. sp. Fig. 21a.

Male: Ochraceous to pitchy black: head reddish brown above, darker on borders and just behind eyes; antenna dark reddish brown, duller apically and silvery pubescent on undersides of segments 7–11; pronotum orange ochraceous; scutellum ochraceous; elytron pale ochraceous on basal 3/5, pitchy black on remainder of disc and in punctures of central portion and reddish at apex and along posterior portion of lateral margin; ventral surfaces ochraceous to pitchy black, paler anteriorly and darker at sides of metasternum and parts of abdominal segments 1–4 and side of last; legs ochraceous basally becoming reddish brown at apices of femora and on tibiae.

Head nearly as long as prothorax; central portion subsquarish, slightly broader than long, finely grooved medially and raised at side, with most of remainder punctured and slightly uneven; cephalic process distinctly longer than central portion, widened beyond middle and broadly rounded apically, with a relatively weak median groove. *Antenna* 1/2 as long as body; segment 1 subcylindrical, strongly punctured, 2× as long as 2; 3 about 3/4 as long as 1, subequal to 4–10; 11 nearly as long as 1. *Prothorax* 4/5 as long as broad, distinctly narrowed anteriorly, slightly sinuate at side with anterior angle slightly projecting and anterolateral angle obtusely rounded and weakly projecting, basal angle slightly withdrawn and preceded by a notch; disc densely and subrugosely punctured. *Scutellum* obtuse behind. *Elytron* 4.5× as long as broad, slightly narrowed at end of basal 1/3, distinctly widened behind middle; apex weakly emarginate-truncate with outer angle subobtuse; disc with large distinct punctures, mostly about as large as interspaces, continuing quite strong to apex. *Ventral surfaces* largely smooth and somewhat shiny, with scattered punctures at side. *Legs* fairly short and strongly punctured. Length 9.6 mm; breadth 2.8.

Female: Cephalic process slender, slightly tapering in basal 3/4, acute apically, 4/5 as long as central portion of head; prothorax with anterolateral angle more prominent than in holotype; elytron largely pale with most of suture and apical portion pitchy. Length

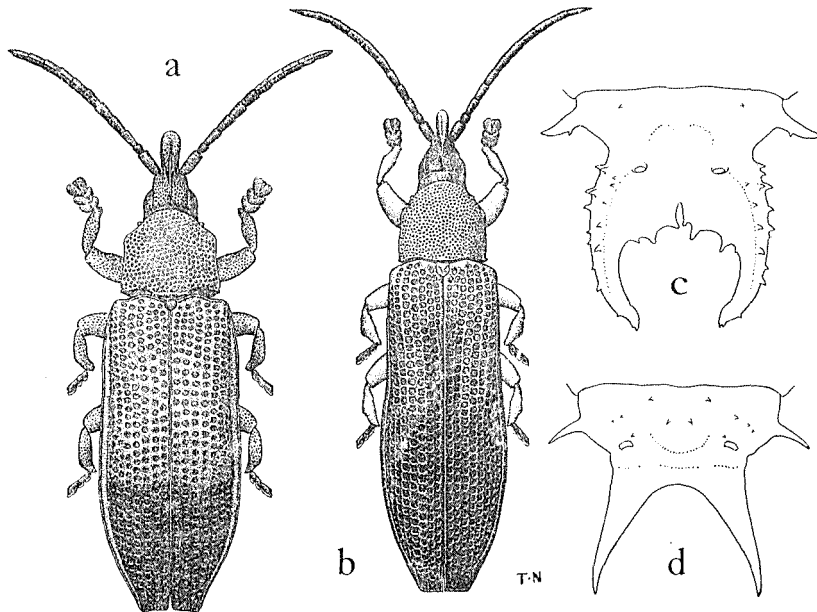


Fig. 21. a, *Ceratispa (Papispa) papuensis* n. sp.; b, *C. (P) latirostris* (Gestro), Oriomo; c, same, last tergite of larva, Oriomo; d, same, last tergite of pupa, Oriomo.

11.7 mm; breadth 3.1.

Paratype (♂): Length 11.7 mm; breadth 3.2. Color pattern as in holotype but paler.

Holotype ♂ (BISHOP 3497), Popondetta, 20 m, NE Papua, 19.VI.1961, J. L. and M. Gressitt, on *Calamus*; paratypes (SAM), Mt. Lamington, 400 m, NE Papua, C. T. McNamara.

Differs from *latirostris* (Gestro) in having prothorax broader than long, body somewhat shorter, elytron paler (basal 3/5); and from *kolbei* (Gestro) in having rostrum of ♂ narrowly concave above, prothorax trapeziform and basal 3/5 of elytron pale.

HOST: *Calamus* sp. (rattan, lawyer vine).

DISTRIBUTION: SE New Guinea.

59. *Ceratispa (Papispa) latirostris* (Gestro) Fig. 21 b-d.

Oxycephala latirostris Gestro, 1885: 160 (Fly R.; BUDAPEST, GENOVA).—*Oxycephala Albertisi* Gestro, 1885: 171 (Fly R.; BUDAPEST).—*Oxycephala obtusirostris* Gestro, 1898: 257 (Astrolabe Bay; BUDAPEST).—*Oxycephala carinaerostris* Csiki, 1900: 196 (Huon Gulf; BUDAPEST).—*Xiphispa brunnea* Uhm., 1928: 351, fig. (Mamberamo R.; LEIDEN).—*Plesispa (Ceratispa) latirostris*: Uhm., 1952: 74.—*Ceratispa latirostris*: Gressitt, 1957: 233, pl. 15, figs. d, e.

NW NEW GUINEA: Nabire, S. Geelvink Bay, 2.VII.1962, Gressitt, on *Calamus*; Nabire, 6-31.X.1962, N. Wilson. NE NEW GUINEA: Wewak, 3 m, 26.VI.1961, M. & L. Gressitt, *Daemonorops*. SE NEW GUINEA (Papua): Many, Oriomo, W. Distr., 26-

28.X.1960, Gressitt, *Korthalsia* & palm; Brown R., 10 m, 5.X.1958, Gressitt, *Daemonorops*; Brown R., 30. VIII. 1959, Maa; Kiunga, Fly R., 11–13. VIII, 21–24. X. 1957, Brandt.

Larva: Lateral processes tapering, very slender distally, with 4 fine hairs, 2 of them from near apex; caudal process with arms moderately stout, arched; apex of each arm with a weak tooth beneath and a stronger one above, broadly cleft at base, with 2–4 teeth on each inner side of an arm and about 7 on outer upper side. Rather easily confused with larva of *kolbei*. The larva keyed as this species earlier (1960, p. 32) was wrongly associated.

HOSTS: *Calamus*, *Daemonorops*, *Korthalsia beccarii*, some palms (?*Heterospathe*).

DISTRIBUTION: New Guinea (NW, NE, SE).

60. *Ceratispa* (*Papuispa*) *pinangae* Gressitt

Ceratispa pinangae Gr., 1960: 36, fig. 11 b–e (Biak; BISHOP)

HOST: *Pinanga* palms.

DISTRIBUTION: Biak I. (NW).

61. *Ceratispa* (? subgen.) *buergeri* (Uhmann)

Plesispa bürgersi Uhm., 1952; 77, figs. 2, 3 (Sepik; ZMB).—*Plesispa* (*Ceratispa*) *Bürgersi*: Uhm., 1958: 202.—*Ceratispa buergeri*: Gressitt, 1960: 40.

Through the kindness of the authorities of the Zoological Museum, Humboldt University, Berlin, I was recently able to examine the type specimen. The species seems to be intermediate between *Ceratispa* and *Plesispa*. Within *Ceratispa* it is closest to *Papuispa*. It might warrant a new subgenus or new genus, but both sexes will be required before this can be clarified. If the type is ♂ it may be *Plesispa*, and if ♀, possibly *Papuispa*. The shape of the frons separates it from other known species.

DISTRIBIUTON: NE New Guinea.

Subgenus *Metallispa* Gressitt, n. subgen.

(Cryptonychini: *Ceratispa*). Body fairly stout, only about 3× as long as broad, broadened postmedially; rostrum relatively small, not reaching apex of antennal segment 1, more or less parallel-sided and truncate apically, in both sexes; antenna barely 2/5 as long as body; prothorax rather broad; elytron relatively short, broadened postmedially, rounded apically. Species generally metallic or slightly metallic.

Type species: *Oxycephala metallica* Gestro 1885, by present designation.

Range: New Guinea and New Britain.

Differs from *Ceratispa* s. str. in lacking the enlarged elytral interspaces 2 and 4, in being shorter, with rounded posterior end, and in having rostrum shorter than antennal segment 1; differs from *Papuispa* in being shorter, with larger prothorax and much shorter and narrower rostrum. The larva may be distinguished from those of the other 2 subgenera in having caudal process much shorter, with stout curved arms bearing teeth and bristles on outer side and lacking teeth or clefts in emargination. This subgenus represents a transition towards *Oxycephala*.

62. *Ceratispa* (*Metallispa*) *metallica metallica* (Gestro) Fig. 22 a-b.

Oxycephala metallica Gestro, 1885: 35 (Fly R.; GENOVA).—*Xiphispa metallica*: Gestro, 1913: 10.—*Plesispa* (s. str.) *metallica*: Spaeth, 1936: 281.—*Ceratispa metallica*: Gress., 1957: 235.

Several, Oriomo, SE New Guinea (W. Papua), 26. X. 1960, Gressitt, on *Korthalsia*; several, Brown River, nr. Port Moresby, 5. XI. 1960, Gressitt, on *Daemonorops*.

Biology: Immature stages are passed between petiole bases and main stems of rattans (lawyer vine), most often at bases of terminal fronds. Adults feed and mate on undersides of newest fronds.

Larva: Head fully 2× as broad as long, subtransverse, rounded at side, finely granulose, with very short antenna, about 4 ocelli on one side, and sinuate facial suture. Lateral processes moderately long, shorter on thorax, tapering and slender apically, each with 4–5 setae on subbasal dorsal tubercles. Caudal process much narrower than body at middle, broader than long, with arms stout and arched, evenly tapering and acuminate, each with tip pointing

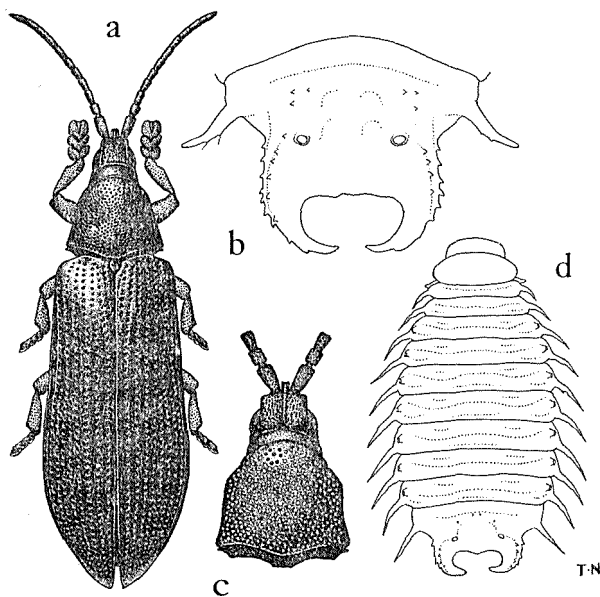


Fig. 22. a, *Ceratispa* (*Metallispa*) *m. metallica* (Gestro), Oriomo; b, same, last tergite of larva, Oriomo; c, *C. (M.) metallica purpurea* n. ssp., allotype, Wewak; d, same, dorsum of larva, Dreikikir.

obliquely inward and very slightly upward, with about 12 tubercles on outer side, distal ones bearing fairly long bristles; emargination not quite 2× as wide as deep, even, transversely oval, 2× as wide as space between tips of arms. Length 10 mm.

HOSTS: *Korthalsia*, *Daemonorops*.

DISTRIBUTION: New Guinea (SE).

63. *Ceratispa* (*Metallispa*) *metallica purpurea* Gressitt, n. subsp. Fig. 22 c-d.

Male: Metallic green to purplish above: head black tinged with purplish and greenish; antenna reddish brown, pitchy black apically; pronotum largely metallic green, blackish near borders; scutellum bluish black; elytron red to purplish, somewhat greenish near base and reddish purplish near apex; ventral surfaces purplish brown to reddish brown; legs brighter reddish brown.

Head 3/4 as long as prothorax; central portion squarish, slightly broader than long, nearly parallel-sided, grooved medially and near side with remainder rough and irregularly punctured; rostrum 3/4 as long as scape, parallel-sided and subtruncate apically, shallowly, de-

pressed above. *Antenna* not quite $1/2$ as long as body; segment 1 subcylindrical, heavily punctured; 2 slightly longer than broad; 3 longer than 2, 3–10 increasing very slightly in length; 11 as long as 1. *Prothorax* $4/5$ as long as broad, nearly straight at side and moderately narrowed anterolateral angle almost obsolete; disc moderately convex, slightly uneven, with dense fairly deep punctures, mostly slightly larger than interspaces. *Scutellum* narrowed and obtuse apically. *Elytron* weakly narrowed just behind basal $1/3$, broadened behind middle, with apex transversely truncate and rounded externally; disc with regular rows of deep punctures mostly a little larger than interspaces in both directions. *Ventral surfaces* finely punctured, a little more heavily so at sides. *Legs* not very stout, closely punctured. Length 10 mm; breadth 2.9.

Female: Cephalic process barely more than $1/2$ as long as scape, parallel-sided and truncate apically; last abdominal sternite transverse. Length 11 mm; breadth 3.3.

Paratype: Length 9.6–11.6 mm; breadth 3.0–3.9.

Holotype ♂ (BISHOP 3498), Wewak, 5 m, NE New Guinea, 26. VI. 1961, M. & L. Gressitt, from large slender-leafed rattan; allotype ♀ (BISHOP) same data; several paratypes (BISHOP, CAS, USNM, BMNH, ANIC, DASF), same data; 1, Maprik, 160 m, 15. XI. 1957, Gressitt, host 3056; larva, Dreikikir, 23. VI. 1961, M. & L. Gressitt; 2, Wewak, 2 m, 25. VI. 1959, Gressitt. One, not designated paratype, Nabire, Geelvink Bay, 12. X. 1962, J. Sedlacek, on rotan.

Differs from *metallica* (Gestro), in having elytron purplish instead of greenish blue behind base, in having central portion of head more rugose and more completely punctured, and elytral apex more truncate and less produced.

Biology: Immature stages live between petiole-bases and main stems of rattan. Adults feed on undersides of new fronds.

Larva: Head broad, subobtusely anteriorly, fairly, smooth; 5 small black eye-spots on one side. Lateral processes moderately stout basally, strongly tapering, not very long, each with 3–5 tubercles subbasally on top and hind sides, bearing setae; spiracles fairly large, cylindrical in distal halves. Caudal process much broader than long, with arms short and stout, strongly curved inward and slightly upward at tips, acute; emargination $3\times$ as broad as long, opening $4/5$ as wide as greatest width, and middle of base with a small obtuse projection. Length 4.5 mm (immature).

HOSTS: *Korthalsia*, *Calamus*.

DISTRIBUTION: NC New Guinea (NE, NW?).

64. *Ceratispa* (*Metallispa*) *atra* Gressitt

Ceratispa atra Gressitt, 1957; 233, fig. 7 a, b (Bubia, NE; BISHOP); 1960: 33, fig. 10b.

HOST: *Korthalsia beccarii* (rattan).

DISTRIBUTION: NE New Guinea.

Genus *Callistola* Dejean, 1837

This genus appears to have speciated extensively in New Guinea. Populations from different areas generally have slight differences. Perhaps later it may be necessary to name additional subspecies, besides the distinct new species which continue to result from further

field work. The larval key below is still a tentative one, besides being augmented considerably (after removal of the Solomons and Bismarck species) since the 1960 key. Larval series of some species are too small to judge degree of intraspecific variation.

KEY TO ADULTS

1. Body large and stout, less than 4× as long as broad; length usually more than 9 mm; alternate elytral interstices raised 2
- Body small and slender, more than 4× as long as broad; length usually less than 8.5 mm; all elytral interstices raised basally 31
- 2 (1). Size large, generally over 13 mm long, with posterior 2/3 of elytron black or body very broad and elytron blue with a pale band at middle broadened near suture; prothorax generally parallel-sided 3
- Size generally under 13 mm; without above color combination; prothorax generally widened anteriorly or concave at side 6
- 3 (2). Elytron very broad postmedially, blue with a band at middle which is broadened posteriorly near suture; pronotum largely pale 4
- Elytron subparallel-sided, blackish or submetallic on posterior 2/3; pronotum usually largely black; elytral costae 2-3 not joined posteriorly 5
- 4 (3). Dark apical triangle of pronotum not nearly reaching middle; center of pronotum densely punctured; band on middle of elytron transverse anteriorly, less than 2× as wide near suture as at side; elytral costae 2-3 not always joined posteriorly **65. pulchra**
- Dark apical triangle of pronotum reaching to behind middle; center of pronotum finely and sparsely punctured; band on middle of elytron curved anteriorly, more than 2× as wide near suture as at side **66. montana**
- 5 (3). Pronotum closely and subregularly punctured; legs largely pale; dark area of elytron subtransverse on inner portion **67. uhmanni**
- Pronotum coarsely and irregularly punctured; legs largely black; black area of elytron extending forward along suture (Moluccas) **bruijni**
- 6 (2). Elytron more or less rounded, subtruncate or weakly emarginate apically 7
- Elytron produced apically at middle and strongly emarginate near sutural angle, which is not projecting; disc with a postmedian blue band followed by reddish apical area **72. tricolor**
- 7 (6). Elytral costae 2-3 generally merging near top of apical declivity 8
- Elytral costae 2-3 not fusing posteriorly; pronotum smooth; elytron bluish violet with a yellow band at middle and a narrow sutural stripe from it to basal angle, where it extends to costa 2 **79. misolensis**
- 8 (7). Humeri pigmented 9
- Humeri pale 16
- 9 (8). Basal 1/3 or more of elytron entirely pigmented 10
- Basal 1/3 of elytron not entirely pigmented, pale on sutural-scutellar area 12
- 10 (9). Elytron largely metallic, sometimes paler apically; body quite broad posteriorly... 11
- Elytron with a broad pale band near middle; body slender **85. margaretae**
- 11 (10). Elytron steely blue to purplish, with apex dark reddish **83. bella**
- Elytron metallic green with slight bluish tinge anteriorly **84. subvirida**

- 12 (9). Body not quite 3× as long as broad..... 13
 Body fully 3× as long as broad..... 14
- 13 (12). Pale areas ochraceous (red in life); metallic areas blue to purplish blue;
 apex of aedeagus sinuate in lateral outline **69. speciosa speciosa**
 Pale areas yellowish testaceous; metallic areas greenish steel blue; apex of
 aedeagus straight in lateral outline **70. speciosa fasciata**
- 14 (12). Pronotum largely impunctate on median strip; elytron largely greenish or
 bluish black with a pale band near middle; length less than 9 mm..... 15
 Pronotum punctured on median portion; elytron with only humeral mark and
 apex purplish; length 12–13 mm **71. papuensis**
- 15 (14). Body distinctly widened posteriorly; scutellar area and elytral base pale; elytral
 pale band narrow at side **86. zonalis**
 Body subparallel, less than 8.5 mm long; suture sometimes pale anteriorly;
 elytral pale band wide throughout..... **85. margaretae**
- 16 (8). Elytron with 2 metallic bands, 1st sometimes reduced to an isolated spot;
 length 11–16 mm 17
 Elytron pale on basal 1/3 or more, or largely metallic and unbanded 18
- 17 (16). Bands green; elytral costae weak **68. elegans**
 Bands blue; elytral costae pronounced **69. speciosa speciosa**
- 18 (17). Pronotum black or almost entirely black..... 19
 Pronotum largely pale, sometimes with median black stripe 21
- 19 (18). Length over 12 mm..... 20
 Length less than 8 mm; elytron red with apical 2/5 largely bluish... **89. pandanella**
- 20 (19). Pronotum largely black; elytron greenish black posteriorly **73. devastator**
 Pronotum at least broadly margined with pale at side; elytron bluish green
 posteriorly..... **80. szentivanyi**
- 21 (18). Pronotum with dark apical area extending behind middle..... 22
 Pronotum with dark apical area not extending behind middle..... 23
- 22 (21). Prothorax slightly emarginate at side, as broad at anterolateral angles as at
 base; median black stripe complete, broad **80. szentivanyi**
 Prothorax straight at side, slightly widened anteriorly; median dark stripe
 vague posteriorly..... **81. metselaari**
- 23 (21). Elytron pale on basal 1/3 or more..... 24
 Elytron sometimes metallic except on extreme base, scutello-sutural area and
 apex, sometimes pale on basal 1/2..... **82. maai**
- 24 (23). Body not nearly 3× as long as broad..... 25
 Body nearly 3× as long as broad..... 26
- 25 (24). Elytron metallic on posterior 1/2..... **74. dilutipes dilutipes**
 Elytron metallic on posterior 2/3 **75. dilutipes alexandrina**
- 26 (24). Prothorax broader than long, not extremely closely punctured..... 27
 Prothorax about as broad as long, very closely punctured, slightly emarginate
 at side; length 10 mm..... **78. puncticollis**
- 27 (26). Prothorax much broader than long..... 28
 Prothorax nearly as long as broad 29
- 28 (27). Extreme elytral apex dark; length 9–11 mm **88. swartensis**
 Extreme elytral apex pale; length 7–8 mm **89. pandanella**

- 29 (27). Length more than 10 mm 30
 Length less than 8 mm **87. fordi**
- 30 (29). Scutellum black; antenna black **76. boisduvali boisduvali**
 Scutellum pale; antenna pitchy **77. boisduvali buloloensis**
- 31 (1). Prothorax distinctly concave at side; elytron not distinctly striped with pale... 32
 Prothorax hardly concave at side; elytron distinctly striped with pale medial-
 ly; length less than 7 mm..... **94. freycinetella**
- 32 (31). Pronotum largely pale; elytron largely or entirely pale on basal 1/2..... 33
 Pronotum largely dark or with a median dark stripe, rarely incomplete; elytron
 largely dark or pitchy brown 34
- 33 (32). Nearly basal 3/5 of elytron entirely pale.....**90. sedlacekana**
 Side of elytron and suture behind basal 1/3 black or pitchy..... **93. attenuata**
- 34 (32). Pronotum largely pale at side; elytron partly reddish to pitchy on extreme
 base and premedian portion of disc **91. bomberiana**
 Pronotum largely pitchy or brown, very densely punctured; elytron entirely
 pitchy black **92. cyclops**

KEY TO LARVAE

1. Emargination of caudal process generally reaching 1/2 way to spiracles; inner
 tooth of arm apex generally short and stout; emargination generally with a
 distinct tooth at middle of base 2
 Emargination of caudal process not reaching 1/2 way to spiracles, or if near-
 ly 1/2 way then inner tooth of arm quite long; emargination often without a
 tooth at middle of base 14
- 2 (1). Emargination of caudal process with a distinct tooth at middle of base..... 3
 Emargination of caudal process without a distinct tooth at middle of base;
 teeth of apex of caudal arm subequal: inner tooth slightly longer and curved
 upward (in *Freycinetia*) **84. subvirida**
- 3 (2). Emargination of caudal process not extending much more than 1/2 way to spi-
 racles (mostly in *Pandanus*)..... 4
 Emargination of caudal process extending much more than 1/2 way to spiracles;
 median tooth large and acute; outer tooth of arm apex very small, inner
 tooth blunt (in *Freycinetia*) **72. ? tricolor**
- 4 (3). Caudal process not very strongly broadened apically..... 5
 Caudal process strongly broadened apically 10
- 5 (4). Inner tooth of apex of arm hardly larger than outer tooth 6
 Inner tooth of apex of arm of caudal process much larger than outer tooth..... 7
- 6 (5). Arm slightly distended preapically, outer margin nearly smooth...**70. speciosa fasciata**
 Arm nearly straight externally, distinctly toothed **76. dilutipes boisduvali**
- 7 (5). Side of arm of caudal process slightly convex, broadened postmedially 8
 Side of arm of caudal process nearly parallel; several ectoapical teeth
 **69. speciosa speciosa**
- 8 (7). Inner tooth of end of caudal arm not recurved in hook-like manner..... 9
 Inner tooth of end of caudal arm recurved in hook-like manner; outer edge
 of arm with fairly small teeth and single ectoapical tooth...**75. dilutipes alexandrina**
- 9 (8). Caudal arm with outer edge strongly toothed, with more than one ectoapical

- tooth..... **74. dilutipes dilutipes**
 Caudal arm with outer edge finely toothed, with a single ectoapical tooth.....
 **77. dilutipes buloloensis**
- 10 (4). Caudal process not broadest at extreme apices of arms 11
 Caudal process broadest at extreme apices of arms 12
- 11 (10). Outer tooth at apex of caudal arm as long as broad; inner tooth oblique and
 horizontal **68. elegans**
 Outer tooth at apex of caudal arm broader than long; inner tooth subtrans-
 verse and elevated..... **73. devastator**
- 12 (10). Apex of caudal arm with 2 distinct teeth 13
 Apex of caudal arm somewhat flattened and serrate on outer side of inner
 tooth..... **65. pulchra**
- 13 (12). Outer side of caudal arm slightly arched; tooth at middle of emargination
 obtuse; inner tooth at apex of arm not much larger than outer tooth
 **66. montana**
 Outer side of caudal arm straight; tooth at middle of emargination acute,
 longer than broad; inner tooth at apex of arm much larger than outer tooth
 (in *Freycinetia*) **80. szentivanyi**
- 14 (1). Emargination of caudal process fairly deep, rounded or oval; terminal teeth
 of arm rarely both short, inner one often long and subtransverse (mostly
 in *Freycinetia*) 15
 Emargination of caudal process shallow, subtransverse; terminal teeth of arm
 short, directed posteriorly, inner slightly smaller than outer (in *Pandanus*)
 **67. uhmanni**
- 15 (14). Teeth at end of caudal arm subequal..... 16
 Teeth at end of caudal arm unequal; inner tooth much longer 17
- 16 (15). Arms of caudal process subparallel-sided; inner apical tooth curved slightly
 inward, slightly longer than outer tooth **87. fordii**
 Arms of caudal process distinctly arched externally, wider at apex than at
 base; apex with 2 subequal teeth pointing more or less backward **82. maai**
- 17 (15). Space between apices of inner apical caudal spines greater than length of 1
 spine..... 18
 Space between apices of inner apical caudal spines not greater than length of
 1 spine 22
- 18 (17). Caudal process much longer than broad 19
 Caudal process slightly longer than broad, with inner terminal tooth oblique,
 2× as large as outer tooth..... **88. swartensis**
- 19 (18). Space between apices of inner apical caudal spines not greater than length of
 1 spine..... 20
 Space between apices of inner apical caudal spines greater than length of 1
 spine; caudal process arched at side; inner terminal tooth subtransverse,
 more than 2× as large as outer tooth **83. bella**
- 20 (19). Inner terminal tooth of caudal arm at least 2× as long as outer tooth..... 21
 Inner terminal tooth of caudal arm less than 2× as long as outer tooth; 1st
 abdominal process 2× as long as metathoracic process; last abdominal
 process as long as 1/2 width of segment **85. margaretae**

- 21 (20). Caudal process slightly broadened apically; caudal emargination subrounded, even **81. metselaari**
 Caudal process slightly narrowed apically; caudal emargination suboblong, with a weak obtuse tooth at middle of base..... **91. bomberiana**
- 22 (17). Caudal process slightly convex at side, narrowed apically..... 23
 Caudal process parallel-sided; inner terminal tooth 3× as long as outer (in *Pandanus*)..... **89. pandanella**
- 23 (22). Head with 5 distinct black eye-spots..... 24
 Head with 6 distinct black eye-spots; inner caudal spine about 2.4× as long as outer spine; abdominal process 1 about 6× as long as metathoracic..... **92. cyclops**
- 24 (23). Abdominal process 1 about 4× as long as metathoracic process; inner caudal spine curved somewhat upward; larva whitish **90. sedlacekana**
 Abdominal process 1 about 2× as long as metathoracic process; inner spine not curved distinctly upward; larva testaceous **93. attenuata**

65. *Callistola pulchra* Gressitt, 1937: 249, fig. 12 a-d (Salawaket Mts.; BISHOP).

NE NEW GUINEA: Many from Wau, 1250 m, I. 1963 and Mt. Misim, 1300 m, II. 1963, Sedlacek.

Biology: Eggs are laid near bases of leaves of *Pandanus*; larvae feed irregularly on white leaf surfaces at bases of new leaves; pupae occur between leaf bases; adults feed in the same environment, in straight lines on the leaves.

HOST: *Pandanus*.

DISTRIBUTION: NE New Guinea.

66. *Callistola montana* Gressitt, 1960: 56, fig. 14 d-f (S. Highlands, Papua; BISHOP).

NE NEW GUINEA: Several from Aiyura, 2000 m, 10. IV. 1960, R. T. Simon Thomas: Moife, E. Highlands, 2. X. 1959, Maa; Karimui (Papua border), 1000 m, 8. VI. 1961, M. & L. Gressitt.

HOST: *Pandanus*.

DISTRIBUTION: New Guinea (SE, NE).

67. *Callistola uhmanni* Gressitt, 1960: 54, fig. 14 b-c (Biak; BISHOP).

HOST: *Pandanus*.

DISTRIBUTION: NW New Guinea (Biak I.)

68. *Callistola elegans* Gressitt, 1960: 46 (Fak Fak area; BISHOP). Fig. 23 a-b.

NW NEW GUINEA: Several, Kamo (Kamu) Valley, 1500-1700 m, VIII. 1962, J. Sedlacek. These have pronotum more extensively black than type.

Larva: Testaceous, slightly tinged with brownish on parts of caudal process; head lacking pigmented eye spots, with median groove broad anteriorly and narrow posteriorly and meeting an oblique groove on each side behind a smooth raised elliptical area; spiracles quite short, thoracic spiracle with a short process beneath it; lateral processes subequal in size including 2 on thorax, but last abdominal process a little longer and stouter; caudal

process longer than broad, distinctly broadened posteriorly; each arm nearly straight at side with 10–12 irregular tubercles on both upper and lower margins and terminating in a short tubercle externally, an incurved longer acuminate spine internally; apical emargination much broader than long, with a strong obtuse tubercle in middle of base and apical opening about $\frac{4}{5}$ as wide as emargination at widest point.

Pupa: Dull, testaceous, darker on cephalic processes. Head with rostrum barely visible, anterolateral process large, broadened and flattened in middle and acute apically; lateral processes fairly small and subequal, mostly a little longer than broad; caudal process about as long as broad, with arms distinctly diverging, unequally narrowed but fairly slender beyond middle and obliquely truncate apically, with emargination slightly broader than deep and fairly even.

HOST: *Pandanus*.

DISTRIBUTION: New Guinea (SW, NW).

69. *Callistola speciosa speciosa* (Boisduval), 1835: 535 (Waigeu; PARIS).—See Gressitt, 1957: 247 for complete synonymy. Fig. 23 c–d.

NW NEW GUINEA: Several, Nabire, Geelvink Bay, 4. VII. 1962, Sedlacek; Bodem, 16. VII. 1959, Maa. SW NEW GUINEA: Several, Danowaria, nr. Fak Fak, 2. VI. 1959, Gressitt. NE NEW GUINEA: Dreikikir, Sepik, 24. VI. 1961, M. & L. Gressitt.

HOST: *Pandanus*.

DISTRIBUTION: New Guinea (NW, SW, NE), Waigeu.

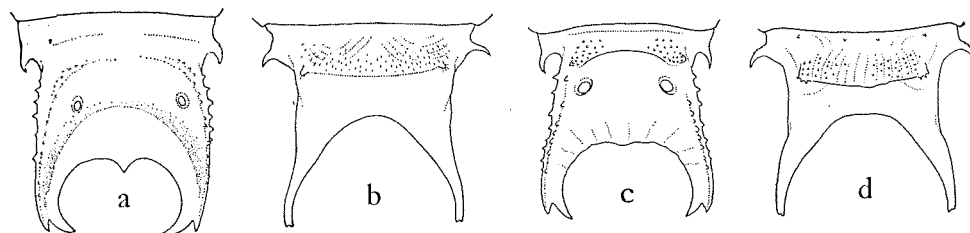


Fig. 23. a, *Callistola elegans* Gress., Wissel Lakes, last tergite of larva; b, same, last tergite of pupa; c, *C. speciosa speciosa* (Boisd.)?, Nabire, last tergite of larva; d, same, last tergite of pupa.

70. *Callistola speciosa fasciata* (Weise), 1905: 95 (New Guinea; ZMB).—Gressitt, 1957: 249, fig. 11 c, d, f.

SW NEW GUINEA: Many, Oriomo, 26. X. 1960, Gressitt; Daradae, Musgrove R., 4. X. 1958, Gressitt; Aroa, Redscar Bay, 28. IX. 1958, Gressitt; Kiunga, Fly R., 24. IX. 1957, Brandt; Brown R., 28. X. 1960, Gressitt. One, Karimui, border of NE New Guinea, slightly questionable.

HOST: *Pandanus*.

DISTRIBUTION: SE New Guinea.

71. *Callistola papuensis* Gressitt, 1957: 252, fig. 12e (Moroka; MCZ).

SE NEW GUINEA: Tapini, 900–1100 m, 18. V. 1961, M. & L. Gressitt; Catalina, nr.

Port Moresby, 3. IX. 1959, Maa.

HOST : *Pandanus*.

DISTRIBUTION : SE New Guinea.

72. *Callistola tricolor* Gressitt, n. sp. Fig. 24 a-b.

Ochraceous to purplish green and black : head black above with slight metallic sheen ; frons reddish above and blackish beneath ; underside of neck testaceous ; antenna black with very slight pitchy tinges ; pronotum orange-ochraceous with apical triangular black area ; scutellum pitchy black ; elytron ochraceous on slightly less than basal $1/2$, with a broad purplish green band occupying more than penultimate $1/4$, and apical $1/5$ reddish ochraceous ; ventral surfaces testaceous on pro- and mesosternum, black on most of remainder ; legs largely blackish, ochraceous on basal $1/2$ of hind side of fore femur.

Head $5/7$ as broad as prothorax, less than $1/2$ as long on median line in dorsal view ; central portion broader than long, somewhat narrower anteriorly, deeply grooved anterior to middle and irregularly punctured on basal $2/3$; rostrum barely $1/3$ as long as scape ; frons not quite $2/3$ as long as broad. *Antenna* barely $2/5$ as long as body ; segment 1 stout, widest just before apex, distinctly punctured ; 2 about $1/2$ as long as 1 and slightly longer than broad ; 3 distinctly longer ; 3-6 subequal in length ; 7 slightly longer, subequal to 8-10 ; last about as long as 1. *Prothorax* nearly as long as broad, slightly widened anteriorly and slightly concave at side with anterolateral angle broadly rounded ; disc subeven, deeply and somewhat coarsely punctured except along median line and near apex. *Scutellum* narrowed and subacute apically, slightly depressed in center. *Elytron* $4\times$ as long as broad, distinctly widened postmedially ; apex produced, with outer angle oblique and rounded and sutural angle considerably withdrawn and intervening border distinctly

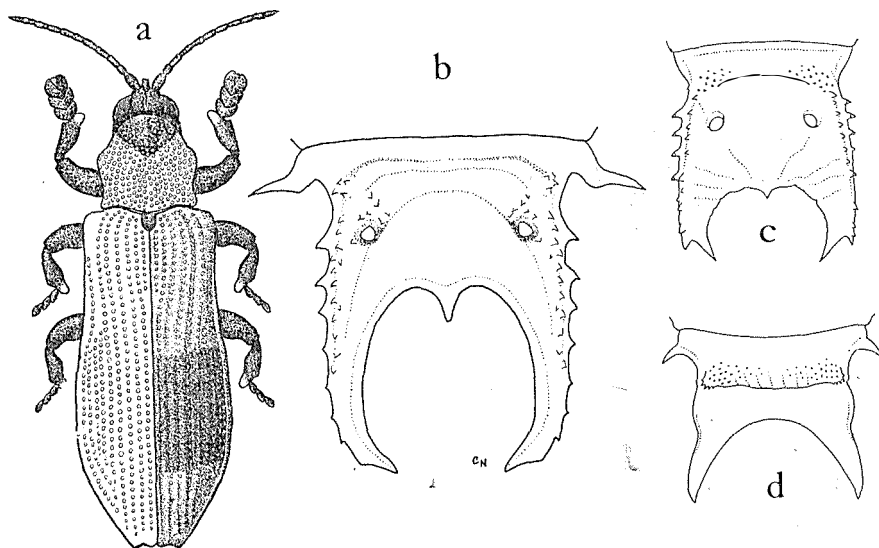


Fig. 24. a, *Callistola tricolor* n. sp. ; b, same, last tergite of larva ; c, *C. devastator* Gr., topotype, last tergite of larva, d, same, last tergite of pupa.

emarginate; disc regularly punctured with alternate interstices distinctly raised and others slightly raised basally. *Ventral surfaces* finely punctured at side of metasternum and with a depressed area of punctures on each side of abdominal segments 2-4; last sternite weakly emarginate apically. *Legs* stout and short. Length 10 mm; breadth 3.6.

Holotype ♀ (BISHOP 3499), betw. Bomberi and Kalimati, 300 m, nr. Fak Fak, SW Vogelkop, 10. VI. 1959, Gressitt, from *Freycinetia*; larva, same data.

Differs from *dilutipes* (Ws.) in having elytron reddish apically and apex strongly produced, with outer angle extending much farther backward than sutural angle.

Larva (not associated for certain; 1/2 grown): testaceous, pale pitchy brown on most of caudal process. Head with 3 distinct and 3 less distinct blackish eye spots, median groove narrow posteriorly and with a sublongitudinal groove on each side besides a few oblique grooves; abdominal spiracles gradually becoming larger posteriorly; lateral processes small on thorax and anterior portion of abdomen, suddenly much larger on last 3 segments with last process about 1/3 as long as width of segment; caudal process much longer than broad, subparallel-sided but slightly narrowed basally and apically; each arm with about a dozen small teeth on upper side and about 7 stronger teeth on under side and apex with a moderate ectoapical tooth and a much stronger oblique inner tooth more or less forming continuation of arch; emargination longer than broad, with a strong obtuse tooth on middle with a slender process at apex and with opening of emargination slightly wider than 1/2 of greatest width.

HOST: *Freycinetia* sp.

DISTRIBUTION: SW New Guinea.

73. *Callistola devastator* Gressitt, 1960: 47 (Swart Valley; BISHOP). Fig. 24 c-d.

HOST: *Pandanus*.

DISTRIBUTION: NW New Guinea.

74. *Callistola dilutipes dilutipes* (Weise), 1905: 95 (Astrolabe Bay; ZMB).—Gressitt, 1957: 252, fig. 13 a, d. Fig. 25 a-b.

NW NEW GUINEA: Many, Sumberbaba, Japen I., XI. 1962, N. Wilson; Nabire, VII. Gressitt; IX, Sedlacek, 1962; Genjam, 1-10. III. 1960, Maa; Mouth of R. Tor, nr. Hol-Maffen, 3. VII. 1959, Maa; Ifar, 7. IX. 1962, Sedlacek; Bernhard Camp, 750 m, III. 1939, Toxopeus; Rattan Camp, 1250 m, III. 1939, Toxopeus; Letterbox Camp, 3600 m, 27. IX. 1938, Toxopeus; Hollandia, VII. 1938, Toxopeus, all Neth. Ind.-American Exped. NE NEW GUINEA: Siaute, nr. Toricelli Mts. 9-17. XI. 1958, Brandt; Sugoitei, Toricelli Mts., 24. I. 1959, Brandt; Mobitei, 5. III. 1959, Brandt; Gabumi, Saidor, Finisterre Mts., 24. VI. 1958, Brandt.

HOST: *Pandanus*.

DISTRIBUTION: New Guinea (NW, NE).

75. *Callistola dilutipes alexandrina* Gressitt, n. subsp. Fig. 25c.

Male: Yellowish testaceous to steely and purplish blue; head pale above on central portion and pitchy on upper portion of neck, testaceous on remainder except for pitchy;

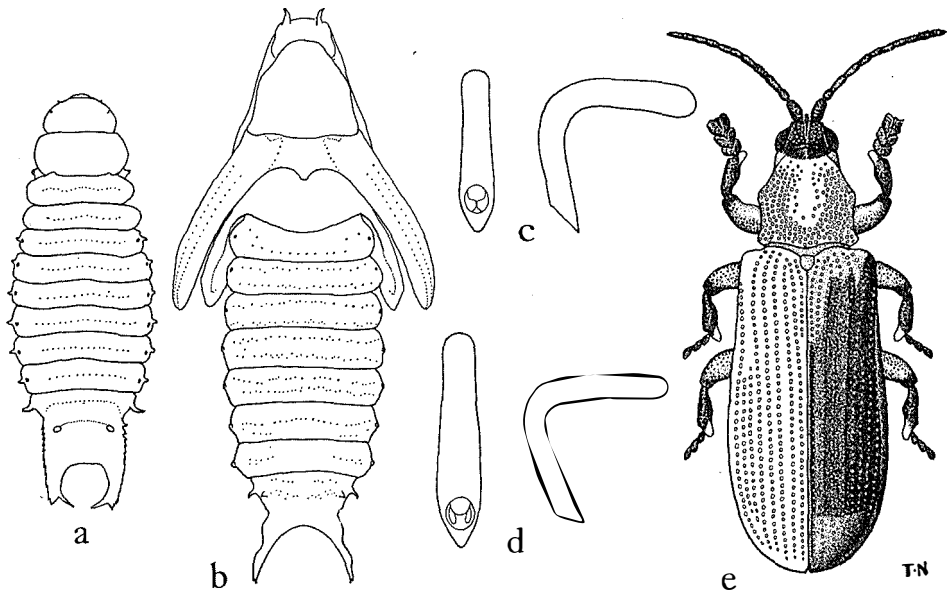


Fig. 25. a, *Callistola d. dilutipes* (Ws.), dorsum of larva, Waris; b, same, dorsum of pupa, Waris; c, *C. dilutipes alexandrina* n. ssp., aedeagus, dorsal and lateral views; d, *C. bella* Gr., aedeagus; e, *C. maii* Gr., W. Cyclops Mts.

labrum, mandible and eye; antenna testaceous basally becoming pitchy in central portion and duller pitchy apically; pronotum yellowish testaceous with small apical pitchy trapeziform mark; scutellum pale; elytron testaceous on basal 1/3, purplish in middle and largely steel blue on remainder except side of apex and sutural margin on apical declivity, ochraceous; ventral surfaces yellowish testaceous; legs testaceous with tarsi brownish.

Head 3/4 as broad as prothorax and less than 1/2 as long in dorsal view on median line; central portion slightly broader than long, slightly narrowed apically with a deep median groove and with basal 2/3 irregularly punctured; rostrum not quite 1/3 as long as scape; frons slightly longer than broad. **Antenna** barely 2/5 as long as body; segment 1 broadest in middle, not quite 2× as long as broad; 2 nearly as long as 1; 2–10 subequal in length; 11 slightly longer than 1. **Prothorax** nearly 5/6 as long as broad, subparallel-sided but slightly concave at middle of side; disc slightly irregular, unevenly punctured with punctures densest on posterolateral area and sparsest along middle and near apex. **Scutellum** narrowed and rounded-acute apically. **Elytron** not quite 4× as long as broad, subparallel basally and slightly widened behind middle; apex subevenly rounded, with sutural angle only slightly withdrawn; disc with relatively small, regular punctures and alternate interstices fairly broad and distinctly raised. **Ventral surfaces** with numerous fine punctures on side of metasternum and on abdominal segments 1–3 with a few at side of sternite 4; sternite 5 truncate-rounded apically. **Legs** relatively slender. Length 12.4 mm; breadth 4.5.

Female: Basal 1/2 of antenna largely pale reddish; elytron with apex ochraceous and pale border extending along sutural margin for 1/6 of elytral length; elytron truncate and

weakly emarginate apically with outer angle broadly rounded and slightly protruding. Length 13.5 mm; breadth 4.8.

Paratypes: Length 10.5–13.0 mm; breadth 3.5–4.6.

Holotype ♂ (BISHOP 3500), Dreikikir, 350–400 m, W of Maprik, Sepik Distr., 23. VI. 1961, M. & L. Gressitt; allotype ♀ (BISHOP), same data; paratypes (BISHOP, CAS, USNM, BMNH, ANIC, DASF), same data, and Maprik, 160 m, 14. X. 1957, Gressitt and 29. XII. 1959, T. C. Maa; Bainyik, 150 m, 12. I. 1960, Maa and 21–22. VI. 1961, M. & L. Gressitt; all from *Pandanus*. One specimen from behind Kotanika, nr. Lake Sentani, 17. X. 1957, Gressitt, is not designated a paratype.

Differs from *C. dilutipes* in having more than posterior 1/2 of elytron metallic. The aedeagus is more recurved than in the typical form, more acute than in *boisduvali*, and less recurved than in *buloloensis*. Named for the Alexander Mts. of the Wewak-Maprik area.

Larva: Testaceous, becoming slightly pitchy brown on depressed areas of caudal process; head with 5 distinct eye spots, median line deeply grooved and with some irregular oblique grooves; spiracles fairly large and short, subequal except for 1st and last; a distinct process beneath thoracic spiracle; lateral processes subequal, including 2 on thorax, each strongly tapered, acute and curved posteriorly; caudal process large, somewhat longer than broad, with arms distinctly diverging and slightly recurved apically; arm with about 13 strong short teeth on upper edge and a larger number of smaller teeth on lower edge with apex ending in a fairly short stout tooth and with a much longer inward projecting and recurved hooked tooth; emargination about 2× as wide as deep with a strong tooth at middle of base and apical opening about 3/4 as wide as emargination.

Pupa: Testaceous, reddish on cephalic processes. Head with rostrum barely visible, much broader than long, and anterolateral process long, broad in middle, narrowed and acuminate apically and considerably flattened; pronotum distinctly corrugated transversely; lateral processes fairly short, strongly tapered and acuminate, last about 4× as long as broad; caudal process nearly as broad as long, with arms slightly diverging, slender and acute, with emargination broad and with a very weak obtuse tooth at middle of base.

HOST: *Pandanus* spp.

DISTRIBUTION: NW New Guinea.

76. *Callistola boisduvali boisduvali* (Weise), n. status.

Oxycephala speciosa ab. *Boisduvali* Ws., 1908: 331 (New Guinea; LEIDEN).—*Callistola dilutipes boisduvali*: Gressitt, 1957: 253, fig. 13e.

This species, although very similar to *dilutipes*, is distinctly narrower.

HOST: *Pandanus*.

DISTRIBUTION: NE New Guinea.

77. *Callistola boisduvali buloloensis* Gressitt, n. status.

Callistola dilutipes buloloensis Gr., 1957: 254, fig. 13 b, c, f (NE NG; BISHOP).

NE NEW GUINEA: Many, Wau, 8–9. II. 1962, J. Sedlacek; Kassam, E of Kainantu, 7. XI. 1959, Maa; Busu R., nr. Lae, I. 1958, R. Paine; L. Wanum, Markham Valley, 10. X.

1956, J. Ardley.

HOST: *Pandanus*.

DISTRIBUTION: NE New Guinea.

78. *Callistola puncticollis* Spaeth, 1936: 285 (New Guinea; BMNH).

DISTRIBUTION: NW New Guinea (Vogelkop).

79. *Callistola misolensis* Spaeth, 1936: 285 (Misoöl; BMNH).

DISTRIBUTION: NW New Guinea (Misoöl I.).

80. *Callistola szentivanyi* Gressitt, 1960: 50, fig. 13b (Baiyer R.; BISHOP).

NW NEW GUINEA: Several, probably this species, Araucaria Camp, 800 m, III. 1939, and Lower Mist Camp, 800 m, III. 1939, Toxopeus, Neth. Ind.-American Exped.

HOST: *Freycinetia*.

DISTRIBUTION: New Guinea (NE, NW).

81. *Callistola metselaari* Gressitt, 1960: 49, fig. 13a (Cyclops Mts.; BISHOP).

NW New Guinea: Ifar, 28. VI. 1962, Gressitt, in *Freycinetia*.

HOST: *Freycinetia*.

DISTRIBUTION: NW New Guinea.

82. *Callistola maai* Gressitt, 1960: 59, fig. 15c (Bodem; BISHOP). Fig. 25e.

NW NEW GUINEA: W. Cyclops Mts., 150-250 m, 16. VI. 1959, Gressitt.

HOST: *Freycinetia*.

DISTRIBUTION: NW New Guinea.

83. *Callistola bella* Gressitt, 1960: 57, fig. 15a (Adelbert Mts.; BISHOP). Fig. 25d.

HOST: *Freycinetia*.

DISTRIBUTION: NE New Guinea.

84. *Callistola subvirida* Gressitt, n. sp. Fig. 26 a-b.

Male: Orange testaceous to steel blue, metallic green and black; head pitchy tinged with reddish above and testaceous beneath; antenna largely black but reddish on much of segment 1; pronotum orange testaceous, with apical area narrowly pitchy brown; scutellum pale; elytron steely blue on basal 2/5, gradually merging to metallic golden greenish on most of remainder but somewhat purplish to blackish on extreme apex; ventral surfaces largely ochraceous but pitchy at side of metasternum and pitchy black on much of central portions of abdominal segments 2-4, much of segment 1 and all of segment 5 testaceous; legs pitchy with femora largely ochraceous.

Head 3/4 as broad as prothorax and less than 1/2 as long on median dorsal line; central portion slightly broader than long, somewhat narrowed anteriorly, deeply grooved anterior to middle and relatively finely punctured on basal 3/4; rostrum 1/4 as long as scape; frons somewhat longer than broad. *Antenna* barely 2/5 as long as body; segment 1 stout, just over 2× as long as broad; 2 slightly over 1/2 as long as 1; 3 distinctly

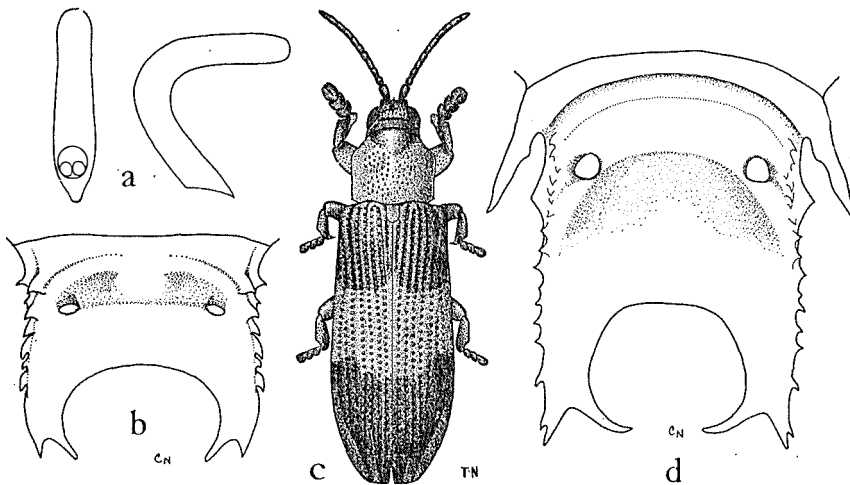


Fig. 26. a, *Callistola subvirida* n. sp., aedeagus; b, same, last tergite of larva; c, *C. margaretae* n. sp.; d, same, last tergite of larva.

longer than 2, nearly as long as 1; 4 intermediate between 2 and 3; 4-6 subequal; 7 slightly longer; 7-10 subequal; 11 shorter than 1. *Prothorax* 5/6 as long as broad, slightly concave at sides and fully as broad at anterolateral angles as at base; disc somewhat uneven at side, smooth in middle with scattered punctures, mostly on basal 1/2 and very few on central portion and near apex. *Scutellum* narrow and subacute, apically slightly depressed in middle. *Elytron* not quite 4× as long as broad, distinctly widened to well behind middle; apex subevenly narrowed and briefly truncate by sutural angle; disc regularly punctured with alternate interstices convex but not carinate. *Ventral surfaces* finely punctured at side of metasternum and with many fine punctures across abdominal segments 1-3 and with an area of punctures at side of segment 4; last sternite moderately emarginate apically. *Legs* short and not very stout. Length 11 mm; breadth 3.8.

Paratype: Antenna entirely blackish; basal 2/5 of elytron largely purplish. Length 9.5 mm; breadth 3.25.

Holotype ♂ (BISHOP 3501), Dreikikir, 350 m, W. of Maprik, Sepik Distr., 23. VI. 1961, M. & L. Gressitt; paratopotype, same data, in *Freycinetia*.

Differs from *bella* Gr. in being slightly smaller, less broad posteriorly, with elytron somewhat more bluish basally and almost entirely greenish on posterior 3/5, and partly blackish on venter.

Larva: Testaceous. Head with 6 pigmented eye spots, shallow median groove, and lacking distinct oblique grooves; spiracles very short; lateral process short, subequal; caudal process about as long as broad; arm with about 6 moderate tubercles and some small ones, both above and below, with apical teeth subequal; inner one slightly longer and curved upward and slightly inward; emargination broad, widely open and untoothed.

HOST: *Freycinetia* sp.

DISTRIBUTION: NW New Guinea,

85. *Callistola margaretae* Gressitt, n. sp. Fig. 26 c-d.

Male: Orange testaceous to purplish black; head black above with a slightly metallic tinge, largely testaceous beneath; antenna black, slightly pitchy basally; pronotum orange testaceous with rounded-obtuse apical triangle blackish; scutellum ochraceous; elytron purplish to greenish black on basal 1/3, orange testaceous in middle 1/3 and purplish black on slightly more than apical 1/3; ventral surfaces orange testaceous; legs pitchy with basal 2/3 of each femur pale ochraceous.

Head 3/4 as broad as prothorax and 1/2 as long in dorsal view; central portion distinctly broader than long, narrowed anteriorly, deeply grooved in center and heavily punctured on posterior 1/2; rostrum narrow, 1/4 as long as scape; frons 2.3× as long as broad. *Antenna* 2/5 as long as body; segment 1 slightly arched, distinctly punctured and widest just beyond middle; 2 slightly longer than broad, 1/2 as long as 1, 3/4 as long as 3; 3 slightly longer than 4 and subequal to 5; 6 slightly shorter than 5, subequal to 7; 7-10 increasing slightly in length; 11 not quite as long as 1. *Prothorax* 5/6 as long as broad, subparallel at side but slightly broadened at anterolateral angle which is broadly rounded; disc slightly depressed on each side of middle, heavily punctured but mostly partially punctured along median line, near apex and along side. *Scutellum* elongate, narrowed apically and weakly depressed in middle. *Elytron* 4.6× as long as broad, subparallel basally and distinctly widened postmedially; apex with outer angle strongly rounded and somewhat protruding; disc regularly punctured and with alternate interstices distinctly raised and intervening ones slightly raised basally. *Ventral surfaces* distinctly punctured at side of metasternum and abdominal sternites with a group of punctures near middle of each side. *Legs* short and stout. Length 8.4 mm; breadth 2.6.

Female: Elytron subtruncate apically with outer angle broadly rounded and fairly prominent. Length 8.5 mm; breadth 2.5.

Paratypes: Length 7.4-8.0 mm; breadth 2.4-2.5.

Holotype ♂ (BISHOP 3502), Karimui, 1000 m, S of Goroka, nr. Papua border, 4. VI. 1961, M. & L. Gressitt, in *Freycinetia*; allotype ♀ (BISHOP), same data; 9 paratopotypes (BISHOP, ANIC, DASF), same data, with larvae.

Differs from *zonalis* Gr. in being smaller, more parallel-sided, with much broader pale band on elytron, central portion of head more trapeziform, and elytron more sparsely punctured. Named for Margaret Gressitt who helped collect the material.

Larva: Yellow testaceous. Head with 5 pigmented eye spots, a broad median depressed area and about 4 oblique grooves at side; spiracles low, much broader than long except mesothoracic spiracle which is as broad as long; lateral processes quite small on thorax, gradually becoming longer on abdomen and last process about 1/2 as long as width of its segment; caudal process somewhat longer than broad, subparallel-sided with numerous fine teeth on upper edge of outer side and slightly fewer teeth beneath; apex of arm with strong distal tooth and slightly stronger inward curving tooth forming an emargination which is slightly broader than long with opening about 1/2 as great as width and middle of base subtransverse.

Pupa: Rostrum much shorter than broad; anterolateral process of head about 4× as long as broad, flattened in middle and acuminate and bent down apically; pronotum weakly striated transversely; abdominal tergites with numerous small tubercles in 2 semi-con-

tinuous transverse rows; lateral processes short, mostly hardly longer than broad except for last one which is about 4X as long as broad; caudal process slightly broader than long, slightly widened preapically with arms unequally tapering but acute and pointed almost directly backward with emargination slightly broader than long and fairly even.

HOST: *Freycinetia* sp.

DISTRIBUTION: NE New Guinea.

86. *Callistola zonalis* Gressitt, 1960: 59, fig. 15b (Adelbert Mts.; BISHOP).

NE NEW GUINEA: Mokai, 750 m, Torricelli Mts., 1-23. I. 1959, W. W. Brandt; Sibog, Saidor, Finisterre Mts., 6-16. VI. 1958, Brandt.

HOST: *Freycinetia*.

DISTRIBUTION: NE New Guinea.

87. *Callistola fordii* Gressitt, 1957: 254, fig. 14 a-b (Bulolo; BISHOP). Fig. 27 a-b.

NE NEW GUINEA: Lae-Bubia area, 22. VII. 1959, 18. VI. 1961, Gressitt; Wau, 880-1090 m, 25. I. 1963, 8-9. II. 1963, J. Sedlacek.

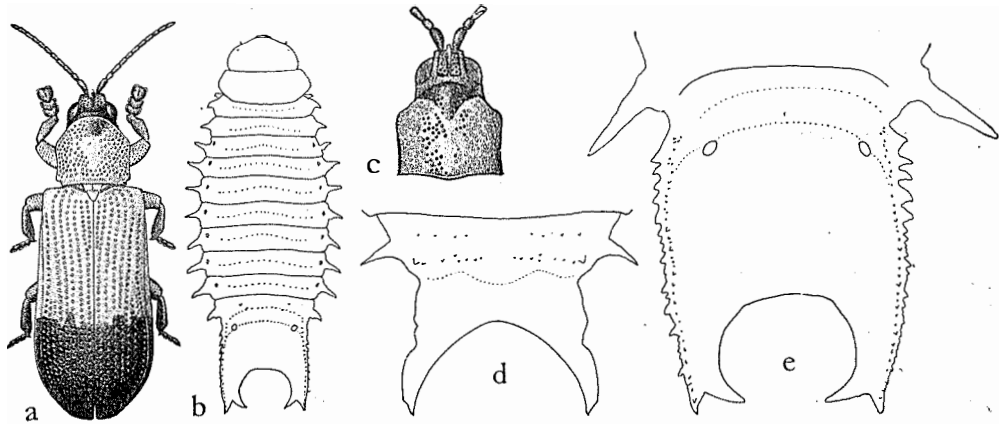


Fig. 27. a, *Callistola fordii* Gr., Lae; b, same, dorsum of larva, Bubia; c, *C. swartensis* Gr., paratype, head and pronotum; d, same, last tergite of pupa; e, same, last tergite of larva.

HOST: *Freycinetia*.

DISTRIBUTION: NE New Guinea.

88. *Callistola swartensis* Gressitt, 1960: 51, fig. 13 c-d (Swart Valley; BISHOP). Fig. 27 c-e.

HOST: *Freycinetia*.

DISTRIBUTION: NW New Guinea.

89. *Callistola pandanella* Gressitt, 1960: 60 (nr. Fak Fak; BISHOP). Fig. 28 a-b.

The pronotum is sometimes largely red,

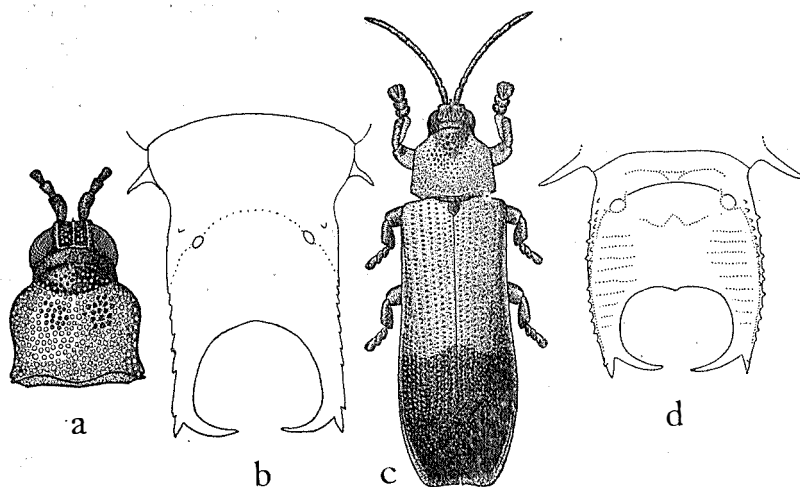


Fig. 28. a, *Callistola pandanella* Gr., paratype; b, same, last tergite of larva; c, *C. sedlacekana* n. sp.; d, same, last tergite of larva.

HOST: Small *Pandanus*.

DISTRIBUTION: SW New Guinea (S. Vogelkop).

90. *Callistola sedlacekana* Gressitt, n. sp. Fig. 28 c-d.

Male: Testaceous to black; head black above, pitchy on frons and ochraceous on mouthparts and underside of neck; antenna black except for buff-pubescent borders of last 5 segments; pronotum orange testaceous with apical blackish triangle reaching backwards $2/5$ distance to base; scutellum dull brown; elytron orange testaceous on basal $3/5$, blackish on remainder; ventral surfaces testaceous on pro- and mesosterna, pitchy blackish on remainder; legs pitchy black except fore femur testaceous.

Head $2/3$ as broad as prothorax and $1/2$ as long in dorsal view; central portion slightly broader than long and slightly broadened anteriorly, deeply grooved in middle and heavily punctured on basal $2/3$; rostrum $1/4$ as long as scape; frons $2.5\times$ as long as broad. *Antenna* $2/5$ as long as body; segment 1 thickest preapically, slightly arched, $1/2$ again as long as 2; 2-6 subequal in length; 7 longer; 7-10 subequal; 11 slightly longer than 1. *Prothorax* $3/4$ as long as broad; anterolateral angle broadly rounded and about as wide here as at base but slightly concave in middle of side; disc rather heavily punctured on each side of middle and partly impunctate along median line. *Scutellum* narrow, subacute apically and slightly depressed in center; elytron $5.3\times$ as long as broad; subparallel-sided but slightly widened postmedially; apex broadly rounded with sutural corner slightly withdrawn but sutural angle briefly toothed; disc regularly punctured with alternate interstices distinctly raised and intervening ones raised basally. *Ventral surfaces* finely punctured at side of metasternum, with a scattering of punctures on abdominal segment 1 and a depressed area with punctures at sides of sternites 2-4 and a very small one on 5; last sternite weakly emarginate apically. *Legs* short and moderately stout. Length 8 mm; breadth 2,

Female: Antenna more reddish on distal antennal segments, black triangle on apex of pronotum smaller; elytral apex broader and more truncate. Length 8.4 mm; breadth 2.3.

Paratypes: Coloration fairly uniform but black area sometimes extending very slightly forward along suture. Length 8.0–8.8 mm; breadth 2.0–2.4.

Holotype ♂ (BISHOP 3503), Enarotadi (Enarotali), 1800–1900 m, Wisselmeren, 1–9. VIII.1962, J. Sedlacek, in *Freycinetia*; allotype ♀ (BISHOP), same data; 16 paratypes and larvae (BISHOP, CAS, USNM, BMNH, ANIC), same data.

Differs from *attenuata* Gr. in being slightly smaller, with elytron more extensively pale and not partly striped.

Larva: Head with 4 black eye spots, broad median depression and several fine oblique grooves; spiracles small, mesothoracic spiracle broader than long, abdominal spiracles quite small and broader than long but last 3 larger; meso- and metathorax with minute lateral processes; abdominal processes gradually larger, all slender and subacute, last one about 1/3 as long as width of its segment; caudal process large, slightly longer than broad, upper margin slightly narrowed basally and apically, upper edge with numerous small teeth and lower edge with fewer slightly larger teeth; apex of arm with a strong tooth directed straight backward and a much larger oblique and slightly curved one extending inward; emargination much broader than long, a weak obtuse tooth at middle of base and posterior opening barely 1/3 as wide as emargination.

Pupa: Testaceous but darker posteriorly and somewhat pitchy on basal portion of last abdominal segment. Rostrum distinct, not quite as long as broad; head with a central depression and a small distinct tubercle on each side; pronotum largely transversely corrugated; middle abdominal segment with a number of small black tubercles on raised areas; lateral processes mostly about 3× as long as broad but last one more slender; caudal process slightly longer than broad with arms very slightly divergent and emargination deep and even but briefly subtransverse at middle of base; arms slender but truncate apically.

HOST: *Freycinetia* sp.

DISTRIBUTION: NW New Guinea.

91. *Callistola bomberiana* Gressitt, n. sp. Fig. 29 a–c.

Female: Orange testaceous to pitchy black, head pitchy black above, pitchy brown to reddish brown beneath; antenna dark pitchy brown, blackish distally; pronotum orange testaceous with a large median black area covering entire apex and narrowing to basal margin where it covers less than middle 1/3; scutellum pitchy; elytron largely pitchy black with slightly greenish tinge; most of extreme base, and a premedian spot, testaceous; ventral surfaces testaceous on prothorax and largely pitchy black on remainder; legs pitchy black except fore femur largely ochraceous.

Head about 2/3 as broad and 1/2 as long as prothorax; central portion slightly broader than long, narrowed anteriorly, medially grooved and largely punctured on remainder; rostrum about 1/4 as long as scape; frons about 3× as long as broad. *Antenna* 2/5 as long as body; 1st segment 2.5× as long as broad, thickest near middle; 2 about 2/3 as long as 1; 2 and 3 subequal; 4–6 each shorter, subequal; 7 about as long as 3; 7–9 subequal; 10 slightly longer; 11 longer than 1. *Prothorax* about 5/7 as long as broad, strongly sinuate at side, slightly broader at base than at anterolateral angle which is broadly rounded;

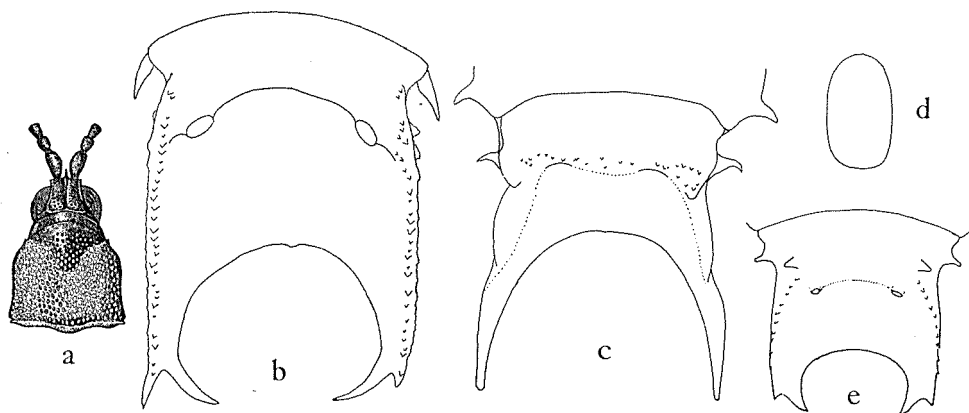


Fig. 29. a, *Callistola bomberiana* n. sp., W. Cyclops Mts.; b, same, topotypic, last tergite of larva; c, same, last tergite of pupa; d, *C. sp.*, egg, from small broad-leaved Freycinetia, nr. Fak Fak; e, same, last tergite of larva.

disc subevenly convex, rather densely punctured except for a partly impunctate median strip. *Scutellum* longer than broad, rounded apically. *Elytron* nearly 5× as long as broad, moderately broadened behind middle; apex slightly emarginate-truncate with outer angle rounded and slightly prominent; disc with alternate interstices strongly carinate and intervening interstices moderately carinate basally; punctures distinct and regular. *Ventral surfaces* moderately punctured at side of metathorax and mid portions of sides of abdominal segments (fewer punctures from base to apex); last abdominal sternite rounded-truncate. Length 9 mm; breadth 2.6.

Male: Dark portion of pronotum pitchy reddish; elytron paler with much of basal portion ochraceous and apical portion reddish. Apex of elytron subobliquely truncate, broadly rounded externally; last abdominal sternite slightly emarginate. Length 8.3 mm; breadth 2.4.

Paratypes: Length 7.0–8.4 mm; breadth 2.2–2.4.

Holotype: ♀ (BISHOP 3504), Bomberi, 900 m, Bomberai Pen., nr. Fak Fak, 7. VI. 1959, Gressitt, from *Freycinetia*; allotype ♂ (BISHOP), same data; 3 paratopotypes (BISHOP, USNM, BMNH), same data. One adult and larva, W. Cyclops Mts., N of Lake Sentani, 850 m, 22. VI. 1959, Gressitt, *Freycinetia*.

Differs from *freycinetella* in being longer, with elytron largely black or pitchy and not striped.

Larva: Distinctly broadened in middle; 5 distinct eye spots and 1 indistinct one; head above grooved medially and obliquely ridged on each side of middle; lateral processes of abdomen gradually longer posteriorly and rather evenly tapering and acute; caudal process considerably longer than broad, subparallel-sided with numerous small tubercles on upper and lower outer margins; each arm with a fairly strong tooth pointing posteriorly, a lesser tooth pointing upward and a strong spine pointing obliquely inward; apices of spines separated by a distance equivalent to about 1/5 of width of emargination which is slightly longer than broad and barely toothed in middle of base (tooth obtuse).

HOST: *Freycinetia* sp.

DISTRIBUTION: New Guinea (NW, SW).

92. *Callistola cyclops* Gressitt, n. sp. Fig. 30 a-b.

Male: Testaceous to black; head pitchy black above, largely ochraceous to brownish beneath, ochraceous on frons; antenna pitchy black, more blackish apically except for broad buff-pubescent area on each side of distal 5 segments; pronotum ochraceous brown, gradually becoming blackish anteriorly; scutellum pitchy; elytron pitchy blackish, slightly paler in center and on base, ventral surfaces ochraceous, largely pitchy brown after abdominal segment 1; legs orange testaceous, darker on tibiae and apices of femora and fairly black on tarsi.

Head $2/3$ as broad and $3/4$ as long as prothorax; central portion trapeziform, evenly narrowed anteriorly and slightly broader than long, deeply grooved anteriorly and heavily punctured on basal $1/2$; rostrum $1/4$ as long as scape; frons nearly $3\times$ as long as broad. *Antenna* $2/5$ as long as body, moderately stout; segment 1 thickest just beyond middle; 2 about $3/5$ as long as 1, slightly longer than 3; 3-6 subequal; 7 distinctly longer; 7-10 increasing slightly in length; 11 distinctly longer than 1. *Prothorax* $5/6$ as long as broad, distinctly sinuate at side with anterolateral angle broadly rounded and slightly narrower than base; disc very closely and deeply punctured except at apex. *Scutellum* narrowed and rounded apically, grooved medially. *Elytron* fully $5\times$ as long as broad, subparallel, weakly narrowed at end of base $2/5$ and slightly broadened well behind middle; apex broadly rounded-truncate; disc regularly punctured throughout with alternate interstices strongly raised and with intervening interstices distinctly raised in basal $1/4$. *Ventral surfaces* weakly punctured at side of metathorax and distinctly punctured at middle of side

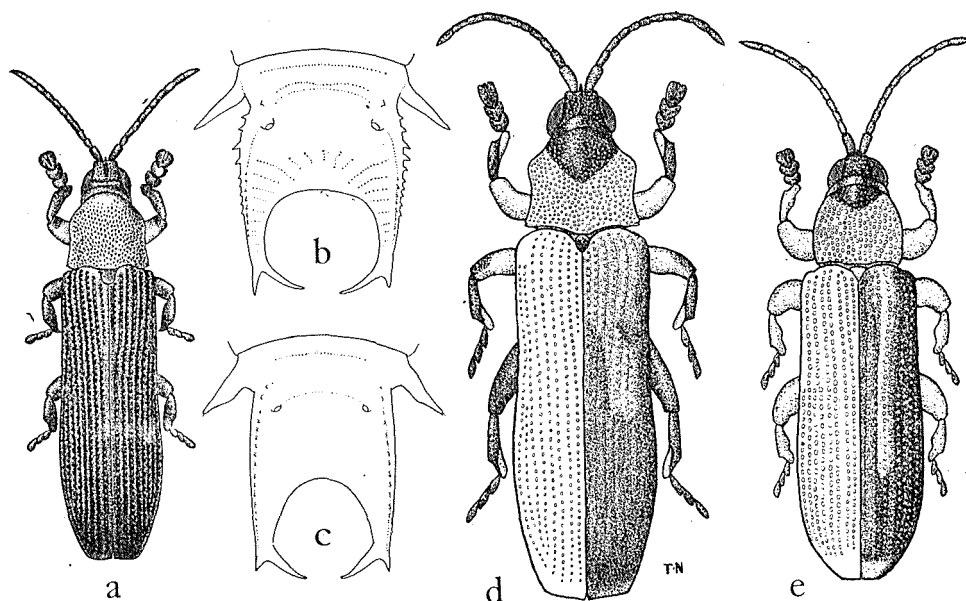


Fig. 30. a, *Callistola cyclops* n. sp.; b, same, last tergite of larva; c, *C. attenuata* n. sp., Nabire, last tergite of larva; d, same, type; e, *C. freycinetella* n. sp.

of each abdominal segment for a lesser area on each segment progressively posteriorly. *Legs* short and stout; foretarsus much larger than others. Length 8 mm; breadth 1.8.

Holotype ♂ (BISHOP 3505), above Ifar, 500 m, E. Cyclops Mts., 29. VI. 1962, Gressitt, in *Freycinetia*; allotopotype ♀ (BISHOP), 24. VI. 1962, Gressitt.

Differs from *bomberiana* Gr. in being darker, with pronotum more densely punctured.

Egg: Pale reddish brown, oblong-oval, nearly parallel-sided, strongly convex. Length 2.2 mm; breadth 0.9.

Larva: Head with 6 eye spots, median groove and 2 or 3 fairly strong oblique grooves on each side; lateral processes of abdomen gradually longer posteriorly, subevenly tapering and acute; abdominal spiracles 1-5 fairly short, cylindrical, 6 and 7 larger, distinctly broader than long, 8 much larger and rounded; caudal process distinctly broader than long, subparallel-sided with about 15 teeth each on upper and lower edges of outer side; apex of arm with a strong backward projecting tooth and an oblique tapering spine pointing inward and 2× as long as outer tooth; emargination nearly round with a very weak obtuse convexity at middle of base; space between inner apical spines about 1/4 as broad as emargination.

HOST: *Freycinetia* sp.

DISTRIBUTION: New Guinea (NW).

93. *Callistola attenuata* Gressitt, n. sp. Fig. 30 c-d.

Female: Yellowish testaceous to black; head black above, pitchy beneath; antenna reddish pitchy on segments 1-2, duller on 3-9, and more reddish on 10-11; pronotum yellowish testaceous with apical triangular pitchy black area; scutellum pitchy; elytron largely testaceous on upper portion of basal 1/2 and largely pitchy to reddish on remainder: pitchy area extending forward along suture to end of basal 1/4 and the reddish area covering apex and anterior 1/2 of lateral portion; ventral surfaces testaceous anteriorly, gradually becoming pitchy and blackish posteriorly; legs largely pitchy but fore femur almost entirely testaceous and basal 1/2 of mid femur ochraceous.

Head 2/3 as broad and 2/3 as long as prothorax; central portion nearly square, barely broader than long and hardly narrowed anteriorly; a deep median groove near center and posterior 2/3 heavily and closely punctured; rostrum 1/4 as long as scape; frons about 3× as long as broad. *Antenna* 2/5 as long as body; segment 1 thickest preapically, 1/2 again as long as 2; 2 slightly longer than 3; 3 slightly longer than 4; 4-6 subequal; 7 longer; 7-10 increasing slightly in length; 11 slightly longer than 1. *Prothorax* slightly broader than long, sinuate at side with anterolateral angle rounded and nearly as broad as base; disc weakly and evenly convex, quite densely punctured, a little less so along median line and apex. *Scutellum* longer than broad, rounded apically, depressed in center. *Elytron* 4.6× as long as broad, subparallel in basal 1/3, widened behind middle; apex broadly truncate and weakly emarginate with outer angle rounded but fairly prominent; disc regularly and deeply punctured with alternate interstices strongly raised and intervening interstices distinctly raised in basal 1/3. *Ventral surfaces* finely punctured at side of metasternum, densely punctured at middle of side of abdominal segments 2-4; last abdominal sternite rounded-truncate. *Legs* short and not very stout. Length 9 mm; breadth 2.55.

Paratype: Dark apical triangle of pronotum shorter and more obtuse; elytron more extensively pale but with apical portion more blackish. Length 8.3 mm; breadth 2.4.

Holotype ♀ (BISHOP 3506), nr. Fak Fak, 100 m, SW Vogelkop, 11. VI. 1959, Gressitt, in *Freycinetia*; paratype ♀ (BISHOP), with larva, Nabire, 20 m, S. coast of Geelvink Bay, 4. VII. 1962, Gressitt, in *Freycinetia*.

Differs from *pandanella* Gr. in being much more elongate and parallel-sided, with different markings.

Larva (2/3 grown): Head with 6 eye spots, broad median groove and several oblique grooves; meso- and metathorax with distinct lateral processes about 1/2 as large as anterior abdominal processes which gradually increase in size posteriorly with last process nearly 1/3 as long as width of its segment; abdominal spiracles rather small and short but last 3 larger; caudal process large, distinctly longer than broad and subparallel-sided in basal 2/3 and slightly narrowed apically; side of arm with about 16 small teeth above and about 12 partly larger teeth beneath and apex with a strong posteriorly directed tooth and a much larger oblique and slightly sinuate inward projecting process; emargination broader than long, with a weak obtuse tooth at middle of base and opening at apex about 1/5 as wide as emargination.

HOST: *Freycinetia* sp.

DISTRIBUTION: New Guinea (SW, NW).

94. *Callistola freycinetella* Gressitt, n. sp. Fig. 30e.

Male: Testaceous to black: head pitchy black above, largely orange beneath; antenna pitchy, slightly reddish at base and apex; pronotum orange with apical obtuse area pitchy black; scutellum ochraceous; elytron pitchy black with a tapering testaceous stripe from base to beginning of apical 1/4 and another spot of ochraceous at apex; ventral surfaces orange testaceous with most of abdomen pitchy brown beyond segment 1; legs ochraceous with tarsi pitchy brown.

Head 3/4 as long and 3/4 as broad as prothorax; neck impunctate; central portion of head trapeziform, narrowed anteriorly, with fairly deep median groove, sublateral groove and dense punctures on remaining area of basal 3/4; rostrum about 1/5 as long as scape; frons nearly 1/2 as broad as long. *Antenna* nearly 1/2 as long as body; segment 1 thickened preapically, finely punctured; 2 about 2/3 as long as 1; 2-3 subequal; 4 slightly longer; 4-10 increasing very slightly in length; 11 slightly longer than 1, distinctly compressed. *Prothorax* 1/7 broader than long, subparallel-sided but weakly sinuate, being slightly narrowed between middle and base; disc deeply, closely and coarsely punctured. *Scutellum* fairly long, narrowed and rounded behind. *Elytron* 4.6× as long as broad, somewhat gradually narrowed from slightly behind base to slightly behind middle; apex broadly rounded-truncate; disc with alternate interstices strongly raised and subcarinate, punctures fairly deep and regular. *Ventral surfaces* with few punctures at side of metasternum and a few at sides of abdominal segments 1-4; last abdominal sternite weakly emarginate apically. *Legs* stout and short. Length 6.6 mm; breadth 1.7.

Holotype ♂ (BISHOP 3507), W. Cyclops Mts., N of Lake Sentani, 450 m, 24. VI. 1959, Gressitt.

Differs from *pandanella* Gr. in being much narrower, with elytron largely black and striped, etc.

HOST: *Freycinetia* sp.

DISTRIBUTION: NW New Guinea.

Tribe COELAENOMENODERINI

Genus *Enischnispa* Gressitt, 1957

KEY TO ADULTS

1. Elytral puncture-rows 3-4 complete throughout..... 2
 Elytral puncture-rows 3-4 merged in more than middle 1/3; body largely or entirely shiny black above..... 3
2. Body with extensive pale brown or testaceous areas above; legs pitchy; alternate interstices not very strongly raised; pronotum with a broad transverse impunctate strip just anterior to middle **95. calamivora**
 Body largely black; legs entirely pale; alternate interstices very sharply raised; pronotum with a brief impunctate area just anterior to middle..... **96. palmicola**
3. Elytron in postmedian portion with interstice 2 much more strongly raised than 3; tarsi reddish **97. rattana**
 Elytron in postmedian portion with interstice 3 a little more strongly raised than 2; tarsi nearly black..... **98. daemonoropa**

95. *Enischnispa calamivora* Gressitt, 1957: 275, fig. 20 b-c (New Ireland; BISHOP).

Fig. 31a.

NE NEW GUINEA: Several from Bubia, 17. XI. 1955, Gressitt; Bainyik, nr. Maprik, 21. VI. 1961, M. & L. Gressitt, mostly from *Daemonorops*. Several from Brown R., 5. XI. 1960 and Oriomo, 26. X. 1960, Papua, Gressitt, questionably this species.

HOSTS: *Calamus*, *Daemonorops*.

DISTRIBUTION: New Ireland, New Guinea (NE, SE?).

96. *Enischnispa palmicola* Gressitt, n. sp. Fig. 31b.

Female: Largely reddish to pitchy black with paler appendages; head pitchy reddish, more reddish anteriorly; antenna pale ochraceous, slightly duller distally; pronotum pitchy reddish with borders and impunctate strip more blackish; scutellum pitchy reddish; elytron pitchy reddish with most of carinae more blackish and with 3 narrow yellowish areas in apical 1/4 on interstices 2, 4 and 6; ventral surfaces dark pitchy brown; legs testaceous partly tinged with ochraceous.

Head about as broad as prothorax at widest point, moderately punctured above; rostrum about 1/4 as long as scape, broad and blunt with a concavity on each side between its base and eye. *Antenna* barely 1/3 as long as body; segment 1 slightly longer than broad, subrounded; 2 slightly longer than 1, slender basally and thickest preapically; 3 nearly as long as 1+2; 4 barely longer than 2; 4-7 successively shorter; 8 barely longer than 3.

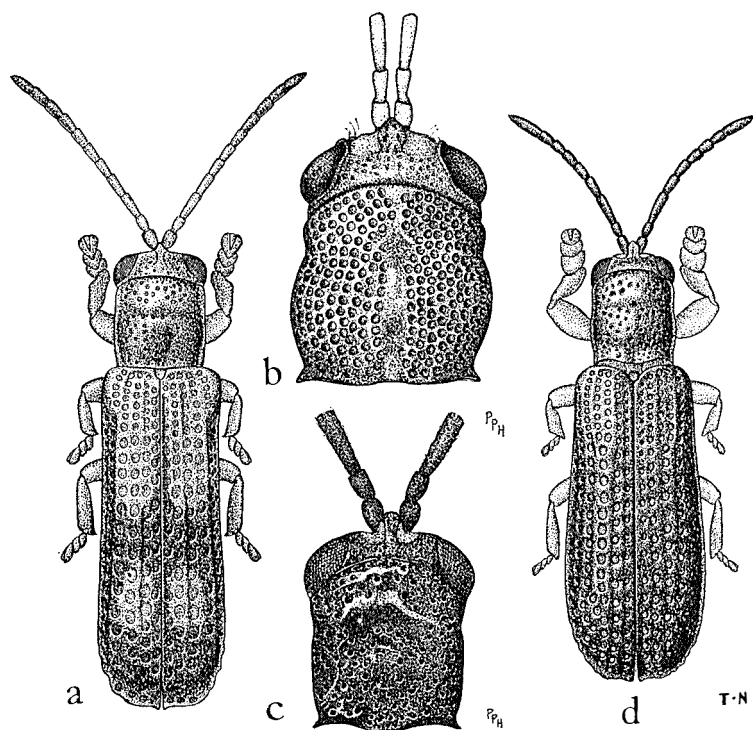


Fig. 31. a, *Enischnispa calamivora* Gr.?, Brown River; b, *E. palmicola* n. sp.; c, *E. rattana* Gr., ♀; d, *E. daemonoropa* n. sp.

Prothorax nearly as long as broad, distinctly widened just behind middle and slightly constricted behind apex and base; disc closely and deeply punctured except for much of median strip which is smooth and slightly raised with anterior end of strip slightly broadened and partially separated from remainder of strip. *Scutellum* constricted and raised apically, blunt at tip. *Elytron* nearly 5× as long as broad, slightly widened well behind middle; apex broadly rounded; disc deeply punctured in 8 rows in central portion and very briefly in 10 rows postbasally and preapically, alternate interstices very strongly raised and carinate. *Ventral surfaces* with scattered distinct punctures on thorax and abdominal segment 1 and with progressively smaller punctures on remainder of abdominal sternites. *Legs* fairly slender, shiny. Length 4.1 mm; breadth 1.1.

Holotype ♀ (BISHOP 3508), Brown R., 8 m, N of Port Moresby, 23. X. 1960, Gressitt, on small palm.

Differs from *calamivora* Gr. in having a small impunctate area anterior to middle of pronotum instead of a transverse band, and in being pitchy above except for a few small pale spots on ridges on posterior part of elytron.

HOST: Small palm.

DISTRIBUTION: SE New Guinea (Papua).

97. *Enischnispa rattana* Gressitt, 1960: 70, fig. 18e (Maprik; BISHOP). Fig. 31c.

NE NEW GUINEA: 3, Bainyik, nr. Maprik, 21. VI. 1961, M. & L. Gressitt, on rattans; 1, Wewak, 26. VI. 1961, M. & L. Gressitt, on *Daemonorops*.

HOSTS: *Calamus*, *Daemonorops*.

DISTRIBUTION: NE New Guinea.

98. *Enischnispa daemonoropa* Gressitt, n. sp. Fig. 31d.

Male: Shiny black to pitchy black with legs largely pale; head pitchy reddish above, pale reddish anteriorly and beneath; antenna pitchy black, slightly reddish at apex of segment 2; pronotum shiny pitchy black with a slight reddish tinge basally and at sides; scutellum reddish; elytron shiny black; ventral surfaces largely pitchy black, reddish along middle parts of thoracic sternae; legs testaceous with tarsi pitchy black.

Head distinctly broader than prothorax, coarsely punctured above; rostrum $1/3$ as long as scape, broad and flattened; frons extremely short. *Antenna* $1/2$ as long as body; segment 1 about $1.6\times$ as long as broad, swollen preapically; 2 slightly shorter than 1 and slightly less stout; 3 longer than 1+2, subcylindrical; 4 about $2/3$ as long as 3; 5 distinctly shorter than 4; 5-7 successively slightly shorter; 8 slightly longer than 3. *Prothorax* slightly longer than broad, subparallel-sided but very weakly constricted anterior to middle and moderately constricted just anterior to base; disc coarsely punctured but with median central strip impunctate and a transverse raised impunctate area just anterior to middle and punctures sparse on anterior median portion. *Scutellum* subtriangular, blunt behind. *Elytron* $4.6\times$ as long as broad, subparallel-sided but weakly broadened behind middle; apex broadly rounded; disc very heavily and regularly punctured in 8 rows at middle and briefly in 10 rows postbasally, rows 3-4 merging just behind end of basal $1/4$ and separating again just before beginning of apical quarter; interstice 3 in central portion quite strongly carinate and also interstice 6 strongly carinate in central portion. *Ventral surfaces* with few punctures at side of metathorax and with scattered punctures on abdomen mostly at sides. *Legs* smooth and shiny on femora and tibiae. Length 3.2 mm; breadth 0.8.

Paratype: Length 4.05 mm; breadth 0.95.

Holotype ♂ (BISHOP 3509), Bomberi, 850 m, nr. Fak Fak, S. Vogelkop, 4. VI. 1959, Gressitt; paratopotype ♂, same data.

Differs from *rattana* Gr. in having elytron with interstice 3 more strongly raised than 2 in central portion, and in having legs brighter yellow with nearly black tarsi.

HOST: *Daemonorops* sp. (rattan).

DISTRIBUTION: SW New Guinea.

Tribe PROMECOTHECINI

Genus *Promecotheca* Blanchard, 1853

This genus appears to be much less well represented in New Guinea than in the Solomons.

KEY TO ADULTS

1. Elytral punctures generally in 8 fairly regular rows 2
 Elytral punctures in at least 9 rows behind basal 1/3, or partly in 10 rows 5
- 2 (1). Elytron pale, yellowish to reddish; pronotum very smooth, shiny black 3
 Elytron metallic or blackish apically; pronotum punctured, sometimes also pitted... 4
- 3 (2). Elytron with 8 regular rows of punctures; transverse swollen area parallel to
 base of pronotum about as wide as basal margin; prothorax as long as broad
 **99. callosa callosa**
 Elytron with some extra punctures between rows 3-4; subbasal swelling of pro-
 notum broader than basal margin; prothorax broader than long
 **100. callosa major**
- 4 (2). Elytron dark on apical 1/5; pronotum generally pitted as well as punctured;
 hind femur very long **101. pandani**
 Elytron dark on posterior 2/3; pronotum finely punctured **102. freycinetiae**
- 5 (1). Elytral punctures largely in 10 regular rows; elytron dark in apical 1/4 or less ... 6
 Elytral punctures partly irregular, partly in 9 or 10 rows..... 7
- 6 (5). Pronotum dark with fine punctures; elytron dark on apical 1/4 or 1/5, with
 just a few hairs on dark area **103. palmivora**
 Pronotum pale, with median line raised and a flat heavily punctured strip on
 each side of median line; elytron dark on apical 1/6, with numerous hairs
 on dark area **104. pubescens**
- 7 (5). Elytron entirely pale, without distinct transverse corrugations; length 10-11 mm
 **105. straminipennis**
 Elytron metallic on apical 2/5, with partial transverse corrugations; length 8.0-
 9.5 mm..... **106. papuana**

KEY TO LARVAE

1. Head capsule subparallel-sided posteriorly, much wider at middle than anteriorly 2
 Head capsule widened posteriorly, nearly as wide anteriorly as at middle and deeply
 constricted between..... **106. papuana**
2. Head capsule with emargination somewhat parallel-sided posteriorly, its opening no
 wider, or only slightly wider than a posterior arm just before its apex 3
 Head capsule with emargination strongly and evenly narrowed anteriorly for much
 of its length, its opening generally distinctly wider than an arm just before
 its apex..... 4
3. Head capsule distinctly narrowed posteriorly, distinctly widest at middle, with
 emargination subparallel-sided in posterior 3/4..... **103. palmivora**
 Head capsule subparallel-sided posteriorly, barely wider at middle than posteriorly,
 with emargination somewhat narrowed in posterior 2/5 **101. pandani**
4. Head capsule distinctly pigmented at side, with arms somewhat obtuse apically and
 oblique on outer side of apex 5
 Head capsule feebly pigmented at side, with arms subrounded apically; dorsal sub-
 circular marking not very heavily pigmented, subpentagonal..... **102. freycinetiae**
5. Head capsule with posterior arms more rounded, dorsal subcircular marking briefly
 truncate posteriorly and preceded by a pair of unpigmented transverse spots

..... 99. *callosa*
 Head capsule with posterior arms more obtuse, dorsal subcircular marking sub-
 angular posteriorly and not preceded by a pair of distinct pale spots.....

..... 105. *straminipennis*

99. *Promecotheca callosa callosa* Baly, 1876: 128 (N. Australia; BMNH).—Gressitt 1957: 292 (Merauke).

SE NEW GUINEA: 1, Yule I. (BUDAPEST).

DISTRIBUTION: N. Australia (N. T., Qld.), New Guinea (SW, SE).

100. *Promecotheca callosa major* Gressitt, n. subsp. Fig. 32 a-c.

Male: Shiny black with elytron bright reddish orange. Body largely glabrous above except for a few hairs around eyes and on apical margin of elytron; ventral surfaces partly glabrous but with pale hairs on posterior portions and sides of abdominal segments; legs with suberect hairs on undersides of femora.

Head much broader at eyes than on neck but narrower than widest portion of prothorax; occiput smooth, with a depression at center. *Antenna* $3/4$ as long as body, slender, shiny on basal $1/2$ and pubescent on remainder; segment 1 somewhat larger and longer than 2; 3 longer than 1+2 and slightly longer than 4; 5 barely longer than 4, distinctly longer than 6; 6-10 decreasing strongly in length; 11 about as long as 7. *Prothorax* not quite as long as broad; smooth, shiny, very weakly and sparsely punctured; middle of side strongly swollen with a slight depression above at each side of center of disc; strong

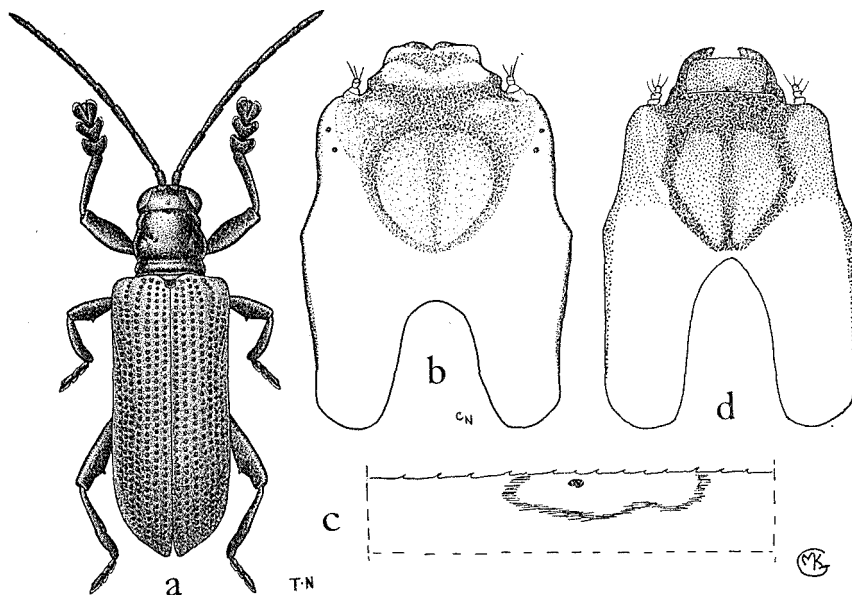


Fig. 32. a, *Promecotheca callosa major* n. ssp.; b, same, head capsule, dorsal view; c, same, first instar larval mine in *Pandanus* leaf; d, *P. pandani* Gr., topotypic, head capsule, dorsal view.

constriction behind median swelling and swollen area parallel to basal margin quite wide near side. *Scutellum* flat and punctured anteriorly; elevated, smooth and suboblong posteriorly. *Elytron* nearly 5× as long as broad, subparallel-sided and subrounded apically; disc with strong large punctures with a few extra punctures between rows 3 and 4 and between 5 and 6. *Ventral surfaces* fairly smooth and shiny with progressively more punctures towards posterior end of abdomen; legs slender with hind femur straight and strongly toothed preapically. Length 12.2 mm; breadth 3.7.

Female: Antenna 2/3 as long as body; last abdominal segment swollen and densely punctured on each side near posterior margin and moderately swollen and punctured near side. Length 12 mm; breadth 4.

Paratypes: Length 10.9–12.0 mm; breadth 3.4–4.0.

Holotype ♂ (BISHOP 3510), Karimui, 1000 m, S of Goroka near Papua border, NE New Guinea, 5.VI.1961, M. & L. Gressitt, in large *Pandanus*; allotype ♀ (BISHOP), same data; 8 paratopotypes, 2–7.VI.

Differs from *callosa* Baly in being larger, with prothorax shorter, more swollen near base, and with extra punctures on elytron just before apical declivity. The populations in southern New Guinea are closer to the typical form from N. Australia, but might represent another subspecies.

Larva: Head capsule just over 2/3 as broad as long, much wider near middle than anteriorly and constricted in between, gradually narrowed from middle to posterior end; posterior emargination gradually narrowed anteriorly; posterior lobes rounded behind, pigmented mark on anterior portion nearly forming a circle. Pronotum with anterior lobe nearly granulose, remainder of sclerotized portion smooth and only slightly wrinkled in a transverse fashion; spiracles rather small, slightly broader than high; middle abdominal tergite rather smooth, with a transverse crease on each side of middle bordered by a weakly swollen and finely granulose area; end of last abdominal segment feebly bilobed. Length 15 mm.

HOST: *Pandanus*.

DISTRIBUTION: NE New Guinea.

101. *Promecotheca pandani* Gressitt, 1960: 82, fig. 23a (Adelbert Mts.; BISHOP). Fig. 32d.

Some of the specimens from Dreikikir had a bright red band in apical 1/3, preceding the dark apical area. This band disappeared as the specimens dried. A large series was taken with the type, but this information was omitted with the original description.

HOST: *Pandanus*.

NW NEW GUINEA: 1, Araucaria Camp, 800 m, III.1939, Toxopeus, Neth. Ind.-American Exped. NE NEW GUINEA: 4, Dreikikir, 300 m, W. of Maprik, 23–24.VI.1961, M. & L. Gressitt; 2, Sugoitei, 900 m, 24.I.1959, W. W. Brandt.

Larva: Head capsule subparallel-sided in posterior 1/2, weakly constricted behind middle, distinctly constricted between middle and anterior portion and much narrower anteriorly than at middle; posterior emargination somewhat evenly narrowed in posterior 3/4 and more strongly narrowed anteriorly; dorsal pigmentation forming a subcircular ring which is produced posteriorly towards posterior emargination and with a weak mid-longitudinal stripe. Pronotum minutely punctured on anterior lobe, smooth with only few sub-

transverse depressed lines on remainder; spiracles very low, much broader than high; mid-abdominal tergite with a continuous transverse groove bordered before and behind on each side with a somewhat swollen pale area. Terminal process of last abdominal segment slightly bilobed with an upward projecting tubercle on each lobe. Length 12 mm.

HOST: *Pandanus* (large).

DISTRIBUTION: New Guinea (NW, NE).

102. *Promecotheca freycinetiae* Gressitt, 1960: 79, fig. 21 (Biak; BISHOP).

More were taken at type locality, VI, 1962, Gressitt & Sedlacek.

HOST: *Freycinetia* (large).

DISTRIBUTION: NW New Guinea (Biak I.).

103. *Promecotheca palmivora* Gressitt, 1960: 80, fig. 22 (Cyclops; BISHOP).

HOST: Unknown palm (G-3484).

DISTRIBUTION: NW New Guinea.

104. *Promecotheca pubescens* Gressitt, 1957: 293, fig. 25e (Maffin Bay; CAS).

DISTRIBUTION: NW New Guinea.

105. *Promecotheca straminipennis* Weise, 1922: 69 (New Britain; STOCKHOLM).—Gressitt, 1957: 291, fig. 25 a-d; 1960: 83.

Only 2 specimens, not "many", were taken at Wanuma, Adelbert Mts., X, 1958; several were taken on Manus.

HOST: *Pandanus* (large).

DISTRIBUTION: New Britain, Manus, NE New Guinea.

106. *Promecotheca papuana* Csiki, 1900: 80 (Simbang, Huon Gulf; BUDAPEST).—See Gressitt, 1957: 287, fig. 24, pl. 15f for synonymy, etc.; 1959: 119-48, figs., for biology, etc.

DISTRIBUTION: NE New Guinea, Manus, New Britain.

Tribe GONOPHORINI

KEY TO GENERA

1. Elytron with 3 costae (sometimes interrupted) 2
 Elytron with only 2 costae **Agoniella**
2. Pronotum subevenly convex, not very broadly margined as a rule **Aspidispa**
 Pronotum uneven, strongly convex, deeply impressed at side of disc, and with
 broad, often serrate, lateral margin which is generally widened anteriorly.....
 **Gonophora** (*Micrispa*)

Genus *Agoniella* Weise, 1911

107. *Agoniella horsfieldi* (Baly), 1878: 43 (Gonophora; Java; BMNH).—*Agonia* (*Agoniella*) *Horsfieldi*: Weise, 1911, Col. Cat. **35**: 57.

DISTRIBUTION: Sulu Is., Java, New Guinea.

Genus *Aspidispa* Baly, 1869

The larvae in this genus are leaf-miners in palms, particularly in rattans.

KEY TO ADULTS

1. Elytron broader anteriorly than posteriorly, wider anterior to middle than at middle 2
- Elytron narrowed anteriorly, parallel-sided, or widest at middle 12
- 2 (1). Prothorax broader than, or about as broad as, a single elytron 3
- Prothorax distinctly narrower than a single elytron; elytron very broad anterior to middle, black on basal 2/3, orange on remainder and on pronotum; elytral ridges almost obsolete **108. lata**
- 3 (2). Elytral costae largely complete, costa 3 usually depressed postbasally 4
- Elytral costae quite irregular, depressed at intervals, 2 and 3 largely obsolete; prothorax more than 2× as broad as long; elytron very short and broad anteriorly; largely rusty brown **109. papuana**
- 4 (3). Elytral costa 2 at least in part much closer to 3 than to costa 1 5
- Elytral costa 2 more or less equidistant between 1 and 3 7
- 5 (4). Elytron largely black, marked with pale; pronotum partly pitchy, with 4 swollen, generally pale areas, forming an oblong spanning central swelling 6
- Elytron red on anterior 1/2 or 2/5, blackish on remainder; pronotum red ...
..... **110. palmella**
- 6 (5). Pronotum largely orange, with median black stripe; elytron pitchy black with pale basal and preapical areas; elytron distinctly broadened near base...? **111. ifara**
- Pronotum pitchy or brown with 4 small raised areas paler; elytron blackish with extreme base and costa 2 largely pale; elytron weakly broadened near base **113. striata**
- 7 (4). Elytron distinctly narrowed in anterior 1/2, straight or slightly concave in central portion of side 8
- Elytron not strongly narrowed, slightly convex at side 10
- 8 (7). Side of prothorax and apex of elytron distinctly toothed; side of pronotal disc subevenly convex near middle; pronotum largely or entirely dark at side; length 3.6–4.0 mm 9
- Side of prothorax and apex of elytron weakly toothed; side of pronotal disc with a narrow transverse ridge; pronotum pale at side; elytron dark brown with costae about 1/2 yellow; length 5.2 mm **112. expansa**
- 9 (8). Pronotum with rather broad, shiny, impunctate median area and large impunctate swellings at side; pronotum largely black; elytron pale anteriorly and black posteriorly **114. sedlaceki**
- Pronotum with fairly narrow, medially impressed, impunctate median area and fairly small impunctate swellings at side; pronotum largely pitchy; elytron pitchy with costa 2 paler **116. rattana**
- 10 (7). Pronotum entirely pale, with rather strong punctures and not very evenly convex on center; elytron pale basally or broadly striped medially with pale... 11.

- Pronotum pale with a median pitchy stripe, rather evenly convex and with fairly small punctures; elytron with costa 1 pale preapically and costa 2 pale on basal 3/5 **111. ifara**
- 11 (10). Prothorax broadest well anterior to middle, with punctures rather heavy but few; elytron red on basal portion and outer margin **115. pinangae**
 Prothorax broadest just anterior to middle, with punctures fairly dense and numerous; elytron with a broad median pale stripe (sometimes narrowed beyond basal 1/5) **117. wilsoni**
- 12 (1). Elytron distinctly narrowed anteriorly from behind middle, or subparallel-sided... 13
 Elytron distinctly convex at side in dorsal outline 17
- 13 (12). Elytron narrowed anteriorly from behind middle; costae strong 14
 Elytron subparallel-sided except near extreme base and apex; costae weak..... 15
- 14 (13). Elytral costae 2-3 largely obsolete; elytron entirely black or pitchy; length 4.0-4.2 mm **?128. bicolor**
 Elytral costae 2-3 largely distinct; elytron pale on basal 1/5; length 4.5-5.0 mm..... **118. albertisi**
- 15 (13). Elytron long and slender, with fine punctures; pronotum widest anterior to middle, strongly punctured..... 16
 Elytron short, with large punctures; pronotum widest near middle, weakly punctured on central portion **119. nigratarsis**
- 16 (15). Elytron about 3× as long as broad; head and pronotum red; elytron brownish pitchy with slight metallic tint..... **120. flagellariae**
 Elytron nearly 4× as long as broad; head and pronotum blackish, generally pale on central portion of latter; elytron blackish with pale outer margin **121. maai**
- 17 (12). Elytral costae 1-3 all distinct, subequally raised 18
 Elytral costae 2-3 partly or largely much lower than costa 1 21
- 18 (17). Pronotum with a broad median impunctate area; elytron at least weakly striped with pale..... 19
 Pronotum with a narrow median impunctate area with strong punctures on each side..... 20
- 19 (18). Prothorax strongly narrowed basally in a fairly straight line; elytron palish on extreme base and pitchy on part of costa 2 **? 123. meijerei**
 Prothorax subevenly convex at side; elytron with costa 2 almost entirely pale, and costa 1 often partly pitchy **122. calami**
- 20 (18). Dorsum entirely blackish; elytron distinctly convex at side **125. daemonoropa**
 Head, pronotum and base of elytron yellowish red; elytron weakly convex at side **124. horvathi**
- 21 (17). Elytral costa 3 fairly distinct, with costa 2 depressed..... 22
 Elytral costae 2-3 both partly or largely depressed 23
- 22 (21). Elytral costa 2 depressed for most of length and costa 3 not more strongly raised in middle than elsewhere **126. subviridipennis**
 Elytral costa 2 more depressed in middle and costa 3 more strongly raised in middle; dorsum largely purplish blue to pitchy brown or black **127. korthalsiae**
- 23 (21). Pronotum strongly punctured on each side of median strip; elytron with trans-

- verse ridges not higher than costa 2; pronotum reddish with center pitchy; elytron greenish black..... **129. rotanica**
- Pronotum with a broad, evenly convex central area; elytron with transverse ridges higher than at least middle portion of costa 2; head, prothorax and appendages ochraceous; elytron pitchy brown to black **128. bicolor**

KEY TO LARVAE

1. Head capsule about 1/3 broader posteriorly than anteriorly..... 2
 Head capsule less than 1/4 broader posteriorly than anteriorly; weakly convex (nearly straight) at side; a black dot near side about 1/6 length from anterior margin; posterior emargination triangular, with straight sides **111. ifara**
2. Head capsule with frontal suture weakly convex externally, nearly straight, not sinuate or obtuse near middle; nearly 2× as long as breadth anteriorly 3
 Head capsule with frontal suture sinuate, bending somewhat outward near middle; much less than 2× as long as breadth anteriorly..... 4
3. Posterior lobes of head capsule rather widely diverging; posterior emargination only slightly longer than wide; without grooves behind antennal insertion..... **122. calami**
 Posterior lobes of head capsule not very widely diverging; posterior emargination distinctly longer than broad; several subarcuate longitudinal grooves behind antennal insertion..... **128. bicolor**
4. Head capsule less than 1.5× as long as breadth anteriorly; posterior emargination very little longer than broad 5
 Head capsule more than 1.5× as long as breadth anteriorly; posterior emargination distinctly longer than broad; side weakly sinuate; anterior section of dorsal pattern extending acutely backward..... **127. korthalsiae**
5. Head capsule with posterior emargination slightly longer than broad; frontal suture strongly arcuate; dorsal pattern widest near middle, with anterior portion gradually narrowed posteriorly..... **110. palmella**
 Head capsule with posterior emargination practically as broad as long; frontal suture weakly arcuate; dorsal pattern widest anteriorly, with anterior portion unevenly narrowed posteriorly..... **114. sedlaceki**

108. *Aspidispa lata* Gressitt, n. sp. Fig. 33a.

Male: Orange ochraceous to shiny black; head, pronotum and scutellum pale orange ochraceous, slightly pitchy on mouthparts; antenna pitchy, reddish at base; elytron shiny black with a slight bluish to greenish tinge on basal 2/3, ochraceous on remainder; ventral surfaces pitchy on metathorax, ochraceous on remainder; fore leg ochraceous, mid and hind legs pitchy.

Head 3/4 as broad as prothorax; occiput with a central depression behind level of posterior margin of eyes; rostrum short, only moderately compressed and projecting slightly upward; frons about 3× as broad as deep. *Antenna* slightly over 1/2 as long as body; segment 1 pyriform; 2 subcylindrical, nearly as long as 1; 3 more slender, slightly longer than 2; 3-10 decreasing very slightly in length and gradually thickening; 11 longest, subacute apically. *Prothorax* slightly over 1/2 as long as broad, sinuate at side and widest well anterior to middle with a slight constriction between anterior swelling and anterior

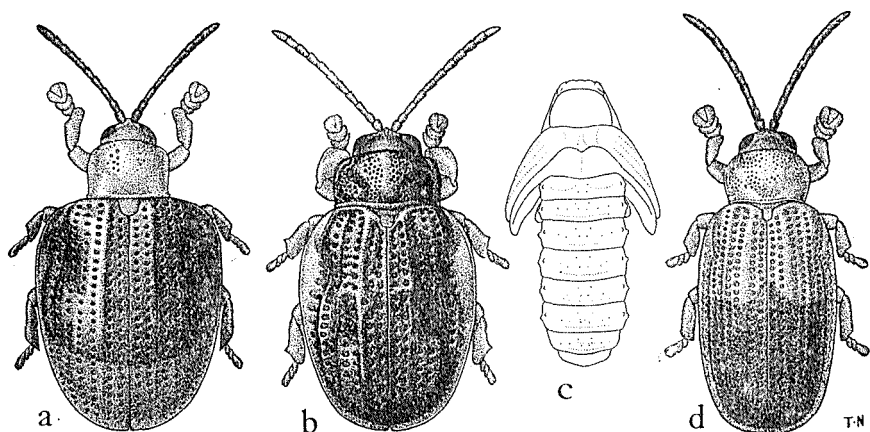


Fig. 33. a, *Aspidispa lata* n. sp.; b, *A. papuana* n. sp.; c, *A. palmella* Gr., dorsum of pupa, Nabire; d, same, adult, Nabire.

corner; disc subevenly convex but depressed behind middle of side, sparsely punctured on central portion and on anterior and posterior raised portions of side. *Scutellum* subtrapeziform, smooth. *Elytron* nearly $1/2$ as broad as long, much broader than prothorax, widest near end of basal $1/4$ and strongly narrowed at side and more obliquely narrowed posteriorly; outer margin very weakly serrate posteriorly; disc smooth and shiny, without distinct costae, but punctured in 8 fairly regular rows, the punctures relatively small and shallow but quite distinct. *Ventral surfaces* weakly punctured at side of metathorax and very finely punctured on abdomen. *Legs* fairly broad and somewhat flattened; fore tarsus nearly $3/4$ as broad as long. Length 3.9 mm; breadth 2.3.

Female: Antenna not quite $1/2$ as long as body; elytron with dark area more purplish pitchy; ventral surfaces and legs entirely pale. Length 3.6 mm; breadth 2.2.

Paratypes: Length 3.5–4.0 mm; breadth 2.1–2.4.

Holotype (BISHOP 3511), Enarotadi (Enarotali), 1800 m, Wissel Lakes, 6 8. VIII. 1962, J. Sedlacek, on small rattan; allotype ♀ (BISHOP), and 11 paratypes (BISHOP, CAS, USNM, BMNH, ANIC), same data.

Differs from known species in having elytron very broad anteriorly and without costae.

HOST: Rattan.

DISTRIBUTION: NW New Guinea.

109. *Aspidispa papuana* Gressitt, n. sp. Fig. 33b.

Pitchy brown to pale brown or ochraceous; head largely pale brown, darker brown behind eyes; antenna testaceous; pronotum pitchy black across central portion, more brownish anteriorly and near base with marginal area paler brown; scutellum ochraceous; elytron pale reddish brown to slightly pitchy, testaceous on posterior portion of outer border; ventral surfaces and legs ochraceous.

Head $2/3$ as broad as prothorax, subeven above with slight median depressed line near level of hind borders of eyes; rostrum $1/3$ as long as scape, fairly narrow; frons quite

short. *Antenna* about $1/2$ as long as body; segment 1 nearly as broad as long, subtruncate apically; 2 subcylindrical, nearly as long as 1; 3 longer and more slender; 4 slightly shorter than 3, 4-10 varying slightly in length; 11 longest, acute apically. *Prothorax* more than $2\times$ as broad as long, sinuate anteriorly and subtruncate in central portion of base; side subevenly convex and finely toothed, with a slight notch near anterior angle; disc slightly raised and impunctate on a median strip, closely and deeply punctured on much of side, with rather weak pre- and postmedian lateral swellings. *Scutellum* narrowed and raised posteriorly, rounded-truncate apically. *Elytron* nearly $1/2$ as long as broad, broadly rounded in anterior $1/3$ and strongly narrowed posteriorly; disc with costa 1 fairly distinct but uneven, somewhat depressed anterior to middle, costa 2 obsolete behind middle and not very strongly raised posteriorly, costa 3 strongly depressed at end of basal $1/4$, moderately distinct but not strongly raised on remainder. *Ventral surfaces* not very distinctly punctured, in part microgranulose. *Legs* fairly slender. Length 3.3 mm; breadth 2.4.

Paratype: Dorsum darker, largely dark pitchy brown to blackish but reddish brown on all of outer margin of elytron. Length 3.3 mm; breadth 2.15.

Holotype (BISHOP 3512), Oriomo Gov. Agric. Sta., 10 m, Oriomo R., N of Daru, W. Papua, 28.X.1960, Gressitt, on *Calamus*; paratype (BISHOP), Brown R., 8 m, nr. Port Moresby, Papua, 5.XI.1960, Gressitt, on *Daemonorops*.

Differs from *lata* Gr. in being slightly less broad, with elytral costae more distinct, and coloration different.

HOSTS: *Calamus*, *Daemonorops* (rattans).

DISTRIBUTION: New Guinea (SE).

110. *Aspidispa palmella* Gressitt, 1960: 85, figs. 24 a-b (Cyclops Mts.; BISHOP). Fig. 33 c-d.

NW NEW GUINEA: Nabire, S. Geelvink Bay, 20 m, 4.VII.1962, Gressitt, on *Korthalsia*. NE NEW GUINEA: Dreikikir, 350 m, W of Maprik, Sepik, 23.VI.1961, M. & L. Gressitt, on *Dieffenbachia*.

Pupa: Yellowish testaceous; eye pitchy black. Head distinctly concave between eyes with a low granulate ridge on each side near inner edge of eye. Pronotum convex anteriorly, slightly convex at side; disc with a number of punctures visible on each side of median line; fore wing with punctures visible; metanotum smooth. Abdominal tergites 2-7 each with a pair of distinct tubercles near middle followed by a subtransverse row of 6 smaller tubercles; each spiracle on side of a rounded swelling on upper portion of side; last tergite fairly smooth, with a slight depression and a few setae on each side, and apical margin weakly obtuse. Length 6 mm; breadth 2.8.

HOSTS: Small palms, rattan, ?*Dieffenbachia*.

DISTRIBUTION: New Guinea (NW, NE).

111. *Aspidispa ifara* Gressitt, n. sp. Fig. 34 a-b.

Yellowish testaceous to pitchy black: head largely testaceous, briefly pitchy on middle of postoccipt, base of labrum and apical portion of mandible; antenna pitchy black with segments 1-2 and base of 3 reddish with portions of last few segments reddish clothed with blackish hairs; pronotum testaceous with a broad median pitchy stripe; scutellum pitchy

black; elytron pitchy black with middle of base and 2nd interstice yellowish to middle and 1st yellowish for a short distance just before top of posterior declivity, also external margin somewhat brownish behind middle. Ventral surfaces testaceous, becoming brown on last segment of abdomen; legs testaceous with hind tibia largely pitchy. Body largely glabrous, with a few hairs at side and apex of abdomen and on tibia and tarsi as well as antenna.

Head slightly narrowed behind eyes; occiput convex and largely smooth, with a few distinct punctures posteriorly; vertex with a very brief truncate interantennal process; frontoclypeus transverse, with an obtuse raised portion meeting rostrum; eye large, weakly concave posteriorly. *Antenna* $1/2$ as long as body, moderately stout; segment 1 distinctly longer than broad, slightly longer than 2; 3 as long as 1, barely longer than 4; 4 = 5; 6 slightly shorter than 5; 6-10 decreasing slightly in length; 11 about as long as 3. *Prothorax* much broader than long, strongly convex above, subevenly rounded at side with widest portion just anterior to middle; disc subevenly convex in center, with a narrow indistinct median impunctate strip and with a number of moderate deep punctures on each side of median area and along anterior portion slightly behind anterior margin; side of disc moderately raised before and behind middle, with several distinct punctures in intervening cavity. *Scutellum* narrowed anteriorly and subparallel-sided posteriorly, nearly truncate behind. *Elytron* $3.3\times$ as long as broad, weakly convex at side, moderately narrowed posteriorly, distinctly denticulate on apical margin; disc very regularly punctured with 4 double rows of punctures, the punctures on most rows broader than long; alternate interstices moderately and subequally raised except that 2nd slightly depressed anterior to middle and 3rd deeply depressed briefly just behind humeral area. *Ventral surfaces* largely smooth and shiny with moderate punctures on metepisternum and fine sparse punctures on last few abdominal segments and near lateral margins of preceding segments. *Legs* quite short; tarsi very broad. Length 6.5 mm; breadth 2.0.

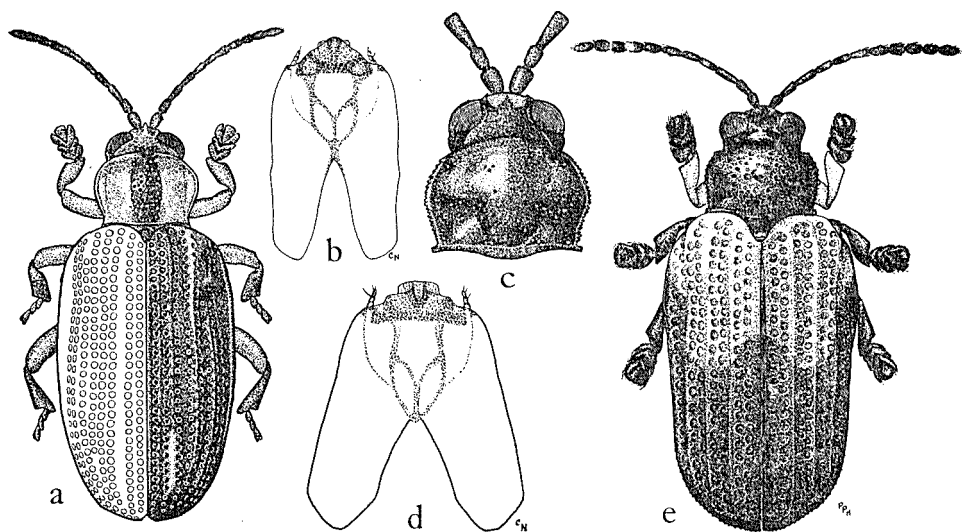


Fig. 34. a, *Aspidispa ifara* n. sp.; b, same, larval head capsule; c, *A. striata* n. sp.; d, *A. sedlaceki* n. sp., larval head capsule; e, same, adult.

Paratypes: Length 4.7–5.4 mm; breadth 1.9–2.2.

Holotype (BISHOP 3513), Ifar, 300 m, E. Cyclops Mts., NW New Guinea, 20. VI. 1959, on slender-pinnate palm, Gressitt; 4 paratopotypes 400–750 m, 23. VI. 1959, Gressitt, 27–28. VI. 1962, Gressitt, 9. IX. 1962, Sedlacek; 2 additional, W. Cyclops Mts., 100–250 m, palm 3475, Gressitt. Additional specimens from Ifar may represent the opposite sex or another species.

Differs from *expansa* Gr., in having apex of elytron more distinctly denticulate, side of pronotal disc more evenly convex and not subcarinate, occiput and pronotum not grooved medially, head largely pale, 1st elytral costa largely dull, antenna black instead of pale in central portion and paler instead of black at base and apex.

Larva: Whitish testaceous, more yellowish on pronotum; testaceous on head capsule with anterior border and mandibles pitchy reddish and margins and dorsal pattern pale reddish. Head capsule $\frac{1}{4}$ longer than broad, less than $\frac{1}{4}$ broader posteriorly than anteriorly; dorsal pattern parallel-sided in anterior $\frac{2}{3}$ and facial suture arching strongly outward towards antennal insertion; posterior emargination triangular, with nearly straight sides and distinctly longer than broad. Pronotum granulose anteriorly, followed by a smooth slightly raised narrow obtuse area and microrugulose on remainder. Remainder of tergites microreticulate, each with a narrow transverse granulose band; last tergite obtusely rounded apically; sternites similar to tergites. Length 5.6 mm; breadth 1.8.

HOSTS: Slender-pinnate palms.

DISTRIBUTION: New Guinea (NW).

112. *Aspidispa expansa* Gressitt, 1957: 304, fig. 28b (Huon Pen.; SAM).

DISTRIBUTION: New Guinea (NE).

113. *Aspidispa striata* Gressitt n. sp. Fig. 34c.

Ochraceous to pitchy brown; head pale reddish brown, darker behind eyes; antenna pitchy brown, reddish on segments 1–2; pronotum ochraceous, pitchy along central portion and pale anteriorly and at side; scutellum pitchy; elytron pitchy brown with costae 1 and 2 largely pale and distinctly pale just before their apices; ventral surfaces ochraceous with last abdominal sternite pitchy; legs ochraceous.

Head $\frac{3}{4}$ as broad as prothorax, slightly punctured above, with a slight median depression; rostrum $\frac{1}{5}$ as long as scape, fairly narrow; frons much broader than long, convex. *Antenna* nearly $\frac{3}{5}$ as long as body; segment 1 stout, thickest near middle; 2 as long as 1, subparallel-sided; 3 longer and more slender; 4 shorter than 3; 4–10 decreasing slightly in length; 11th $\frac{1}{2}$ again as long as 1. *Prothorax* about 2× as broad as long, strongly convex at side and widest well anterior to middle, with outer margin distinctly denticulate and not indented anteriorly; disc somewhat raised medially on an impunctate strip, densely punctured on each side of strip but with pre- and postmedian lateral swellings largely impunctate. *Scutellum* fairly broad and smooth, raised and rounded apically. *Elytron* about 3× as long as broad, broadest at end of basal $\frac{1}{4}$ and gradually narrowed and rounded posteriorly; disc with costae distinct, costa 1 bent distinctly outward before end of basal $\frac{1}{3}$, costa 3 strongly depressed behind humerus. *Ventral surfaces* rather smooth and shiny with fine sparse punctures. *Legs* moderately stout with very broad tarsi.

Length 4.2 mm; breadth 1.9.

Paratypes: Some specimens with pronotum largely pale and costa 2 very pale; others largely pitchy with only lateral swellings of pronotum, extreme base of elytron and most of costa 2 pale. Length 3.6–4.0 mm; breadth 1.7–1.9.

Holotype (BISHOP 3514), Tamaui, 150 m, Maprik, Sepik, NE New Guinea, 15. X. 1957, Gressitt, on broad-leafed palm; 6 paratypes (BMNH, ANIC); 1 paratopotype; 3, Ifar, 300–500 m, 20. VI. 1959, 28–29. VI. 1962, Gressitt, on rattans; 1, Waris, 450 m, 8–15. VIII. 1959, Maa; 1, Bomberi, 700–900 m, nr. Fak Fak, Vogelkop, 5. VI. 1959, Gressitt, on slender-leafed palm.

Differs from *expansa* Gr. in being more elongate, darker and with costa 2 almost entirely pale.

HOSTS: Palms and rattans.

DISTRIBUTION: New Guinea (NE, NW).

114. *Aspidispa sedlaceki* Gressitt, n. sp. Fig. 34 d–e.

Male: Pale testaceous to shiny black; head black above and pitchy beneath with paler palpi; antenna black except for part of submarginal area pale anteriorly; scutellum black; elytron pale yellowish testaceous on much of basal 2/5, pitchy black on remainder with apex slightly brownish; ventral surfaces pale testaceous along median portion of thoracic sternites and pitchy at side with abdomen more broadly pitchy medially and pale at sides of segments 1–4; legs pale testaceous with tarsi and mid and hind tibiae pitchy.

Head 3/4 as broad as prothorax, largely impunctate; rostrum very short, projecting upward; frons about 2× as broad as long and partly concave. *Antenna* nearly 3/5 as long as body; segment 1 subpyriform; 2 barely longer than 1 and distinctly shorter than 3; 4–10 subequal in length but increasing in thickness; 11 nearly as long as 1+2. *Prothorax* fully 2× as broad as long, with side convex, broadest anterior to middle and finely toothed; disc subevenly convex in central portion and hardly punctured along median strip, irregularly and in part deeply punctured on remainder but with both lateral swellings minutely punctured. *Scutellum* narrow, raised and subtruncate apically. *Elytron* about 3× as long as broad, broadest near end of basal 1/3 and gradually narrowed posteriorly; apex obliquely rounded and finely toothed; disc with costae distinct, strongest posteriorly. *Ventral surfaces* largely smooth and shiny with only a few fine punctures. *Legs* relatively slender, tarsi fairly broad. Length 3.65 mm; breadth 1.65.

Female: Antenna about 1/2 as long as body. Length 3.6 mm; breadth 1.6.

Paratypes: Length 3.2–3.8 mm; breadth 1.6–2.0.

Holotype ♂ (BISHOP 3515), Mt. Missim, 1320 m, nr. Wau, NE New Guinea, 2. II. 1963, J. Sedlacek, on rattan; allotopotype ♀ (BISHOP), same data; many paratypes (BISHOP, CAS, USNM, BMNH, ANIC, DASF), same data.

Differs from *lata* Gr. in being much narrower, with elytron more carinate and coloration different.

Larva: Pale testaceous, largely whitish with anterior portion of head capsule pitchy, remainder of head capsule ochraceous and much of pronotum very pale ochraceous. Head capsule distinctly longer than broad, gradually widened posteriorly and about 1/3 again as

wide near posterior end as near anterior end; surface quite flat and smooth, medially bearing a reddish brown pattern of lines outlining a figure simulating a beetle with acute elytra and the pronotum extending posteriorly over scutellum; labrum transverse, convex in center; antenna not very long, strongly tapering; posterior emargination of capsule triangular, nearly as broad behind as long. Pronotum with anterior margin convex, distinctly sinuate; disc finely granulose anteriorly and minutely reticulate with weak subtransverse creases on remainder. Meso- and metanotum minutely punctured to slightly microreticulate; sides slightly produced and rounded. Abdominal tergites microreticulate in central portions, each with a narrow transverse groove bordered with minute granules; side of each segment with a small rounded projection; spiracles small, round. Ventral surfaces microreticulate medially, each segment with a narrow transverse granulose band. Length 6 mm; breadth 1.5.

HOST: Rattan.

DISTRIBUTION: New Guinea (NE).

115. *Aspidispa pinangae* Gressitt, n. sp. Fig. 36a.

Pale ochraceous to blackish with a somewhat bluish tinge; head, prothorax, and scutellum pale ochraceous; antenna pitchy brown with base and apex reddish; elytron ochraceous on base and outer margin, black with a bluish tinge on remainder; ventral surfaces and legs pale ochraceous except tarsi slightly reddish.

Head nearly $3/4$ as broad as prothorax, largely impunctate, with a short depression near center; rostrum about $1/5$ as long as scape; frons more than $2\times$ as broad as long. *Antenna* about $1/2$ as long as body; segment 1 thickest slightly beyond middle; 2 more oblong, nearly as long as 1; 3 somewhat longer and more slender; 3-10 decreasing very slightly in length; 11 nearly as long as 1+2. *Prothorax* about $2\times$ as broad as long, transverse anteriorly and truncate at middle of base; side strongly arched anteriorly and widest well anterior to middle; disc subevenly convex at central portion but with some deep punctures in part reaching almost to center, anterior and posterior lateral swellings largely impunctate. *Scutellum* rounded-truncate apically. *Elytron* broadest at about end of basal $1/4$, weakly narrowed posteriorly, apex obliquely rounded and minutely toothed; disc with punctures fairly large, regular, and largely shallow, costa 1 quite strong, costa 2 and 3 slightly weaker with 3 deeply impressed behind humerus. *Ventral surfaces* largely shiny, with very few punctures at sides. *Legs* not very stout but tarsi quite broad. Length 4 mm; breadth 2.

Holotype (BISHOP 3516), Mangrowawa, 50 m, central Biak I., 30. X. 1959, Gressitt, on small-leaved rattan; 3 paratopotypes (BISHOP, BMNH), same data, except *Pinanga*-like palm.

Differs from *expansa* G. in being shorter, more parallel-sided, with anterior portion of body pale and posterior portion blackish.

HOSTS; *Pinanga*, rattan.

DISTRIBUTION: NW New Guinea (Biak).

116. *Aspidispa rattana* Gressitt, n. sp. Fig. 35 a-b.

Pitchy black to testaceous; head bluish black above, largely pale brown beneath; antenna pitchy black; pronotum pitchy black, with anterior portion of side testaceous and an-

terior swelling of side pale brown; scutellum pitchy; elytron largely pitchy black, with costa 1 largely brown and costa 2 largely dull testaceous; ventral surfaces pitchy with a median pale stripe on thorax and a lateral pale stripe on abdominal segments 1-4; legs testaceous with tarsi pitchy and mid and hind tibiae and apices of mid and hind femora pitchy.

Head 4/5 as broad as prothorax, moderately punctured and very finely grooved in center; rostrum minute; frons more than $2\times$ as broad as long. *Antenna* 3/4 as long as body, thickened distally; segment 1 fairly stout, thickest beyond middle; 2 subcylindrical, nearly as long as 1; 3 much longer; 3-10 partially decreasing in length; 11 nearly as long as 1+2. *Prothorax* about $2\times$ as broad as long, subevenly convex in central portion with median strip largely punctate and weakly grooved along center and remainder largely rather densely punctured but more sparsely so on anterior and posterior swellings; side widest anterior to middle and finely toothed. *Scutellum* narrowed and rounded apically. *Elytron* more than $3\times$ as long as broad, broadest at end of basal 1/4, subevenly narrowed posteriorly and apex obliquely rounded and finely toothed; disc with rather close regular punctures and costae distinct but costa 1 broader than others and 3 deeply depressed at end of basal 1/4. *Ventral surfaces* largely impunctate, with a few punctures and wrinkles at side. *Legs* relatively slender but tarsi fairly broad. Length 4.1 mm; breadth 1.9.

Female (not associated for certain): Antenna less than 1/2 as long as body; elytron hardly expanded postbasally; ventral surfaces more extensively pale.

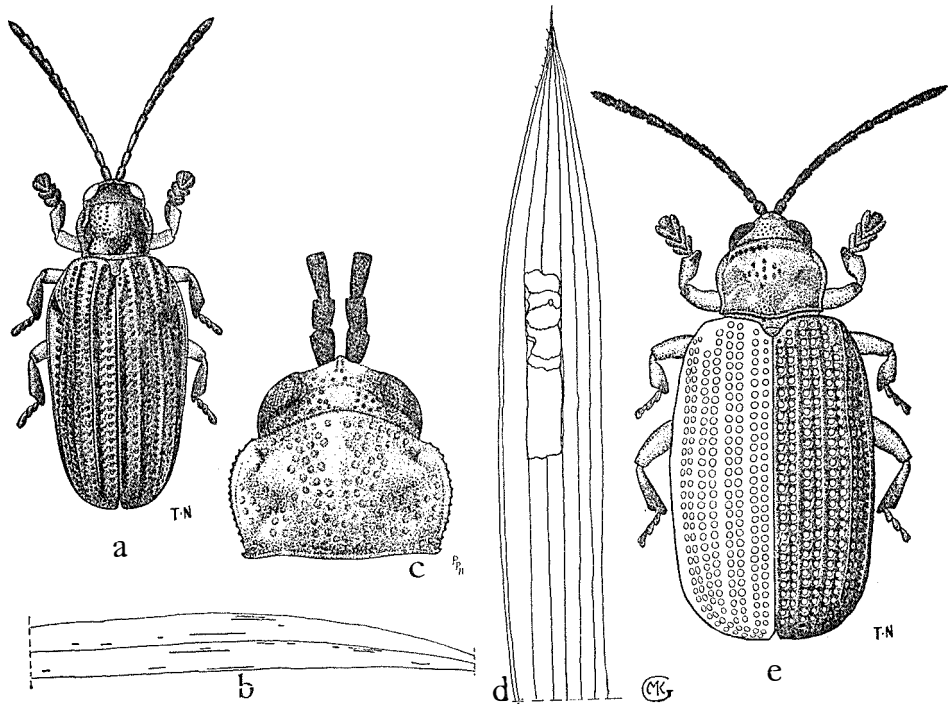


Fig. 35. a, *Aspidispa rattana* n. sp.; b, same, adult feeding marks on rattan leaflet; c, *A. wilsoni* n. sp.; d, same, mine in rattan leaflet; e, *A. flagellariae* n. sp.

Holotype ♂ (BISHOP 3517), Karimui, 1000 m, S of Goroka, nr. Papua border, 2. VI. 1961, M. & L. Gressitt; 3 ♂ paratopotypes (BISHOP, USNM), 2–8. VI. Two ♀♀ from same locality are not associated for certain.

Differs from *sedlaceki* Gr. in being more slender, longer, and darker.

HOSTS; Rattans, *Freycinetia*.

DISTRIBUTION: NE New Guinea.

117. *Aspidispa wilsoni* Gressitt, n. sp. Fig. 35 c–d.

Pale ochraceous to pitchy black; head and pronotum pale ochraceous; antenna black; scutellum pitchy; elytron pitchy black with base and a broad median stripe covering costae 1 and 2 pale ochraceous with extreme apex brownish; ventral surfaces ochraceous; pale along lateral portion of abdomen and slightly brownish on last sternite; legs testaceous with tarsi pitchy brown.

Head fully 3/4 as broad as prothorax, slightly punctured and grooved medially on posterior portion of occiput; rostrum very short; frons fully 2× as broad as long and distinctly raised. *Antenna* nearly 3/5 as long as body; segment 1 thickening nearly to apex; 2 more cylindrical and shorter but slightly oblique at apex; 3 longer than 1, 3–10 decreasing slightly in length; 11th 1.4× as long as 1. *Prothorax* 2× as long as broad, subevenly convex in central portion but with median strip slightly raised and impunctate and area on each side grossly punctured with anterior and posterior lateral swellings partly impunctate; side subequally convex, widest just anterior to middle and finely denticulate. *Scutellum* subparallel-sided and rounded apically. *Elytron* broadest near end of basal 1/4 but very slightly narrowed posteriorly and subtransversely rounded apically, with minute teeth; disc subregularly and not very deeply punctured, with costae distinct and subequally raised except for posthumeral depression of costa 3. *Ventral surfaces* largely shiny and very sparsely punctured. *Legs* not very stout but with tarsi broad. Length 3.7 mm; breadth 1.7.

Paratypes: Head sometimes partly pitchy above; pale elytral stripe sometimes narrowed to costa 2 beyond basal 1/4, and apex and margin entirely bluish black. Length 4 mm; breadth 1.8.

Holotype (BISHOP 3518), Dawai R., nr. Sumberbaba, Japen I., 7. XI. 1962, N. Wilson, on rattan; 1 paratopotype, 28. X. 1962; 1 paratype, Nabire, Geelvink Bay, 4. X. 1962, Wilson.

Differs from *pinangae* in being more elongate, with pronotum more heavily punctured and elytron medially striped.

HOST: Rattan.

DISTRIBUTION: NW New Guinea, Japen I.

118. *Aspidispa albertisi* Gestro, 1890: 265 (Fly R.; GENOVA).—Gressitt, 1957: 304.

SE NEW GUINEA: 3, Oriomo, nr. Daru, 30. X. 1960, Gressitt, on *Korthalsia*.

HOST: *Korthalsia*.

DISTRIBUTION: New Guinea (SE).

119. *Aspidispa nigratarsis* Gestro, 1890: 266 (Fly R.; GENOVA).

The specimen recorded in my first paper (Gressitt, 1957: 303) has been compared with the type and appears to be different, but is being held for more material.

DISTRIBUTION: SE New Guinea.

120. *Aspidispa flagellariae* Gressitt, n. sp. Fig. 35e.

Male: Testaceous to reddish and pitchy; head testaceous; antenna pitchy, slightly reddish near base and apex; pronotum reddish ochraceous; scutellum ochraceous; elytron reddish on extreme base, pitchy with a distinct reddish to metallic tinge on remainder; ventral surfaces testaceous; legs testaceous with tarsi pale brown.

Head 3/4 as broad as prothorax, feebly punctured and hardly grooved medially; rostrum nearly 1/4 as long as scape; frons about 2× as broad as long, moderately convex. *Antenna* 3/5 as long as body, fairly stout; segment 1 slightly longer than broad, broadest somewhat before apex; segment 2 more cylindrical, very slightly shorter; 3 about 1.3× as long as 1, slightly longer than 4; 4-10 decreasing slightly in length; 11 slightly longer than 3. *Prothorax* 2× as broad as long, convex at side and widest somewhat anterior to middle, with margin finely toothed; disc strongly convex with a narrow median impunctate strip with a very weak depressed median line and strong punctures on each side with anterior and posterior raised lateral areas finely punctured. *Scutellum* narrowed and rounded apically. *Elytron* subparallel-sided, obliquely convex and narrowed at base and apex; apex obliquely rounded and minutely toothed; disc with costae weak but punctures quite regular. *Ventral surfaces* shiny, very weakly punctured. *Legs* fairly slender but tarsi moderately broad. Length 4 mm; breadth 1.7.

Paratypes: Elytron often distinctly reddish at side and apex. Pronotum sometimes testaceous or slightly pitchy at side. Length 3.5-4.0 mm; breadth 1.2-1.8.

Holotype ♂ (BISHOP 3519), W. Cyclops Mts., 200 m, nr. Lake Sentani, 24. VI. 1959, Gressitt, from *Flagellaria*; 7 paratypes (CAS, USNM, BMNH, ANIC); 1, same data as type; 1, Ifar, Cyclops Mts., 22. VI. 1959, Maa; 1, Hollandia, 13. III. 1960, Maa; 2, Amok, 165 m, 6. I. 1960, Maa; 1, Waris, 8-15. VIII. 1959, Maa; 1, Dreikikir, 400 m, Sepik, 22. VI. 1961, M. & L. Gressitt.

Differs from other species in being long and parallel-sided, with elytral interstices almost equally raised and punctures rather small and more numerous.

HOST: *Flagellaria*.

DISTRIBUTION: New Guinea (NW, NE).

121. *Aspidispa maai* Gressitt, n. sp. Fig. 36b.

Male: Testaceous to pitchy black; head blackish above and partly pale beneath; antenna pitchy black; pronotum with central portion pale ochraceous and sides pitchy brown to blackish; scutellum orange basally and black apically; elytron largely pitchy black with reddish brown tinge, and outer margin testaceous; ventral surfaces testaceous, slightly tinged with pitchy brown; legs pale testaceous with tarsi and parts of tibiae and apices of femora pitchy brown.

Head 4/5 as broad as prothorax, moderately punctured, finely grooved in center of

occiput; rostrum about $1/4$ as long as scape; frons $2\times$ as broad as long, moderately convex. *Antenna* $3/4$ as long as body, fairly stout; segment 1 broadest near middle; 2 more cylindrical but thickest near middle, slightly shorter than 1; 3 nearly $1.5\times$ as long as 2, distinctly longer than 4; 4-10 decreasing very slightly in length; 11 barely longer than 3. *Prothorax* $2\times$ as broad as long, moderately convex at side and widest well anterior to middle with margin minutely toothed; disc strongly convex, with median portion only partly impunctate and with scattered deep punctures and with anterior and posterolateral swellings largely impunctate except for a few minute punctures. *Scutellum* narrowed and rounded-truncate apically. *Elytron* $4\times$ as long as broad, almost parallel-sided; apex broadly rounded with minute teeth; disc with interstices subequally raised and with punctures relatively small and numerous but regular. *Ventral surfaces* largely smooth but with a few fine punctures at side. *Legs* fairly slender except tarsi broad. Length 4.2 mm; breadth 1.6.

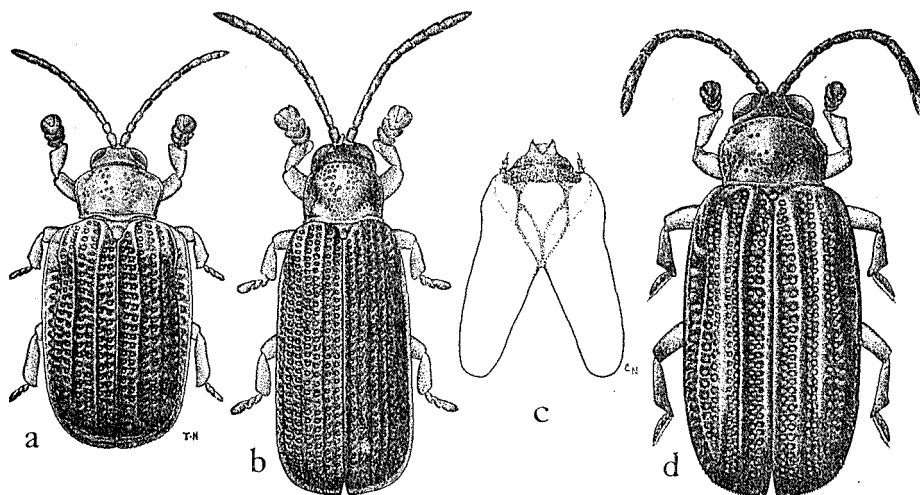


Fig. 36. a, *Aspidispa pinangae* n. sp.; b, *A. maai* n. sp.; c, *A. calami* n. sp., larval head capsule; d, same, adult.

Paratypes: Pronotum sometimes entirely pitchy black or entirely testaceous. Length 3.4-4.6 mm; breadth 1.4-1.6.

Holotype ♂ (BISHOP 3520), Waris, 450-500 m, S of Hollandia, 8-15. VIII. 1959, T. C. Maa; 8 paratopotypes (BISHOP, CAS, USNM, BMNH, ANIC), same data; 1 paratype, Hollandia, 24. I. 1960, Maa; 1 paratype, Bomberi, 700 m, nr. Fak Fak, Vogelkop, 5. VI. 1959, Gressitt, on *Pinanga*.

Differs from *flagellariae* in being longer and narrower, with elytral interspaces still more evenly raised and more finely punctured, and coloration darker.

HOST: *Pinanga* palm.

DISTRIBUTION: New Guinea (NW).

122. *Aspidispa calami* Gressitt, n. sp. Fig. 36 c-d.

Male: Testaceous to pitchy black; head largely blackish above and testaceous be-

neath; antenna dull brown, more reddish basally; pronotum pale ochraceous brown, slightly pitchy along median line and anterior and lateral borders; scutellum ochraceous, pitchy black apically; elytron pitchy black, with middle of extreme base and most of costa 2 testaceous; ventral surfaces testaceous, slightly pitchy at side of metathorax and apex of abdomen; legs testaceous with tarsi and apices of femora and tibiae slightly reddish to pitchy.

Head slightly more than $3/4$ as broad as prothorax, finely punctured at sides of occiput and briefly grooved medially just before level of hind margin of eyes; rostrum narrow, $1/5$ as long as scape; frons $2\times$ as broad as long, convex and finely punctured. *Antenna* $3/5$ as long as body, fairly stout; segment 1 short, slightly longer than broad; 2 about as long as 1, more cylindrical; 3 nearly $1.5\times$ as long as 2; 4 distinctly shorter, 4–10 subequal in length and becoming stouter; 11 slightly longer than 3. *Prothorax* slightly more than $2\times$ as broad as long, convex and finely toothed at side with widest portion well anterior to middle; disc subevenly convex, with median impunctate strip and irregular punctures at sides with anterior and posterior swellings largely impunctate. *Scutellum* narrowed and raised posteriorly, subrounded apically. *Elytron* subparallel-sided, weakly convex in central portion; apex obliquely rounded and minutely toothed; disc with costae strongly raised except for postbasal depression of costa 3. *Ventral surfaces* finely punctured at sides. *Legs* fairly small with tarsi not very broad. Length 3.4 mm; breadth 1.2.

Paratypes: Pronotum sometimes entirely testaceous and costa 1 of elytron sometimes brown with central portion testaceous. Length 3.4–3.6 mm; breadth 1.7–1.8.

Holotype ♂? (BISHOP 3521), Brown River, 10 m, nr. Port Moresby, 5.X.1958, Gressitt, on large-leaf *Calamus*: 2 paratypes (BISHOP), Oriomo Gov't. Sta., Oriomo R., nr. Daru, 28.X.1960, Gressitt, on *Calamus*.

Differs from *meijerei* (Ws) in having prothorax subevenly convex at side, with costa 2 of elytron almost entirely pale.

Larva: Pale whitish testaceous, very slightly pigmented on pronotum; ochraceous on head capsule, paler posteriorly, pitchy reddish anteriorly and reddish on borders of dorsal pattern. Head capsule $1.6\times$ as long as breadth near anterior border, nearly $1/3$ again as broad posteriorly as anteriorly, with side strongly sinuate and slightly constricted at posterior end of anterior $1/3$, broadest very near posterior end; dorsal pattern slightly constricted anterior to middle, anterior section strongly narrowed and acute posteriorly; posterior emargination triangular, only slightly longer than broad, side very weakly emarginate before apex. Pronotum granulate anteriorly, smoother behind anterior lobe, and fairly smooth but microrugulose and somewhat transversely striated on remainder with a very fine median groove. Remainder of tergites microreticulate, each with a transverse granulose strip; side of each segment with a slightly oblique compressed lobe situated well behind spiracle; last segment distinctly rounded in central portion. Length 5.8 mm; breadth 1.4.

HOST: *Calamus* sp. (rattan).

DISTRIBUTION: New Guinea (SE).

123. *Aspidispa meijerei* (Weise), 1908: 332 (*Agonia*; Cyclops Mts.; ZMB). Fig. 37a.

Three specimens from Nabire, Geelvink Bay are questionably placed here.

DISTRIBUTION: New Guinea (NW).

124. *Aspidispa horvathi* Gestro, 1897a: 451 (Madang; BUDAPEST).—Gressitt, 1957: 303, pl. 15g.—*Aspidispa signaticollis* Gestro, 1898: 258 (nr. Madang; BUDAPEST).

DISTRIBUTION: New Guinea (NE).

125. *Aspidispa daemonoropa* Gressitt, n. sp. Fig. 37 b–c.

Male: Testaceous to pitchy black; head pitchy reddish above, paler anteriorly and ochraceous on frons; antenna pitchy black, strongly tinged with reddish; pronotum pitchy black with anterior portion of side ochraceous; scutellum pitchy black; elytron pitchy black tinged with reddish brown on central portion and outer margin; ventral surfaces pale ochraceous, slightly pitchy at apex of abdomen; legs testaceous with tarsi somewhat reddish.

Head $3/4$ as broad as prothorax, finely punctured at side of occiput and feebly depressed at center; rostrum $1/5$ as long as scape; frons $2\times$ as broad as long, moderately convex. *Antenna* $3/5$ as long as body, gradually thickening distally; segment 1 not much longer than broad, thickest just beyond middle; 2 more cylindrical and very slightly shorter; 3 about $1.4\times$ as long as 2; 3–10 somewhat gradually decreasing in length; 11 slightly longer than 3. *Prothorax* slightly more than $2\times$ as broad as long; sides strongly convex, widest slightly anterior to middle and finely toothed on margin; disc with central portion somewhat flattened, narrowly impunctate along middle and very weakly grooved at center with rather strong punctures on remainder except for parts of anterior and posterior lateral swellings. *Scutellum* narrowed and rounded apically. *Elytron* weakly convex at side and widest just anterior to middle; apex obliquely rounded and finely toothed; disc with 3 distinct costae, costa 1 strongest and 3 strongly depressed behind humerus and all bent slightly outward in mid portion. *Ventral surfaces* shiny, with scattered fine punctures at sides and near apex of abdomen. *Legs* not very stout; fore tarsus very large. Length 4.0

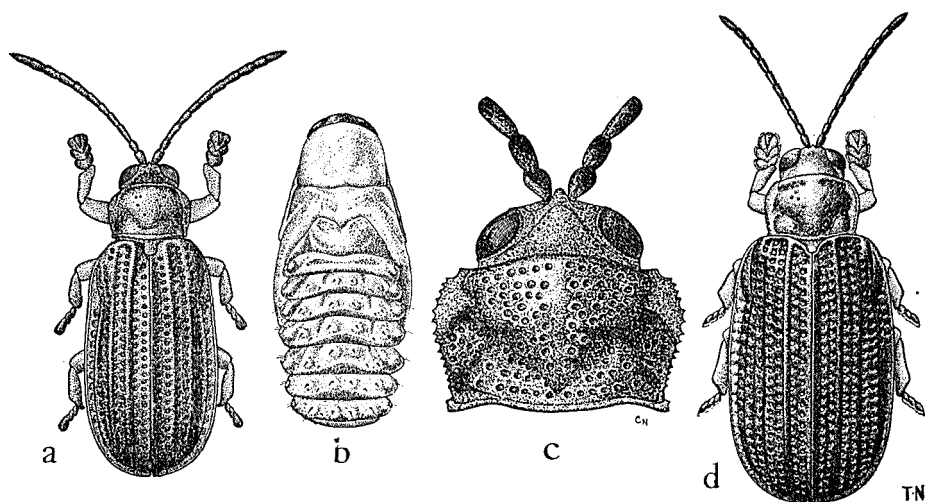


Fig. 37. a, *Aspidispa ?meijerei* (Ws.); b, *A. daemonoropa* n. sp., pupa; c, same, head and pronotum of adult; d, *A. subviridipennis* n. sp.

mm; breadth 1.6.

Paratypes: Length 3.6–4.2 mm; breadth 1.4–2.0.

Holotype ♂ (BISHOP 3522), Bainyik, 225 m, nr. Maprik, Sepik Distr., 21. VI. 1961, M. & L. Gressitt, on *Daemonorops*; 2 paratopotypes, same data.

Differs from *horvathi* Gestro in being entirely blackish above, and in being more convex at side.

Pupa: Orange testaceous; eyes moderately pigmented. Head somewhat broadly concave between eyes. Pronotum evenly convex anteriorly, weakly convex at side; several punctures visible through surface on each side of disc; metanotum smooth. Abdominal tergites 3–7 each with a strong pair of tubercles near middle and 1 or 2 weaker ones toward middle of side; spiracles located on sides of rounded lateral swellings; last tergite fairly smooth, a round depression on each side of middle and posterior margin weakly arcuate. Length 3.7 mm; breadth 1.7.

HOST: *Daemonorops* (rattan).

DISTRIBUTION: NE New Guinea.

126. *Aspidispa subviridipennis* Gressitt, n. sp. Fig. 37d.

Female: Testaceous to greenish; head, pronotum and scutellum reddish ochraceous, slightly brownish in depressed areas and on lateral border of prothorax; antenna reddish brown, somewhat pitchy on segments 2–8; elytron dark metallic greenish, with extreme base and outer border reddish brown; ventral surfaces and legs testaceous to slightly reddish ochraceous.

Head 3/4 as broad as prothorax, finely punctured near eye, feebly depressed at center of occiput; rostrum about 1/5 as long as scape; frons about 2× as broad as long with an arcuate depression near center. *Antenna* 2/5 as long as body; segment 1 subglobose; 2 fully as long as 1, more parallel-sided; 3 slightly longer and more slender; 4 slightly shorter than 3; 4–10 decreasing slightly in length and becoming slightly broader; 11 slightly longer than 3. *Prothorax* slightly more than 2× as broad as long with anterior and posterior margins fairly straight; lateral margins subevenly convex, broadest slightly anterior to middle and minutely denticulate; disc subevenly convex in center with a fairly broad impunctate median strip and with only a few scattered punctures on anterior and postmedian portion of side with anterior and posterior lateral swellings not very strongly convex but fairly large and impunctate. *Scutellum* subtriangular, briefly truncate apically. *Elytron* subparallel-sided but weakly convex at side and widest near middle; apex obliquely rounded and minutely denticulate; disc with costa 1 quite strong, 2 depressed along central portion and 3 strongly depressed behind humerus and fairly distinct on remainder. *Ventral surfaces* in part finely frosted with only minute punctures. *Legs* relatively slender with fore tarsus only moderately broad. Length 4.2 mm; breadth 1.8.

Paratype: Length 3.8 mm; breadth 1.65.

Holotype ♀ (BISHOP 3523), Oriomo Gov't. Agric. Sta., Oriomo R., nr. Daru, 20. X. 1960, Gressitt, on *Korthalsia*; paratopotype, 26–28. X. on palm. A third specimen is questionably placed here.

Differs from *meijerei* in having elytral costa 2 largely depressed, and elytron largely green.

HOST: *Korthalsia*, palm.

DISTRIBUTION: New Guinea (SE).

127. *Aspidispa korthalsiae* Gressitt, n. sp. Fig. 38 a-c.

Female: Testaceous to purplish black; head pitchy above, reddish anteriorly and beneath; antenna pale reddish brown with segments 3-7 pale testaceous; pronotum black with a somewhat pitchy purplish tinge; scutellum pitchy; elytron bluish black with slight purplish and pitchy tinges; ventral surfaces reddish ochraceous, somewhat pitchy at sides of thorax and extreme apex of abdomen; legs testaceous with much of hind femur pitchy and parts of mid femur and mid and hind tibiae brownish to slightly pitchy.

Head $3/4$ as broad as prothorax, sparsely punctured; rostrum quite narrow, $1/4$ as long as scape; frons somewhat arcuate, more than $2\times$ as broad as long. *Antenna* $2/5$ as long as body; segment 1 somewhat oval, not much longer than broad; 2 as long as 1, more cylindrical; 3 slightly longer than 2; 3-10 increasing slightly in length; 11 about $1.6\times$ as long as 1. *Prothorax* $2\times$ as broad as long, subtransverse anteriorly; side subevenly convex, widest just anterior to middle and with a few sparse, weak denticles; disc strongly convex, with a largely impunctate median slightly raised strip and with irregular punctures on each side and almost none on anterior and posterior lateral swellings. *Scutellum* narrowed and rounded apically. *Elytron* less than $3\times$ as long as broad, strongly and subevenly convex at side; apex obliquely rounded and finely denticulate; disc with costa 1 very strong, 2 depressed in central portion and 3 strongly depressed behind humerus but strongly raised in central portion. *Ventral surfaces* largely smooth but somewhat frosted at sides and finely punctured on last abdominal sternite. *Legs* not very stout; fore tarsus broad. Length 3.7 mm; breadth 1.8.

Paratypes: Pronotal and elytral borders sometimes reddish brown; legs and antenna sometimes entirely testaceous. Length 3.2-4.2 mm; breadth 1.2-1.9.

Male (?): Antenna dull brown; pronotum largely dull brown but slightly paler at side; elytron entirely bluish black, subparallel-sided, weakly convex at side.

Holotype ♀ (BISHOP 3524), Wewak, 15 m, Sepik Distr., 26.VI.1961, M. & L. Gressitt,

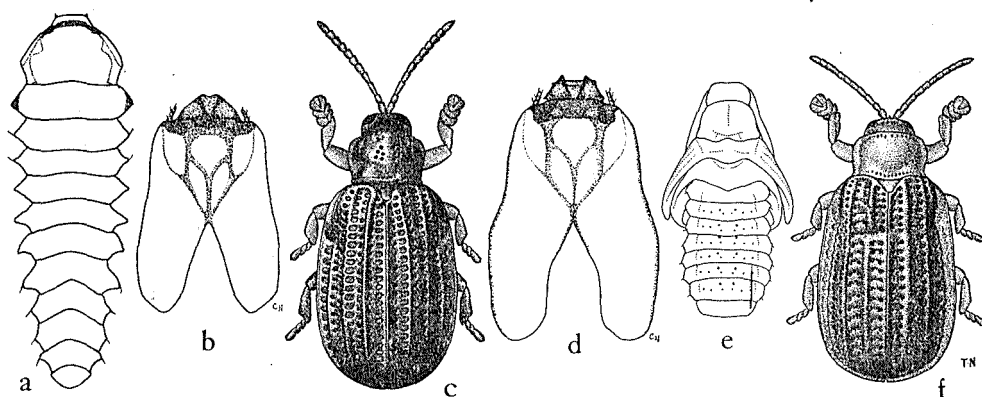


Fig. 38. a, *Aspidispa korthalsiae* n. sp., dorsum of larva; b, same, larval head capsule; c, same, adult; d, *A. bicolor* n. sp., larval head capsule; e, same, pupa; f, same, adult.

on *Korthalsia*; 5 paratypes, Dreikikir, 350 m, 23. VI. 1961, M. & L. Gressitt, on *Korthalsia*, and Bainyik, 225 m, nr. Maprik, 21. VI. 1961, M. & L. Gressitt, on *Korthalsia*. Additional ♀♀, probably this species, Waris, 450 m, S of Hollandia, 8–15. VIII. 1959, T. C. Maa. Additional specimens, probably ♂♂ of this species, from same localities, and also Maprik, 4. XI. 1957, Gressitt, mostly from *Korthalsia* and *Calamus*.

Differs from *subviridipennis* in being more convex at side of elytron, and in being dark bluish instead of greenish.

Larva: Whitish testaceous, pale ochraceous on head and pronotum with borders, sutures and anterior portion of head reddish pitchy. Head capsule nearly 2× as long as breadth of anterior end, over 1/4 again as wide posteriorly as anteriorly, fairly straight at side and widest a slight distance before posterior end; posterior lobe rounded apically; posterior emargination distinctly longer than broad and almost triangular; antenna shorter than mandible, strongly tapering, pale; dorsal pattern parallel-sided anteriorly and acute behind, with anterior portion larger than each portion and extending acutely backward to within 1/2 its length of apex. Pronotum fairly pale and densely granulose on anterior lobe, darker and smoother just behind lobe, moderately punctured on central portion and slightly grooved medially. Remainder of tergites rather smooth, in part finely punctured, and most of abdominal tergites with a narrow transverse granulose band; sides of most abdominal segments with an oblique lobe at side bearing 1 or 2 setae; last tergite fairly smooth, much narrower than preceding segment and weakly convex apically. Length 4.5 mm; breadth 1.4.

HOSTS: *Korthalsia*, *Calamus*.

DISTRIBUTION: New Guinea (NE, NW).

128. *Aspidispa bicolor* Gressitt, n. sp. Fig. 38 d–f.

Orange testaceous to dark purplish brown; head, pronotum, and scutellum orange testaceous; antenna slightly darker ochraceous, paler on segments 1–2; elytron dark purplish brown, somewhat paler on outer borders; ventral surfaces and legs pale ochraceous.

Head 3/4 as broad as prothorax, largely smooth and shiny; rostrum about 1/6 as long as scape; frons fully 2× as long as broad, weakly convex. *Antenna* just over 1/2 as long as body, not very stout; segment 1 slightly flattened, distinctly longer than broad and widest near middle; 2 slightly shorter, more cylindrical; 3 longer and more slender; 3–10 decreasing very slightly in length; 11 nearly as long as 1+2. *Prothorax* 2× as long as broad, transverse anteriorly and subtransverse basally; lateral margin subevenly convex, broader slightly anterior to middle and constricted just before base, with minute denticles; disc subevenly convex and largely smooth above with very fine punctures, side with only a few large punctures and anterior and posterior lateral swellings only minutely punctured. *Scutellum* subparallel-sided in posterior portion, subtruncate apically. *Elytron* nearly 3× as long as broad, subparallel-sided and weakly convex in central portion, apex subevenly rounded externally and finely denticulate; disc with costa 1 strong, 2 depressed at middle and 3 strongly depressed for some distance behind humerus and slightly depressed behind middle, several transverse corrugations higher than costa 2 and as high as costa 3, particularly on central portion. *Ventral surfaces* largely shiny, slightly frosted on side of thorax and very weakly punctured, *Legs* moderately stout with tarsi broad. Length 4.7 mm;

breadth 2.3.

Paratypes: Length 4.0–5.2 mm; breadth 1.9–2.8.

Holotype (BISHOP 3525), Nabire, 3 m, S. Geelvink Bay, NW New Guinea, 3. VII. 1962, Gressitt, on *Korthalsia*; 4 paratopotypes (BISHOP, USNM, BMNH), same data; 3, Bainyik, 225 m, nr. Maprik, Sepik Distr., 21. VI. 1961, M. & L. Gressitt, on *Korthalsia*.

Differs from *korthalsiae* in being larger, more purplish, with elytral costa 3 considerably depressed.

Larva: Pale testaceous, reddish on anterior portion and borders and sutures of head capsule, with mandibles darker. Head capsule distinctly longer than broad, 1/2 again as long as breadth anteriorly and 1/4 again as broad posteriorly as anteriorly, slightly sinuate at side and slightly broader at beginning of last quarter than at apex; posterior emargination narrow and acute, distinctly longer than broad; antenna fairly stout and short, bearing 2 or 3 strong bristles; dorsal pattern divided into 3 subequal parts with a narrow pigmented triangle in center. Pronotum finely granulate anteriorly with a smooth slightly raised obtusely triangular area anterior to center; remainder of thoracic and abdominal tergites minutely punctured in central portions and each bearing a narrow transverse granulate band; side of each segment with a slightly oblique swelling; spiracles subrounded and small; sternite similar to tergites. Length 7.4 mm; breadth 1.4.

Pupa: Yellowish ochraceous, deeper ochraceous on central portion of abdomen. Head slightly concave anteriorly and on postocciput, with a group of anterior setae and 2 or 3 incomplete transverse rows of setae above and at side. Pronotum convex anteriorly, sinuate at side, broadest at base, finely grooved medially; setae forming 2 incomplete transverse rows, 1 anterior to middle, other posterior to middle; wing pads largely smooth without setae. Abdomen with segments 2–7 each with 2 pairs of tubercles near middle, the forward one larger than posterior, and 2 small tubercles near middle of each side and a blunt setigerous tubercle on side of each just above spiracle (up to segment 6); last tergite rather smooth, with only a few setae and a single fovea on each side of middle and posterior margin very slightly convex. Ventral surfaces largely smooth with very few setae. Length 5.6 mm; breadth 2.9.

HOST: *Korthalsia beccarii* (rattan).

DISTRIBUTION: New Guinea (NW, NE).

129. *Aspidispa rotanica* Gressitt, n. sp. Fig. 39.

Orange testaceous to bluish black; head, pronotum and scutellum ochraceous; antenna reddish, somewhat pitchy distally; elytron bluish black, tinged with purplish brown toward side and apex; ventral surfaces and legs orange testaceous.

Head 4/5 as broad as prothorax, weakly punctured and weakly depressed along median line of occiput; rostrum nearly 1/4 as long as scape; frons very short, with an arcuate raised area. *Antenna* just over 1/2 as long as body; segment 1 ovate, thickest just beyond middle and distinctly longer than broad; 2 slightly shorter than 1, subcylindrical and thickest near middle; 3 distinctly longer than 1 and much more slender; 3–10 gradually decreasing in length; 11 nearly 1.5× as long as 1 and slightly longer than 3. *Prothorax* 2× as broad as long; lateral margin strongly arcuate, widest well anterior to middle and slightly constricted before base; disc strongly convex, with a moderately broad median

impunctate strip and with a row or 2 of deep punctures on each side of median strip and also behind anterior margin and on basal portion, mostly between anterior and posterior raised areas which are in large part only minutely punctured. *Scutellum* subtriangular but parallel-sided and truncate at apex. *Elytron* less than 3× as long as broad, weakly convex at side and broadly rounded apically with a few minute denticles; disc with costa 1 strong and uniform, slightly arcuate, costa 2 rather weak behind middle and partly irregular, and 3 depressed behind humerus and rather weak on remaining portion with some transverse ridges as high as costae 2-3. *Ventral surfaces* in large part shiny with very few fine punctures. *Legs* fairly short and moderately stout but tarsi broad. Length 4.2 mm; breadth 1.7.

Paratypes: Length 3.6-4.0 mm; breadth 1.7-2.0.

Holotype (BISHOP 3526), Nabire, S. end Geelvink Bay, 6-7.X. 1962, N. Wilson, on rattan; 13 paratopotypes (BISHOP, CAS, USNM, BMNH, ANIC, BOGOR, LEIDEN), same data. Five, Japen I. (Dawai R., nr. Sumberbaba, 23.X. 1962, Wilson), probably this species.

Differs from *bicolor* in having a median strip on pronotum with deep punctures on each side, and in having transverse ridges of elytron not higher than costae.

HOST: Rattan.

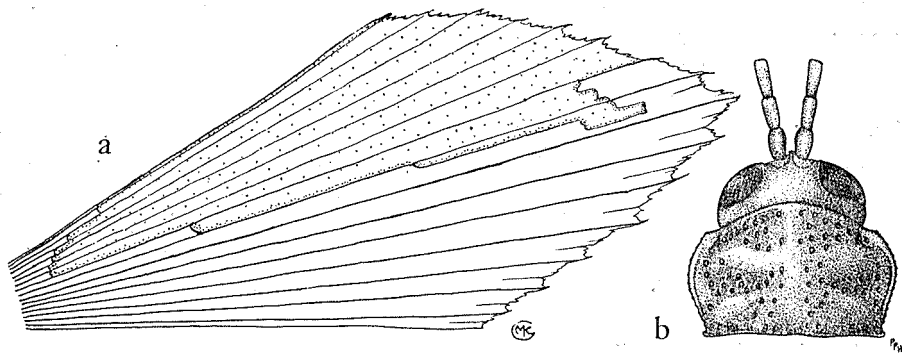


Fig. 39. a, *Aspidispa rotanica* n. sp., compound mine in leaflet of *Korthalsia beccarii* (rattan); b, same, head and pronotum.

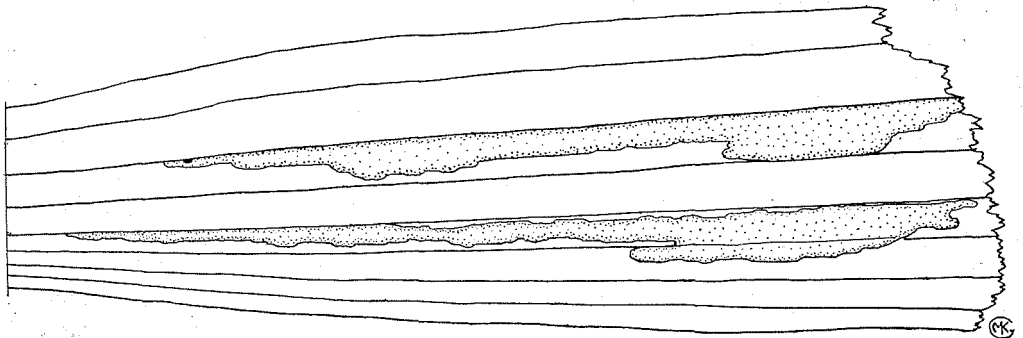


Fig. 40. Mines, probably of *Aspidispa*, in young palm leaflet, Nabire,

DISTRIBUTION: NW New Guinea, Japan I.

Genus **Gonophora** Baly, 1858

Subgenus **Micrispa** Gestro, 1897

KEY TO ADULTS

1. Elytron with transverse costae as high as longitudinal costae and forming cells containing several punctures; antenna very short.....2
- Elytron with transverse costae largely lower than longitudinal costae and not forming cells containing several punctures each 3
- 2 (1). Elytron with several elongate cells on central portion; pronotum with side of central swelling largely impunctate..... **142. donaxiae**
- Elytron with most of cells squarish on central portion; pronotum with side of central swelling largely punctate **143. cubicularis**
- 3 (1). Elytral costae 1 & 2 more or less parallel, fairly straight..... 4
- Elytral costae 1 & 2 partly irregular or sinuate, not parallel-sided.....8
- 4 (3). Prothorax much broader anteriorly than posteriorly; posterolateral angle of elytron broadly rounded; length more than 3 mm.....5
- Prothorax not much broader anteriorly than posteriorly; posterolateral angle of elytron subangulate; dorsum generally largely green; length generally less than 3 mm..... **141. semiviridis**
- 5 (4). Elytron with transverse ridges or with costae 2 & 3 depressed behind middle; length more than 3 mm.....6
- Elytron without transverse ridges and with costae complete, not depressed posteriorly; length less than 3 mm..... **140. scleriae**
- 6(5). Elytron with many more or less transverse ridges between costae 1 & 2; almost no punctures on basal 1/2 of pronotum 7
- Elytron with almost no transverse ridges between costae 1 & 2; costae 2 & 3 partly depressed behind middle; some distinct punctures on basal 1/2 of pronotum; largely orange with much of elytral discs pitchy.....**132. biakana**
- 7 (6). About 9 punctures on each side of pronotum behind anterior border; dorsum largely pale ochraceous..... **130. pellucida**
- About 5 punctures on each side of pronotum behind anterior border; head and pronotum ochraceous; elytron largely pitchy..... **131. maai**
- 8 (3). Swollen portion of pronotum rather evenly convex and evenly punctured 9
- Swollen portion of pronotum not both evenly convex and evenly punctured.....11
- 9 (8). Median groove of pronotum weak; elytral costa 1 fairly straight; costa 1 & 2 not 2× as widely separated preapically as postmedially 10
- Median groove of pronotum stronger; elytral costa 1 strongly bent outward behind middle; costae 1 & 2, 2× as widely separated preapically as postmedially; elytral disc largely brown or pitchy with costae generally partly paler..... **133. sinuicosta**
- 10 (9). Dorsum largely ochraceous; pedicel broadened subbasally; elytron with a transverse ridge on apical declivity parallel to apical margin..... **134. alpiniae**
- Dorsum largely blackish; pedicel subcylindrical; elytron without a transverse

- ridge on apical declivity parallel to margin.....**135. puncticollis**
- 11 (8). Central portion of pronotum partly uneven or carinate, not smooth 12
 Central portion of pronotum largely smooth, with larger punctures only toward
 anterior margin.....13
- 12 (11). Central portion of pronotum smooth medially, grooved and with close rugose
 punctures, somewhat transversely raised in middle; dorsum brown; elytron
 with a deep postmedian depression between costae 2 & 3..... **136. vulnerata**
 Central portion of pronotum finely rugose-punctate, but otherwise evenly con-
 vex; dorsum largely dark; elytron with a shallow postmedian depression...
 **137. majuscula**
- 13 (11). Pronotum with a single row of major punctures parallel to anterior margin;
 posterior angle of elytron not strongly projecting; costa 1 not depressed at
 end of basal 1/3 **138. musae**
 Pronotum with punctures about 3 rows deep near anterior margin; posterior
 angle of elytron strongly projecting; costa 1 depressed at end of basal 1/3
 **139. zingiberaceae**

KEY TO LARVAE

1. Head capsule much longer than broad, with sides nearly parallel; posterior emar-
 gination much longer than width posteriorly.....2
 Head capsule hardly longer than broad, with sides strongly convex; posterior emar-
 gination nearly as broad as long (Manus I.; adult in fig. 41a)..... **cyperaceae**
2. Head capsule with pigmented dorsal pattern widest anterior to middle, often nar-
 row posteriorly; posterior emargination fully 1/2 as deep as 1/2 total length of
 capsule 3
 Head capsule with pigmented dorsal pattern widest slightly behind middle, fairly
 broad posteriorly; posterior emargination not quite 1/2 as deep as total length
 of capsule; 2 minute blackish eye-spots visible; anterior portion of head feebly
 pigmented; antenna pale.....**141. semiviridis**
3. Two distinct black eye-spots visible; lines of pigmented dorsal pattern of head cap-
 sule gradually narrowing posteriorly, and enclosing a trace of a median line pos-
 teriorly 4
 No distinct black eye-spots visible; lines of dorsal pattern thickened near middle
 and not enclosing a median stripe posteriorly.....**139. zingiberaceae**
4. Basal margin of clypeus slightly arched posteriorly; labrum reddish..... **140. scleriae**
 Basal margin of clypeus slightly arched anteriorly; labrum testaceous.....**142. donaxiae**

130. Gonophora (Micrispa) pellucida Gressitt, 1957: 310, fig. 29c (Maffin Bay; CAS).
 Fig. 41b.

NW NEW GUINEA: Djoebaren, 80 m, 90 km SE of R. Tor, 17. VII. 1959, Maa; Bodem, Sarmi area, 14. VII. 1959, Maa; Waris, 450 m, 1. VIII. 1959, Maa; W. Cyclops Mts., 22. VII. 1959, Gressitt; Ifar, 20. VI. 1959, Gressitt; Dawai R., Japen I., X. 1962, N. Wilson.
 NE NEW GUINEA: Mapiik, 150 m, 29. XII. 1959, Maa; Wanuma, Adelbert Mts., 900 m, 25. X. 1958, Gressitt; Madang, 5 m, 28. X. 1958, Gressitt; Busu R., nr. Lae, 14. IX. 1955, Gressitt,

HOST: *Alpinia*.

DISTRIBUTION: New Guinea (NW, NE).

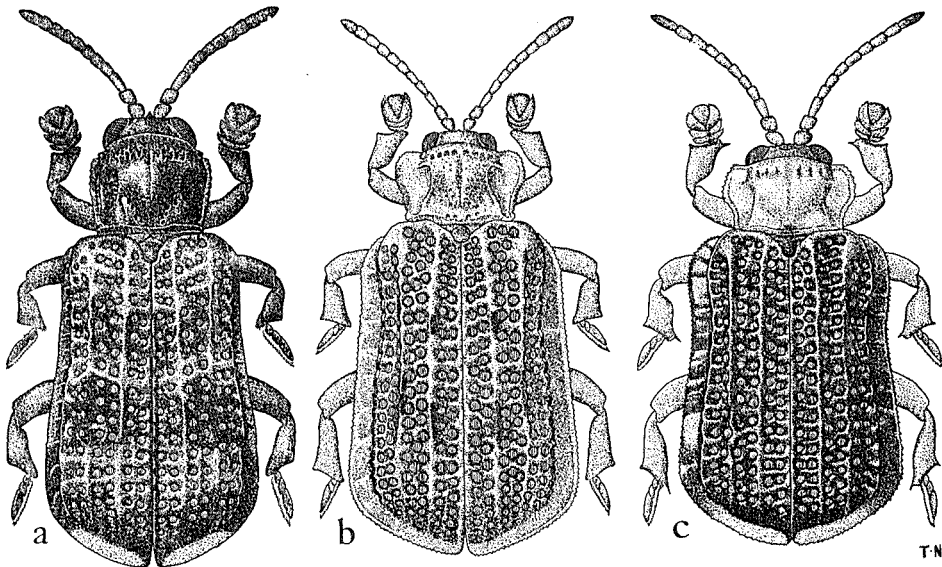


Fig. 41. a, *Gonophora (Micrispa) cyperaceae* Gr. (Manus); b, *G. (M.) pellucida* Gr.; c, *G. (M.) maai* n. sp.

131. *Gonophora (Micrispa) maai* Gressitt, n. sp. Fig. 41c.

Male: Pale orange ochraceous to pitchy black; head, antenna and prothorax pale orange ochraceous, slightly duller on hind portion of head; scutellum pitchy brownish, duller apically; elytron largely pitchy, palest on apical margin and somewhat reddish on costa 1 in basal 1/4, at middle, and before apex, and on costa 2 and 3 slightly before apical declivity; humerus, lateral expansion of elytron and punctures largely brownish; ventral surfaces and legs pale orange ochraceous.

Head less than 3/4 as broad as prothorax, in large part finely granulose; frons about 2× as broad as long. **Antenna** just over 1/2 as long as body, moderately stout; segment 1 nearly as broad as long, slightly compressed; 2 slightly smaller than 1, nearly as broad as long and also slightly compressed; 3 more slender, distinctly longer than broad and slightly shorter than 1; 4 not quite as long as 3; 5 about as long as 3; 5-10 subequal in length and increasing slightly in breadth; 11 nearly as long as 3+4. **Prothorax** nearly 2× as broad as long, subtransverse anteriorly but with anterior angle produced slightly forward; sides strongly sinuate and dentate with anterior 1/2 much wider than posterior 1/2 and widest point well anterior to middle; base distinctly sinuate; disc strongly convex in central portion with a weak median groove, and surface minutely roughened but not punctured except for a single row of about 5 large punctures parallel to anterior margin and very few weak ones on basal portion; middle of side concave and bordered above by a sinuate ridge which reaches to basal margin near posterior angle. **Scutellum** strongly narrowed in anterior 1/2 and briefly subparallel-sided and subtruncate apically. **Elytron** not

quite $3\times$ as long as broad; external margin broadly expanded, transversely wrinkled and minutely denticulate along edge with most of side slightly concave and humeral and posterolateral angles rounded but slightly projecting; apical margin narrower than lateral margin, obliquely rounded and more weakly denticulate; disc with 3 very strong costae which are subparallel-sided but slightly irregular, and much higher than transverse ridges; transverse ridges depressed somewhat behind middle and costa 3 slightly depressed in same area. *Ventral surfaces* finely frosted, largely microgranulose, but hardly punctured. *Legs* not very stout; tarsi about $3/4$ as broad as long. Length 3.6 mm; breadth 1.8.

Holotype ♂ (BISHOP 3527), Bomberi, 700 m, nr. Fak Fak, SW New Guinea, 7.VI.1959, Maa & Gressitt, on *Alpinia*. A ♀ from Karubaka 1450 m, Swart Valley, NW New Guinea, 17. XI. 1958, Gressitt, on *Alpinia*, is not designated paratype.

Differs from *pellucida* Gr. in being broader, darker, more strongly costate and less punctate. Named for T. C. Maa of Bishop Museum.

HOST: *Alpinia*.

DISTRIBUTION: New Guinea (SW, NW).

132. *Gonophora* (*Micrispa*) *biakana* Gressitt, n. sp. Fig. 42a.

Female: Head, antenna, and pronotum pale orange ochraceous, slightly duller on occiput; scutellum somewhat duller reddish; elytron with outer margin brownish and apical margin pale ochraceous and disc pitchy black except for costae and adjacent partial transverse ridges orange on costae 1 and 2 in basal $1/4$, at middle, and just before apical declivity, and duller reddish on humerus and at middle and before apex on costa 3; ventral surfaces orange ochraceous, partly paler on abdomen and duller at side of metasternum; legs orange ochraceous with slightly reddish tinge.

Head nearly $3/4$ as broad as prothorax, in large part finely frosted; frons more than $2\times$ as broad as long, with a raised subtriangular and finely punctured area in middle. *Antenna* not quite $1/2$ as long as body; segment 1 about as broad as long, slightly oblique and strongly compressed; 2 slightly longer than broad; much narrower than 1; 3 slightly longer and more slender than 2; 3-10 decreasing somewhat in length and increasing slightly in breadth; 11 distinctly shorter than 3+4. *Prothorax* $5/8$ as long as broad, subtransverse at center portion of anterior margin but side projecting strongly forward and much wider in anterior $1/2$ than in basal $1/2$, with edge denticulate; basal margin sinuate; disc strongly convex, deeply grooved medially and only minutely punctured on upper portion; with about 9 punctures on each side parallel to anterior margin and a few scattered punctures at side and on depressed portion of basal $1/2$, with side distinctly concave and bordered above by raised ridge which reaches basal margin. *Scutellum* subtriangular, strongly declivitous anteriorly and finely granulose. *Elytron* nearly $3\times$ as long as broad, distinctly concave at side anterior to middle and with anterior and posterior angles slightly projecting; lateral margin broadly expanded and partially denticulate; apical margin suboblique, weakly convex and hardly denticulate; disc with 3 strong costae, costa 1 strongest and quite straight, costa 2 depressed behind middle and weakly sinuate, and 3 depressed both before and behind middle and curved outward behind middle; very few complete transverse ridges between costae, intercostal areas fairly flat just behind middle. *Ventral surfaces* finely frosted but slightly shiny, almost impunctate. *Legs* moderately stout with tarsi almost as broad as long. Length 4.7 mm; breadth 2.3,

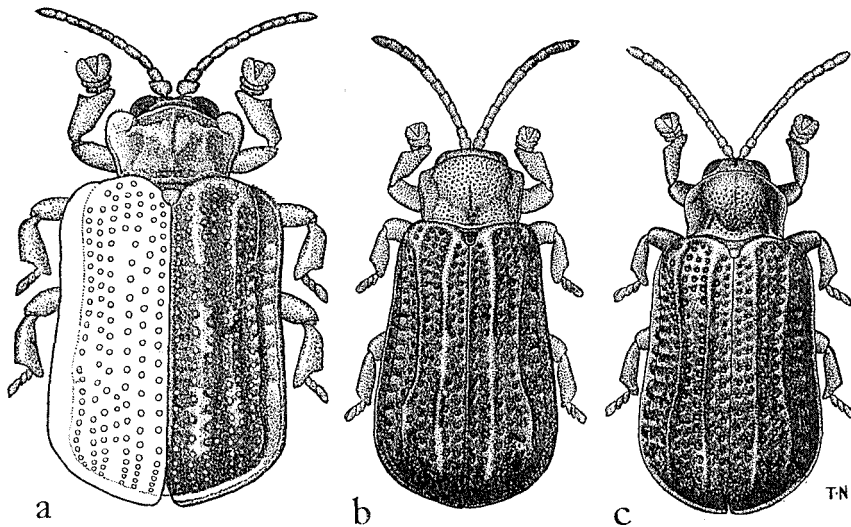


Fig. 42. a, *Gonophora (Micrispa) biakana* n. sp.; b, *G. (M.) ?sinuicosta* Gr.; c, *G. (M.) puncticollis* n. sp.

Holotype ♀ (BISHOP 3528), Kampong Landbouw, 50 m, Biak I., 27.V.1959, Gressitt, on ginger.

Differs from *maai* Gr. in being stouter, with prothorax more punctate, more expanded anteriorly at side, and almost lacking transverse ridges between costae.

HOST: ?*Alpinia*.

DISTRIBUTION: NW New Guinea (Biak I.).

133. *Gonophora (Micrispa) sinuicosta* Gressitt, 1957: 309, fig. 29b (?Cyclops Mts.; CAS). Fig. 42b.

SW NEW GUINEA: Bomberi, nr. Fak Fak, 9.VI.1959, Gressitt. NW NEW GUINEA: Nabire, Geelvink Bay, 12.X.1962, Wilson; Bodem, nr. Sarmi, 11.VII.1959, Maa; Waris, 450 m, 8-15.VIII.1959, Maa; Dawai R., Japen I., X.1962, Wilson. NE NEW GUINEA: Maprik, 160 m, 15.X.1957, Gressitt, 21.VI.1961, M. & L. Gressitt; Wanuma, 800 m, Adelbert Mts., 26.X.1958, Gressitt; Baiyer River, W. Highlands, 19.X.1958, Gressitt.

HOSTS: *Alpinia* and other gingers.

DISTRIBUTION: New Guinea (NW, NE).

134. *Gonophora (Micrispa) alpiniae* Gressitt, 1957: 307, fig. 29a (Kokoda, SE; BISHOP).

SE NEW GUINEA: Popondetta, 10.VI.1961, M. & L. Gressitt, on *Alpinia*.

HOST: *Alpinia*.

DISTRIBUTION: New Guinea (SE).

135. *Gonophora (Micrispa) puncticollis* Gressitt, n. sp. Fig. 42c.

Male: Testaceous to pitchy black; head dull pitchy above and reddish beneath; an-

tenna testaceous with segment 1 reddish; pronotum largely pitchy black but reddish on each side of anterior portion, at anterior angle and near basal angle; scutellum black; elytron pitchy to blackish, with part of extreme base testaceous and basal 1/4, middle, and preapical portion of costa 1 reddish brown; external margin brown to pitchy brown, apical margin ochraceous; ventral surfaces reddish ochraceous; legs ochraceous with outer portions of tibiae and apices of tarsi somewhat pitchy.

Head just over 2/3 as broad as prothorax; occiput finely granulose; frons nearly 2× as long as broad, with a triangular punctured raised area in center. *Antenna* 1/2 as long as body; segment 1 quite broad and flattened, about as broad as long; 2 slightly longer than broad, slightly narrower at apex than base; 3 longer and more slender; 3–10 decreasing in length and increasing in thickness; 11th 1.6× as long as 3. *Prothorax* 2/3 as long as broad, subtransverse anteriorly and sinuate at side, broadest well anterior to middle; lateral margin hardly denticulate; basal margin sinuate; disc with central portion strongly convex and rather evenly swollen with a weak median groove and with dense fairly equal punctures over most of surface; side strongly concave and densely punctured in concave portion which is bordered above with a distinct ridge; lateral expansion and outer 2/3 of basal portion largely impunctate. *Scutellum* subtriangular but broadly truncate apically. *Elytron* 2.5× as long as broad, distinctly widened posteriorly and very weakly concave at side with lateral margin moderately broad and corrugated; apical margin slightly narrower than lateral margin, obliquely rounded; disc with 3 strong costae which are slightly sinuate, particularly in posterior 1/2, connected by rather few complete transverse ridges and with a brief extra ridge between costae 1 and 2 and between 2 and 3. *Ventral surfaces* finely frosted, slightly shiny. *Legs* moderately stout with tarsi about 3/4 as broad as long. Length 3.4 mm; breadth 1.7.

Holotype ♂ (BISHOP 3529), Karimui, 1000 m, S of Goroka, nr. Papua border, 8.VI. 1961, M. & L. Gressitt, on *Alpinia*.

Differs from *alpiniae* Gr. in being much darker, with pedicel subcylindrical instead of thickened basally, and elytron without a transverse ridge on apical declivity parallel to apical margin.

HOST: *Alpinia*.

DISTRIBUTION: New Guinea (NE).

136. *Gonophora* (*Micrispa*) *vulnerata* Gestro, 1895: 705 (Moroka, SE; GENOVA).

(One, similar to this species, Bisianumu, 500 m, nr. Port Moresby, 3.IX.1959, T. C. Maa).

DISTRIBUTION: New Guinea (SW).

137. *Gonophora* (*Micrispa*) *majuscula* Gestro, 1907: 79 (Madang; BUDAPEST).—Gressitt, 1957, 309, pl. 15h.

DISTRIBUTION: New Guinea (NE, NW).

138. *Gonophora* (*Micrispa*) *musae* Gressitt, n. sp. Fig. 43a.

Male: Ochraceous to pitchy black; head reddish with postocciput pitchy; antenna reddish ochraceous with much of central portion and parts of sides and basal margin

pitchy; scutellum largely black; elytron reddish brown with apical margin testaceous and much of disc pitchy black with orange to reddish brown portions of all 3 costae on basal, middle, and preapical sections; ventral surfaces orange ochraceous; legs reddish ochraceous with tarsi reddish pitchy.

Head $3/4$ as broad as prothorax, finely granulose above; frons about $3\times$ as broad as long with a slightly raised obtuse triangle in center. *Antenna* not quite $1/2$ as long as body; segment 1 stout, slightly oblique and slightly compressed, about as broad as long; 2 not quite as broad as long, broadest near base; 3 much more slender than 2 and about as long; 3-10 subequal in length and increasing in breadth; 11th $1.5\times$ as long as 10. *Prothorax* about $3/5$ as long as broad, subtransverse on anterior margin, strongly sinuate and finely denticulate at side with widest portion well anterior to middle and basal angle slightly projecting; swollen portion of disc largely smooth and very weakly punctured but with strong median groove and a punctured depression on each side just above sinuate ridge around lateral depression; a single row of 5 or 6 punctures parallel to anterior margin on each side and several punctures in a concave lateral area and several on depressed portion of inner part of basal $1/2$. *Scutellum* narrowed and rounded-truncate apically. *Elytron* $2.5\times$ as long as broad, slightly widened posteriorly and slightly uneven and concave at side with irregular minute teeth; posterior angle broadly rounded; apex oblique and weakly convex; disc with 3 strong somewhat irregular and sinuate costae and with partial irregular transverse ridges connecting them; punctures rather irregular beyond first pair of puncture rows. *Ventral surfaces* finely frosted and fairly shiny. *Legs* relatively long with tarsi about $3/4$ as broad as long and hind tarsus strongly asymmetrical. Length 3.5 mm; breadth 1.8.

Female: Antenna $2/5$ as long as body; pronotum largely pitchy. Length 3.3 mm;

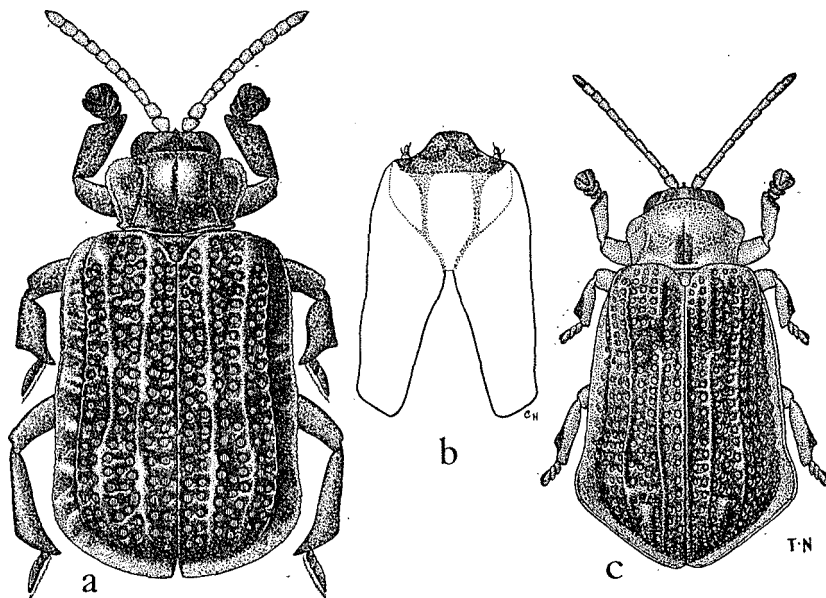


Fig. 43. a, *Gonophora (Micrispa) musae* n. sp.; b, *G. (M.) zingiberaceae* n. sp., dorsum of larval head capsule; c, same, adult.

breadth 1.7.

Paratypes: Length 3.3–3.8 mm; breadth 1.6–1.8.

Holotype ♂ (BISHOP 3530), Bomberi, 750 m, nr. Fak Fak, 9.VI.1959, Gressitt, on *Costus*; allotype ♀ (BISHOP), same data; 2 paratypes, same data, but one from banana; 1 paratype, nr. Fak Fak, 100 m, 3.VI.1959, T. C. Maa. Five paratypes (LEIDEN, BOGOR, AMNH), Sigi Camp, 1500 m, II.1939, Neth. Ind.-American (Third Archbold) Exped., L. J. Toxopeus.

Differs from *vulnerata* Gestro in having central portion of pronotum largely smooth, and lacking a strong postmedian depression on elytron.

HOSTS: *Musa*, *Costus*.

DISTRIBUTION: New Guinea (SW, NW).

139. *Gonophora* (*Micrispa*) *zingiberaceae* Gressitt, n. sp. Fig. 43 b–c.

Female: Pale testaceous to pitchy black; head pale with side of occiput somewhat pitchy; antenna testaceous with last segment pitchy brown and segment 10 slightly brownish; pronotum pale testaceous with a broad median pitchy stripe on basal 1/2 except for extreme basal margin; scutellum testaceous; elytron dull testaceous to pale brown with postbasal, median, and preapical portions of disc darker brown and postmedian portions of costae 1 and 2 pitchy black and preceded and followed by paler areas; ventral surfaces testaceous becoming ochraceous on abdomen and pitchy black at side of metathorax; legs pale testaceous with apical portions of tibiae and tarsi pitchy black preceded by brownish portions.

Head 2/3 as broad as prothorax, frosted above; frons trapeziform, 2× as broad as long and obtusely raised in central portion. *Antenna* 1/2 as long as body, relatively slender; segment 1 nearly as broad as long, distinctly broadened apically; 2 subcylindrical but slightly thicker at base than at apex and slightly longer than broad and shorter than 1; 3 much more slender, slightly longer than 1; 3–10 decreasing gradually in length; 11 not quite 2× as long as 10. *Prothorax* 5/8 as long as broad, transverse on anterior margin, irregularly sinuate at side with anterior 1/2 much broader than posterior 1/2 but slightly angulate and then gradually narrowed posteriorly with widest portion well anterior to middle; basal angles slightly projecting; basal margin somewhat sinuate; disc strongly and subevenly convex in central portion with anterior 1/2 heavily punctured and posterior portion of swelling smooth, shiny and sparsely punctured, with a distinct median groove; depressed area of side rather small, not very distinctly punctured and not very strongly margined above; lateral and basal portions of disc slightly rough but not strongly punctured. *Scutellum* subtriangular but parallel-sided and rounded-truncate apically. *Elytron* 2.35× as long as broad, strongly concave at side with posterolateral angle very prominent; lateral margin moderately expanded and hardly denticulate; apical margin oblique, rounded near sutural angle and very weakly denticulate; disc with costae weak, costa 1 strongly depressed at end of basal 1/3, costa 2 strongly sinuate posteriorly and becoming fairly weak, costa 3 largely indistinct at central portion and obliterated for a short distance before apical 1/4; punctures barely distinct and regular, with 3 or 4 rows in widened interspace between costae 1 and 2 near beginning of last 1/4. *Ventral surfaces* frosted on thorax, smoother and shinier on abdomen with fine punctures at side and on last sternite. *Legs*

relatively long and slender; tarsi about $3/4$ as wide as long. Length 4.05 mm; breadth 2.3.

Male: Antenna slightly over $1/2$ as long as body; elytral disc slightly darker, largely brown to pitchy brown. Length 3.5 mm; breadth 2.15.

Paratypes: Pronotum sometimes largely brownish on basal $1/2$ of central portion; elytron largely dark brown except for vague pale markings adjacent to costae and paler margins. Length 4.1–4.2 mm; breadth 2.3–2.5.

Holotype ♀ (BISHOP 3531), Karimui, 1000 m, S of Goroka and nr. Papua border, NE New Guinea, 5. VI. 1961, M. & L. Gressitt, on long-leafed ginger; allotype ♂ (BISHOP), same data; 2 ♀ paratypes (BISHOP, ANIC), same data.

Differs from the other Papuan species in having posterolateral angles of elytron strongly projecting and costae quite weak, with costa 1 strongly depressed premedially and 3 partly obsolete.

Larva: Creamy whitish with pronotum weakly ochraceous, prosternum nearly reddish brown on central portion and head capsule pitchy black on mouthparts and slightly pigmented on borders and on simple dorsal pattern consisting of a pair of subparallel lines converging to base of posterior emargination. Head capsule not quite $1/3$ again as long as broad, nearly parallel-sided, rounded at corners anteriorly, very slightly broadened posteriorly with posterior arms slightly separated at base and broadly rounded apically; posterior emargination distinctly longer than broad, more than $1/2$ length of head capsule and nearly straight at sides; antenna fairly stout and short; no pigmented eye spots. Pronotum minutely granulose on anterior $1/4$, rather smooth and in part subtransversely striate on remainder. Following tergites smooth, each with a transverse groove bordered by a minute reticulate area; sides of segments with evenly rounded lobes; spiracles minute, slightly elevated and subrounded; last tergite with a rounded lobe at middle. Prosternum similar to pronotum but smoother and more shiny on central portion. Length 6 mm; breadth 1.45.

HOST: Ginger with very long leaves.

DISTRIBUTION: New Guinea (NE).

140. *Gonophora (Micrispa) scleriae* Gressitt, n. sp. Fig. 44.

Female: Whitish testaceous to pitchy black: head pitchy black above, ochraceous beneath; antenna ochraceous on segments 1–2, testaceous on segments 3–6, pitchy brown on remainder; pronotum pale testaceous, with a small pitchy spot on median line near base; scutellum blackish; elytron testaceous with 3 irregular incomplete pitchy black bands: 1) oblique, extending from humerus to suture just anterior to middle but extending forward around 1st and 2nd interstices and backward below and behind humerus; 2) an irregular subtriangular spot just behind center, nearly reaching suture but not approaching external margin; 3) a nearly complete band largely on apical declivity but not reaching apical margin; ventral surfaces largely pale ochraceous but pitchy brown on hind thorax; legs whitish testaceous with tarsi and apices of tibiae reddish brown. Body largely subglabrous with a few minute hairs on front of head and undersides, particularly at apex of abdomen.

Head slightly narrower than prothorax, finely granulose above; a narrow rostrum about $1/3$ as long as scape; fronsotoclypeus transverse, with a subtriangular raised area in center. Antenna $1/2$ as long as body, subcylindrical, most of segments subequal in length; seg-

ment 1 subpyriform; 2 quite stout and subcylindrical; 3 and following slightly longer but more slender than 2; 11 nearly $2\times$ as long as 10. *Prothorax* distinctly broader than long, distinctly wider anteriorly than posteriorly, sinuate and irregular at side with widest point about $1/5$ length from apex and base constricted and then slightly expanded at extreme basal angle; disc swollen and smooth across central portion, finely grooved medially, with anterior $1/3$ heavily and densely punctured, basal $1/2$ of disc heavily punctured on each side of median line and moderately punctured in lateral depression. *Scutellum* subtriangular, raised and parallel-sided posteriorly. *Elytron* slightly narrowed behind humerus, slightly broadened to posterolateral angle which is broadly rounded, oblique and slightly rounded apically; lateral and apical margins moderately and subevenly expanded with corrugations alternating with punctures of outermost puncture row; disc with 3 principal costae distinct and complete, fairly regular and subparallel, each separated by 2 parallel rows of punctures except for an extra row in middle of 2nd interstice near base and with punctures in base of 1st pair somewhat condensed near scutellum; interstices 2 and 3 depressed behind middle and slightly broadened by narrowing of costae in this area with costa 1 higher than 2 and 3 at this point. *Ventral surfaces* in large part finely granulose on thorax and minutely punctured on abdomen. *Legs* fairly short; tarsi each more than $1/2$ as broad as long. Length 2.8 mm; breadth 1.55.

Male: Body more strongly broadened posteriorly; antenna nearly $2/3$ as long as body; dorsum partly reddish brown on pale areas rendering elytral bands less conspicuous. Length 2.3 mm; breadth 1.2.

Holotype ♀ (BISHOP 3532), Bomberi, 750 m, Bomberai Peninsula, nr. Fak Fak, SW

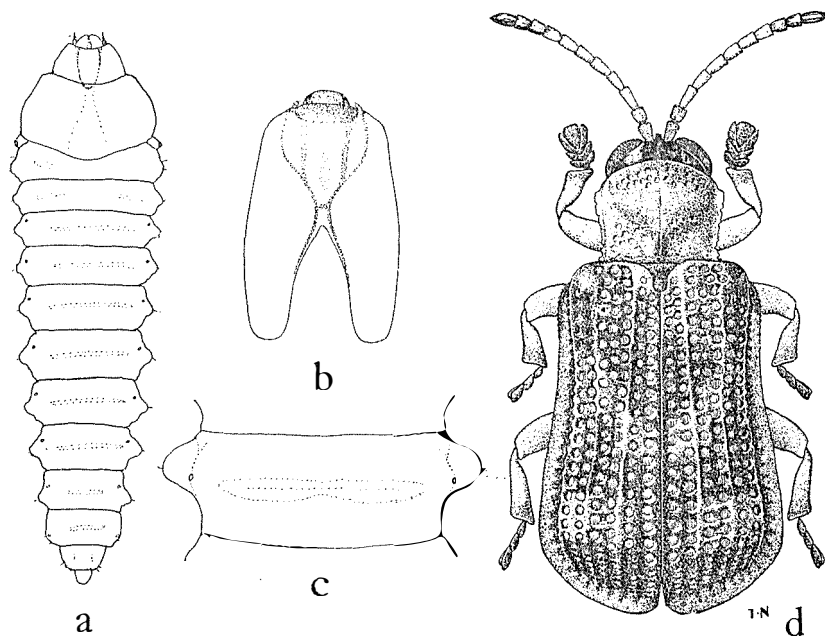


Fig. 44. *Gonophora (Micrispa) scleriae* n. sp.: a, dorsun of larva; b, dorsum of larval head capsule; c, abdominal tergite 3 of larva; d, adult.

Vogelkop, 5. VI. 1959, Gressitt, on sedge 3465, possibly *Scleria*; allotype ♂ (BISHOP), with larva, same data. A somewhat similar specimen, probably different, was taken on banana at the same locality.

Differs from *semiviridis* n. sp. in being slightly larger (♀), with prothorax broader anteriorly and elytron less regular in structure and color.

Larva: Whitish testaceous, slightly less whitish on pronotum, reddish on anterior portion of head capsule and narrowly reddish brown on borders and dorsal pattern of head capsule. Head capsule 1/3 longer than broad, slightly widened posteriorly and nearly straight at side but rounded at anterior corners; antenna short and slender, pale; 2 small blackish eye spots on side a short distance behind antenna; dorsal pattern parallel-sided in anterior 3/5, evenly narrowed and rounded posteriorly, with a narrow faint median stripe behind middle; facial suture strongly arched outward from dorsal pattern and terminating between antenna and eye spots, closer to former; posterior emargination distinctly longer than broad, subtriangular; with posterior lobes separated basally and rounded apically. Pronotum quite smooth, strongly rounded anteriorly. Remainder of tergites rather smooth, with narrow transverse granulose strip across middle of each; sides of segments obtusely rounded; spiracles minute and subrounded; last tergite with a posteriorly rounded produced lobe at middle. Length 4.3 mm; breadth 1.25.

HOST: *Scleria*? sp. (sedge).

DISTRIBUTION: New Guinea (SW).

141. *Gonophora* (*Micrispa*) *semiviridis* Gressitt, n. sp. Fig. 45.

Male: Testaceous to brown and green; head yellowish testaceous; antenna pale reddish brown; pronotum largely pale green, bordered with testaceous anteriorly; scutellum testaceous; elytron with upper portion of disc green, with sides and apex reddish testaceous; ventral surfaces and legs testaceous, somewhat tinged with reddish on tibiae and tarsi.

Head 3/4 as broad as prothorax, finely granulose; frons nearly as broad as long and somewhat rectangular. *Antenna* 4/5 as long as body and moderately stout; segment 1 slightly longer than broad, somewhat irregular and slightly compressed and oblique basally; 2 subcylindrical, slightly compressed, slightly longer than broad, nearly as long as 1; 3 more slender, 1.5× as long as 2; 3–10 decreasing slightly in length and increasing in diameter; 11 not quite 2× as long as 10. *Prothorax* 3/4 as long as broad, weakly convex anteriorly, weakly sinuate laterally and subparallel-sided, very slightly widened anterior to middle with anterior angle nearly square; basal angle slightly projecting following a brief indentation; disc with central portion moderately swollen, deeply grooved medially with a narrow impunctate strip on each side of groove and fairly deep punctures on most of remainder of upper surface, weakly punctured in lateral depression and largely impunctate near posterior angle with a fairly sharp ridge above and behind lateral depression; lateral expansion rather narrow. *Scutellum* strongly narrowed anteriorly, briefly subparallel-sided and subtruncate apically. *Elytron* 3× as long as broad, fairly straight at side and slightly widening but with posterior angle rounded and somewhat projecting; apex oblique, weakly convex and minutely denticulate; disc rather elevated and fairly flat with 3 moderately strong and fairly straight costae, costa 1 somewhat thicker than others and costa 3 slightly weaker and slightly sinuate; punctures in 8 fairly regular rows with a weak extra costa

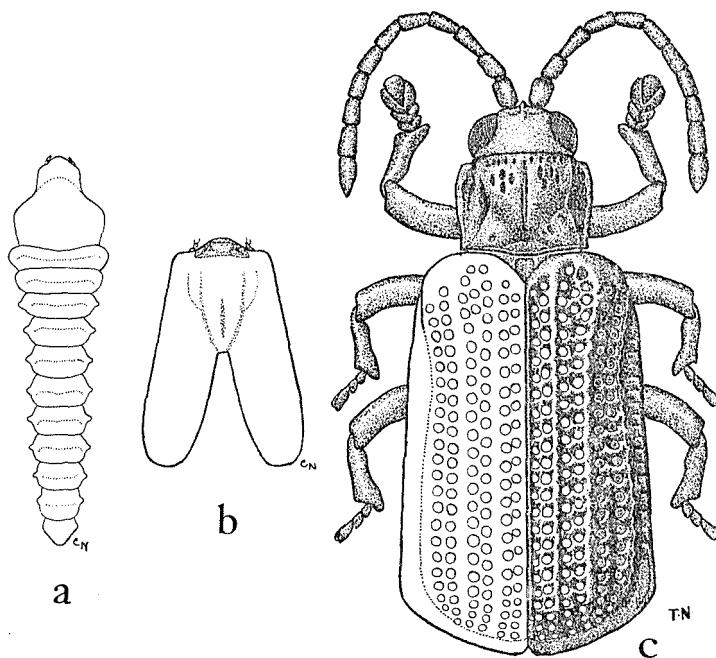


Fig. 45. *Gonophora (Micrispa) semiviridis* n. sp.: a, dorsum of larva; b, dorsum of larval head capsule; c, adult.

between puncture-rows between costae 2 and 3; side and apex rather strongly declivitous; margins fairly narrow. *Ventral surfaces* largely frosted, slightly shiny. *Legs* fairly slender; tarsi about $1/2$ as broad as long. Length 2.6 mm; breadth 1.15.

Female: Dorsal coloration slightly paler green; antenna not quite $3/4$ as long as body. Length 2.3 mm; breadth 1.0.

Paratypes: Dorsal coloration pale green to sometimes nearly testaceous. Length 2.1–2.9 mm; breadth 0.98–1.3.

Holotype ♂ (BISHOP 3533), Bomberi, 800 m, Bomberai Pen., nr. Fak Fak, Vogelkop, 5. VI. 1959, Gressitt, on small ginger; allotype ♀ (BISHOP), same data; 19 paratypes (BISHOP, CAS, USNM, BMNH, LEIDEN, BOGOR, ANIC), same data but partly taken by T. C. Maa.

Differs from other Papuan species in being smaller, more flattened, with narrow prothorax and largely green dorsum. Pale individuals appear to mate with green individuals.

Larva: Whitish testaceous, slightly yellowish on pronotum and head capsule which is reddish anteriorly. Head capsule nearly $1/2$ again as long as broad, slightly wider posteriorly than anteriorly, nearly straight at sides; antenna fairly short and stout; a small blackish pigmented area at corner just external to antennal insertion; 2 minute pigmented eye spots at side about $1/5$ length behind antennal insertion; dorsal pattern consisting of 2 narrow lines, roughly parallel but slightly convex exteriorly and slightly converging posteriorly towards inner end of posterior emargination which is distinctly longer than broad and straight-sided; posterior lobes separate at base, evenly narrowed and broadly rounded

apically. Pronotum quite smooth, strongly convex anteriorly. Remainder of tergites smooth, each with a transverse groove bordered by granules; side of each segment rather strongly lobed; spiracles minute and partly pigmented; last tergite subtransverse posteriorly. Length 2 mm; breadth 0.6.

HOST: ? *Alpinia*.

DISTRIBUTION: New Guinea (SW).

142. *Gonophora* (*Micrispa*) *donaxiae* Gressitt, n. sp. Fig. 46.

Male: Entirely pale ochraceous with raised portions of elytron paler testaceous and ventral surfaces yellowish testaceous.

Head $3/4$ as broad as prothorax, frosted above; frons about $3\times$ as broad as long with a subtransverse ridge across middle. *Antenna* $1/4$ as long as body, fairly stout; segment 1 subtriangular, thickened preapically, nearly as broad as long; 2 more cylindrical, slightly thicker preapically than basally, slightly longer than broad; 3 narrower basally but nearly as stout apically as 2, nearly as broad as long; 4 as broad as 3 but much shorter, broader than long; 4-10 similar, all much broader than long and increasing slightly in breadth; 11 not quite $2\times$ as long as 2, suddenly narrowed and subacute apically. *Prothorax* just over $2/3$ as long as broad, subtransverse anteriorly, rather weakly sinuate laterally with anterior $1/2$ slightly broader than basal $1/2$ and margin slightly rough but hardly denticulate; basal angle hardly projecting; disc uneven, strongly depressed and moderately punctured at side with a strong ridge around lateral cavity except at side, anterior portion with a sinuate line of deep punctures near anterior margin; central portion depressed anteriorly and posteriorly, thus forming somewhat of a transverse ridge but with also a longitudinal median ridge which is grooved medially, raised portion very weakly punctured but with several strong punctures in depressed postmedian portion, and almost no punctures on lateral and posterolateral portion. *Scutellum* strongly narrowed and briefly subparallel and rounded apically. *Elytron* slightly more than $3\times$ as long as broad, somewhat irregular; side weakly concave, distinctly widened posteriorly with posterolateral angle broadly rounded; apex oblique and distinctly rounded; margins fairly narrow and equal with some transverse ridges reaching almost to margin; disc depressed postmedially and with 3 major costae distinct but somewhat irregular and connected at irregular intervals by transverse ridges mostly as high as costae; transverse ridges forming cells which are mostly longer than broad in interspaces 1-2 and mostly broader than long in interspace 3, and thus mostly containing 2 or 4 punctures but with 1 postmedian cell with about 7 punctures. *Ventral surfaces* frosted and not very shiny, very finely punctured. *Legs* short and stout; tarsi about $2/3$ as broad as long. Length 3.6 mm; breadth 1.5.

Female (?): Antenna slightly less stout, just over $1/5$ as long as body. Length 3.6 mm; breadth 1.4.

Paratypes: Dorsum sometimes largely pitchy or ochraceous with postmedian elytral depressions pitchy. Length 3.2-3.6 mm; breadth 1.3-1.6

Holotype ♂ ? (BISHOP 3534), Lae, 20 m, NE New Guinea, 22. VII. 1959, Gressitt, on *Donax canniformis*; allotype ♀ ? (BISHOP), same data; paratypes (BISHOP, CAS, USNM, BMNH, ANIC), Madang, 5 m, 28. X. 1958, Gressitt, on *Donax*; Wanuma, 800 m, Adelbert Mts., 26. X. 1958, Gressitt, on ? *Heliconia*; above Ifar, 550 m, Cyclops Mts., 23. VI. 1959,

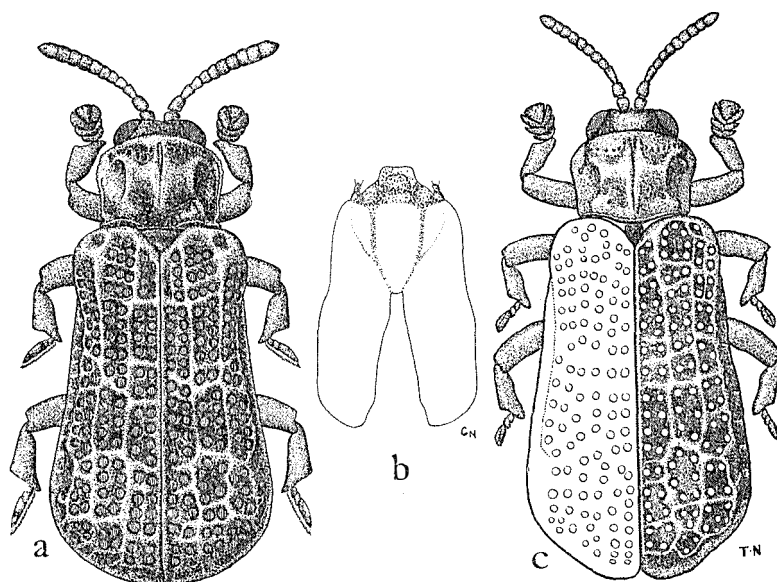


Fig. 46. *Gonophora (Micrispa) donaxiae* n. sp.: a, adult; b, dorsum of larval head capsule; c, adult somewhat questionably this species.

probably on *Donax* (recorded as ? *Heliconia* or ? *Canna*). Additional specimens, possibly different, from Fak Fak area, Nabire, Waris and other areas.

Differs from other Papuan species in being more slender, with shorter antenna and with transverse ridges on elytron as high as costae and forming cells.

Larva: Whitish testaceous, with pronotum darker testaceous and prosternum slightly darker; head capsule testaceous with mouthparts largely reddish to pitchy, antenna pale testaceous and 2 minute but distinct blackish eye spots; dorsal pigmented pattern simple, parallel-sided anteriorly and converging posteriorly to inner end of posterior emargination; facial suture distinctly sinuate. Head capsule $\frac{2}{3}$ again as long as breadth anteriorly, slightly broadened behind middle and subparallel-sided posteriorly; posterior emargination much longer than broad and slightly open at inner end; posterior arms broadly rounded apically. Pronotum strongly convex anteriorly, finely granulose near anterior margin, quite smooth and in part feebly striate on remainder. Rest of tergites smooth, each with a transverse groove bordered by granules, the structure divided on meso- and metatergites; side of each segment with an evenly rounded process; spiracles round, on fairly distinct tubercles; last tergite convex posteriorly, with a slight lobe at middle. Length 5.8 mm; breadth 1.4.

HOST: *Donax canniiformis*.

DISTRIBUTION: New Guinea (NE, NW).

143. *Gonophora (Micrispa) cubicularis* Gressitt, n. sp. Fig. 47.

Male (?): Orange ochraceous to pitchy black; head dull orange, paler anteriorly; antenna testaceous, more orange apically; pronotum pitchy reddish, paler orange anteriorly

and darker pitchy on posterior portion of side; scutellum pitchy black; elytron pitchy black with more than $1/2$ of costae and transverse ridges reddish orange but with ridges just behind humerus, just behind middle and just before apex, largely pitchy; ventral surfaces and legs orange ochraceous with outer edges of tibiae slightly pitchy brown.

Head $3/4$ as broad as prothorax, finely granulose, slightly depressed postmedially; frons slightly broader than long with a large raised triangular area. *Antenna* barely $1/4$ as long as body, distinctly thickened apically; segment 1 barely longer than broad, broadest near apex; 3 slightly longer than 1, fairly slender; 4 distinctly shorter than 3; 4-7 slightly uneven in length; 8-10 becoming much broader, broader than long; 11 fully $2\times$ as long as 10, subacute apically. *Prothorax* nearly $3/4$ as long as broad, weakly convex anteriorly, slightly sinuate laterally with anterior $1/2$ hardly broader than posterior $1/2$ and broadest point at about middle; basal angle hardly projecting and preceded by slight indentation; disc strongly convex in central portion with median area somewhat transversely raised and medially grooved with anterior $1/2$ closely and heavily punctured and posterior $1/2$ of swelling and posterior declivity somewhat more finely and less grossly punctured; lateral depression with several large punctures and with an incomplete ridge bordering it above; lateral portion rather narrowly expanded and with a slight swelling between lateral depression and margin. *Scutellum* subtriangular, rounded behind. *Elytron* not quite $3\times$ as long as broad, distinctly concave at side, narrowest at end of basal $1/3$, gradually broadened posteriorly with posterolateral angle broadly rounded but not projecting; apex oblique and weakly convex; lateral margin only moderately broad, with some of transverse ridges reaching margin; apical margin hardly expanded; disc irregular, with 3 major costae uneven, largely connected by transverse or oblique ridges of nearly the same height, costa 3 quite irregular; most of cells formed by transverse ridges squarish but some irregular, mostly containing 4-6 punctures but some with only 1 or 2 and others with more than 6. *Ventral surfaces* finely frosted, not distinctly punctured. *Legs* fairly stout; tarsi about $3/4$ as broad as long. Length 3.1 mm; breadth 1.4.

Holotype ♂ ? (BISHOP 3535), Bomberi, 800 m, Bomberai Pen., nr. Fak Fak, Vogelkop, 5. VI. 1959, Gressitt.

Differs from *donaxiae* in being broader, with pronotum broadest at middle and more evenly convex above, and with elytral costae less regular and with cells mostly about as broad as long and partly squarish.

HOST: Smooth-leaved ginger, possibly *Alpinia*.

DISTRIBUTION: SW New Guinea.

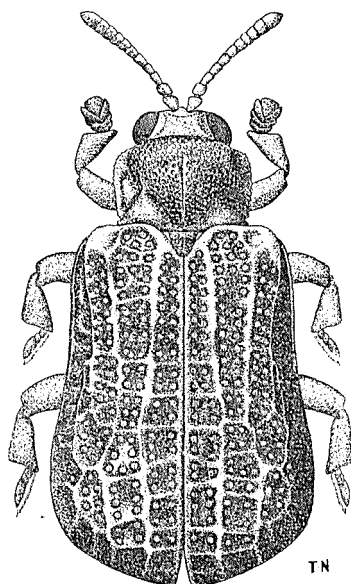


Fig. 47. *Gonophora* (*Micrispa*) *cubicularis* n. sp.

Tribe CHAERIDIONINI

Genus *Prionispa* Chapuis, 1875144. *Prionispa papuana* Gressitt, n. sp. Fig. 48.

Female (?): Pale ochraceous, vaguely marked with pitchy green along middle of disc and along middle of side of pronotum, dull reddish on last 4 antennal segments, very weakly tinged with greenish on borders and ridges of elytron; ventral surfaces pale ochraceous; tarsal claws reddish. Body almost entirely glabrous except for tarsal pads.

Head distinctly narrower than prothorax, subparallel-sided; occiput with deep strong punctures; vertex ridged medially and continuing into a narrow short interantennal process, reaching just beyond middle of scape; frontoclypeus transverse, moderately ridged medially and finely punctured on each side. *Antenna* just over $1/2$ as long as body; segment 1 subcylindrical; 2 distinctly longer than 1, slightly widened towards apex; 3 nearly as long as $1+2$, weakly thickened apically; 4 slightly shorter than 3 and barely longer than 5; 6 shorter than 2, subequal to 7; 8-10 shorter and decreasing in length; 11 about as long as 2. *Prothorax* slightly broader than long, subrectangular; apical margin nearly straight; lateral margins subparallel, with 2 anterior corners with an indentation between them nearly forming a right angle; disc deeply and closely punctured, with just over 10 punctures in an approximate longitudinal row. *Scutellum* longer than broad, subtriangular but slightly extended and subparallel posteriorly. *Elytron* very broad with broad lateral margin, with broadly rounded posthumeral area and strongly angulate posterolateral portion; apical margin gradually narrowed towards sutural angle; disc deeply punctured, the punctures partly in regular rows but disturbed by tubercles: a moderately raised area adjacent to scutellum, a forward projecting ridge at middle of basal margin, a suberect humeral projection, a moderate tubercle in 3rd interstice at about $1/5$ elytral length from base and a smaller tubercle in 5th interstice between former and humeral angle, and a very strong tuberculate ridge near center of interstice 5 forming an acute tubercle at least $1/2$ as high as total body depth (excluding this tubercle); behind this high tubercle 4 weak ridges or tubercles in interstices 1, 2, 4 and 7 counting from suture at this point. *Ventral surfaces* largely smooth and fairly shiny.

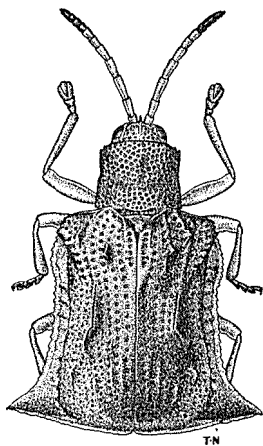


Fig. 48. *Prionispa papuana* n. sp.

Legs moderately long and slender, fairly smooth and shiny. Length 6.9 mm; breadth at humeri 3.6, at posterior teeth 5.2.

Holotype ♀ ? (BISHOP 3536), Kebar Valley, 550 m, W of Manokwari, Vogelkop, NW New Guinea, 4-31. I. 1962, L. W. Quate.

Differs from *fulvicollis* Guer. in having prothorax more parallel-sided and elytron with margin convex near humerus, posterolateral angle much stronger and a far stronger tubercle near middle of disc. Differs from *distincta* Gestro in having posterolateral tooth much more acute and more transverse, etc. Differs from *gemmata* Baly in being much larger, less metallic and much more strongly tuberculate on elytron.

DISTRIBUTION: New Guinea (NW).

Tribe HISPINI

KEY TO GENERA

1. Anterior margin of pronotum with long spines 2
 Anterior margin of pronotum without long spines 3
2. Antennal scape spined; tarsal claws single..... **Hispellinus**
 Antennal scape not spined; tarsal claws paired..... **Dactylispa**
3. Side of prothorax with a generally 4-branched trunk followed by a single spine;
 lateral margin of elytron regular, with many spines..... **Dicladispa**
 Side of prothorax with a broad lobe bearing several spines; lateral margin of elytron
 with 2 broad lobes, anterior one often with 5 or 6 spines and posterior one often
 with 3 spines **Platypria**

Genus **Hispellinus** Weise, 1875

KEY TO ADULTS

1. Thoracic spines in part elevated at more than 45° angle (at least anterior spines) 2
 Thoracic spines all elevated at less than 45° angle, for most part nearly horizontal..... 3
2. Elytron with longer apical spines 2/3 as long as longer lateral spines; spine on scape
 sinuate, reaching to middle of segment 4..... **146. albertisi**
 Elytron with longer apical spines 4/5 as long as longer lateral spines; spine on scape
 arched apically, reaching to end of segment 3 **145. csikii**
3. External margin of elytron with 20–21 spines; lateral spines longer than discal
 spines, or thoracic spines all nearly horizontal 4
 External margin of elytron with 24 spines; lateral spines hardly longer than discal
 spines; thoracic spines obliquely raised..... **149. coarctatus**
4. Elytron with spines slender; lateral spines longer than discal spines; thoracic spines
 slender and obliquely raised **147. germari**
 Elytron with spines stout; lateral spines about as long as discal spines; thoracic
 spines stout and horizontal..... **148. multispinosus**

145. *Hispellinus csikii* (Gestro), 1907: 80 (*Monochirus*; NE New Guinea; BUDAPEST).—
Hispellinus csikii: Uhmman, 1954: 102.—Gressitt, 1957: 313, fig. 30.

NE NEW GUINEA: Lae, VIII. 1944, F. E. Skinner (PURDUE); Lae, 4. VII. 1961, J. &
 J. H. Sedlacek. SE NEW GUINEA: Middle Fly River, 400 km upstream, VII. 1928, Pem-
 berton; Loloipa, Gailala, Owen Stanley Range, 16–30. I. 1958, Brandt; Tapini, 1100 m, 17.
 V. 1961, M. & L. Gressitt, on grasses.

HOST: Kunai (grass complex including *Themeda*, *Imperata* and *Saccharum sponta-
 neum*).

DISTRIBUTION: New Guinea (NE, SE).

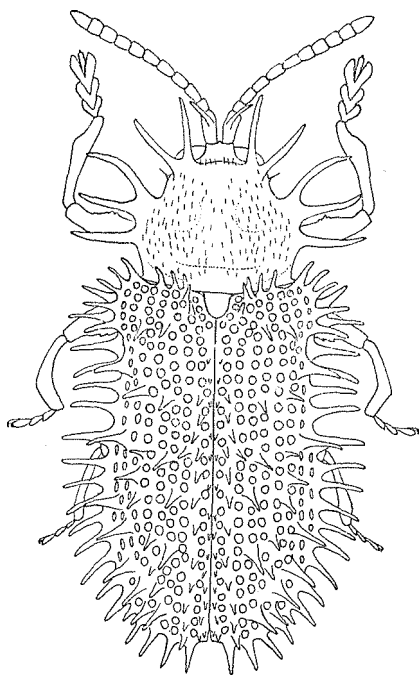


Fig. 49. *Hispellinus* sp., probably *albertisi* Gestro.

146. *Hispellinus albertisi* (Gestro), 1897: 122 (*Monochirus*; Fly R.; GENOVA).—*Hispellinus albertisi*: Uhmman, 1954: 102.—Gressitt, 1957: 313. Fig. 49.

NW NEW GUINEA: W. Cyclops Mts., nr. Sentani, 150–250 m, 17. VI. 1959, Gressitt. NE NEW GUINEA: Mobitei, Torricelli Mts., 750 m, 1–15. IV. 1959; Sibog, Saidor, Finisterre Range, 27. V–5. VI. 1958, Brandt; Madang, 28. X. 1958, Gressitt, grass; Lae, 4. VII. 1961, M. & L. Gressitt on *Saccharum*. SE NEW GUINEA: Daradae Plantation, 500 m, 80 km NE of Port Moresby, 4. IX. 1959, Maa; Loloipa, Goilala, Owen Stanley Mts., 25. XI–10. XII. 1957, Brandt; Tapini, 1100 m, 17. V. 1961, M. & L. Gressitt on grasses; Doa Estate, W of Port Moresby, 27. X. 1962, R. Straatman; Otomata, E of Port Moresby, 2. XI. 1960, Gressitt.

HOSTS: Grasses, *Saccharum*.

DISTRIBUTION: New Guinea (NW, NE, SE).

147. *Hispellinus germari* (Chapuis), 1877: 48 (*Monochirus*; Carpentaria; BRUXELLES).—*Hispellinus Germari*: Uhmman, 1934: 5; 1954: 102 (Herkules R.; Etna Bay).

NW NEW GUINEA: Itouda, Kamo Vall., Wisselmeren, 13. VIII. 1955, Gressitt; Bokondini, 40 km N of Baliem, 1300 m, 16–23. XI. 1961, S. & L. Quate; Kutsime, W of Swart Vall., 1500 m, 14. XI. 1958, Gressitt; Karubaka, Swart Vall., 1450 m, 5. XI. 1958, Gressitt, on grasses; Sibil, Star Mts., 1245 m, 18. X–8. XI. 1961; above Ifar, 500–750 m, 23. VI. 1959, Gressitt; Waris, 450 m, 5. VIII. 1959, Maa. NE NEW GUINEA: Mobitei, 750 m, Torricelli Mts., 1–15. IV. 1959, Brandt; Siaute, nr. sea level, nr. Torricelli Mts., 9–17. XI. 1958, Brandt; Nangian, Torricelli Mts., 17–24. XI. 1958, Brandt; Sugoitei, Torricelli Mts., 1–28. II. 1959, Brandt; Mokai, Torricelli Mts., 16–31. XII. 1958, Brandt; Maprik, 160 m, Sepik, 23. VIII. 1957, D. E. Hardy; Dreikikir, W of Maprik, 350 m, 24. VI. 1961, M. & L. Gressitt; Baiyer R., W. Highlands, 17. X. 1958, Gressitt; Tapibagar, upper Jimmi Vall., 19. VII. 1955, Gressitt; Bubia, nr. Lae, 21. V. 1959, Michener. SE NEW GUINEA: Oriomo Gov't. Sta., W. Distr., 26. X. 1960, Gressitt; Kiunga, Fly R., 15. VIII. 1957, Brandt; Brown R., nr. Port Moresby, 28. X. 1960, Gressitt; Aiyuop, S. Highlands, 1530 m, 7. X. 1958, Gressitt; Daradae Plantation, 80 km NE of Port Moresby, 6. IX. 1959, Maa.

HOST: Grasses.

DISTRIBUTION: Australia, New Guinea, Manus.

148. *Hispellinus multispinosus* (Germar), 1848: 246 (*Hispa*; S. Australia: ? ZMB).—*Monochirus multispinosus*: Gestro, 1885: 173.—*Hispellinus multispinosus*: Gressitt, 1957: 313.

NE NEW GUINEA: Sugoitei, 900 m, 10. II. 1959, Siaute, 5 m, 9. XI. 1958, Torricelli Mts., Brandt; Bainyik, 150 m, nr. Maprik, 21. VI. 1961, M. & L. Gressitt; Maprik, 160 m, 27. VIII. 1957, D. E. Hardy; Dreikikir, W of Maprik, 400 m, 24. VI. 1961, M. & L. Gressitt. SE NEW GUINEA: Mendi, S. Highlands, 1660 m, 6. X. 1958, Gressitt, in kunai; Masava, nr. Port Moresby, 17. III. 1956, Gressitt.

HOST: Kunai (*Themeda*, *Imperata* or *Saccharum spontaneum*).

DISTRIBUTION: Australia, E. New Guinea.

149. *Hispellinus coarctatus* (Chapuis), 1877: 48 (*Monochirus*; Sydney; BRUXELLES).—*Hispellinus coarctatus*: Uhmman, 1958: 262.

NW NEW GUINEA: Kebar Vall., W of Manokwari, 550 m, 4–31. I. 1962, Quate, Bokondini, 40 km N of Baliem Vall., 1300 m, 5–11. XI. 1961, Quate. NE NEW GUINEA: Minj, W. Highlands, 8–13. IX. 1959, Maa. SE NEW GUINEA: Middle Fly R., 400 km upstream, VII. 1928, Pemberton.

HOST: Grasses.

DISTRIBUTION: Australia, New Guinea (NW, NE, SE).

Genus *Dactylispa* Weise, 1897

KEY TO ADULTS

1. Prothorax with lateral spines unequal, 3 : 1 or 2 : 1; elytron spined..... 2
Prothorax with 4 equal lateral spines with a common base; elytron tuberculate, with lateral margin toothed; ochraceous with elytral disc pitchy black..... **150. *cincta***
2. Prothorax with lateral spines 3 : 1 3
Prothorax with lateral spines 2 : 1 5
3. Elytral disc with 8–10 long spines; lateral margin with some small spines..... 4
Elytral disc with only one long spine; apical teeth very short, no longer than broad; elytron almost entirely black, very evenly convex..... **153. *semecarpi***
4. Elytron with major lateral spines about 7 in number; apical spines hardly longer than broad; elytron entirely black in posterior 3/5 **152. *rubus***
Elytron with major lateral spines about 9; apical spines longer than broad; elytron with margin and apex pale and about posterior 3/4 of disc pitchy **151. *plagiata***
5. Elytral disc with about 9 spines; apical spines not much longer than broad; thoracic spines distinctly tapering; elytral disc largely black..... 6
Elytral disc with 11 spines; apical spines much longer than broad; thoracic spines very slender, hardly tapering till apices; elytral disc broadly bordered with pale **156. *minor***
6. Elytron with about 8 major lateral spines; apical teeth distinct; elytral margin rather sinuate between spines..... **155. *macnamarana***
Elytron with about 6 major lateral spines; apical teeth largely obsolete; elytral margin rather straight between spines **154. *discalis***

150. *Dactylispa cincta* (Gestro), 1885: 177 (*Hispa*; Andai, NW; GENOVA).—*Dactylispa cincta* Weise, 1911: 64.—Gressitt, 1957: 318. Fig. 50a.

NE NEW GUINEA: 1, Mt. Kainai, 300 m, 9. I. 1962, J. Sedlacek.

DISTRIBUTION: New Guinea (NW, NE).

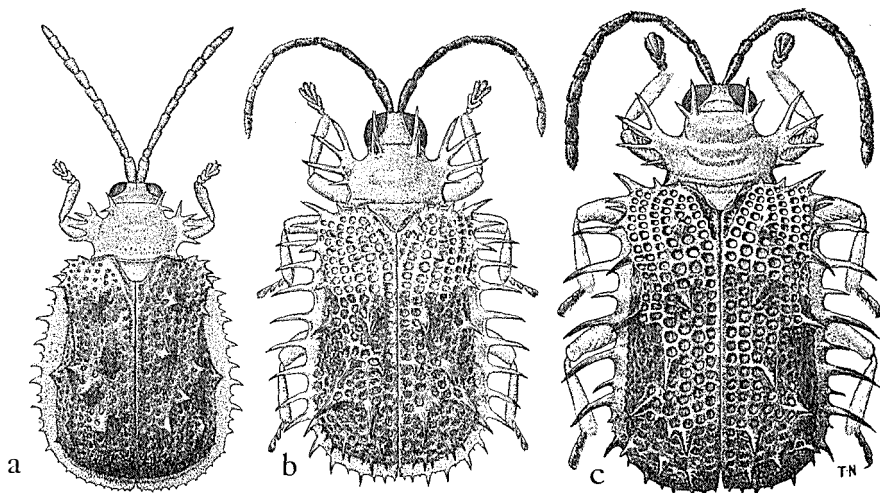


Fig. 50. a, *Dactylispa cincta* (Gestro); b, *D. plagiata* Ws.; c, *D. rubus* (Gestro).

151. *Dactylispa plagiata* Weise, 1905a : 248 (NG : ZMB).—Gressitt, 1957 : 317. Fig. 50b.

NW NEW GUINEA : Boden, nr. Sarmi, 16. VII. 1959, T. C. Maa. NE NEW GUINEA : Wewak, 5 m, 25. VI. 1959, Gressitt ; Bubia, nr. Lae, 50 m, 17. IX. 1955, Gressitt ; Busu River, nr. Lae, 100 m, 14. IX. 1955, Gressitt.

DISTRIBUTION : New Guinea (NW, NE).

152. *Dactylispa rubus* (Gestro), 1892 : 1019 (*Hispa* ; Papua ; GENOVA).—*Dactylispa rubus* : Weise, 1911 : 68.—Gressitt, 1957 : 317. Fig. 50c.

SE NEW GUINEA : Kapagere, nr. Rigo, 14–19. V. 1959, C. D. Michener ; Kiunga, Fly R., 24–25. IX. 1957, W. W. Brandt ; Aroa Estate, W of Redscar Bay, 30. IX. 1958, Gressitt ; Daradae, nr. Jawarere, Musgrove Range, 100 m, 5. X. 1958, Gressitt.

DISTRIBUTION : New Guinea (SE), Solomon Is.

153. *Dactylispa semecarpi* Gressitt, n. sp. Fig. 51a.

Male : Orange testaceous to black ; head and prothorax pale orange ochraceous with extreme apices of thoracic spines pitchy ; scutellum testaceous ; elytron black with extreme base near scutellum pitchy brown and basalmost spines on humerus and elytral margin pitchy ; ventral surfaces and legs orange ochraceous ; antenna black with apex pitchy brown.

Head about as broad as apex of prothorax, largely smooth and shiny ; vertex with a short narrow rostrum ; frons trapezoidal, about as broad as deep, somewhat convex and partly punctured or rugose. *Antenna* nearly $\frac{3}{4}$ as long as body, fairly slender ; segment 1 long and slender, subcylindrical ; 2 barely $\frac{1}{2}$ as long as 1, nearly $2\times$ as long as broad ; 3 subcylindrical, slightly thickened apically, nearly as long as 1 ; 4 about $\frac{4}{5}$ as long as 3 ; 4–10 decreasing slightly in length ; 11 slightly longer than 8. *Prothorax* much

broader than long, with very strong spines; a bifurcating spine on side near anterior margin, with posterior branch suberect and slightly longer than anterior branch; lateral spines arising from a broad common base with 3 strong anterior branches separating from main trunk at a slightly greater distance from base than length of last spine, 2nd branch longest and 1st distinctly longer than 3rd; disc fairly smooth and almost impunctate, transversely raised across middle and depressed before and behind transverse convexity. *Scutellum* large, subtrapeziform and slightly rounded apically. *Elytron* 2.4× as long as broad (excluding spines); lateral margin fairly straight but slightly concave at end of basal 1/3 and slightly broadened postmedially, evenly rounded apically; outer margin moderately and subevenly broadened and bearing about 8 major spines at side, partly about as large as 3rd thoracic spine but becoming shorter posteriorly, and apical margin with 6 or 7 teeth which are mostly just a little longer than broad but spine nearest posterolateral angle about 3× as long as broad; basal margin with 3 weak spines or teeth near scutellum and humerus with 3 fairly stout and not very long spines; disc with only 1 major spine located on 2nd interstice somewhat anterior to middle and with 3 or 4 other nearly obsolete spines or tubercles; punctures in about 10 rows anterior to middle and 9 rows just behind middle; punctures fairly strong and fairly uniform in size with interstices slightly raised and largely subequal. *Ventral surfaces* fairly smooth and slightly shiny with some frosting towards side. *Legs* moderately slender with tarsi fairly long. Length 5.2 mm; breadth 2.5 (excluding spine).

Paratype: Length 5.8 mm; breadth 3.2.

Holotype ♂ ? (BISHOP 3537), Kampong Landbouw, 25 m, Biak I., 21. X. 1957, Gressitt, on *Semecarpus*-like plant; paratype, same data.

Differs from *rubus* (Gestro) in having elytron entirely black, in almost lacking spines on elytral disc, and in having margins less broadly expanded.

HOST: ?*Semecarpus*.

DISTRIBUTION: NW New Guinea (Biak I.).

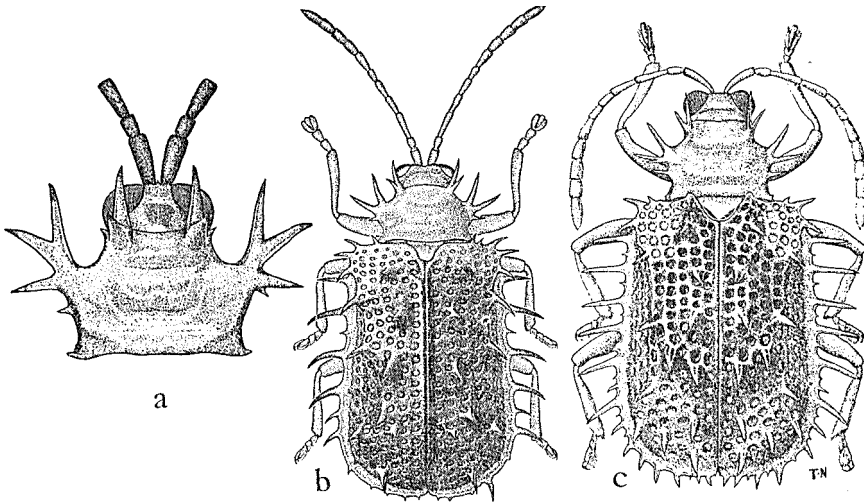


Fig. 51. a, *Dactylispa semecarpi* n. sp.; b, *D. discalis* n. sp.; c, *D. minor* n. sp.

154. *Dactylispa discalis* Gressitt, n. sp. Fig. 51b.

Male: Pale orange ochraceous with apical portion of antenna more reddish; elytral disc (except base, humerus and apex) pitchy black; lateral spines of elytron partly somewhat pitchy.

Head slightly broader than extreme apex of prothorax, nearly as long as broad; surface smooth and shiny, slightly depressed medially between eyes; rostrum minute; frons distinctly broader than deep, moderately convex in middle of apical portion. *Antenna* nearly $4/5$ as long as body, fairly slender; segment 1 long, thickest slightly before apex; 2 slightly longer than broad, subcylindrical; 3 long and slender, nearly as long as 1; 4 about $3/4$ as long as 3; 5 similar to 4; 6 shorter and slightly stouter; 7 stouter and nearly as long as 3; 8–10 slightly shorter and stouter; 11 about as long as 1. *Prothorax* about $2/3$ as long as broad (excluding spines); anterior pair of spines distant from middle of anterior margin, branching fairly near base and fairly slender; lateral spines 3, with a common base, 1 and 2 much longer and with a common base separated from extreme base by slightly less than length of spine 3; 1 and 2 subequal, each slightly more than $2\times$ as long as 3 and much stouter; disc fairly smooth and shiny, with a transverse raised area in middle and depressed before and behind with basal portion slightly roughened and in part punctured. *Scutellum* broadly triangular, broadened apically. *Elytron* not quite $3\times$ as long as broad, distinctly widened postmedially, broadly rounded apically; external margin moderately expanded and somewhat sinuate; lateral margin with 5 or 6 major spines of unequal size interspersed with 1 or 2 quite small ones; apical margin with a fairly strong tooth near posterolateral curvature and with only few minute teeth in addition; disc strongly convex, with subregular rows of strong punctures and with 7 or 8 major spines of unequal size, some represented by obtuse tubercles and others as long as lateral spines and quite stout, arranged roughly in 2 subparallel rows but with 1 spine missing in outer row near middle; humeral area with 4 moderately long well separated spines on extreme base with 1 moderate spine. *Ventral surfaces* moderately shiny and largely impunctate. *Legs* quite slender; tarsi narrow. Length 4.3 mm; breadth 2.3 (excluding spines).

Paratypes: Length 3.6–4.0 mm; breadth 2.2–2.5.

Holotype ♂ (BISHOP 3538), Karimui, 1000 m, S of Goroka and nr. Papua border, 6. VI.1961, M. & L. Gressitt, on large-leaved shrub: 2 paratypes (BISHOP, CAS), same data. Four, not designated paratypes, Kiunga, Fly R., 21. X.1957, W. Brandt; Feramin, 11. V. 1959, Brandt.

Differs from *macnamarana* Gr. in being slightly larger, in having only about 6 major spines at side of elytron, and with apical teeth nearly obsolete.

HOST: Large-leaved shrub.

DISTRIBUTION: New Guinea (NE, SE?).

155. *Dactylispa macnamarana* Gressitt, 1957: 316 (Mt. Lamington; AM).

NE NEW GUINEA: Several, Kiambavi, VII–VIII.1958, and Matoko, VIII–IX.1958, Saidor, Finisterre Range, W. W. Brandt.

DISTRIBUTION: New Guinea (SE, NE).

156. *Dactylispa minor* Gressitt, n. sp. Fig. 51c.

Pale yellowish testaceous to ochraceous and pitchy black; head, antenna, prothorax and scutellum pale yellowish testaceous; elytron reddish ochraceous with inner portion of disc pitchy from near scutellum to somewhat behind middle and to just external to median line slightly anterior to middle; ventral surfaces and legs yellowish testaceous.

Head barely broader than extreme apex of prothorax, largely smooth and shiny with a slightly depressed median line; rostrum minute; frons nearly as broad as long, moderately convex and slightly punctured. *Antenna* nearly $4/5$ as long as body; segment 1 long and slender, thickest near apex; 2 subovate, distinctly longer than broad and narrowest basally; 3 slender, nearly as long as 1; 4 about $4/5$ as long as 3 and distinctly longer than 5; 6 shorter than 5; (remainder abnormal in type). *Prothorax* $5/8$ as long as broad (excluding spines); anterior spines distant from middle, bifurcating some distance from base, extremely slender, posterior branch longer than anterior; lateral spines 3, 1 and 2 subequal, quite slender, branching a short distance from common base, spine 3 arising from posterior end of common base and about $1/2$ as long as spine 1; disc transversely raised in middle, largely smooth and shiny. *Scutellum* triangular, rounded behind. *Elytron* (excluding spines) about $2.5\times$ as long as broad, moderately expanded on margins with about 6 major spines on outer margin mostly alternating with minute spinules and with 6 or 7 fairly strong teeth on apical margin, mostly about $2\times$ as long as broad; 1 moderate tooth near scutellum and 3 distinct spines on humeral area with 1 small tooth in addition; disc with about 9 major spines of varying length, arranged partly in 2 and partly in 3 rows with 3 spines in an approximate transverse row near top of posterior declivity; punctures moderately large and fairly regular except where disturbed by spines. *Ventral surfaces* largely smooth and shiny with few minute punctures or granules along sides. *Legs* slender; tarsi narrow. Length 3.2 mm; breadth 1.7 (excluding spines).

The additional specimen has the antennae $4/5$ as long as body and quite slender; apical segments much longer than broad.

Holotype (BISHOP 3539), Bomberi, Bomberai Pen., 800 m, nr. Fak Fak, Vogelkop, SW New Guinea, 4. VI. 1959, Gressitt. Additional specimen, not designated paratype, Urapura (Ugapuga), 1530 m, Kamo Valley, Wisselmeren, 10. VIII. 1955, Gressitt.

Differs from *macnamarana* Gr. in being smaller, in having more spines on elytral disc, and with apical spines distinctly longer than broad and thoracic spines very slender.

DISTRIBUTION: New Guinea (SW, NW?).

Genus ***Dicladispa*** Gestro, 1897

KEY TO ADULTS

1. Pronotum with at least a partial narrow median groove, and with moderately dense punctures on each side close to median groove..... 2
- Pronotum without a narrow median groove, with a fairly broad median impunctate area and with discal punctures few and sparse..... 3
2. Body reddish brown except for black elytron; pronotum with median groove more distinct; scutellum smooth; elytral punctures mostly smaller than interspaces.....
- **157. *fabricii***

- Body entirely black, sometimes bluish or purplish black; pronotum with median groove less distinct; scutellum slightly granulose or rough; elytral punctures mostly as large as, or larger than, interspaces **158. linnei**
3. Spines of apical margin of elytron nearly $1/2$ as long as those of lateral margin; legs black; elytron steely blue; length 5.0–6.5 mm **159. kapauku**
- Spines of apical margin of elytron much less than $1/2$ as long as those of lateral margin; legs brownish; elytron bronzy purplish; length 4.5 mm..... **160. pembedtoni**

157. *Dicladispa fabricii* (Guérin-Ménéville), 1838 : 140 (*Hispa*; New Guinea; PARIS).—*Dicladispa fabricii*: Barber & Bridwell, 1940 : 6.—Gressitt, 1957 : 319.

NW NEW GUINEA: Bodem, nr. Sarmi, 18. VII. 1959, T. C. Maa; Kebar Vall., Vogelkop, 4–31. I. 1962, L. & S. Quate; Mangrowawa, Biak I., 29. VI. 1959, Gressitt. NE NEW GUINEA: Dreikikir, Sepik, 23. VI. 1961, M. & L. Gressitt; Maprik, 14. X. 1957, Gressitt.

HOSTS: *Oplismenus* and other grasses.

DISTRIBUTION: New Guinea (NW, NE), New Britain, Bougainville.

158. *Dicladispa linnei* (Weise), 1905 : 101 (*Hispa*; NE NG; ?ZMB).—*Dicladispa linnei*: Uhmman, 1952a : 238.—Gressitt, 1957 : 319. Fig. 52.

NE NEW GUINEA: Eliptamin Vall., 1700–2500 m, 23–30. VI. 1959, W. Brandt; Feramin, 150 m, 7–14. VI. 1959, Brandt; Minj, W. Highlands, 8–13. IX. 1959, Maa; Nondugl, 2200 m, 28. V. 1959, Michener; Aiyura, 1620 m, 19. X. 1959, Maa; Kassam, 1350 m, 30. X. 1959, Maa; Arau, 1400 m, 16. X. 1959, Maa; Wau, 1300 m, 17. VI. 1961, with larvae, Gressitt & Sedlacek, 15. X. 1961, 22. XII. 1961, Sedlacek. SE NEW GUINEA: Brown R., 24. V. 1956, E. J. Ford, Jr.; Loloipa, Goilala Distr., 21–31. XII. 1957, Brandt; Tapini, Goilala, 16. XI. 1957, Brandt; Keparra-Sungi, nr. Kokoda, 27. III. 1956, Gressitt.

Biology: Larvae mine between upper and lower surfaces of leaves of grasses; pupation takes place in the same environment.

Larva (Wau): Whitish testaceous, slightly ochraceous on anterior and postmedian portions of head capsule and on central portion of pronotum; posterior processes of last abdominal segment and adjacent area of side somewhat reddish brown. Head capsule nearly $5/6$ as long as broad, widest near middle, emarginate for nearly posterior $1/2$ of length; posterior lobes somewhat gradually narrowed and rounded apically, but with a slight emargination on outer side anterior to middle; emargination between lobes gradually narrowed anteriorly and then somewhat suddenly and obtusely narrowed at anterior end; median line pigmented with pitchy and an oblique whitish line on each side from near base of emargination to area of eye-spots; antenna $3\times$ as long as broad; about 4 or 5 pigmented eye-spots located on lateral margin some distance behind antenna. Thorax without lateral processes; spiracle moderately prominent and subacute; sclerotized portion of pronotum rather smooth, in part finely striate transversely and with a depression near middle of each side. Abdomen with fairly short fleshy lateral processes, process of segment 1 extremely short and blunt, those of segments 2–5 quite stout but tipped with a small acuminate and setose process; process 6 with a weakly obtuse base and quite slender and short; process 7 somewhat smaller than 6; process 8 still slightly smaller, apex of segment 8 broadly rounded in middle and with a strong posteriorly projecting process at side of mid-

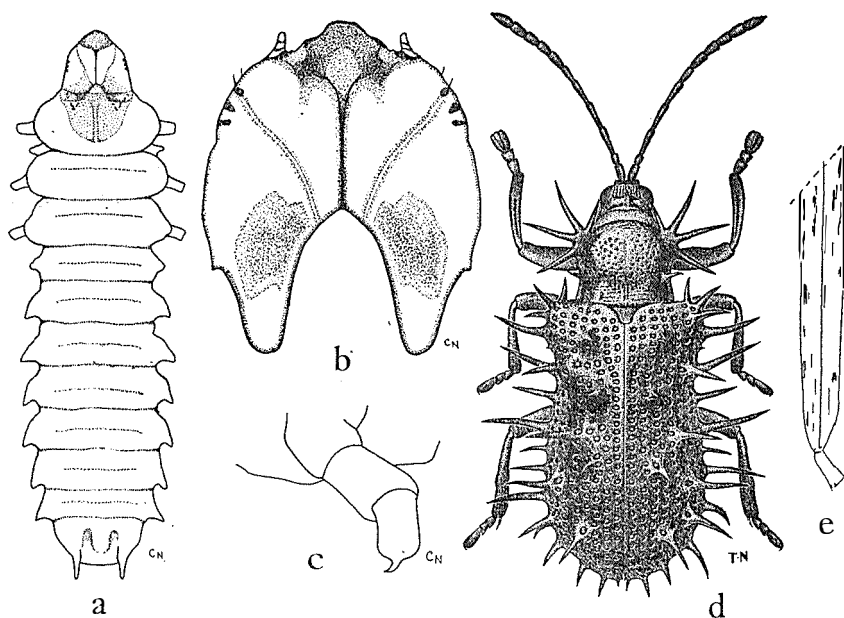


Fig. 52. *Dicladispa linnei* (Ws.): a, dorsum of larva; b, dorsum of larval head capsule; c, side view of leg 1; d, adult; e, adult feeding on *Paspalum*.

dle. Length 4.5 mm; breadth 1.5.

HOSTS: Grasses, ?*Aralia*, ?*Costus*.

DISTRIBUTION: New Guinea (NE, SE).

159. *Dicladispa kapauku* Gressitt, 1957: 320 (Wisselmeren, NW; BISHOP).

NW NEW GUINEA: Enarotadi, 1750 m, 10. VIII. 1962, Sedlacek; Swart Vall., 7-18. XI. 1958, Gressitt; Bokondini, 5-11. XI. 1961, S. & L. Quate; Paniai, 29. IX. 1939, Leiden Mus. Exped. K. N. A. G.

HOSTS: Grasses.

DISTRIBUTION: NW New Guinea.

160. *Dicladispa pembertoni* Gressitt, 1957: 321, fig. 32b (Fly R.; BISHOP).

DISTRIBUTION: SE New Guinea.

Genus **Platypria** Guérin-Ménéville, 1840

The species below is the easternmost of the genus.

161. *Platypria moluccana aitapensis* Gressitt, 1957: 323 (Aitape, NE; AM).

SE NEW GUINEA: 1, Subitana, 16. XI. 1947, W. Brandt; 1, Bisianumu, 500 m, 24. IX. 1955, Gressitt.

DISTRIBUTION: New Guinea (NE, SE).

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