

# Hispinæ of the New Guinea-Solomons Area I. Tribe Callispini (Coleoptera: Chrysomelidae)<sup>1</sup>

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## ABSTRACT

Twenty species of *Hispodonta* from the New Guinea area are treated, including 4 described as new. One species is synonymized. A key to these species is given and the genitalia of most are illustrated for the first time. *Spilispa* is synonymized with *Hispodonta*.

## INTRODUCTION

This is the first of a series of reports on the Hispinæ of the New Guinea-Solomons area. *Hispodonta* Baly is treated in this report; it is the only member of the Callispini occurring in the area. New Guinea appears to be the eastern terminus for *Hispodonta*, with no species reaching the Solomons, contrary to the project title.

The Callispini ranges through the Afrotropical and Oriental regions and extends into the Pacific. The genera included in the Callispini now exclude 1 of the 5 treated by Würmli (1975). Only *Hispodonta*, including the here-synonymized *Spilispa* Chapuis, reaches New Guinea. The monotypic *Pseudocallispa* Uhmann is from the Philippines, *Callispa* Baly ranges over Africa and Asia, and *Amblispa* Baly is found in India and Sri Lanka.

This report is based on new and previously studied specimens of *Hispodonta* (Gressitt 1957, 1960, 1963). Although a large part of this material accumulated from activities by Bishop Museum over the past decades, collections belonging to a number of institutions were also crucial to these studies.

Specimen depositories are symbolized by the following codens: BMNH = British Museum (Natural History), London; BPBM = Bishop Museum, Honolulu; CASC = California Academy of Sciences, San Francisco; ISNB = Institut Royal des Sciences Naturelles de Belgique, Bruxelles; MCSN = Museo Civico de Storia Naturale, "Giacomo Doria," Genoa; MNHN = Museum National d'Histoire Naturelle, Paris; TPNG = Department of Primary Industry, Konedobu; ZNHB = Museum für Naturkunde der Humboldt Universität, Berlin; ZMUC = University of Copenhagen.

Holotypes of the new species described herein are deposited in Bishop Museum. Paratypes and nontype specimens cited in the material examined sections are deposited in Bishop Museum unless indicated otherwise.

The island of New Guinea is divided into quadrants for the convenience of citing specimens and indicating general localities in the key. Irian Jaya is divided to make the NW and SW quadrants; Papua New Guinea is divided to make the NE and SE quadrants (see map in Gressitt 1966: 918).

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## SYSTEMATICS

Genus *Hispodonta* Baly

- Hispodonta* Baly, 1858, Cat. Hispidae, p. 78, pl. 2, fig. 1 (type species *H. nigricornis* Baly; Philippines).—Chapuis, 1875, Genera Coleopt. 11: 284.—Weise, 1911, Genera Insect. 125: 61.—Maulik, 1919, Fauna India, Hispinae, p. 42.—Gressitt, 1957, Nova Guinea 8(2): 211; 1960, Pac. Insects 2(1): 4; 1963, Pac. Insects 5(3): 594.—Würmli, 1975, Entomol. Arb. Mus. Frey 26: 14, 16.
- Spilispa* Chapuis, 1875, Genera Coleopt. 11: 285 (type species *S. balyi* Chap. = *imperialis* Baly).—Weise, 1911, Genera Insect. 125: 61.—Gressitt, 1957, Nova Guinea 8(2): 214.—Würmli, 1975, Entomol. Arb. Mus. Frey 26: 14, 16. **New Synonymy.**

Species of *Hispodonta* are recognized and distinguishable from others of the tribe by the distinctly flattened body and the relatively long antennal segment 3, which is at least  $3\times$  as long as segment 2. The form of the prothorax and the structure of the antennal scape are variable and can no longer be used to separate the here-synonymized *Spilispa* from *Hispodonta*. In New Guinea species, the form of the prothorax may be quite variable. Even within a given species, this variation can be pronounced, with the anterior pronotal breadth either narrower or broader than the basal breadth. The form of the antennal scape extended into a ventral prolongation occurs in varying degrees among New Guinea *Hispodonta*; it is a sexual character that may be weakly expressed in females.

The larvae of *Hispodonta* are quite flattened and broad and resemble those of many aquatic beetles. These larvae, in fact, live in water accumulated in petiole bases of large palm fronds, especially of sago palms.

The genus ranges over "greater Wallacea" (Sulawesi, Philippines, Maluku, and New Guinea). It does not extend into the Bismarck Archipelago or the Solomons, but it may be expected in the Lesser Sunda Is. One species is reported from India, though that may be in error (Maulik 1919: 42).

Key to Papuan Species of *Hispodonta*

- |         |   |                    |
|---------|---|--------------------|
| 1.      | Elytron entirely pale .....   | 2                  |
|         | Elytron at least partly black or metallic .....   | 3                  |
| 2 ( 1). | Scutellar area of elytron with slightly irregular row of punctures; inner puncture-rows regular to apex; body $\pm$ subovate; body length ca. 12 mm ... (New Guinea: NE) .....                            | <i>delkeskampi</i> |
|         | Scutellar area of elytron with dense irregular punctures; inner puncture-rows irregular in posterior $\frac{1}{2}$ ; body $\pm$ suboblong; body length 11.9–13.5 mm ... (New Guinea: NW, NE) .....        | <i>grandis</i>     |
| 3 ( 1). | Elytron bluish anteriorly and posteriorly, or striped along suture and outer hind margin of disc .....  | 4                  |
|         | Elytron without both anterior and posterior broad metallic bands; without sutural and outer apical black stripes .....  | 6                  |
| 4 ( 3). | Elytron broadly banded with blue anteriorly and posteriorly .....   | 5                  |
|         | Elytron with black sutural stripe and another black stripe on posterior portion of outer edge of disc and margin, both merging into black apical $\frac{1}{2}$ ; body length 8–10.5 mm ... (Maluku) ..... | <i>elegantula</i>  |
| 5 ( 4). | Pronotum punctured $\pm$ overall; posterior elytral blue band broader than anterior band; body length 12–14 mm ... (Sulawesi, Maluku) .....   | <i>imperialis</i>  |
|         | Pronotum punctured near side and base; anterior elytral blue band broader than posterior band; body length 9.5 mm ... (Maluku) .....  | <i>bifasciata</i>  |
| 6 ( 3). | Body subovate, usually broadest behind middle of elytra; body usually $\frac{1}{2}$ or more as broad as long .....  | 7                  |
|         | Body suboblong, $\frac{1}{2}$ or less as broad as long .....  | 8                  |

- 7 ( 6). Body length <10 mm ..... 15  
 Body length >10 mm, usually >11 mm; elytron bluish black apically; venter and legs black; body very flat ... (New Guinea: NW?) ..... *depressa*
- 8 ( 6). Head, prothorax, and venter pale; elytron subevenly declivous posteriorly ..... 9  
 Head, prothorax, and venter black; elytron black on apical  $\frac{1}{4}$ , with apical margin largely flat; body length 11.7 mm ... (New Guinea: NE) ..... *nitida*, n. sp.
- 9 ( 8). Elytron with disc entirely or almost entirely metallic purplish to greenish blue ..... 10  
 Elytron with disc orange and posterior  $\frac{1}{2}$   $\pm$  metallic or black ..... 12
- 10 ( 9). Lateral margin of elytron either dark anteriorly or with moderately broad pale border; elytron 2.7–3.2 $\times$  as long as broad ..... 11  
 Lateral margin of elytron narrowly pale anteriorly; elytron at least 3.2 $\times$  as long as broad; elytral disc purplish blue, lateral margin pale to apex; body length 9.45–10.25 mm ... (New Guinea: SE) ..... *feliciae*, n. sp.
- 11 (10). Elytron steel blue, except apical  $\frac{2}{5}$  or less of lateral margin pale; body length 8.6–10.05 mm ... (New Guinea: NE) ..... *sagu*  
 Elytron purplish with external margin broadly pale and a narrow pale stripe on basal  $\frac{1}{5}$  of suture; body length 8.5–10.7 mm ... (New Guinea: NW, NE) ..... *discalis*
- 12 ( 9). Elytron with posterior  $\frac{1}{2}$  to  $\frac{1}{3}$  of disc bluish or greenish; side of prothorax convex or sinuate; body length <11 mm ..... 13  
 Elytron with posterior  $\frac{2}{5}$  of disc steel blue; side of prothorax nearly straight; body length 11.7–12.2 mm ... (New Guinea: NW) ..... *bicolor*
- 13 (12). Prothorax weakly convex at side ..... 14  
 Prothorax sinuate at side, strongly convex anterior to middle; pronotum sparsely punctured in middle; body length 8.75–10.75 mm ... (New Guinea: NW) ... *palmicola*
- 14 (13). Body nearly  $\frac{1}{2}$  as broad as long; pronotum sparsely punctured on each side of center; 4th elytral puncture-row complete; body length 9.4–10.6 mm ... (New Guinea: NE) ..... *vicina*  
 Body distinctly less than  $\frac{1}{2}$  as broad as long; pronotum densely punctured on each side of center; 4th elytral puncture-row incomplete anteriorly; body length 9.4–10.8 mm ... (New Guinea: SE) ..... *semipallida*, n. sp.
- 15 ( 7). Elytral disc entirely or almost entirely metallic or black ..... 16  
 Elytral disc pale on approximately basal  $\frac{1}{2}$  ..... 18
- 16 (15). Antenna with flagellar segments orange-testaceous to pitchy but not black; outline of elytral preapex  $\pm$  evenly convex to extremity; male: aedeagus with apex angulate ..... 17  
 Antenna commonly with flagellar segments black; outline of elytral preapex  $\pm$  angled and becoming truncate at extremity; elytral color various but usually entirely dark except margin near apex; male: aedeagus with apex convex; body length 7.9–9.5 mm ... (New Guinea: NE, SE) ..... (part) *loriae*
- 17 (16). Elytral suture dark except at extreme apex; elytron shiny dark overall except for apical  $\frac{2}{5}$  or less of lateral margin; pronotum either broadest near middle or basally; body length 6.85–8.75 mm ... (New Guinea: NW, NE) ..... *palmella*  
 Elytral suture narrowly or broadly orange-testaceous along anterior  $\frac{1}{3}$ ; lateral margin also orange-testaceous; pronotum usually broadest near or before middle and slightly narrowed prebasally; body length 7.4–8.65 mm ... (New Guinea: NE) *metroxyloa*
- 18 (15). Pronotum entirely pale or dark ..... 19  
 Pronotum bicolorous, disc variously infuscated, often pale basally and with pale median stripe; margins usually pale; body length 7.6–9.6 mm ... (New Guinea: SE) ... *sacsac*
- 19 (18). Pronotum pale ..... 20  
 Pronotum dark ..... 21
- 20 (19). Elytral dark area occupying apical  $\frac{1}{2}$  or more, except pale margin at apex; outline of elytral preapex tending to be angulate; antennal flagellar segments commonly black ... (New Guinea: NE, SE) ..... (part) *loriae*  
 Elytral dark area usually occupying less than apical  $\frac{1}{2}$  (except apex); outline of elytral preapex gradually convex to extremity; antennal flagellar segments tending to be

- orange-testaceous to pitchy; body length 6.75–9.9 mm . . . (New Guinea: NW, NE, SE) . . . . . (part) *chapuisi*
- 21 (19). Elytron orange- to red-testaceous basally; posterior dark area occupying apical  $\frac{2}{5}$ , except pale margin at apex; apical antennal segment tending not to be paler than preceding segments; larvae in palms . . . (New Guinea: NW, NE, SE) . . . . . (part) *chapuisi*
- Elytron yellow-testaceous basally; posterior dark area occupying ca. apical  $\frac{1}{3}$ , except apex; apical antennal segment tending to be paler than preceding segments; body length 7.6–9.05 mm; larvae in sedges . . . (New Guinea: NE) . . . . *cyperaceae*, n. sp.

**I. Nitida Group**

Elongate species with antenna distinctly less than  $\frac{1}{2}$  as long as body; scape not produced distally; prothorax black; elytron bicolorous: mostly pale, apex black. Only the unique *H. nitida*, n. sp., is assigned thus far.

**1. *Hispodonta nitida* Gressitt, new species** Fig. 1A

**FEMALE.** Elongate, subparallel-sided. Subshining black, except antennal segments 1–6, basal  $\frac{3}{4}$  of elytron and tarsi reddish ochraceous; venter black to pitchy. Body length 11.7 mm; breadth 5.1 mm.

*Head* with interocular area shallowly grooved medially, impunctate; eye moderately concave behind; interantennal process  $\frac{5}{6}$  as long as pedicel. *Antenna*  $\frac{2}{5}$  as long as body; scape very slightly produced below; segment 3 shorter than 4 + 5. *Prothorax* 0.85× as long as broad, parallel-sided, broadest at posterior angles, slightly wider than an elytron, subtransverse anteriorly; disc moderately punctured except on an approximate apical inverted triangle with apex just anterior to center. *Scutellum* smooth, broadly rounded behind. *Elytron* 3.6× as long as broad, subparallel-sided, with relatively narrow margin continued onto apex; disc with irregular puncturation near scutellum, with 3 regular puncture-rows extending nearly to apex and irregularly punctured on rest. *Venter* partly punctured or frosted. *Legs* moderately smooth, with some fine punctures.

**Type data.** Holotype ♀ (BPBM 13789), NE NEW GUINEA: PNG: West Sepik Prov: Torricelli Mts, Samoro, 1,000–1,100 m, on a *Heterospathe*-like palm, 11.V.1975 (J.L. Gressitt).

**Host.** *Heterospathe*-like palm.

**Remarks.** This species differs from *bicolor* Gressitt in being narrower in the prothorax and elytron, with the elytral margin narrower but continuing onto the apex, and in having the head, prothorax, and apical  $\frac{1}{2}$  of the antenna black.

**II. Semperi Group**

Quite elongate species with antenna much less than  $\frac{1}{2}$  as long as body; scape not protruding distally; usually shiny black with elytron entirely pale. The 2 species treated below and *Hispodonta semperi* Chapuis from Luzon comprise this group.

**2. *Hispodonta delkeskampii* Uhmann**

*Hispodonta delkeskampii* Uhmann, 1952, Philipp. J. Sci. 80: 346, fig. 1 (Sattelberg, NE; ZMHB).—Gressitt, 1963, Pac. Insects 5(3): 594.

Black with testaceous elytron; elytron with a single sutural row of punctures. Body length ca. 12 mm.

**Distribution.** NE NEW GUINEA (PNG: Morobe Prov: Huon Peninsula).

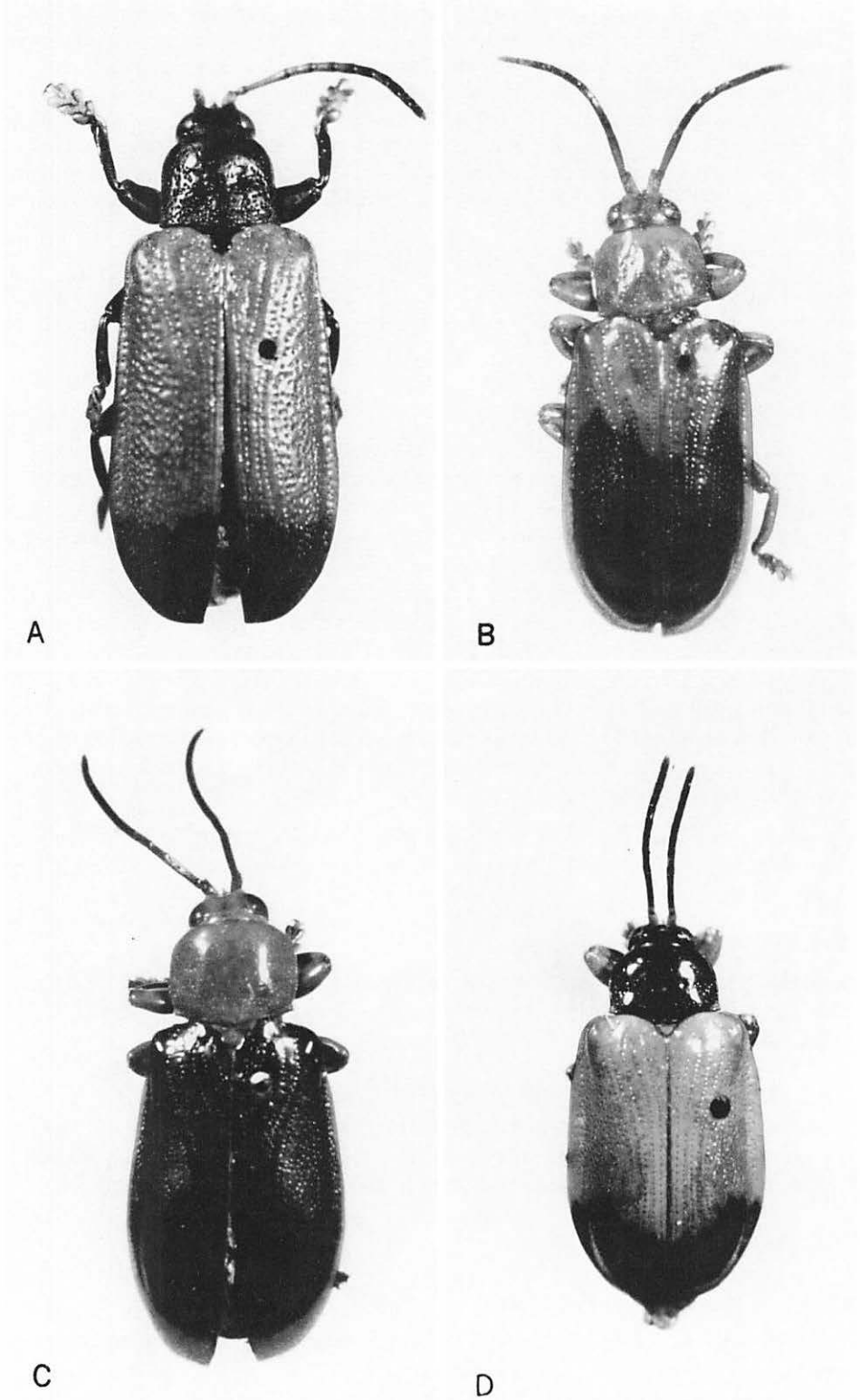


Fig. 1. Dorsal view: A, *Hispodonta nitida*; B, *H. semipallida*; C, *H. feliciae*; D, *H. cyperaceae*.

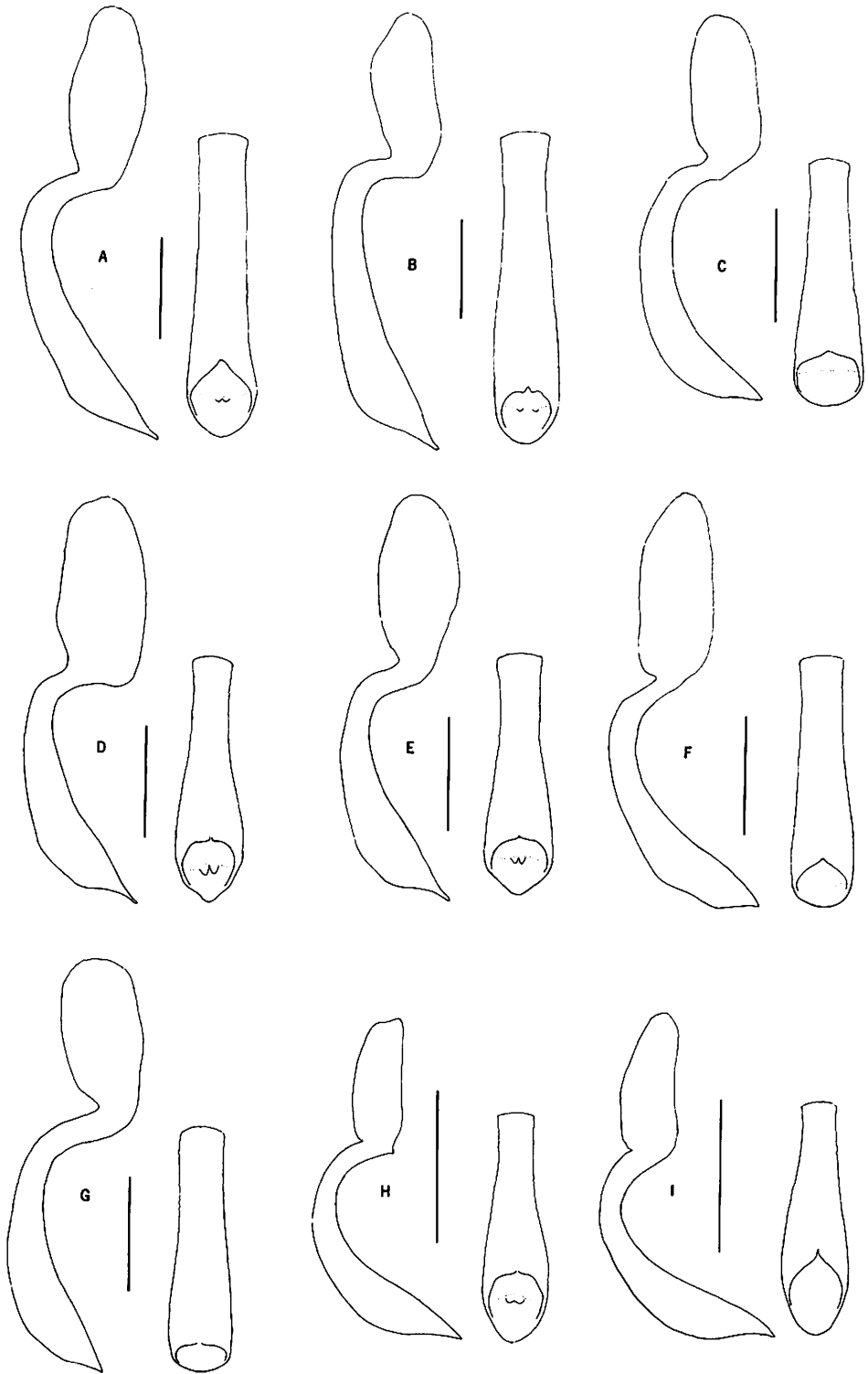


Fig. 2. Aedeagus, lateral and dorsal views: **A**, *Hispodonta grandis*; **B**, *H. imperialis*; **C**, *H. palmicola*; **D**, *H. semipallida*; **E**, *H. feliciae*; **F**, *H. sagu*; **G**, *H. discalis*; **H**, *H. chapuisi*; **I**, *H. sacsac*. Scale = 1 mm.

3. *Hispodonta grandis* Gressitt

Fig. 2A, 4A

*Hispodonta grandis* Gressitt, 1963, Pac. Insects 5(3): 596 (Waris, NW; BPBM).

Black with pale orange-brown elytron; elytron with dense confused punctures near scutellum. Body length 11.9–13.5 mm.

**Material examined.** NE NEW GUINEA: PNG: West Sepik Prov: 2, Apu, XI.1985, on banana (J.W. Ismay) (BPBM, TPNG).

**Distribution.** NW NEW GUINEA (Irian Jaya: Waris, Rattan Camp upper Idenburg River); NE NEW GUINEA (PNG: W Sepik Prov).

III. *Imperialis* Group

Suboblong species, more than 2× as long as broad; distinct sexual dimorphism in the antennal scape, which is produced beneath at apex in male; dorsum often red with posterior portion (or more) of elytral disc metallic or black.

4. *Hispodonta imperialis* (Baly), new combination

Fig. 2B

*Oxycephala imperialis* Baly, 1959, Proc. Entomol. Soc. Lond. 1859: 88 (Moluccas; BMNH).*Spilispa balyi* Chapuis, 1875, Genera Coleopt. 11: 286 (Celebes, Moluccas; ISNB).*Spilispa imperialis*: Gestro, 1885, Ann. Mus. Civ. Genova Ser. 2, 2: 157.—Uhmann, 1952, Philipp. J. Sci. 85: 347, fig. 2.—Gressitt, 1957, Nova Guinea 8(2): 214.

Orange-testaceous; elytron with broad (and variable) basal and postmedian areas of steel blue often connected along outer margin. Body length 12–14 mm.

**Distribution.** SULAWESI; MALUKU (Morotai, Halmahera, Ternate, Mera, Bacan).

5. *Hispodonta elegantula* Baly*Hispodonta elegantula* Baly, 1869, Trans. Entomol. Soc. Lond. 1869: 374 (Ambon; BMNH).—Gressitt, 1957, Nova Guinea 8(2): 211.

Black with anterior femur and elytron pale brown, latter with apical  $\frac{1}{5}$  plus partial sutural stripe and stripe on outer side of disc black. Body length 8–10.5 mm.

**Distribution.** MALUKU (Ambon).

6. *Hispodonta bifasciata* Gestro*Hispodonta bifasciata* Gestro, 1906, Ann. Mus. Civ. Genova 42: 469 (Batchian; MNHN).

Pale brown, shiny; antenna black with base red; elytron banded with blue basally and apically; pronotum unevenly punctured. Body length 9.5 mm.

**Distribution.** MALUKU (Bacan).

7. *Hispodonta bicolor* Gressitt

Fig. 4B

*Hispodonta bicolor* Gressitt, 1963, Pac. Insects 5(3): 597, fig. 1b (Nabire, NW; BPBM).

Pale orange-red with antenna darker red and partly pitchy and elytron purplish blue on apical  $\frac{2}{5}$ ; pronotum heavily punctured toward side. Body length 11.7–12.2 mm.

**Material examined.** NW NEW GUINEA: IRIAN JAYA: 1 (holotype), Nabire, S Geelvink Bay, 20–50 m, 4.IX.1962, large lvd. ginger (J. Sedlacek); 1 (paratype), Nabire (Sedlacek).

**Host.** Large leaved ginger.

**Distribution.** NW NEW GUINEA (Irian Jaya: Nabire).

**Remarks.** The sex of the holotype indicated as questionably a female in the original description is now confirmed as female. The paratype is also a female.

8. *Hispodonta palmicola* Gressitt

Fig. 2C

*Hispodonta palmicola* Gressitt, 1960, Pac. Insects 2(1): 6 (Biak, NW; BPBM); 1963, Pac. Insects 5(3): 599, fig. 2.

Pale orange; antenna somewhat pitchy distally; elytron purplish black on posterior  $\frac{3}{5}$  of elytral disc; pronotum strongly and sparsely punctured on basal  $\frac{1}{2}$ . Body length 8.75–10.75 mm.

**Host.** *Metroxylon* (sago palm).

**Distribution.** NW NEW GUINEA (Irian Jaya: Biak I).

9. *Hispodonta semipallida* Gressitt, new species

Fig. 1B, 2D, 4C

**MALE.** Oblong, subparallel-sided. Largely reddish ochraceous but elytron with posterior  $\frac{3}{5}$  of disc purplish blue; distal  $\frac{2}{3}$  of antenna pitchy to reddish, proximal segments reddish; abdomen largely pitchy. Body length 9.4 mm; breadth 4.3 mm.

**Head** distinctly grooved medially for most of interocular space; eye slightly concave behind; interocular process  $\frac{2}{3}$  as long as pedicel. **Antenna**  $\frac{1}{2}$  as long as body; inferior extension of scape reaching to apex of pedicel; segment 3 slightly longer than 4 + 5. **Prothorax**  $0.78 \times$  as long as broad, distinctly wider than an elytron, subparallel-sided, slightly convex, rounded anterolaterally, transverse anteriorly; disc convex, slightly uneven, heavily punctured on each side of center, moderately punctured at side. **Scutellum** subtriangular, rounded apically. **Elytron**  $3.25 \times$  as long as broad, nearly straight at side, with relatively narrow lateral margin; disc with 4 puncture-rows nearly reaching apex, irregularly punctured at side. **Venter and legs** largely smooth, nearly impunctate.

**FEMALE.** Scape not quite reaching to middle of pedicel below; pigmented area of elytral disc reaching only to ca.  $\frac{1}{10}$  elytral length from apex. Body length 10.8 mm; breadth 4.55 mm.

**PARATYPE.** Body length 10.1 mm; breadth 4.55 mm.

**Type data.** Holotype ♂ (BPBM 13790), SE NEW GUINEA: PNG: Western Prov: Olsobip, 400 m, upper Fly Riv, 28.VIII.1969 (J. Sedlacek); allotopotype ♀ (BPBM), same data except 500 m; paratopotype ♀, same data except 400–600 m.

**Remarks.** This species differs from *bicolor* Gressitt in having the prothorax shorter, more oblong, and less regularly punctured, and the elytron with stronger punctures and dark pigmentation extending farther forward and not so far posteriorad.

10. *Hispodonta vicina* Gressitt

Fig. 4D

*Hispodonta vicina* Gressitt, 1963, Pac. Insects 5(3): 599, fig. 3a (Maprik, NE; BPBM).

Orange-red with approximately posterior  $\frac{1}{2}$  of disc greenish blue; antenna slightly pitchy distally; pronotum slightly convex at side, nearly impunctate on anterior  $\frac{1}{3}$ ; body length 9.4–10.6 mm.

**Material examined.** NW NEW GUINEA: PNG: East Sepik Prov: 1 (holotype), Maprik, 150 m, 29.XII–17.I.1960 (T.C. Maa); West Sepik Prov: 1, Samoro, Torricelli Mts, 850 m, on *Metroxylon*, V.1975 (J.L. Gressitt).

**Host.** *Metroxylon* (sago palm).



**Distribution.** NE NEW GUINEA (PNG: W Sepik Prov and E Sepik Prov).

**Remarks.** The sex of the holotype, not indicated in the original description, is now reported as female.

11. *Hispodonta feliciae* Samuelson, new species

Fig. 1C, 2E, 4E

**MALE.** Suboblong, slightly widened postmedially. Head and prothorax orange-ochraceous; antenna red-testaceous; elytron blackish purple except lateral margin narrowly pale along side and more broadly pale at apex; abdomen partly pitchy. Body length 9.45 mm; breadth 4.25 mm.

*Head* grooved medially above and briefly depressed just before postocciput between hind margins of eyes; interantennal process  $\frac{2}{3}$  as long as pedicel; eye concave behind. *Antenna*  $\frac{1}{2}$  as long as body; scape with inferior projection extending to apex of pedicel; segment 3 slightly longer than 4 + 5. *Prothorax*  $0.80\times$  as long as broad, distinctly broader than an elytron, broadest basally, slightly narrowed anteriorly, weakly convex at side, rounded anterolaterally, subtransverse anteriorly; disc submoderately punctured, more densely so near lateral margin, almost impunctate near anterior margin and along median line. *Scutellum* short, rounded behind. *Elytron*  $3.2\times$  as long as broad, slightly broadened to behind middle; lateral margin relatively narrow; apical margin not quite flat; disc with 4 rows of punctures extending only to declivity, rest only partly regular; sutural row becoming a fine stria on apical  $\frac{1}{2}$  and nearly reaching apex. *Venter and legs*  $\pm$  smooth with fine texture and only partly with weak punctures.

**FEMALE.** Nearly identical to  $\delta$  in coloration. Scape with inferior projection extending to middle of pedicel; prothorax  $0.82\times$  as long as broad, moderately convex at side and not as narrowed anteriorly as in  $\delta$ . Body length 10.25 mm; breadth 4.65 mm.

**Type data.** Holotype  $\delta$  (BPBM 13791), SE NEW GUINEA: PNG: Western Prov: Olsobip, upper Fly Riv, 400 m, 28.VIII.1969 (J. & M. Sedlacek); allotype  $\eta$  (BPBM), Kiunga, Fly Riv, 35 m, VIII.1969 (J. Sedlacek).

**Remarks.** This species differs from *sagu* Gressitt by having the elytron longer and the elytral punctures finer; it differs from *discalis* Gressitt in not having a moderately broad, pale margin along the anterior part of the lateral margin of the elytron; it differs from both species by having the apex of the aedeagus angulate instead of broadly convex.

The name honors Dr. Felicia Gressitt Bock of Berkeley, California.

12. *Hispodonta sagu* Gressitt

Fig. 2F, 4F

*Hispodonta sagu* Gressitt, 1963, Pac. Insects 5(3): 600, fig. 4 (Dreikikir, NE; BPBM).

Orange-red with elytron steely blue except for extreme apex; antenna pitchy in distal  $\frac{1}{2}$  except distal  $\frac{1}{2}$  of last segment; pronotum sinuate laterally, sparsely punctured except near base. Body length 8.6–10.05 mm.

**Material examined.** NE NEW GUINEA: PNG: East Sepik Prov: 1 (holotype), Dreikikir, Sepik Distr, 350–400 m, 23.VI.1961 (J.L. Gressitt); 1, Maprik, 160 m, X.1957, *Metroxylon* (Gressitt); West Sepik Prov: 4, Samoro, Torricelli Mts, 850 m, on *Metroxylon*, V.1975 (Gressitt).

**Host.** *Metroxylon sagu* (sago palm).

**Distribution.** NE NEW GUINEA (PNG: W Sepik Prov and E Sepik Prov).

**Remarks.** The sex of the holotype, not indicated in the original description, is now reported as female.

13. *Hispodonta discalis* Gressitt Fig. 2G, 4G  
*Hispodonta discalis* Gressitt, 1957, Nova Guinea 8(2): 212, fig. 1 (Maffin Bay, NW; CASC);  
 1963, Pac. Insects 5(3): 600, fig. 3b,c.

Orange-red with elytral disc, except near scutellum, steely blue; antenna slightly dusky distally; pronotum slightly convex at side, almost impunctate on anterior  $\frac{2}{5}$ . Body length 8.5–10.7 mm.

**Host.** *Metroxylon sagu* (sago palm).

**Distribution.** NW NEW GUINEA (Irian Jaya: Genjam, Maffin Bay, Jayapura). NE NEW GUINEA (PNG: E Sepik Prov).

#### IV. Chapuisi Group

Body subovate, usually broadest behind middle of elytra; scape with ventral projection slightly to strongly produced in males; elytron never entirely pale; body length usually <10 mm. This group comprises the following 7 species, all from New Guinea.

14. *Hispodonta chapuisi* Gestro Fig. 2H, 4H  
*Hispodonta chapuisi* Gestro, 1885, Ann. Mus. Civ. Genova Ser. 2, 2: 156 (Andai, NW; MCSN).—Gressitt, 1963, Pac. Insects 5(3): 604.

Red, with posterior  $\frac{2}{5}$  of elytral disc purplish to blackish; antenna pitchy to black except at base and apex; prothorax sometimes black, convex at side, impunctate on anterior  $\frac{1}{2}$  except for a few punctures near side; elytron very broad, with wide margin. Body length 6.75–9.9 mm.

**Material examined.** NE NEW GUINEA: PNG: Morobe Prov: many, Garaina, 550–830 m, I.1968 (J. & M. Sedlacek) (BMNH, BPBM, CASC, MNHN, TPNG); 3, Garaina, 700 m, VII.1969, spineless sago palm (J.L. Gressitt); 1, Garaina, 750 m, IX.1979 (Gressitt); 17, Wau, 1,200–1,500 m, III,V & VII.1963, XII.1965 (Sedlacek, Shanahan) (BMNH, BPBM, CASC, MNHN, TPNG); 3, Wau, Mt Missim, 1,400–1,600 m, XII.1964 (Sedlacek); E Highlands Prov: 4, Aiyura, 1,700 m, I.1965, betel palm (Gressitt, Sedlacek). SE NEW GUINEA: PNG: Northern Prov: 1, Popondetta, VIII–IX.1965, rattans (Sedlacek); Milne Bay Prov: 1, Sinaeda Agric. Stn, II.1965, *Metroxylon* (R. Straatman); 1, Bubaleta Agric. Stn, 0 m, III.1965, palms (Straatman); 1, Waigani, III.1965, *Metroxylon* (Straatman); 1, Naura, 5 km W of Waigani, III.1965, betel nut palm (Straatman); 1, Milne Bay, II.1969 (Sedlacek).

**Hosts.** *Pinanga*, *Heterospatha*, *Areca*.

**Distribution.** NW NEW GUINEA (Irian Jaya: Vogelkop, Japen I); NE NEW GUINEA (PNG: E Highlands Prov, Morobe Prov); SE NEW GUINEA (PNG: Northern Prov, Milne Bay Prov).

15. *Hispodonta depressa* Gestro  
*Hispodonta depressa* Gestro, 1906, Ann. Mus. Civ. Genova 42: 130 (New Guinea; MNHN).—  
 Gressitt, 1963, Pac. Insects 5(3): 595.

Brown above with antenna black and elytral apex broadly blackish blue; venter black except for prosternum; legs black with tarsi and profemur brown; prothorax subsinuate laterally and punctured near base of disc; elytron broad. Body length 11.25 mm.

**Distribution.** NEW GUINEA (Irian Jaya?—no locality specified).

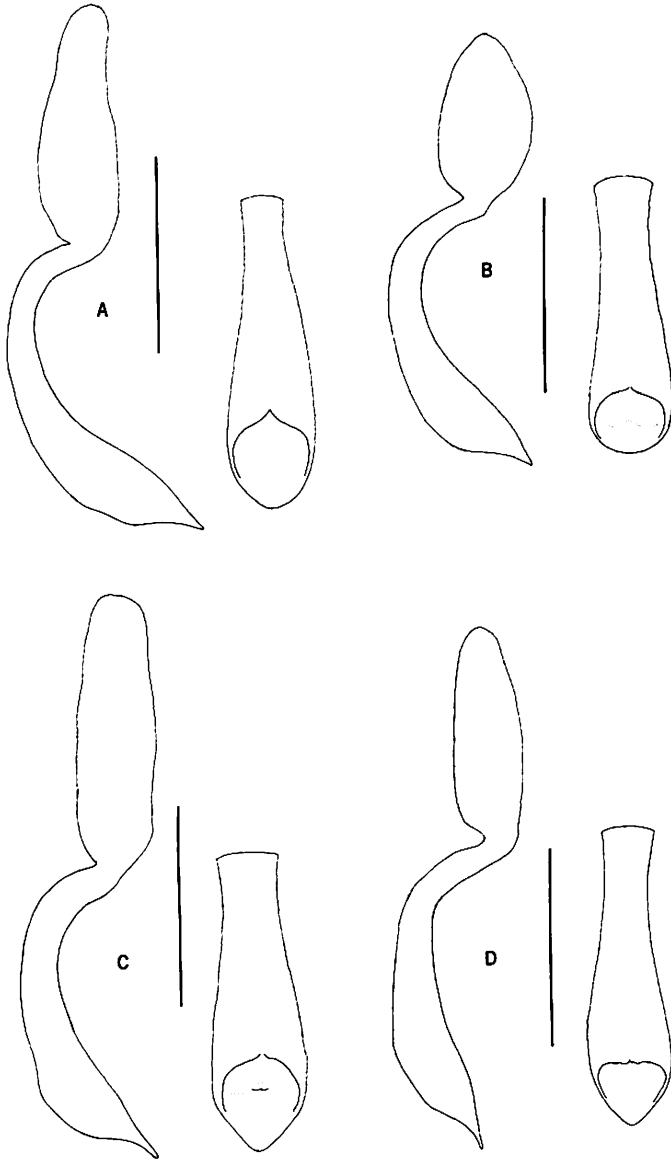


Fig. 3. Aedeagus, lateral and dorsal views: A, *Hispodonta loriae*; B, *H. cyperaceae*; C, *H. metroxylona*; D, *H. palmella*. Scale = 1 mm.

16. *Hispodonta saccac* Gressitt

Fig. 2I, 4I

*Hispodonta saccac* Gressitt, 1963, Pac. Insects 5(3): 604, fig. 6c (Cape Rodney, SE; BPBM).

Red with antenna pitchy to black except at base and elytron purplish to bluish on posterior  $\frac{1}{3}$  to  $\frac{2}{5}$  of disc; pronotum red, pitchy or black, short, convex at side, with disc largely impunctate anteriorly and medially. Body length 7.6–9.6 mm.

**Material examined.** SE NEW GUINEA: PNG: Central Prov: 1 (holotype), Cape Rodney, 10 m, 2–4.XI.1960 (J.L. Gressitt); many, Mamai Plantation, nr Port Glasgow, 60 m, II.1965, *Metroxylon* and large rattan (R. Straatman) (BMNH, BPBM, CASC, MNHN, TPNG);

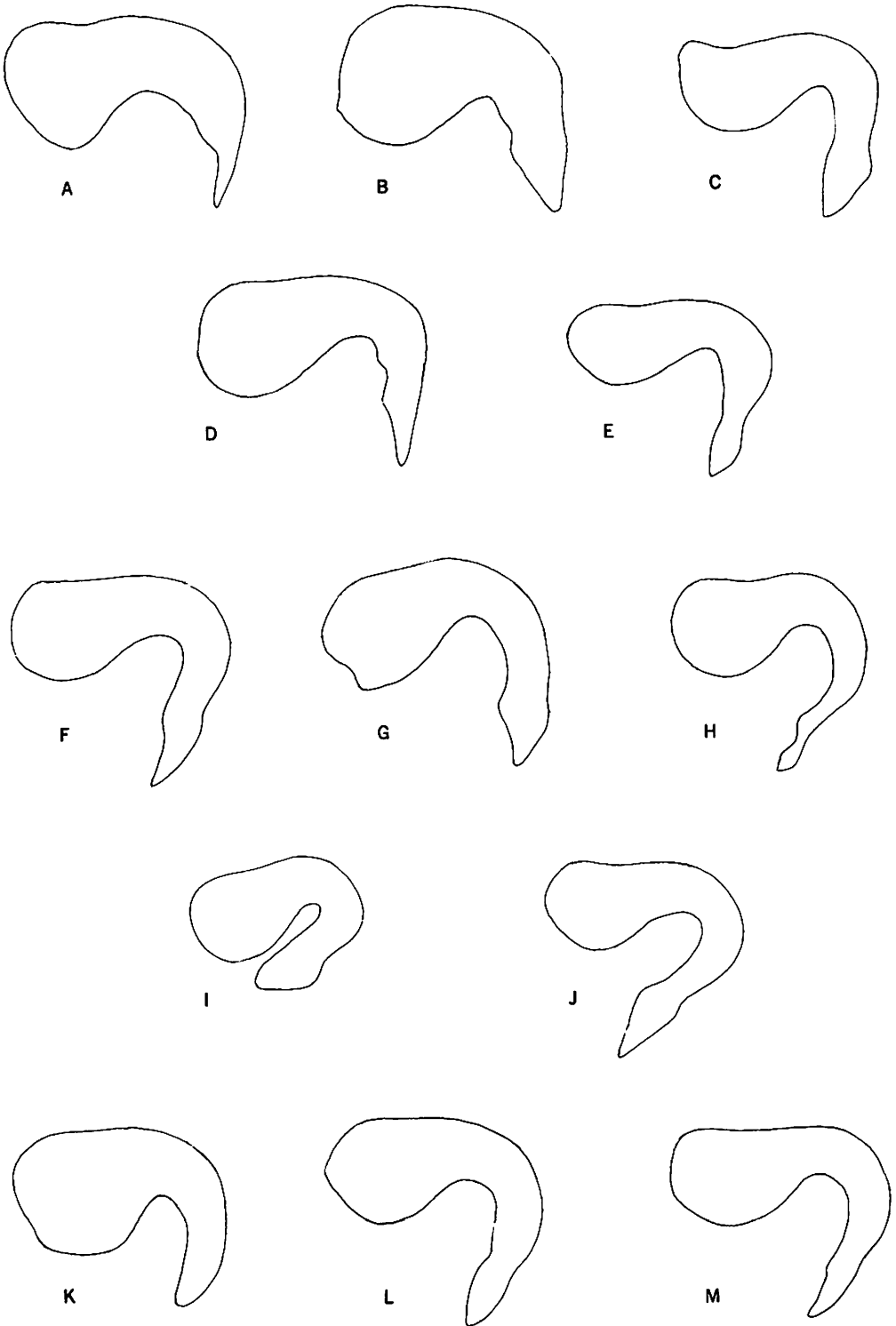


Fig. 4. Spermatheca, lateral view: **A**, *Hispodonta grandis*; **B**, *H. bicolor*; **C**, *H. semipallida*; **D**, *H. vicina*; **E**, *H. feliciae*; **F**, *H. sagu*; **G**, *H. discalis*; **H**, *H. chapuisi*; **I**, *H. saccac*; **J**, *H. loriae*; **K**, *H. cyperaceae*; **L**, *H. metroxylona*; **M**, *H. palmella*. Scale = 0.5 mm.

1, Mamai, 100 m, II.1965, sago palm (P. Shanahan); 1, Oibada, nr Mamai Estate, I.1965, palms (Shanahan).

**Hosts.** *Metroxylon sagu*; *Calamus* sp.

**Distribution.** SE NEW GUINEA (PNG: Central Prov).

**Remarks.** The sex of the holotype, not indicated in the original description, is now reported as male.

17. *Hispodonta loriae* Gestro

Fig. 3A, 4J

*Hispodonta loriae* Gestro, 1913, Ann. Mus. Civ. Genova 46: 13 (Purari Riv, SE; MCSN).

Red with posterior  $\frac{1}{2}$  or more of elytron purple; apex red even if (rarely) entire rest of elytron purple; antenna beyond pedicel pitchy to black; prothorax short, convex at side, with very few punctures on anterior  $\frac{1}{3}$ ; elytron moderately broad. Body length 7.9–9.5 mm.

**Material examined.** SE NEW GUINEA: PNG: Milne Bay Prov: 2, Sinaeada Agric. Stn, 5 m, II.1965, on *Metroxylon* (R. Straatman); 5, Waigani, 5 m, III.1965, on *Metroxylon* (Straatman); 4, Naura, 5 km W of Waigani, III.1965, betel nut palm (Straatman); 12, Milne Bay, II.1969 (J. Sedlacek) (BMNH, BPBM, CASC, MNHN, TPNG); Gulf Prov: 4, Murua, nr Kerema, 3–5 m, XII.1964, on sago (J.L. Gressitt); Western Prov: 1, Tabubil, 610 m, X.1975 (R.W. Hornabrook); 10, Kiunga Fly Riv, 35 m, VIII.1969 (J. & M. Sedlacek) (BMNH, BPBM, CASC, MNHN, TPNG).

**Host.** *Metroxylon sagu* (sago).

**Distribution.** SE NEW GUINEA (PNG: Western Prov, Gulf Prov, Milne Bay Prov).

18. *Hispodonta cyperaceae* Gressitt, new species

Fig. 1D, 3B, 4K

**MALE.** Testaceous with head and prothorax largely pitchy black above, apical  $\frac{1}{4}$  of elytron (except extreme apical margin) purplish pitchy, much of metasternum and abdomen pitchy and tibiae and metafemur largely pitchy; antenna black except for ochraceous segments 1–2 and pitchy brown segment 11. Body length 7.8 mm; breadth 4.25 mm.

*Head* shallowly depressed medially above, with interantennal process  $\frac{1}{2}$  as long as pedicel; eye concave behind. *Antenna*  $\frac{1}{2}$  as long as body; inferior projection of scape nearly reaching apex of pedicel; segment 3 longer than 4 + 5. *Prothorax*  $0.68\times$  as long as broad, width slightly greater than an elytron, slightly convex at side, rounded anterolaterally; disc smooth with quite sparse punctures on basal  $\frac{1}{2}$  only. *Scutellum* smooth. *Elytron* subparallel-sided except basally and apically, with lateral margin only moderately wide; disc with fairly regular, arcuate puncture-rows, partly irregular at side. *Venter and legs* largely impunctate.

**FEMALE.** Scape hardly produced apically beneath. Body length 8.7 mm; breadth 4.65 mm.

**PARATYPES.** Body length 7.6–9.05 mm; breadth 4.15–4.6 mm.

**LARVA.** Oblong-ovate, parallel-sided along middle, anterior and posterior margins broadly and equally rounded. Dorsal surfaces alutaceous to micropustulate, impunctate, becoming briefly transversely rugulose centrally on 2nd and 3rd thoracic and anterior abdominal tergites; a fine median line running from anterior margin to apical tergites; pronotum with 3 low ridges radiating forward nearly to margin and with a shallow oblique depression prebasally on each side; penultimate tergite with anterior margin  $\pm$  evenly convex; ultimate tergite only slightly broadened apically, subevenly rounded anteriorly, sides straight. Ventral surfaces weakly sclerotized, finely shagreened. Body length 11.9 mm; breadth 7.2 mm.

**Type data.** Holotype ♂ (BPBM 13792), NE NEW GUINEA: PNG: Eastern Highlands Prov: Akivitana Riv nr Aiyura, 1,550 m, 10.I.1965, in sedges (R. Straatman); allotype ♀ (BPBM), same data; 9 paratypes (BMNH, BPBM, CASC, MNHN, TPNG) and 3 larvae, same data.

**Host.** Sedges (unidentified).

**Remarks.** This species differs from *chapuisi* Gestro in being less ovate, more oblong, and having only the apical ¼ of the elytron dark, the venter and the legs largely pitchy instead of pale, and the elytron more regularly punctured. The 3 larvae each represent a different instar; the latest instar is described above. In the key to larvae (Gressitt 1963: 595–96), this larva runs to the vicinity of *chapuisi*, but it lacks the vermiculate sculpture present in *chapuisi*.

19. *Hispodonta metroxylona* Gressitt

Fig. 3C, 4L

*Hispodonta metroxylona* Gressitt, 1960, Pac. Insects 2(1): 5 (Madang, NE; BPBM); 1963, Pac. Insects 5(3): 602, fig. 5.

Red, with elytral disc blue except near scutellum, and margin largely pale; antenna slightly pitchy distally; prothorax sinuate laterally, impunctate anteriorly and medially; elytron in large part regularly punctured. Body length 7.4–8.65 mm.

**Material examined.** NE NEW GUINEA: PNG: Madang Prov: 1 (holotype), Madang, 5 m, 27.X.1958, *Metroxylon* (J.L. Gressitt).

**Host.** *Metroxylon sagu* (sago).

**Distribution.** NE NEW GUINEA (PNG: Madang Prov).

**Remarks.** The sex of the holotype, not indicated in the original description, is now reported as male.

20. *Hispodonta palmella* Gressitt

Fig. 3D, 4M

*Hispodonta palmella* Gressitt, 1963, Pac. Insects 5(3): 602, fig. 6a,b (Dreikikir, NE; BPBM). *Hispodonta subrotunda* Gressitt, 1963, Pac. Insects 5(3): 603 (Nabire, NW; BPBM). **New Synonymy.**

Red, with antenna dusky to pitchy distally and elytron bluish purple except on apical margin to behind middle of side; abdomen sometimes pitchy; prothorax variable: nearly straight to sinuate and strongly concave at side, with disc convex and shiny, ± sparsely punctate basally and ± impunctate apically and medially; elytron with 4 fine puncture-rows, regular near suture and rest largely irregular, lateral margin flattened and fairly broad along middle. Body length 6.85–8.75 mm.

**Material examined.** NE NEW GUINEA: PNG: East Sepik Prov: 1 (holotype of *palmella*), Sepik Distr, Dreikikir, 350–400 m, 23.VI.1961, long pinn. palm (J.L. Gressitt); many, Wanamowi junction, May–Sepik rivers, 80 m, VI.1963, on rattan (R. Straatman) (BMNH, BPBM, CASC); 1, May Riv Patrol Stn, 250 m, VI.1963, rattan (Straatman); West Sepik Prov: 9, Green Riv/Sepik Riv junction, 110 m, VI.1963 (Straatman) (BPBM, MNHN, TPNG). NW NEW GUINEA: IRIAN JAYA: 1 (holotype of *subrotunda*), Nabire, S Geelvink Bay, 5 m, 4.VII.1962, #4005 (J.L. Gressitt).

**Host.** *Calamus* sp.

**Distribution.** NW NEW GUINEA (Irian Jaya: Nabire, Jayapura); NE NEW GUINEA (PNG: West Sepik Prov and East Sepik Prov).

**Remarks.** *Hispodonta subrotunda* is synonymized with *palmella*, because the two cannot be separated by genitalic or pronotal differences. The form of the pronotum is variable. The sex of the holotype (*palmella*), not indicated in the original description, is now reported as female.

#### CHECKLIST

- |  |  |
|--|--|
| I. Nitida Group                        | 10. <i>vicina</i> Gressitt             |
| 1. <i>nitida</i> Gressitt, n. sp.      | 11. <i>feliciae</i> Samuelson, n. sp.  |
| II. Semperi Group                      | 12. <i>sagu</i> Gressitt               |
| 2. <i>delkeskampi</i> Uhmann           | 13. <i>discalis</i> Gressitt           |
| 3. <i>grandis</i> Gressitt             | IV. Chapuisi Group                     |
| III. Imperialis Group                  | 14. <i>chapuisi</i> Gestro             |
| 4. <i>imperialis</i> (Baly)            | 15. <i>depressa</i> Gestro             |
| 5. <i>elegantula</i> Baly              | 16. <i>sacsac</i> Gressitt             |
| 6. <i>bifasciata</i> Gestro            | 17. <i>loriae</i> Gestro               |
| 7. <i>bicolor</i> Gressitt             | 18. <i>cyperaceae</i> Gressitt, n. sp. |
| 8. <i>palmicola</i> Gressitt           | 19. <i>metroxylona</i> Gressitt        |
| 9. <i>semipallida</i> Gressitt, n. sp. | 20. <i>palmella</i> Gressitt           |

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