



A contribution to *Sticholotis* Crotch from Myanmar (Coleoptera: Coccinellidae: Sticholotidini)

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Abstract

Known species of *Sticholotis* Crotch from Myanmar are redescribed, diagnosed and illustrated, and a key for their identification is presented. Notes on the genus and nomenclatural history for each species are provided. Lectotypes are designated for *Orcus bipunctatus* Gorham, *Orcus quadriguttatus* Gorham and *Orcus discoideus* Gorham. A neotype is designated for *Sticholotis dohrni* Weise.

Key words: taxonomy, Coleoptera, Cucujoidea, Chilocorini, Sticholotidini, *Orcus*, *Sticholotis*, Myanmar

Introduction

Sticholotis was established by Crotch (1874) for two new species from Japan, *Sticholotis substriatus* and *S. punctatus*, and *Lotis confucii* Mulsant, 1850, from Sarawak, Borneo. Crotch placed *Sticholotis* in the subfamily Chilocorides, which then included beetles with hemisphaerical, usually glabrous and simply punctate body, with very short antennae, with clypeus produced, margining the eyes and epipleura more or less foveolate.

In more modern classifications, *Sticholotis* has been placed within the tribe Sticholotidini Weise, 1901, in the subfamily Sticholotidinae (Sasaji 1968), often regarded as the “most primitive” lineage of Coccinellidae (Sasaji 1971; Kovář 1996). This genus has been generally used to accommodate small or very small coccinellids possessing a terminal maxillary palpomere that is conical or strongly elongate-oval. Ślipiński (2007), while revising the Australian Coccinellidae, proposed only two coccinellid subfamilies, Microweiseinae and Coccinellinae, placing the tribe Sticholotidini in the latter.

Some species described in 19th century were placed originally in the chilocorine genera *Chilocorus* Leach and *Orcus* Mulsant but were later transferred to *Sticholotis* (e.g., *Orcus ferrugineus* Gorham, 1894, from India; *O. discoideus* Gorham, 1895, *O. carinicus* Gorham, 1895, *O. bipunctatus* Gorham, 1895, and *O. quadrimaculatus* Gorham, 1895, from Myanmar). Gorham originally placed them in *Orcus* based on the shape of the thorax, being “of the usual Chilocorid form” (Gorham 1894, 1895). However, he expressed his doubts in this placement, emphasizing in the original descriptions that these species “are placed provisionally in the genus *Orcus*”. Weise (1895) noticed that *O. ferrugineus* from India apparently did not belong to *Orcus* or even to Chilocorini and moved it to the genus *Sticholotis*. Similarly, Weise (1902) changed the generic placement of *O. discoideus* from Myanmar.

The remaining three Gorham species from Myanmar (*O. carinicus*, *O. bipunctatus* and *O. quadriguttatus*) remained classified under the genus *Orcus* until relatively recently (Korschefsky 1932; Poorani 2002). Interestingly, these were the only 3 species of *Orcus* recorded from mainland Asia.

While completing a revision of *Orcus* (Łączyński & Tomaszewska 2009), we had an opportunity to study the type specimens of these species, leading us to transfer them from *Orcus* to *Sticholotis*, based on the diagnosis and redefinition of the genus by Ślipiński (2004). After this transfer *Orcus sensu stricto* is absent in the Asian mainland.

Based on our study of the type specimens, redescrptions and lectotype designations are presented in this paper for the Gorham species from Myanmar. Moreover, *S. dohrni* Weise, 1885 is also redescrbed, summarizing all knowledge of the five *Sticholotis* species known presently from Myanmar, all of which are so far endemic.

Material and methods

This study was based on examination of the type specimens, borrowed from the following museums:

MCSN	Museo Civico di Storia Naturale "G. Doria", Genova, Italy
MIZ	Muzeum i Instytut Zoologii PAN, Warszawa, Poland
MNB	Museum für Naturkunde, Berlin, Germany.

Measurements were made using an ocular micrometer attached to an Olympus (SZH 10) dissecting microscope as follows: (TL) total length, from apical margin of clypeus to apex of elytra; (PL) pronotal length, from the middle of anterior margin to base of pronotum; (PW) pronotal width at widest part; (EL) elytral length along suture including scutellum; (EW) elytral width across both elytra at widest part; (GD) greatest depth through the highest point of elytra to metaventrite.

Male and female genitalia were dissected, cleared in a 10% solution of KOH, and placed in glycerine on slides for further study. Structural illustrations were made from slide preparations using a camera lucida attached to a Leica dissecting microscope.

SEM photographs were made using a HITACHI S-3400N machine, and digital photographs were made using a Leica digital camera mounted on microscope and subsequently enhanced using AUTO MONTAGE software in the laboratory of the MIZ.

Terminology used for adult morphology follows Ślipiński (2007).

Systematics

Sticholotis Crotch

Sticholotis Crotch, 1874: 200. Type species, by original designation: *Sticholotis substriata* Crotch, 1874. Ślipiński 2004: 390 (redescription).

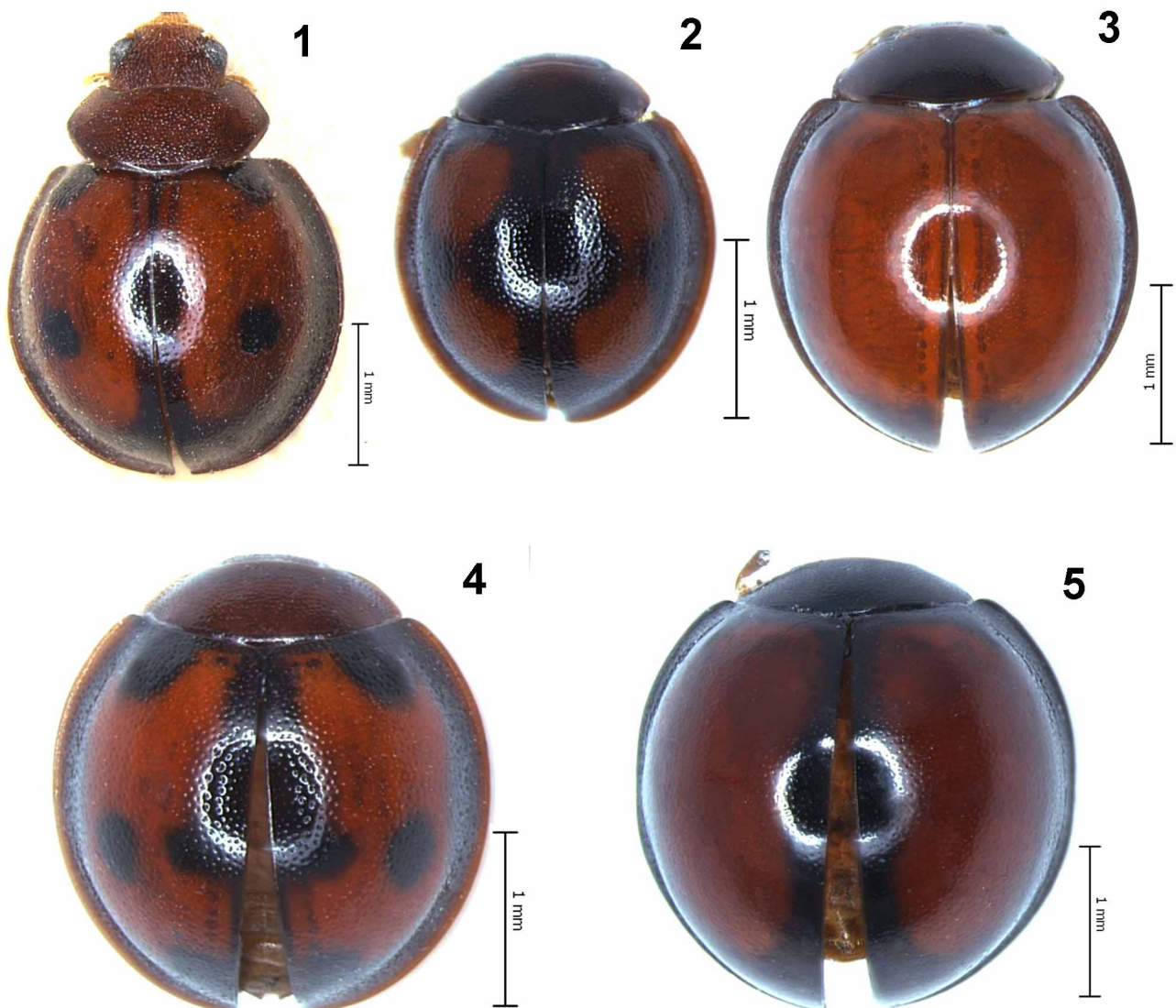
Gymnoscyrnus Blackburn, 1892: 241. Type species, by monotypy: *Gymnoscyrnus quadrimaculatus* Blackburn, 1892. Synonymised by Weise, 1908: 13.

Diagnosis and remarks. *Sticholotis* is comprised entirely of Old World species, with most of its diversity in the Oriental Region. The genus was redefined by Ślipiński (2004) while revising the Australian species. Ślipiński (2004) further synonymised *Paranesolotis* Hoang, 1982 and *Nesolotis* Miyatake, 1966 with *Sticholotis*. Wang *et al.* (2010), working on the Chinese species of *Nesolotis*, agreed with Ślipiński's opinion that *Paranesolotis* is synonymous with *Nesolotis*, but they still considered *Nesolotis* a distinct genus within Sticholotidini, removing it from synonymy with *Sticholotis*. Wang *et al.* (2010) characterized *Sticholotis* by the following characters: body rounded and moderately convex; antennae 11-segmented; prosternal process broad quadrate or subpentagonal, broadening anteriorly and carinate laterally; external margin of elytra distinctly expanded, elytral epipleuron broad and nearly horizontal, indistinctly foveate; protibiae normal.

Key to the species of *Sticholotis* from Myanmar

- 1 Body smaller, about 2.1 mm long; elytra almost black; each elytron with two large, rounded, brown maculae (Fig. 2)

- *S. quadriguttata* (Gorham)
- Body larger, 2.5–3.1 mm long; elytra mostly reddish-brown, maculae if present, black..... 2
- 2 Disk of each elytron brown without contrasting markings; prosternal process without lateral carinae (Figs. 24, 28) .
..... 3
- Disk of each elytron brown covered with black spots; prosternal process with lateral carinae (Figs. 9, 48)..... 4
- 3 Elytral suture reddish brown; elytra very finely punctate; prosternal process with anterior margin arcuate anteriorly (Fig. 28); terminal maxillary palpomere about 3.0 times longer than broad (Fig. 28); female abdominal ventrite V triangular with pointed apex (Fig. 32) *S. discoidea* (Gorham)
- Elytral suture black; elytra coarsely punctate; prosternal process with anterior margin straight to scarcely emarginate (Fig. 24); terminal maxillary palpomere about 2.0 times longer than broad (Fig. 20); female abdominal ventrite V arcuate (Fig. 26)..... *S. carinica* (Gorham)
- 4 Each elytron with two, black spots (Fig. 1); elytra along suture evenly punctate; pronotal hypomera and antero-lateral parts of prosternum smooth without any grooves; aedeagus as in Figs. 16–18..... *S. bipunctata* (Gorham)
- Each elytron with four, black spots (Fig. 4); elytra along suture in mid length with irregular, short rows of coarse punctures (Fig. 44); antero-lateral part of prosternum and hypomeron with groove for receiving antennal club (Fig. 45); aedeagus as in Figs. 54, 55 *S. dohrni* Weise



FIGURES 1–5. Habitus, dorsal view; 1) *Sticholotis bipunctata* (Gorham); 2) *Sticholotis quadriguttata* (Gorham); 3) *Sticholotis discoidea* (Gorham); 4) *Sticholotis dohrni* Weise; 5) *Sticholotis carinica* (Gorham).

Species redescription

Sticholotis bipunctata (Gorham)

(Figs. 1, 6–18)

Orcus bipunctatus Gorham, 1895: 689.

Sticholotis bipunctata: Łączyński & Tomaszewska, 2009: 609.

Diagnosis. This species is similar to *S. dohrni*, but is easily distinguished by having two, black spots on each elytron, the elytra covered with uniform punctures, and the venter of prothorax without antennal grooves.

Redescription. Male. Length 3.0 mm; TL/EW = 1.3; PL/PW = 0.5; EL/EW = 0.95; GD/TL = 0.5.

Body (Fig. 1) rounded, strongly convex; pronotal margins very narrow, hardly visible from above; elytral margins narrowly explanate, entirely visible from above. Head and pronotum dark reddish brown; labrum, ventral mouthparts and antennae yellowish brown. Scutellum black. Elytra predominantly reddish brown with black stripe along suture from about mid length of elytra running continuously along apex and lateral margins (except for marginal bead reddish brown); each elytron additionally with two moderately large black round spots, one in mid length of basal margin (touching margin) and second on disk slightly beyond half length of elytron. Punctures on pronotum 0.5–1.5 diameters apart, moderately coarse and deep; punctures on elytra slightly sparser and shallower than those on pronotum, 1.0–2.5 diameters apart; surfaces between elytral and pronotal punctures polished and shiny; dorsum apparently glabrous. Ventral surface dark reddish brown with thoracic ventrites and abdominal ventrite I infuscate. Legs with dark brown coxae, gradually slightly lighter towards tarsi, which are yellowish.

Head flat medially, punctate, covered with rather dense and moderately long setae. Clypeus weakly arcuate anteriorly, scarcely reflexed along anterior margin. Eyes moderately large, coarsely faceted, dorsally separated by about 3.25 times width of eye; interocular distance nearly 0.6 times head width; inner margins of eyes slightly rounded, convergent anteriorly. Maxillary terminal palpomere (Figs. 7, 8) about 2.25 times longer than wide, subparallel along basal 2/3 of its length, strongly and obliquely truncate apically; labial terminal palpomere narrowed and acuminate, distinctly narrower than penultimate palpomere. Antenna (Fig. 10) 11-segmented with narrow 3-segmented club.

Prothorax about 0.93 times basal width of elytra; pronotum with groove extending along basal margin, gradually disappearing as it approaches hind angles; pronotal hypomerion and prosternum smooth; anterior lobe of prosternum distinctly bordered with anterior edge straight; prosternal process (Fig. 9) subtruncate at apex, with distinct lateral carinae, rather finely and sparsely punctate; punctures with moderately long setae. Mesoventral intercoxal process (Fig. 6) about 1.15 times mesocoxal diameter. Metaventrite with complete discrimen, moderately coarsely and sparsely punctate; postcoxal lines curved and complete. Elytral epipleuron (Fig. 6) broad with maximum width at metaventrite, narrowing posteriorly but complete to apex, without distinct foveae. Wings well-developed.

Abdomen (Figs. 11, 12) with 5 ventrites; ventrite I along midline about 3.75 times longer than ventrite II; postcoxal line of first ventrite curved posteriorly and laterally, closely paralleling posterior margin, incomplete laterally; postcoxal disk microreticulate and very sparsely punctate (Fig. 13); ventrite V triangularly produced posteriorly. Abdominal segment VIII with sternite deeply emarginate medially (Fig. 14). Male genital segment (Fig. 15) with sternite round-oval, apophysis absent.

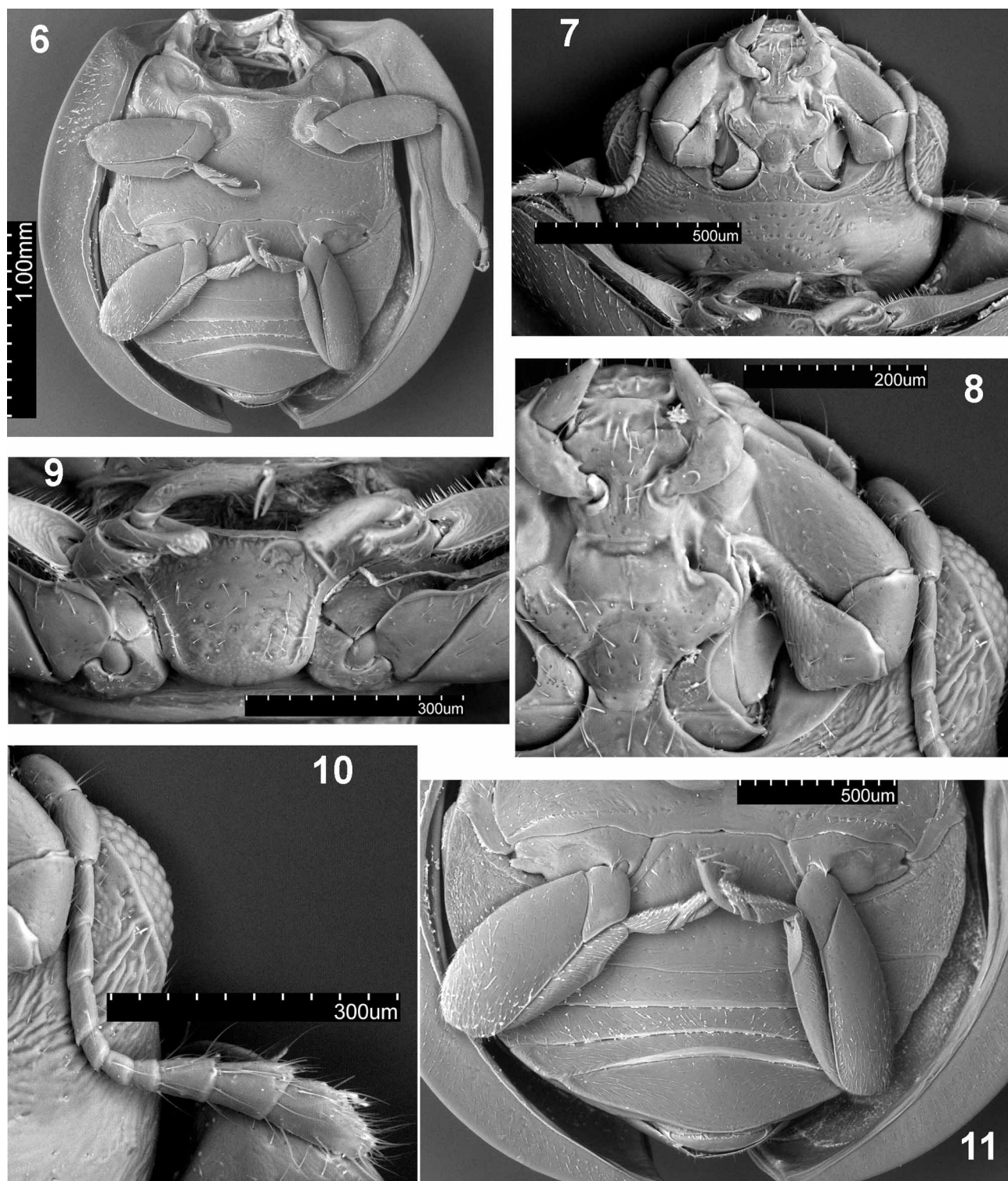
Male genitalia as in Figs. 16, 17, 18. Tegminal basal piece with distinct strut and additional, dorsal strut-like projection of nearly the same length; parameres long and thin, densely setose along at least distal half of their length; penis with large basal capsule.

Female not known.

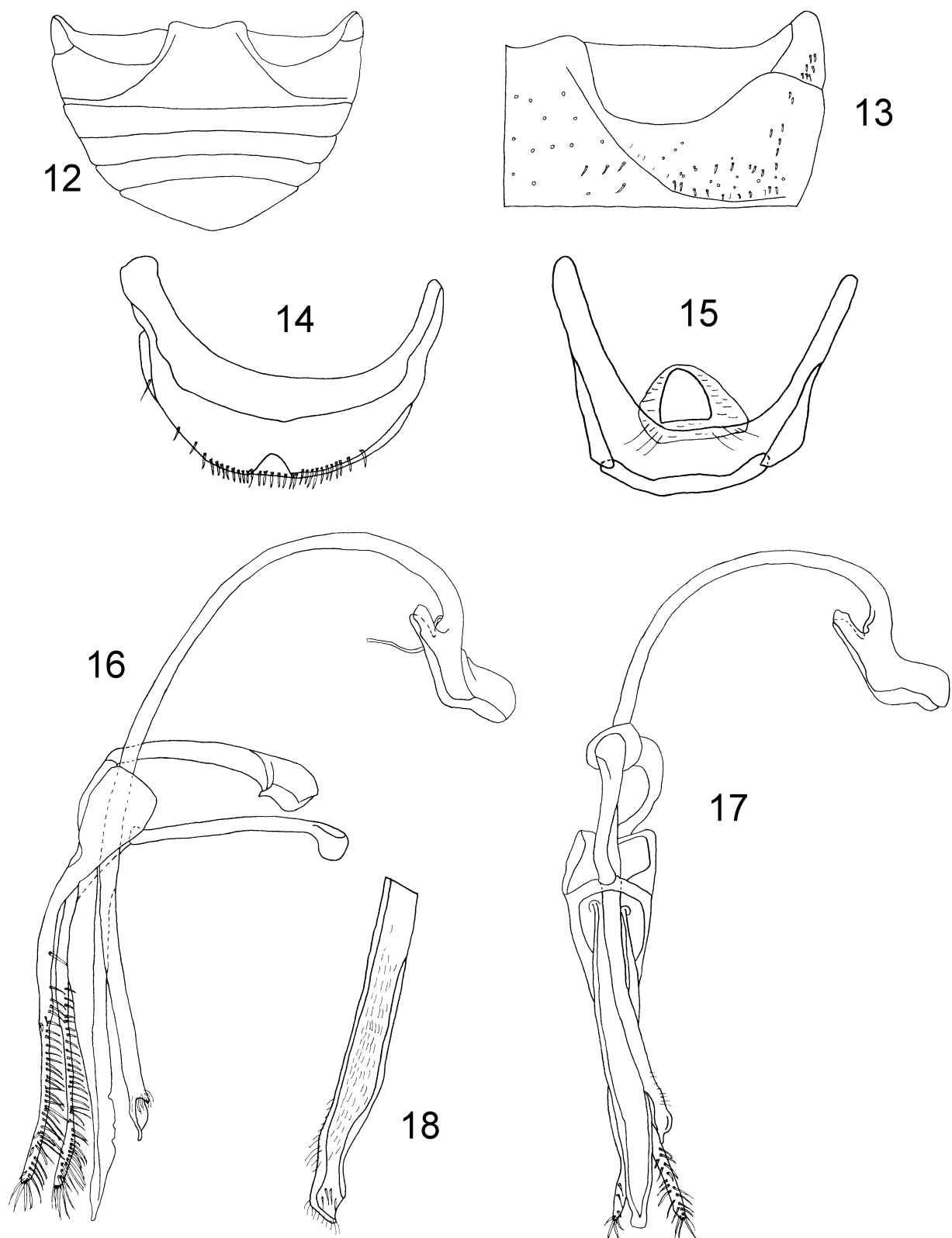
Material examined. Types. Lectotype (here designated), male: “Bhamo Birmania, Fea VIII 1886/ Gorham type/ Typus/ *bipunctatus* Gorh./ *O. bipunctatus* Gorh. typus!/ Syntypus, *Orcus bipunctatus* Gorham, 1895/ Museo Civico di Genova” (MCSN).

Note. The designation of the lectotype for *O. bipunctatus* Gorham, 1895, is made to fix the taxonomic status of this species. Two syntypes of *O. bipunctatus* represent two distinct species, easily distinguished

externally and by male genitalia. The syntype with two black spots on each elytron, perfectly matching original diagnosis, has been chosen here as the lectotype of *O. bipunctatus*. The other syntype with four black spots on each elytron will be designated as the neotype of *S. dohrni* later in this paper.



FIGURES 6–11. *Sticholotis bipunctata* (Gorham); 6) ventral view (except head and prothorax); 7) head, ventral; 8) mouthparts, ventral; 9) prosternal process; 10) antenna; 11) abdomen, ventral.



FIGURES 12–18. *Sticholotis bipunctata* (Gorham); 12) abdomen, ventral; 13) abdominal postcoxal line; 14) abdominal segment VIII, male, ventral; 15) male genital segment, ventral; 16) aedeagus, lateral; 17) aedeagus, inner; 18) tip of penis.

***Sticholotis carinica* (Gorham)**

(Figs. 5, 19–26, 68–71)

Orcus carinicus Gorham, 1895: 688.*Sticholotis carinica*: Łączyński & Tomaszewska, 2009: 609.

Diagnosis. *S. carinica* is similar to *S. discoidea* by coloration of the dorsum but can be differentiated in having larger and more convex body, the elytral suture black throughout its length and the elytra more coarsely punctate.

Redescription. Female. Length 3.1 mm; TL/EW = 1.1; PL/PW = 0.45; EL/EW = 0.95; GD/TL = 0.65.

Body (Figs. 5, 19, 23) rounded, strongly convex; pronotal margins very narrow, hardly visible from above; elytral margins narrow, entirely visible from above. Head brownish black; labrum, mouthparts and antennae yellowish brown. Pronotum and scutellum black. Elytra with disk chestnut brown and suture and margins black. Punctures on pronotum 1–2 diameters apart, moderately coarse and deep; punctures on elytra finer and shallower than on pronotum, 2–3 diameters apart; surfaces between elytral and pronotal punctures finely reticulate and shiny; dorsum apparently glabrous. Ventral surface blackish brown with legs dark yellowish brown and abdomen (except for intercoxal process of ventrite I) dark chestnut brown; elytral epipleuron dark chestnut brown along inner half of its width.

Head (Figs. 20, 25) flat medially, punctate, with sparse, short setae, densest near clypeus. Clypeus weakly arcuate anteriorly, weakly reflexed along anterior margin. Eyes rather large, moderately and coarsely faceted, dorsally separated by nearly 4 times eye width; interocular distance about 0.7 times head width; inner margins of eyes slightly sinuate, convergent anteriorly. Maxillary terminal palpomere more than 2 times longer than wide, scarcely tapering along basal 2/3 length, strongly and obliquely truncate apically; labial terminal palpomere narrowed and acuminate. Antenna 11-segmented with narrow 3-segmented club.

Prothorax (Figs. 22, 25) about 0.9 times basal width of elytra; pronotum with groove along most of basal margin, distinctly disappearing before reaching hind angles; pronotal hypomeron and prosternum smooth; anterior lobe of prosternum distinctly bordered with anterior edge straight medially; prosternal process (Fig. 24) subtruncate apically, without distinct lateral carinae, deeply and coarsely punctate, and distinctly setose. Mesoventral intercoxal process (Fig. 21) about 1.4 times mesocoxal diameter. Metaventrite with complete discrimen, moderately coarsely punctate; postcoxal lines straight laterally, complete. Elytral epipleuron (Fig. 21) with maximum width at metaventrite, narrowing posteriorly but complete to apex, without distinct foveae. Wings well-developed.

Abdomen (Figs. 26, 68) with 5 ventrites; ventrite I along mid line more than 3.5 times longer than ventrite II; postcoxal line of first ventrite curved posteriorly and laterally, nearly touching posterior margin, incomplete laterally; postcoxal disk microreticulate and sparsely punctate (Fig. 69); ventrite V triangularly produced posteriorly. Female abdominal segment VIII with sternite and tergite rounded (Fig. 70).

Female genitalia as in Fig. 71. Proctiger (T10) reduced. Ovipositor sclerotized, coxites elongate, entirely separated; spermatheca not observed.

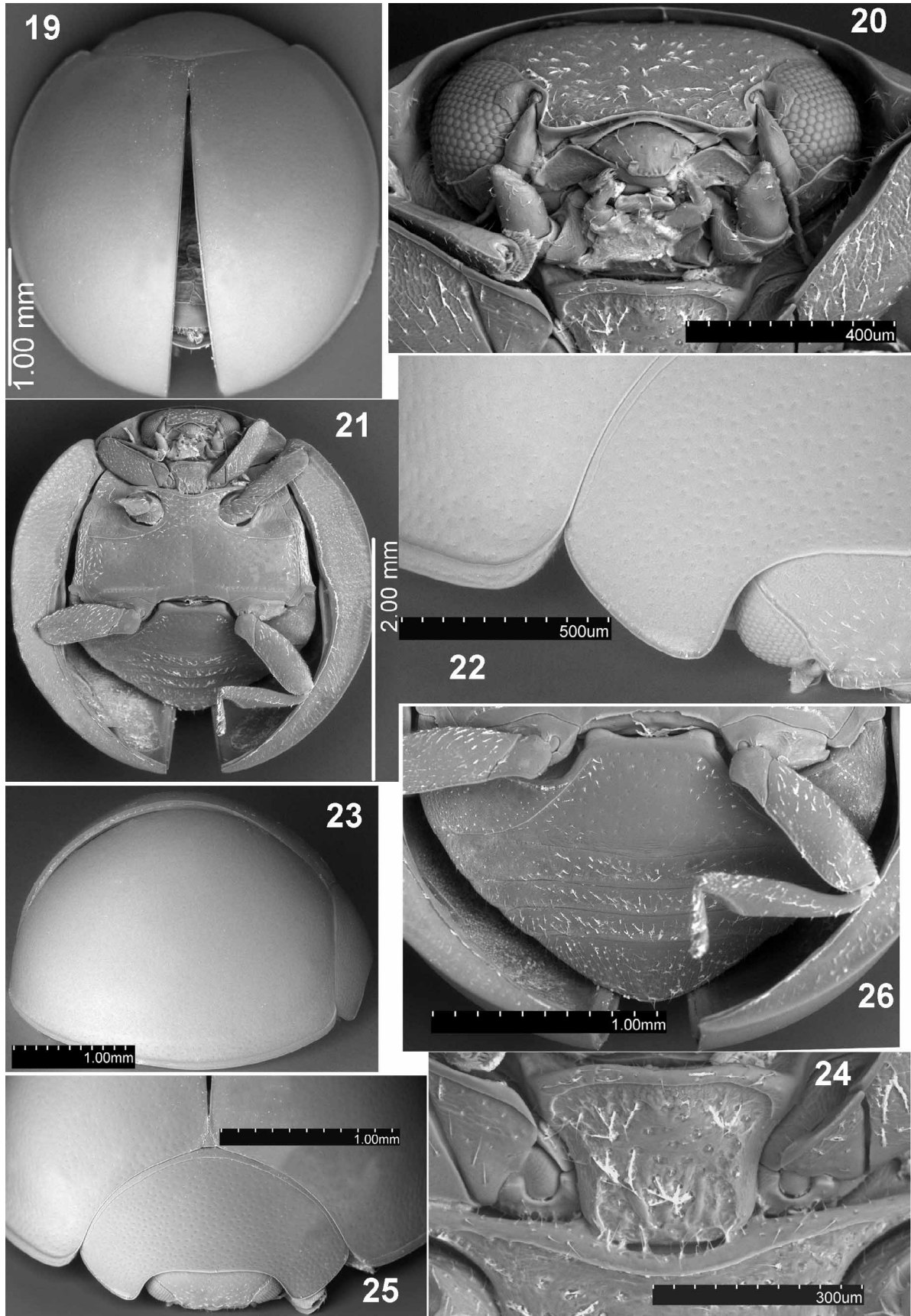
Male not known.

Material examined. Types. Holotype, female: “Carin Cheba, 900-1100 m., L. Fea V-XII-88/ Gorham type/ Typus/ *carinicus* Gorh./ *Orcus carinicus* Gorh./ *O. carinicus* Gorh. Typus!/ Holotypus, *Orcus carinicus*, Gorham, 1895/ Museo Civico di Genova” (MCSN).

***Sticholotis discoidea* (Gorham)**

(Figs. 3, 27–43)

Orcus discoideus Gorham, 1895: 688.*Sticholotis discoideus*: Weise, 1902: 512.*Sticholotis discoidea*: Łączyński & Tomaszewska, 2009: 610.



FIGURES 19–26. *Sticholotis carinica* (Gorham); 19) body, dorsal view; 20) head, antero-ventral; 21) body, ventral view; 22) prothorax-elytron connection; 23) body, lateral; 24) prosternal process; 25) head, prothorax and base of elytra, antero-dorsal; 26) abdomen, ventral.

Diagnosis. This species resembles externally *S. carinica* but can be separated by having smaller and less convex body, the elytral suture reddish brown, and the elytra very finely punctate.

Redescription. Length 2.5–2.8 mm; TL/EW = 1.1–1.2; PL/PW = 0.45–0.47; EL/EW = 0.85–1.00; GD/TL = 0.6.

Body (Figs. 3, 27, 34) rounded, strongly convex; pronotal margins very narrow, visible from above; elytral margins moderately explanate, entirely visible from above. Head, pronotum and elytra along lateral and apical margins brownish black; scutellum infuscate; disk of elytron pale reddish brown; labrum dark reddish brown. Punctures on pronotum fine, 1.5–2.5 diameters apart; punctures on elytra very fine, 2.5–4.0 diameters apart; surfaces between punctures feebly microreticulate and shiny; dorsum apparently glabrous. Ventral surface dark reddish brown with hypomera, metepisterna, metepimera, inner part of elytral epipleuron, and abdominal ventrites along their lateral margins slightly lighter. Labial and maxillary palpi, antennae and tarsi yellowish brown.

Head (Fig. 28, 30) flat medially, punctate and sparsely setose with short setae (more distinct anteriorly). Clypeus weakly arcuate anteriorly, scarcely reflexed along anterior margin. Eyes moderately large, coarsely faceted, dorsally separated by nearly 4.0 times eye width; interocular distance nearly 0.7 times head width; inner margins of eyes slightly sinuate, convergent anteriorly. Maxilla (Figs 28, 31) with terminal palpomere almost 3.0 times longer than wide, subparallel along basal 2/3 of its length, strongly and obliquely truncate apically; labial terminal palpomere (Figs. 28, 31) narrowed and acuminate, distinctly narrower than penultimate palpomere. Antenna (Fig. 31) 11-segmented with narrow 3-segmented club.

Prothorax (Fig. 30) about 0.88 times basal width of elytra; pronotum with groove extending along basal margin, disappearing laterally as it approaches hind angles; pronotal hypomeron and prosternum smooth; anterior lobe of prosternum distinctly bordered with anterior edge arcuate anteriorly; prosternal process (Fig. 28) subtruncate at apex, without distinct lateral carinae, deeply and coarsely punctate near its apex and less coarsely near its base, punctures with long setae. Mesoventral intercoxal process (Fig. 29) about 1.2 times mesocoxal diameter. Metaventrite with complete discrimen, rather finely punctate; postcoxal lines curved and complete. Elytral epipleuron (Fig. 29) broad with maximum width at metaventrite, narrowing posteriorly but complete to apex, without distinct foveae. Wings well-developed.

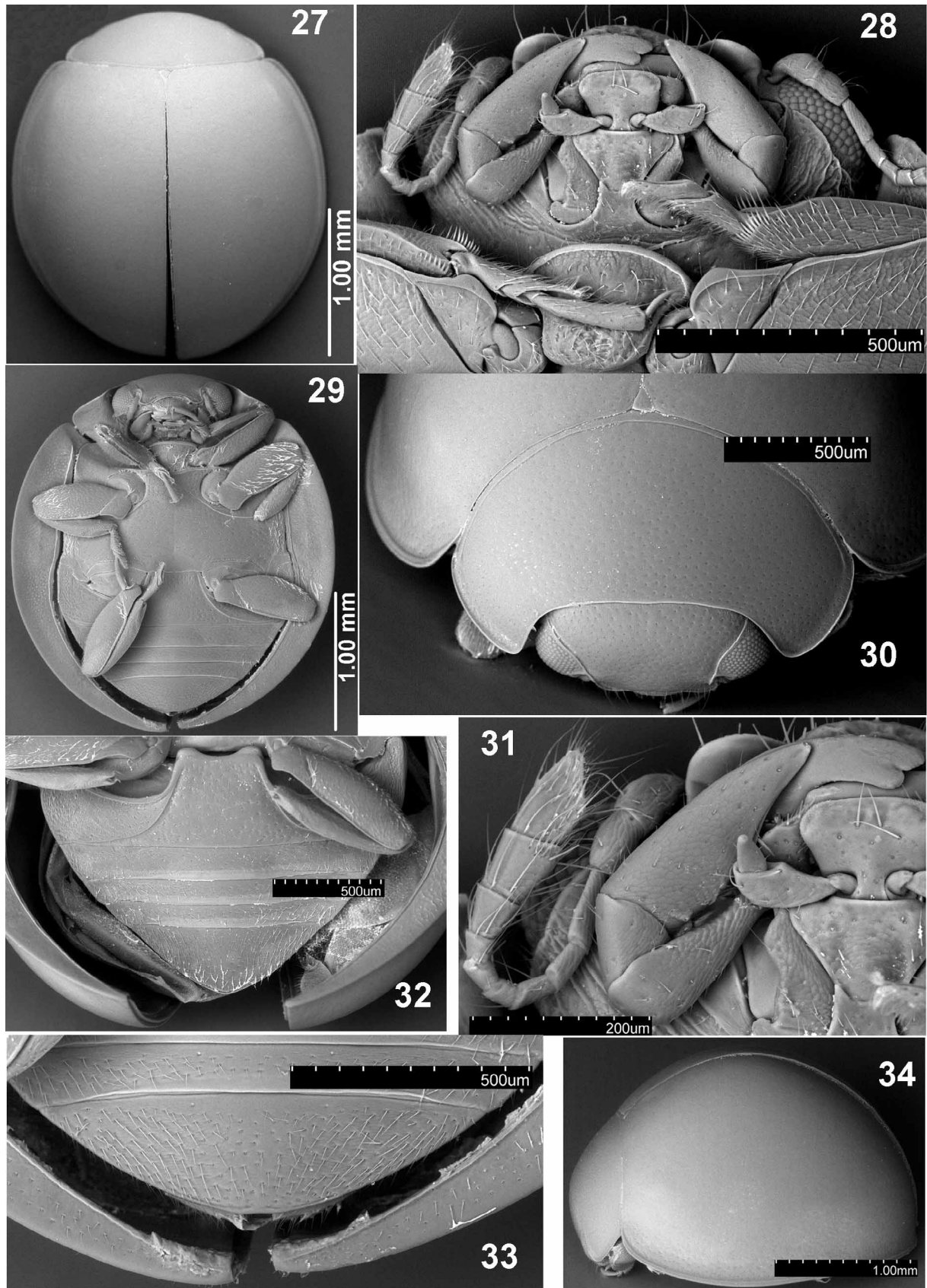
Abdomen (Figs. 32, 33, 35) with 5 ventrites in both sexes; ventrite I along midline about 3.0 times longer than ventrite II; postcoxal line of first ventrite curved posteriorly and laterally, closely paralleling posterior margin, incomplete laterally; postcoxal disk microreticulate and distinctly punctate (Fig. 36); ventrite V triangularly produced posteriorly and almost pointed at apex in female, regularly rounded in male. Male and female abdominal segment VIII as in Figs. 37, 39.

Male genital segment with sternite IX triangular without apophysis (Fig. 38). Male genitalia as in Figs. 42, 43. Tegminal basal piece with distinct strut and additional, dorsal strut-like projection of about half length of proper strut; penis guide with additional, lateral lobes along apical half of its length; parameres long and thin with long setae at their apices; penis broad and flattened along apical third and with large capsule at base.

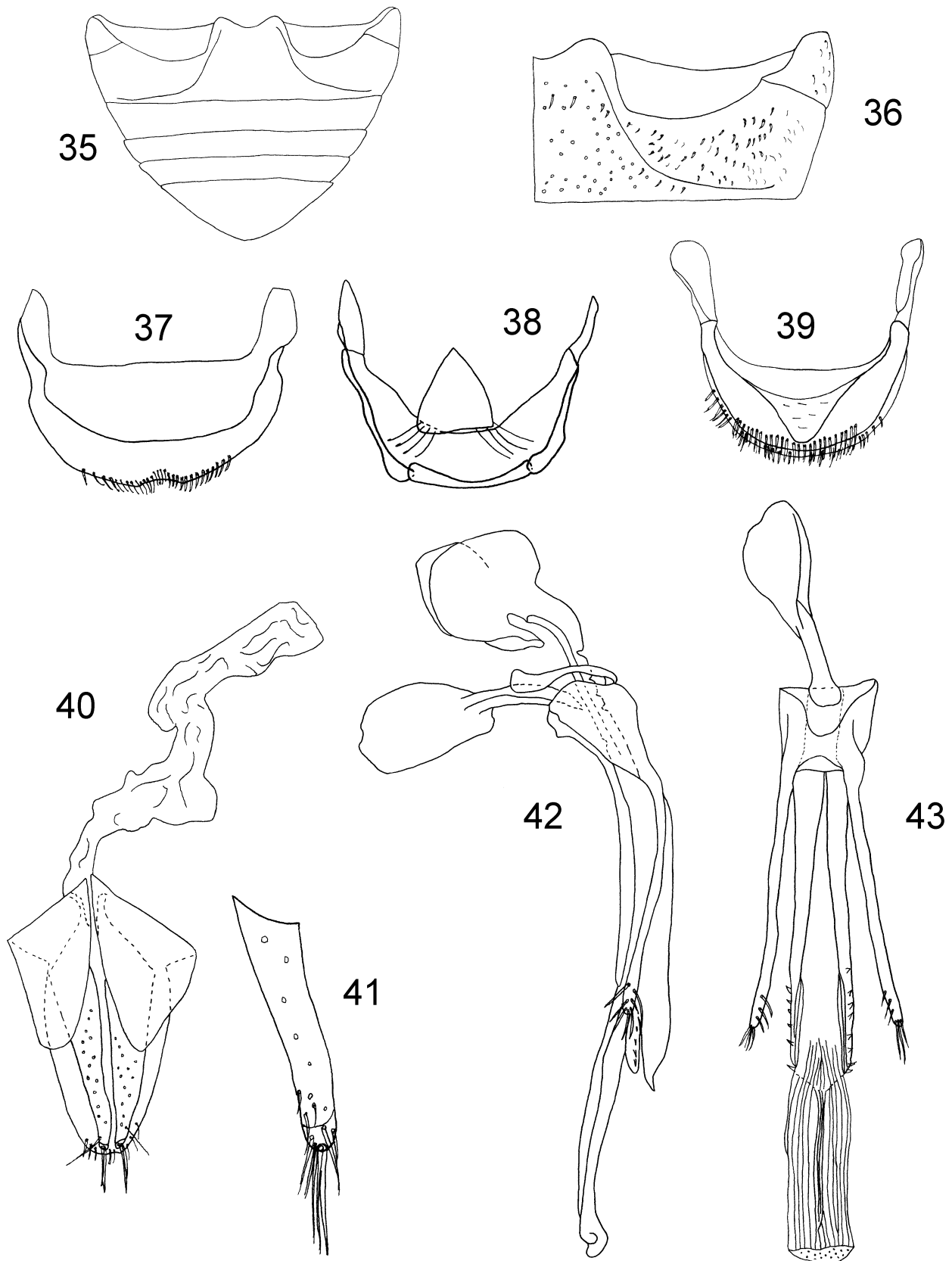
Female genitalia as in Figs. 40, 41. Proctiger (T10) well developed. Ovipositor sclerotized; coxites elongate, entirely separated, densely setose apically; styli absent; spermatheca not observed.

Material examined. Types. Lectotype (here designated), male: “Carin Ghecu, 1300-1400 m, L. Fea, II-III.88./ Syntypus, *Orcus? discoideus* Gorham, 1895/ Museo Civico di Genova” (MCSN); **Paralectotypes:** “Carin Ghecu, 1300-1400 m, L. Fea, II-III.88./ Gorham type/ Typus/ *discoideus* Gorh./ *Orcus discoideus* Gorh./ *Orcus? discoideus* Gorh. typus!/ Syntypus, *Orcus? discoideus* Gorham, 1895/ Museo Civico di Genova” (2: MCSN); “Carin Ascuii Cheba, 1200-1300 m L. Fea. I-88./ Syntypus *Orcus discoideus*, Gorham, 1895/ Museo Civico di Genova” (2: MCSN); “Carin Chebà, 900-1100 m., L. Fea V-XII-88/ Syntypus, *Orcus discoideus* Gorham/ Museo Civico di Genova 1895” (1: MCSN); “Carin Ghecù / 1300-1400 m / L. Fea II-III.88/ 81884/ Cotype/ *Orcus discoideus* Gorh. sp. n.” (1: MNB); “Carin Ghecù/ 1300-1400 m. / L. Fea II-III.88/ Cotype” (1: MNB); “Carin Chebà/ 900-1100. m./ L. Fea V XII-88/ Cotype” (1: MNB); “Carin Chebà, 900-1100 m., L. Fea V-XII-88 (1: MIZ)”.

Note. In spite of formal transfer of *Orcus discoideus* to *Sticholotis* by Weise (1902), a lectotype has never been designated. The lectotype and paralectotypes for *O. discoideus* Gorham, 1895, are designated here to fix the taxonomic status of this species.



FIGURES 27–34. *Sticholotis discoidea* (Gorham); 27) body, dorsal view; 28) head, ventral and prosternal process; 29) body, ventral view; 30) head, prothorax and base of elytra, antero-dorsal; 31) antenna and mouthparts, ventral; 32) abdomen, female, ventral; 33) last abdominal ventrites, male; 34) body, lateral.



FIGURES 35–43. *Sticholotis discoidea* (Gorham); 35) abdomen, ventral; 36) abdominal postcoxal line; 37) abdominal segment VIII, male, ventral; 38) male genital segment, ventral; 39) abdominal segment VIII, female, ventral; 40) female genitalia, ventral; 41) coxite, ventral; 42) aedeagus, lateral; 43) aedeagus, inner.

Sticholotis dohrni Weise

(Figs. 4, 44–55)

Sticholotis dohrni Weise, 1885: 240.

Diagnosis. *S. dohrni* resembles *S. bipunctata*, but can be separated by having four, black spots on each elytron, the elytra irregularly punctate with additional short, somewhat regular rows of coarse punctures in mid length near suture, and the venter of prothorax with deep antennal grooves.

Redescription. Male. Length 2.65 mm; TL/EW = 1.1; PL/PW = 0.47; EL/EW = 0.85; GD/TL = 0.6.

Body (Figs. 4, 44) rounded, strongly convex; pronotal margins very narrow, hardly visible from above; elytral margins moderately explanate, entirely visible from above. Head and pronotum dark reddish brown; labrum, ventral mouthparts and antennae dark yellowish brown. Scutellum blackish. Elytra predominantly reddish brown with black lateral margins (except for lateral edges reddish brown), and black stripe along suture running from scutellum to about mid length of elytra; each elytron additionally with four, moderately large, black round spots – first one near mid length of basal margin (touching margin), second one on disk slightly posteriad of half length of elytron, third one (smallest one) at posterior end of sutural stripe, appearing as a lateral expansion of this stripe, fourth one just before elytral apex. Punctures on pronotum 1.0–1.5 diameters apart, moderately coarse and dense; punctures on elytra slightly finer and shallower than those on pronotum, 1.5–2.5 diameters apart; additional irregular, short rows of coarse punctures along suture in mid length of elytra; surfaces between elytral and pronotal punctures feebly microreticulate and shiny; dorsum apparently glabrous. Ventral surface dark reddish brown with prosternal process, meso-, metaventrite and intercoxal process of abdominal ventrite I infuscate.

Head (Fig. 47, 48) flat medially, punctate, covered with dense and moderately long setae. Clypeus weakly arcuate anteriorly, scarcely reflexed at anterior edge. Eyes moderately large, rather coarsely faceted, dorsally separated by about 4 times eye width; interocular distance nearly 0.65 times head width; inner margins of eyes slightly rounded, convergent anteriorly. Maxilla (Fig. 45) with terminal palpomere about 2 times longer than wide, subparallel along basal 2/3 of its length, strongly and obliquely truncate apically; labial terminal palpomere narrowed and acuminate, distinctly narrower than penultimate palpomere. Antenna (Fig. 45) 11-segmented with narrow 3-segmented club.

Prothorax (Fig. 47) about 0.92 times basal width of elytra; pronotum with groove extending along most of basal margin, disappearing laterally before reaching hind angles; pronotal hypomerion anteriorly and lateral prosternum with distinct antennal groove (Fig. 45); anterior lobe of prosternum distinctly bordered with anterior edge straight; prosternal process (Fig. 48) subtruncate at apex, with distinct lateral carinae, moderately coarsely and densely punctate, punctures with long setae. Mesoventral intercoxal process (Figs. 46, 49) about 1.4 times mesocoxal diameter. Metaventrite (Fig. 49) with complete discrimen, densely and moderately coarsely punctate medially and sparsely punctate laterally; postcoxal lines curved and complete. Elytral epipleuron (Fig. 46) broad with maximum width at metaventrite, narrowing posteriorly but complete to apex, without distinct foveae. Wings well-developed.

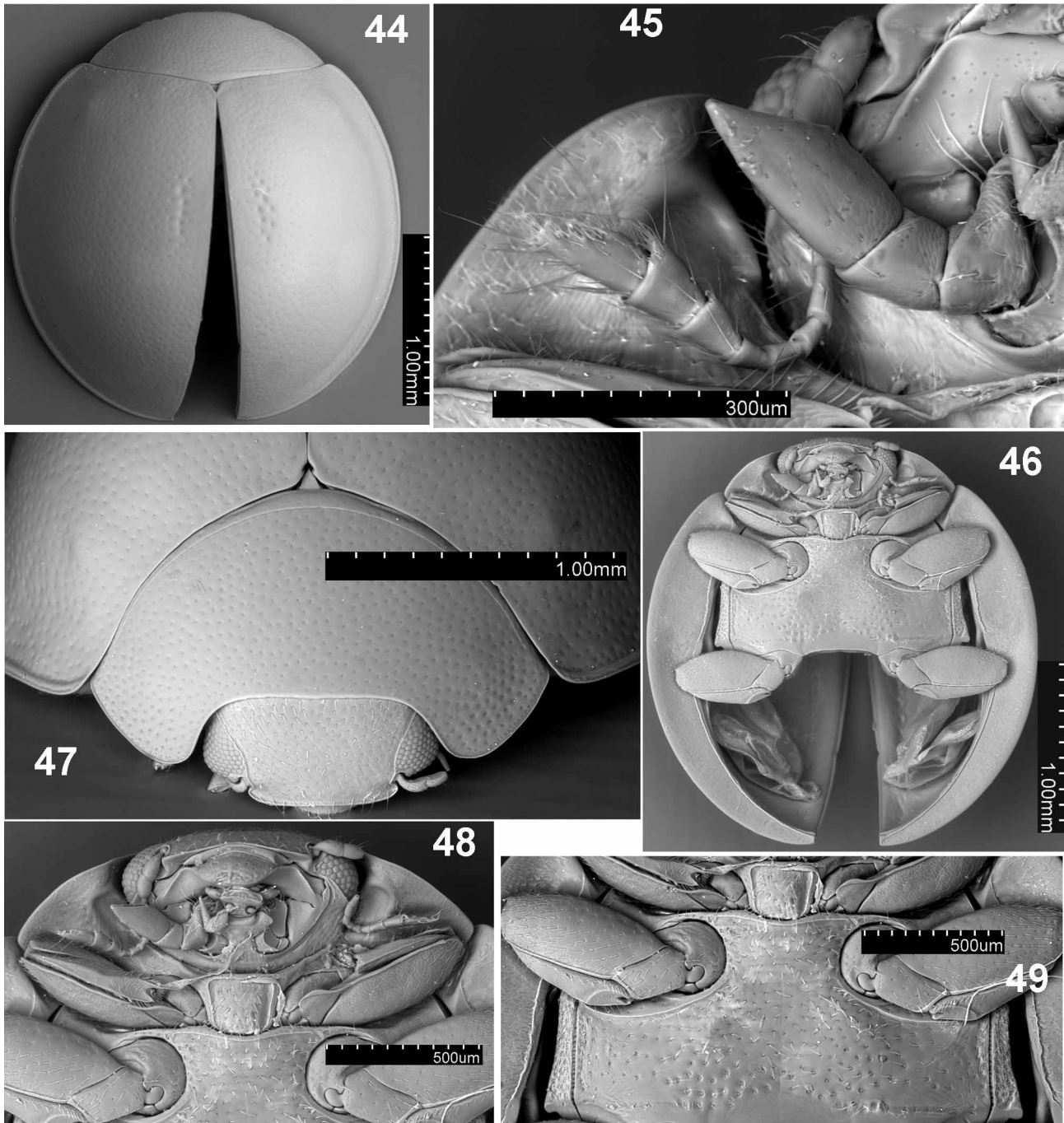
Abdomen (Fig. 50) with 5 ventrites; ventrite I along mid line about 3.5 times longer than ventrite II; postcoxal line of first ventrite curved posteriorly and laterally, closely paralleling posterior margin, incomplete laterally; postcoxal disk microreticulate and sparsely punctate (Fig. 51); ventrite V arcuate. Abdominal segment VIII with sternite divided in two parts (Fig. 52). Male genital segment (Fig. 53) with sternite round-oval, apophysis absent.

Male genitalia as in Figs. 54, 55. Tegminal basal piece with distinct strut and additional, dorsal strut-like projection of nearly the same length; parameres long and thin with long setae at their apices; penis with large capsule at base, and with two small teeth near apex.

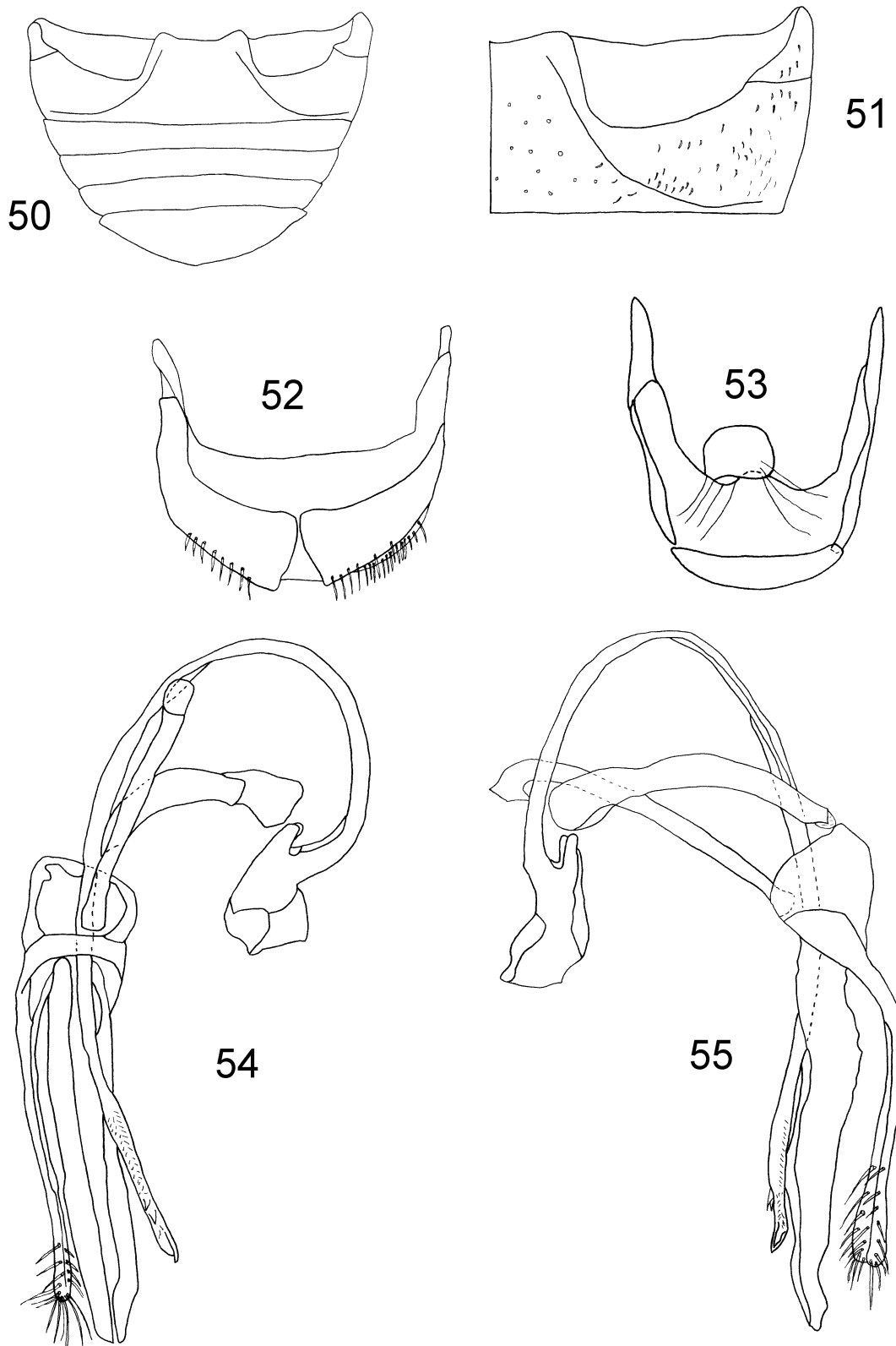
Female not known.

Material examined. Types. Neotype (here designated), male: “Tenasserim Meetan, Fea. Apr. 1887/ Gorham type/ *Orcus bipunctatus* Gorham/ Syntypus, *Orcus bipunctatus* var. Gorham, 1895/ Museo Civico di Genova” (MCSN).

Note. After an extensive and unsuccessful search for the type of *S. dohrni* in many European museums where the Dohrn and Weise collections are deposited, we consider it lost. Therefore, the incorrectly placed syntype of *O. bipunctatus*, which is actually a member of *S. dohrni*, is designated here as the **neotype** of this species. The designation of the neotype for *S. dohrni* Weise, 1885, is made to fix the taxonomic status of this species.



FIGURES 44–49. *Sticholotis dohrni* Weise; 44) body, dorsal view; 45) antenna, maxillary palp and prothoracic hypomeron; 46) body, ventral view (except abdomen); 47) head, prothorax and base of elytra, antero-dorsal; 48) head, pro- and mesothorax, ventral; 49) meso- and metathorax, ventral.



FIGURES 50–55. *Sticholotis dohrni* Weise; 50) abdomen, ventral; 51) abdominal postcoxal line; 52) abdominal segment VIII, male, ventral; 53) male genital segment, ventral; 54) aedeagus, inner; 55) aedeagus, lateral.

Sticholotis quadriguttata (Gorham)

(Figs. 2, 56–67)

Orcus quadriguttatus Gorham, 1895: 689.*Sticholotis quadriguttata*: Łączyński & Tomaszewska, 2009: 609.

Diagnosis. This species is easily distinguished among species of *Sticholotis* from Myanmar by its small body and two large, brown maculae on each elytron.

Redescription. Female. Length 2.1 mm; TL/EW = 1.15; PL/PW = 0.47; EL/EW = 0.85; GD/TL = 0.5.

Body (Figs. 2, 56) rounded, strongly convex; pronotal margins very narrow, visible from above; elytral margins comparatively explanate, entirely visible from above. Pronotum, scutellum and background of elytra brownish black; head and labrum dark reddish brown. Each elytron with two large, round, reddish brown spots along mid line of disk, narrowly connected to each other; elytral and pronotal lateral margins reddish brown. Punctures on pronotum 1.5–2.5 diameters apart, rather fine and moderately deep; punctures on elytra slightly coarser and deeper than those on pronotum, 1.0–2.0 diameters apart; surfaces between elytral and pronotal punctures polished and shiny; dorsum apparently glabrous. Ventral surface dark reddish brown with meso- and metaventrite, especially along middle and anterior part of abdominal ventrite I, infuscate. Ventral mouthparts and antennae yellowish brown; legs slightly darker.

Head (Figs. 57, 59) flat medially, finely punctate and moderately densely setose. Clypeus weakly arcuate anteriorly, scarcely reflexed at anterior edge. Eyes moderately large, rather coarsely faceted, dorsally separated by about 3 times eye width; interocular distance nearly 0.65 times head width; inner margins of eyes slightly rounded, convergent anteriorly. Maxilla (Figs. 58, 59) with terminal palpomere about 2.3 times longer than wide, parallel-sided along basal half of its length, strongly obliquely truncate towards apex; labial terminal palpomere narrowed and acuminate, distinctly narrower than penultimate palpomere. Antenna (Fig. 58) 11-segmented with narrow 3-segmented club.

Prothorax (Figs. 57, 62) about 0.9 times base of elytra; pronotum with groove extending parallel along base, curving anteriorly near hind angles; pronotal hypomeron and prosternum smooth; anterior lobe of prosternum distinctly bordered with anterior edge emarginate medially; prosternal process (Figs. 59, 60) subtruncate at apex, without distinct lateral carinae, moderately coarsely and rather sparsely punctate, punctures with moderately long setae. Mesoventral intercoxal process (Fig. 61) about 1.35 times mesocoxal diameter. Metaventrite with complete discrimen, moderately coarsely and sparsely punctate; postcoxal lines curved and complete. Elytral epipleuron broad with maximum width at metaventrite, narrowing posteriorly but complete to apex, without distinct foveae. Wings well-developed.

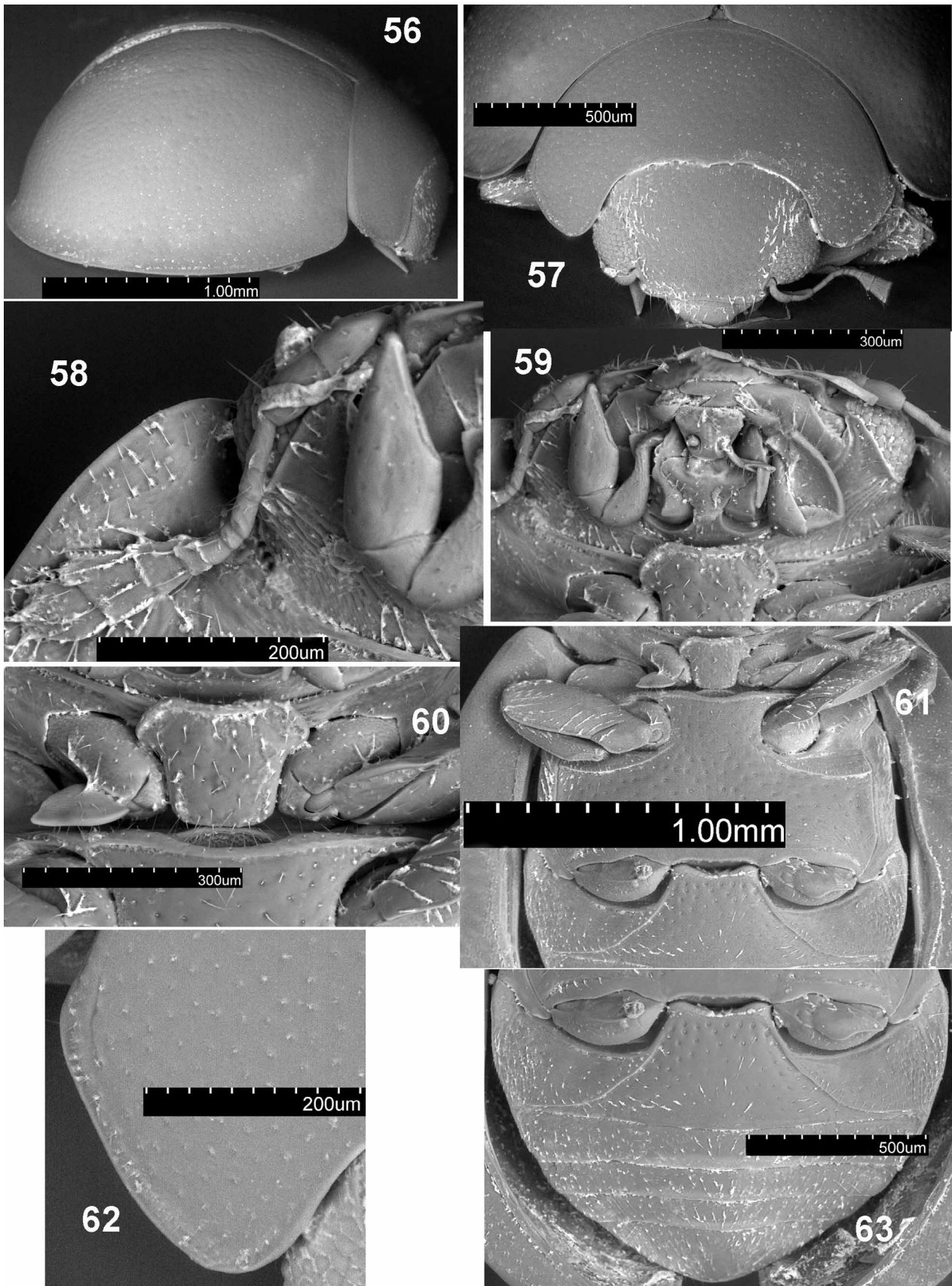
Abdomen (Figs. 63, 64) with 5 ventrites; ventrite I along mid line about 3.0 times longer than ventrite II; postcoxal line of first ventrite curved posteriorly and laterally, closely paralleling posterior margin, incomplete laterally; postcoxal disk microreticulate and sparsely punctate (Figs. 63, 65); ventrite V triangularly produced posteriorly; abdominal segment VIII in female as in Fig. 66.

Female genitalia as in Fig. 67. Proctiger (T10) well developed, somewhat triangular in shape; ovipositor sclerotized, coxites triangularly oval, entirely separated; styli absent; spermatheca not observed.

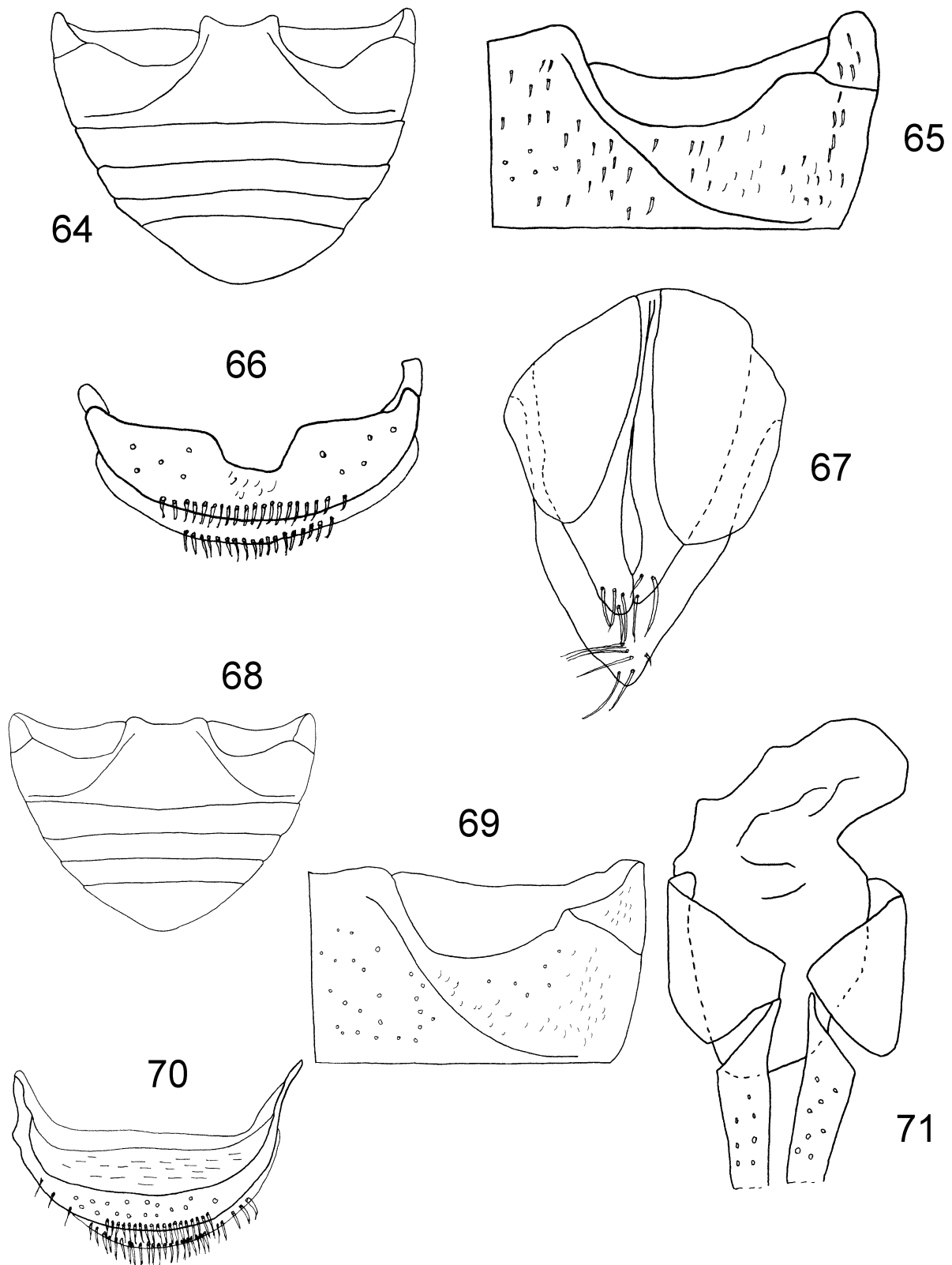
Male not known.

Material examined. Types. Lectotype (here designated), female: “Rangoon Birmania, Fea V. 1885/ Typus/ *quadriguttatus* Gorh./ *Orcus quadriguttatus*/ *O. quadriguttatus* Gorh. typus!/ Syntypus, *Orcus quadriguttatus* Gorham, 1895/ Museo Civico di Genova 1895” (MCSN).

Note. The designation of the lectotype for *O. quadriguttatus* Gorham, 1895, is made to fix the taxonomic status of this species.



FIGURES 56–63. *Sticholotis quadriguttata* (Gorham); 56) body, lateral view; 57) head, prothorax and base of elytra, antero-dorsal; 58) antenna, maxillary palp and prothoracic hypomeron; 59) head and prothorax, ventral; 60) prosternal process; 61) meso-, metathorax, and abdominal ventrite I, ventral; 62) pronotum, lateral; 63) abdomen, female, ventral.



FIGURES 64–67. *Sticholotis quadriguttata* (Gorham); **68–71.** *Sticholotis carinica* (Gorham); 64, 68) abdomen, ventral; 65, 69) abdominal postcoxal line; 66, 70) abdominal segment VIII, female, ventral; 67, 71) female genitalia.

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