

Six New Species and a New Genus of the Tribe Mesosini (Coleoptera, Cerambycidae, Lamiinae) from Borneo

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Abstract Six new species and one new genus of the tribe Mesosini are described from Borneo: *Agelasta (Dissosira) antennata* n. sp. (West Kalimantan), *Ereis thoracius* n. sp. (Sabah), *Metacoptops nagaii* n. sp. (Sabah), *Pseudoclyzomedus borneensis* n. sp. (Sabah), *Silgonda borneensis* n. sp. (Sabah), and *Paraclyzomedus albobasalis* n. gen. et sp. (West Kalimantan). The type species of poorly known genera, *Metacoptops*, *Pseudoclyzomedus*, and *Silgonda*, are figured for comparison.

Introduction

According to a web list of Cerambycidae from Borneo (HEFFERN, 2005), 67 described species of the tribe Mesosini have hitherto been recorded from Borneo, excluding two new species of the genus *Anipocregyes* BREUNING, 1939 recently described by YAMASAKO and MAKIHARA (2017). The faunal study of the tribe in Borneo is still preliminary and more undescribed and unrecorded species are expected.

We herein describe six new species and one new genus of the tribe from Borneo. Three out of the six new species belong to poorly known monotypic genera, *Metacoptops* BREUNING, 1939, *Pseudoclyzomedus* YAMASAKO, 2009, and *Silgonda* HELLER, 1924, respectively. With this opportunity, we also provide dorsal and lateral habitus images of the type species of these genera for comparison.

Material and Methods

This study was conducted based on dried specimens from the private collections of our colleagues and ourselves. The holotypes designated herein will be deposited in the Ehime University Museum (EUMJ) or Texas A&M University (TAMU). Paratypes are deposited in the private collections of the authors and our colleagues.

Verbatim label data are provided for each holotype, of which data on each label are cited in double quotation marks (“ ”) with a slash (/) indicating the line break.

The method for observing male genitalia and the terminology of endophallus follow mainly YAMASAKO and OHBAYASHI (2011).

Measurements of various body parts are coded as follows: LB = length of body, from the tip of vertex to elytral apices; LE = length of elytra, from the basal margin to the apex along suture; LG = length of gena, from the upper to lower margins; LL = length of lower eye lobe, from the upper to lower margins; LP = length of pronotum, from the basal to the apical margins along the suture; WB = maximum width across body; WEH = width across elytral humeri; WL = width of lower eye lobe near middle; WP = maximum width across pronotum.

Taxonomy

Agelasta (Dissosira) antennata n. sp.

(Figs. 1–4, 29, 30 & 39–44)

Type locality. Indonesia, West Kalimantan, Mt. Bawang.

Type series. Holotype (EUMJ; Figs. 1, 2 & 29): ♂, “Mt. Bawang / W. Kalimantan / INDONESIA / V. 2016 / Native coll.”. Paratypes: 2 ♀♀ (Figs. 3, 4 & 30), same data as the holotype; 1 ♂, same locality, V.2016, Native coll.; 1 ♂ (Figs. 39–44), 1 ♀, same locality, V.1992; 1 ♂, same locality, but 0°53'5 "N/ 109°22'2"E, III.2015, BATAVI coll.; 2 ♀♀, same locality and collector, VI.2015; 4 ♂♂, same locality as the holotype, III.2017; 1 ♂, same locality, IV.2017; 1 ♂, same locality, VI.2017; 7 ♀♀, same locality, III.2017; 4 ♀♀, same locality, IV.2017; 2 ♀♀, same locality, V.2017; 4 ♀♀, same locality, VI.2017.

Description. Male (Figs. 1, 2 & 29; n = 4): LB = 17.5–20.5 mm, WB = 7.2–9.1 mm.

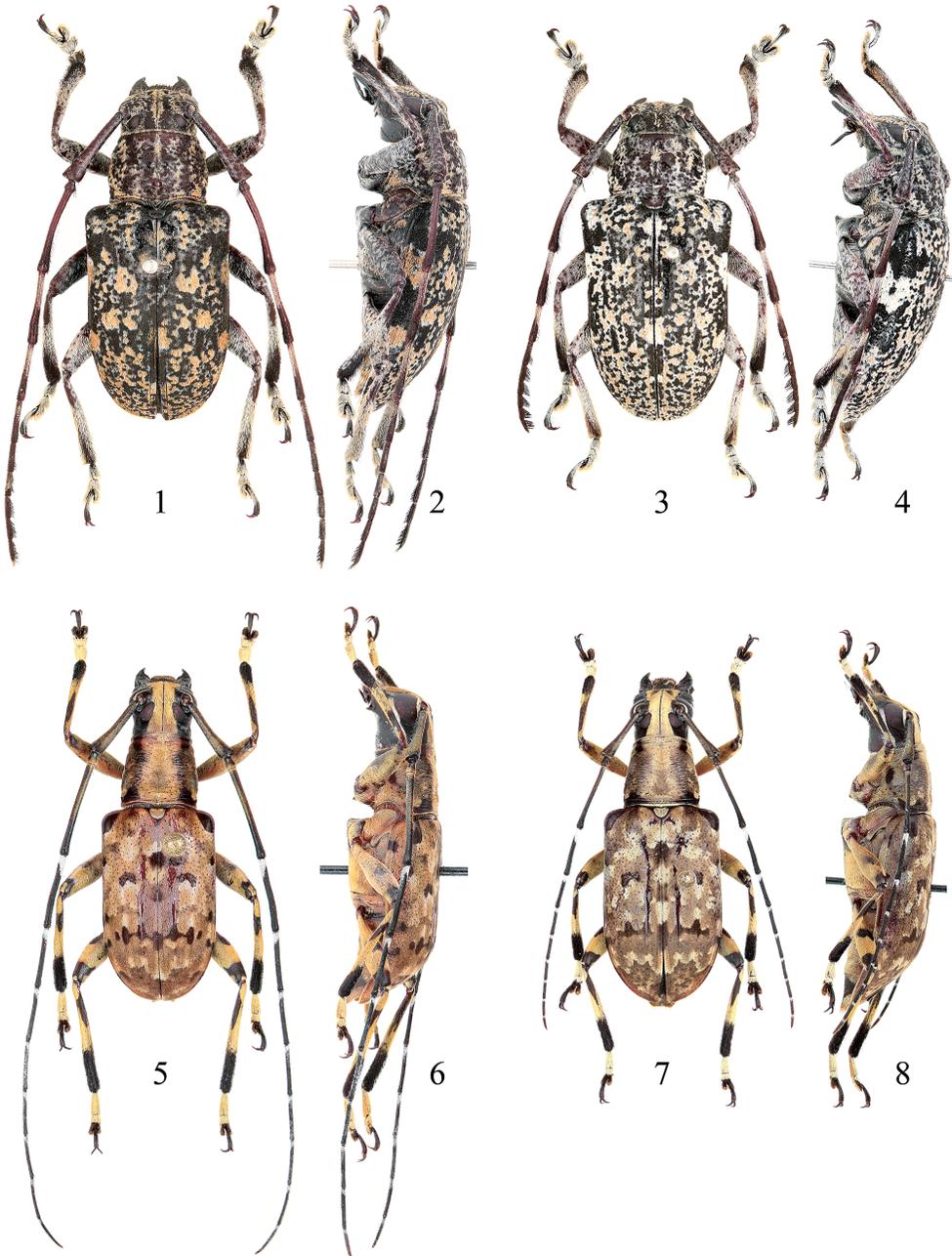
Body dark reddish-brown except for black or dark brown elytra, dominantly clothed with mottled light orange or whitish pubescence and black pubescence, of which the black pubescence forms vague interrupted transverse bands on basal 1/4 and apical 1/3 of elytra.

Head with frons transverse; antennal tubercle slightly projected. Eye subdivided into upper and lower lobes connected posteriorly by narrow line without ommatidium; lower lobe slightly transverse, LL/WL = 0.9–1.0, LL/LG = 0.7–0.8. Antenna long, 1.5–1.7 times as long as LB, with black setae beneath each segment, which are denser apically from antennomere VI toward XI; scape elongate, thickened apically in apical half, with cicatrix on outer side of apex; relative lengths of each segment as follows: 1.6–1.7 : 0.1–0.2 : 1.7–1.8 : 1.4–1.5 : 1.2 : 0.9 : 0.6–0.7 : 0.5–0.6 : 0.4–0.5 : 0.5 : 0.6–0.7.

Pronotum transverse, widest near middle, LP/WP = 0.7, WP/WEH = 0.7–0.8, weakly swollen above, with transverse furrow near apex. Elytra moderate in length, LE/LB = 0.6–0.7, LE/WEH = 1.5–1.6, scattered with sparse punctures which are rough and relatively distinct in basal part but reduced apically; sides almost straight toward apical 1/3, arcuately narrowed and rounded apically; apices with subquadrate inner angles. Prosternal process weakly projected below, nearly truncated in lateral view. Mesosternal process with developed tubercle on center near apex, truncated in lateral view. Mesotibia without distal notch.

Male genitalia (n = 3) as in Figs. 39–44. Tegmen in dorsal view rhombic, widest just behind middle, gently curved in lateral view; paramere somewhat thick, slightly constricted at base, nearly straight toward rounded apex, with short setae denser apically, concentrated together with long setae in apical 1/3; ringed part expanded laterally just behind middle of tegmen, evenly narrowed basally. Median lobe in dorsal view slender and gently constricted before middle, gently curved in lateral view; basal struts bifurcated before middle; ventral plate with apex pointed. Endophallus about twice the length as median lobe, subdivided into BPH, MPH (MT+CT & PB), and APH; BPH with pair of CS, subequal to half length of median lobe; MPH with MT+CT slightly longer than median lobe, constricted at distal part, with MSp in proximal half and LSp on dorsal side of distal half; PB with linguulate appendix on dorsal side; APH distinctly swollen in ovoid shape, with single ED on dorsal side. LSp arranged into two irregular lines, unidentate in proximal area, multidentate in distal area. SSp small, unidentate, distributed from dorsal part of proximal half of PB to entire part of distal half of PB.

Female (Figs. 3, 4 & 30; n = 5): LB = 16.6–20.0 mm, WB = 7.2–9.5 mm. Similar to male, but body more rotund and antenna 1.0–1.1 times as long as LB.



Figs. 1–8. Habitus of new Mesosini spp. from Borneo. — 1–4, *Agelasta (Dissosira) antennata* n. sp.; 5–8, *Ereis thoracicus* n. sp. — 1, 2, 5 & 6, Holotype, male; 3, 4, 7 & 8, paratype, female. — 1, 3, 5 & 7, Dorsal view; 2, 4, 6 & 8, lateral view.

Diagnosis. This species is similar to *Agelasta (Dissosira) lecideosa* (PASCOE, 1865) described from Sarawak, but easily distinguishable from the latter by the general appearances, especially the following characteristics: lower eye lobe somewhat small; antenna with scape elongate, surpassing basal 1/3 of pronotum, with dense long setae beneath apical fourth antennomeres [*A. (D.) lecideosa*: lower eye lobe well large; antenna with scape relatively short, barely surpassing basal 1/3 of pronotum, with sparse setae on apical fourth antennomeres].

Etymology. The species name is derived from its remarkable antenna with dense long setae beneath antennomeres.

Distribution. Borneo (known only from the type locality).

***Ereis thoracius* n. sp.**

(Figs. 5–8, 31, 32 & 45–52)

Type locality. Malaysia, Sabah, Tongod.

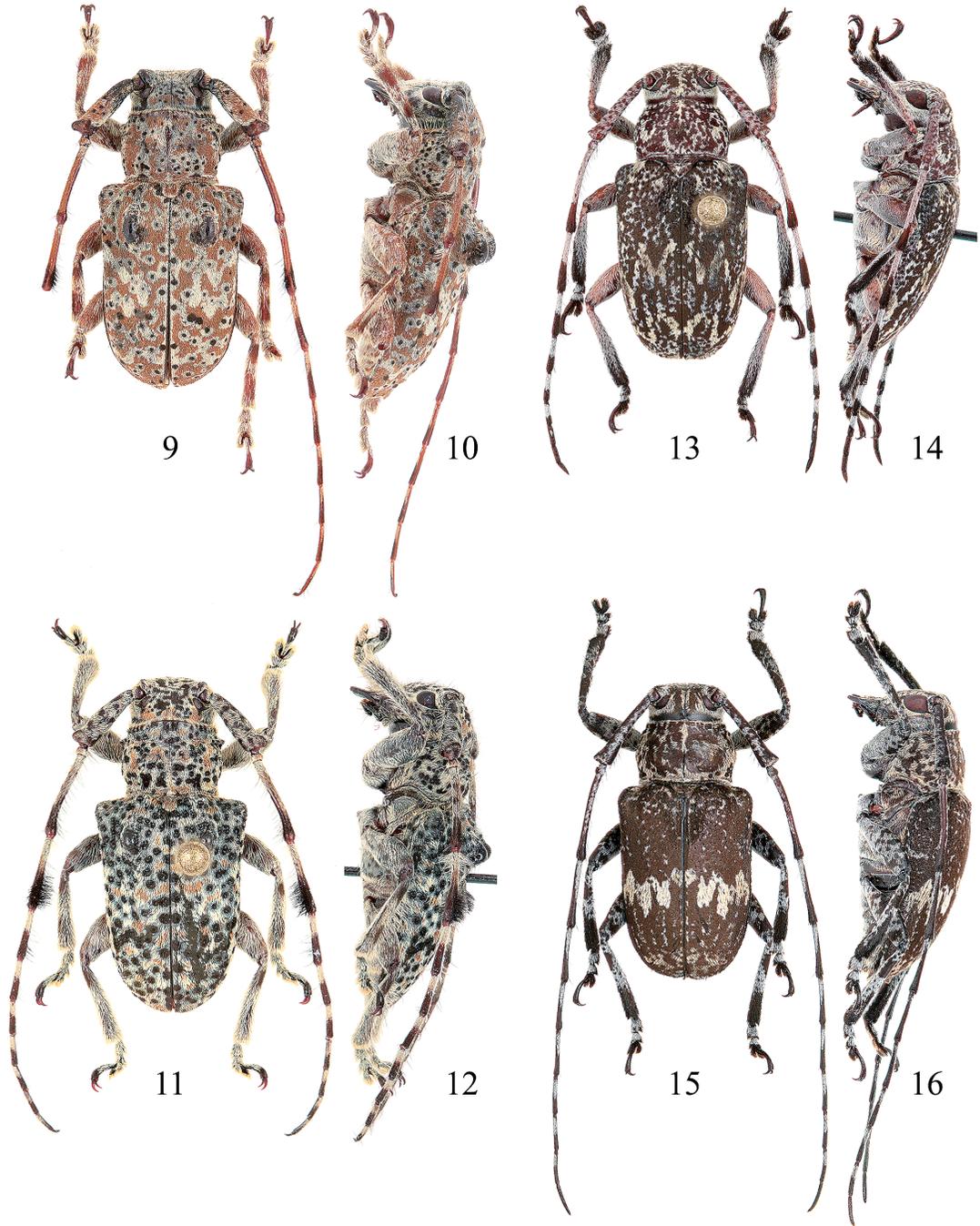
Type series. Holotype (TAMU; Figs. 5, 6, 31 & 45–52): ♂, “Malaysia, Sabah / Tongod / IV–3–2014 / local coll”. Paratypes: 1 ♀, Crocker Range, vic. Trus Madi, Sabah, Malaysia, 22.III.2000, local coll.; 1 ♂, Sipitang area, Sabah, Malaysia, 1.II.2003, local coll.; 1 ♀ (Figs. 7, 8 & 32), Pensiangan, Sabah, Malaysia, 20.III.2010, local coll.; 1 ♀, Mt. Trus Madi, Sabah, Malaysia, 18.IV.2010, local coll.

Description. Male (Figs. 5, 6 & 31; n = 2): LB = 15.5 mm; WB = 5.4 mm.

Body black to reddish-brown, dominantly clothed with yellow ocher pubescence which becomes lighter in some areas such as lateral sides of head, a part of pronotum, scutellum, middle of elytra, and so on. Head with vittae of black pubescence behind upper eye lobes. Antenna with scape, pedicel and antennomere III with yellow ocher pubescence, but each basal part of antennomeres IV–XI with white pubescence and the remainder with black pubescence. Pronotum with vague vittae of black pubescence extending from head on disk. Elytra with black pubescence on humeral corner, with several small spots of black pubescence irregularly arranged transversally before middle, behind middle, and apical 1/5. Legs each with black pubescence on middle and apex of femur, basal and apical 1/3 of tibia, and tarsomere III.

Head with frons narrowed between lower eye lobes. Eye subdivided into upper and lower lobes, connected posteriorly by narrow line without ommatidium; lower eye lobe large, transverse, LL/WL = 0.6, LL/LG = 1.1–1.2. Antenna 1.8–1.9 times as long as LB; scape long and slender, thickened apically in apical 1/3, with developed cicatrix on outer side of apex; relative lengths of each segment as follows: 1.1–1.2 : 0.2 : 1.6 : 1.2–1.3 : 1.0–1.1 : 0.9 : 0.9 : 0.7–0.8 : 0.7–0.8 : 0.7 : 0.7. Pronotum long, widest before middle, narrowed apically, LP/WP = 1.0, WP/WEH = 0.7, with irregular transverse rugae on disk. Elytra somewhat short, LE/LB = 0.6, LE/WEH = 1.7, with shallow punctures which are reduced apically and almost disappeared in apical half; sides almost straight toward apical 1/4, arcuately narrowed and rounded apically; apices with subquadrate inner angles. Prosternal process projected below and with transverse ridge near base, truncated in lateral view. Mesosternal process obtusely swollen on center near apex, truncated in lateral view. Mesotibia without distal notch.

Male genitalia (n = 1) as in Figs. 45–52. Tegmen in dorsal view elongate rhombic, widest behind middle, gently curved in lateral view; paramere short and slim, slightly constricted at base, gently curved toward rounded apex, with short setae appearing from near middle of latero-dorsal side, denser apically, concentrated together with long setae in apical 1/3; ringed part expanded laterally behind middle of tegmen, evenly narrowed basally, fused at basal 1/3 and dilated basally. Median lobe in lateral view slightly curved in basal 2/3, gently curved in apical 1/3; basal struts bifurcated near middle; ventral plate with apex pointed. Endophallus slightly longer than twice length of median lobe, subdi-



Figs. 9–16. Habitus of new Mesosini spp. from Borneo and comparative species. — 9 & 10, *Metacoptops nagaii* n. sp. (holotype, male); 11 & 12, *M. fasciculata* (AURIVILLIUS, 1911) (male); 13 & 14, *Pseudoclyzomus borneensis* n. sp. (holotype, female); 15 & 16, *P. ohbayashii* YAMASAKO, 2009 (paratype, male). — 9, 11, 13 & 15, Dorsal view; 10, 12, 14 & 16, lateral view.

vided into BPH, MPH (MT+CT & PB), and APH; BPH with pair of CS, subequal to 1/4 length of median lobe; MPH with MT+CT slightly longer than median lobe, curved at distal 1/4 and constricted at distal part, with MSp in proximal half and LSp in latero-dorsal side of distal 1/3; PB weakly swollen laterally and with fin like membranous appendix on each side of distal part; APH rudimentarily swollen in clavate shape, with AS composed of several horizontal sclerites arranged in single longitudinal line on dorsal side, with single ED on dorsal side of distal part. LSp fine, unidentate, arranged into two irregular lines. SSp minute, unidentate, distributed in dominant part of PB.

F e m a l e (Figs. 7, 8 & 32; n = 3): LB = 13.0–17.0 mm; WB = 5.2–5.4 mm. Similar to male, but body relatively rotund and antenna 1.1–1.3 times as long as LB.

Diagnosis. This species is close to *Ereis anthriboides* (PASCOE, 1857) described from Borneo, but easily distinguishable from the latter by the elongate pronotum and long antennal scape. Among the other congeners, it is also close to *E. javanica* BREUNING, 1936 from Java and *E. sumatrensis* GAHAN, 1907 from Sumatra, but different from the former in the elongate pronotum and fine antennal scape, and from the latter in the robust and relatively short body. It is somewhat similar to *Mesocacia multimaculata* (PIC, 1925) distributed in Indochina at a glance, but clearly different from the latter in its narrow frons, fine and long antennal scape, male genital features, and so on.

Etymology. The species name refers to its characteristic prothorax with remarkably elongate pronotum.

Distribution. Borneo (Sabah).

Metacoptops nagaii n. sp.

(Figs. 9, 10, 33 & 53–58)

Metacoptops fasciculata (non AURIVILLIUS, 1911): YAMASAKO & OHBAYASHI, 2011: 38 (Fig. 16), 50.

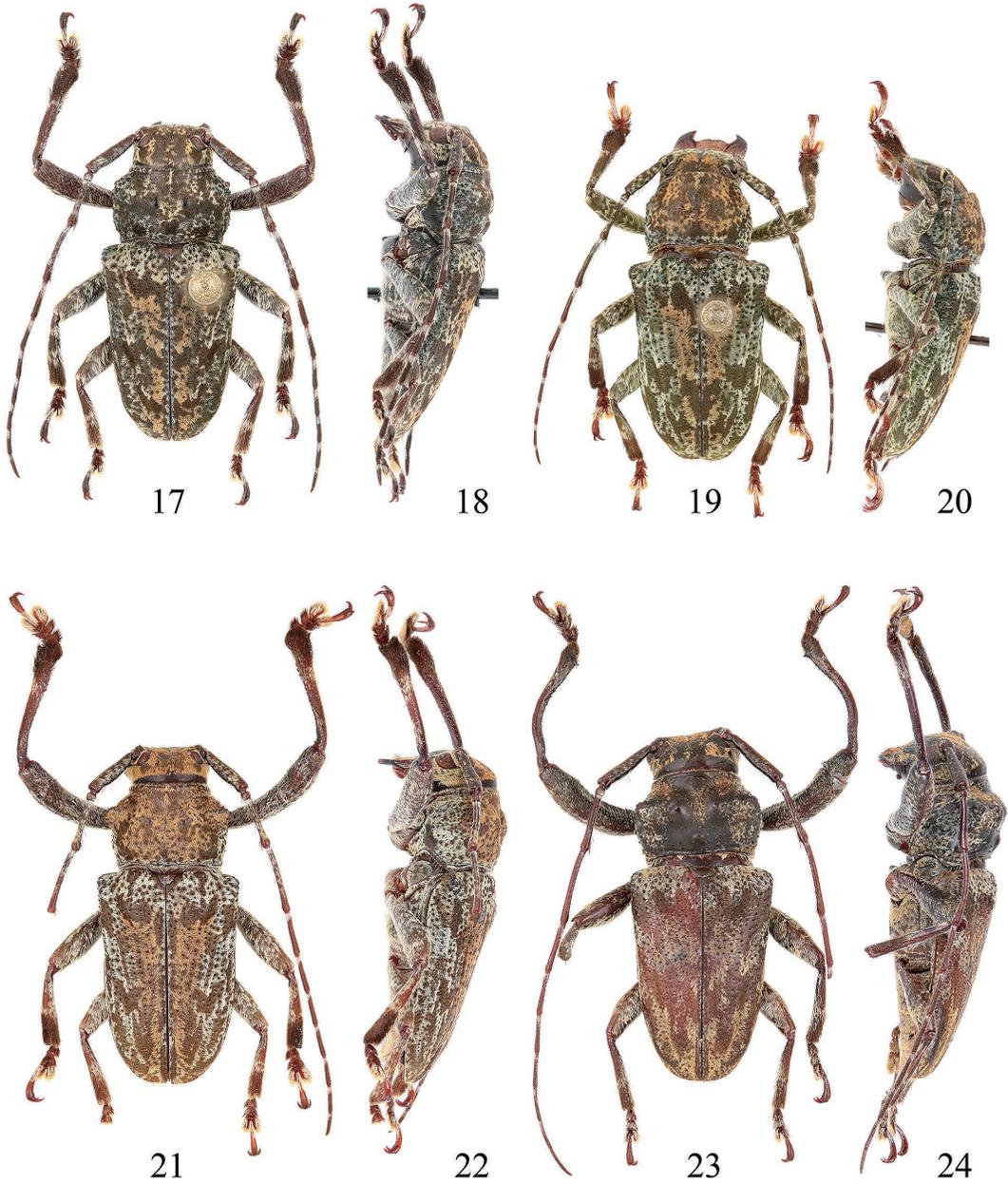
Type locality. Malaysia, Sabah, northwest 16 miles from Keningau, Alt. 1,406 m.

Type series. Holotype (EUMJ; Figs. 9, 10 & 33): ♂, “[SABAH, BORNEO] / 16 miles point, NW / of Keningau, 1406m / , IV, 1983 / Shinji Nagai legit”. Paratype: 1 ♂ (Figs. 53–58), near Keningau, Sabah, Malaysia, 18.IV.1990, S. NAGAI leg.

Description. **M a l e** (Figs. 9, 10 & 33; n = 2): LB = 13.3–13.8 mm, WB = 6.1–6.2 mm.

Body with head, pronotum, and elytra dark brown, and the remainder reddish-brown; head dominantly clothed with light beige pubescence, scattered with a few small black spots; antennal scape, pronotum, and elytra clothed with ocher and light beige pubescence, scattered with irregular markings of light beige pubescence and sparse small black spots; antenna with pedicel and each base of antennomeres III–XI clothed with light beige pubescence, and the remainder with sparse reddish-brown pubescence; ventral surface and legs dominantly clothed with light beige pubescence.

Body with sparse suberect black setae on dorsal surfaces of head, pronotum, and elytra. Head with frons transverse; antennal tubercle well elevated. Eye subdivided into upper and lower lobes connected posteriorly by narrow line without ommatidium; lower lobe slightly vertically long, LL/WL = 0.9–1.0; LL/LG = 0.7. Antenna 1.7 times as long as LB; scape thick, with developed cicatrix on outer side of apex; antennomere IV with tuft of black setae in apical half; antennomere XI bent inwardly near apex; relative lengths of each segment as follows (n = 1): 1.4 : 0.2 : 1.5 : 1.3 : 1.0 : 0.9 : 0.8 : 0.7 : 0.7 : 0.7 : 0.8. Pronotum transverse, widest near middle, LP/WP = 0.7–0.8, WP/WEH = 0.7, weakly convex above, weakly constricted at base, with three indistinct tubercles on disk and distinct small projection on each lateral side near apex. Elytra moderate in length, LE/LB = 0.6–0.7, LE/WEH = 1.3–1.4, each with prominent elevated ridge (Figs. 10, 33) located centrally near base, scattered with sparse tubercles and shallow punctures in basal 1/3, and the punctures reduced apically and nearly ob-



Figs. 17–24. Habitus of *Silgonda* spp. — 17–22, *S. borneensis* n. sp. (17 & 18, holotype, male; 19 & 20, paratype, female; 21 & 22, paratype, male); 23 & 24, *S. rufipes* HELLER, 1924 (male). — 17, 19, 21 & 23, Dorsal view; 18, 20, 22 & 24, lateral view.

solete in apical 1/3; sides almost straight toward apical 1/3, arcuately narrowed and rounded apically; apices with subquadrate inner angles. Prosternal process with weakly ridged lateral margins slightly projected below near base, nearly truncated in lateral view. Mesosternal process with ridged lateral margins forming a pair of tubercles near apex, nearly truncated in lateral view. Mesotibia without distal notch.

Male genitalia (n = 2) as in Figs. 53–58. Tegmen wide and rhombic, widest at middle in dorsal view, gently curved in lateral view; paramere slender, evenly narrowed toward rounded apex, with several short setae on apex; ringed part gently expanded laterally near middle of tegmen, evenly narrowed basally. Median lobe thick in dorsal view, curved near basal 1/3 in lateral view; basal strut bifurcated near basal 1/3 of median lobe; ventral plate with apex pointed. Endophallus subdivided into BPH, MPH (MT, CT & PB), and APH; BPH short, subequal to 1/3 length of median lobe, with CS; MPH with MT subequal to median lobe in length, distinctly swollen, with dense minute scaly sclerites in dominant part; CT slightly shorter than MT, slender, with similar sclerites as MT on ventral side; PB short, cylindrical, with minute spicules throughout; APH rudimentarily swollen in ovoid shape, with single ED.

Diagnosis. This species is distinguishable from *Metacoptops fasciculata* (AURIVILLIUS, 1911) from Borneo (Figs. 11 & 12) by the following features: antenna and legs much lighter color than head, pronotum, and elytra; body clothed with light brown and light beige pubescence; head, pronotum, and elytra with relatively sparse black suberect setae throughout, scattered with sparse small black spots [*M. fasciculata*: antenna and legs black or dark brown as well as head, pronotum, and elytra; body clothed with ocher, light beige, and greenish light gray pubescence; head, pronotum, and elytra with relatively dense black suberect setae throughout, scattered with dense small black spots].

Etymology. The species name is dedicated after Shinji NAGAI, an excellent entomologist who collected the type series.

Distribution. Borneo (Sabah).

Remarks. The genus *Metacoptops* was established for *Aesopida fasciculata* AURIVILLIUS, 1911 from Borneo by BREUNING (1939), and had been monotypic for a long term. Here, a second species is added to this genus which is known only from Borneo.

The median lobe with endophallus of this new species and its specimen data were shown based on a misidentification as *Metacoptops fasciculata* in YAMASAKO and OHBAYASHI (2011: fig. 16 in p. 38 and appendix in p. 50).

Pseudoclyzomedus borneensis n. sp.

(Figs. 13, 14 & 34)

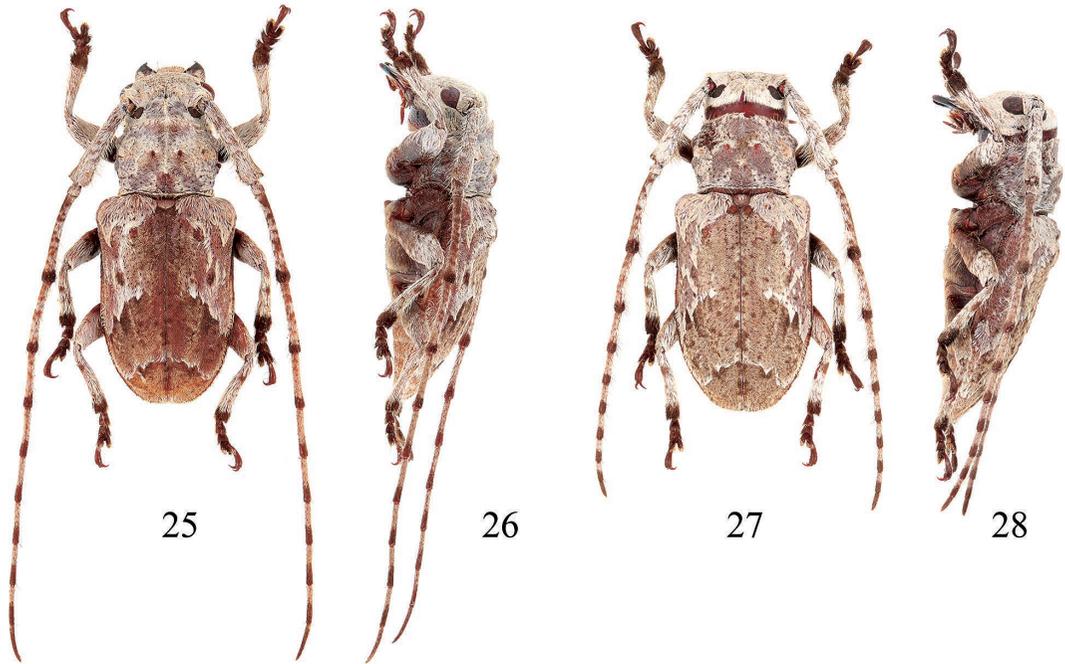
Type locality. Malaysia, Sabah, Pensiangan.

Type series. Holotype (TAMU, Figs. 13, 14 & 34): ♀, “Malaysia, Sabah / Pensiangan / III-11-2010 / local coll”. Paratype: 1 ♀, Mt. Trus-Madi, Sabah, Malaysia, 14.III.2007, local coll.

Description. Female (Figs. 13, 14 & 34; n = 2): LB = 10.0–12.0 mm, WB = 4.3–5.3 mm.

Body dark reddish-brown; head, pronotum, and elytra with mottled dark brown pubescence and white or creamy-white pubescence, with indistinct interrupted narrow zigzag bands of creamy-white pubescence behind middle and on apical 1/4 of elytra; antenna with each basal part except for antennomeres X–XI, ventral surface, and dominant part of legs except for tarsomere III and claws with silver white pubescence.

Body rotund. Head with frons transverse; antennal tubercle slightly projected. Eye subdivided into upper and lower lobes connected posteriorly by narrow line without ommatidium; lower lobe



Figs. 25–28. Habitus of *Paraclyzomedus albobasalis* n. gen. et sp. — 25 & 26, Holotype, male; 27 & 28, paratype, female. — 25 & 27, Dorsal view; 26 & 28, lateral view.

slightly long vertically, $LL/WL = 1.0–1.1$, $LL/LG = 0.8–0.9$. Antenna long and slender, 1.3–1.4 times as long as LB , with black setae beneath each segment from scape to antennomere VI but almost without setae on antennomeres VII–XI; scape elongate, slightly thickened apically, with cicatrix on outer side of apex; relative lengths of each segment as follows: 1.8–1.9 : 0.2 : 2.0–2.1 : 1.4 : 1.0–1.1 : 0.8 : 0.7–0.8 : 0.5–0.6 : 0.5 : 0.4 : 0.4. Pronotum transverse, widest near middle, weakly constricted at base, $LP/WP = 0.6$, $WP/WEH = 0.7–0.8$, weakly swollen above, with smooth disk and rounded sides. Elytra moderate in length, $LE/LB = 0.6–0.7$, $LE/WEH = 1.5–1.6$, with sparse shallow punctures which are reduced apically and nearly obsolete in apical 1/3; sides almost straight toward apical 1/3, arcuately narrowed and rounded apically; apices with subquadrate inner angles. Prosternal process not projected below, roundly sloped in lateral view. Mesosternal process with tubercle on center near apex, nearly truncated in lateral view. Mesotibia without distal notch.

Diagnosis. This new species is very similar to *Pseudoclyzomedus ohbayashii* YAMASAKO, 2009 (Figs. 15 & 16), but distinguishable from the latter by the following characteristics: elytra with small spots of white or creamy-white pubescence throughout as well as pronotum, and with narrow zigzag bands [*P. ohbayashii*: elytra with small spots of white or creamy-white pubescence which are arranged more sparsely than pronotum, usually with relatively wide zigzag band of creamy-white pubescence behind middle].

Etymology. The species name is derived from its distribution.

Distribution. Borneo (Sabah).

Remarks. No male specimen of this new species was available for this study.

The genus *Pseudoclyzomedus* was established by YAMASAKO (2009) based on a single species, *P.*

ohbayashii. Prior to this study, the genus had been monotypic and known only from northern Laos (YAMASAKO, 2009) and northern Thailand (HOLZSCHUH, 2017). This new species is disjunctly distributed in Borneo.

***Silgonda borneensis* n. sp.**

(Figs. 17–22, 35, 36 & 59–66)

Type locality. Malaysia, Sabah, Kuamut.

Type series. Holotype (TAMU) (Figs. 17, 18, 35 & 59–66): ♂, “Malaysia, Sabah / Kuamut / III-26-2014 / Local coll”. Paratypes: 1 ♀ (Figs. 19–20), Mt. Trus Madi, Sabah, Malaysia, 8.VI.2001, local coll. ‘Addle’, DJHC. Acc. #98.5305; 1 ♂, Tawau vic, Sabah, Malaysia, 13.III.2005, local coll.; 1 ♂ (Figs. 21–22), 16 miles point, Northwest of Keningau, Alt. ca. 1,400 m, Sabah, Malaysia, 17.V.1983, S. NAGAI leg.

Description. Male (Figs. 17, 18, 21, 22 & 35; n = 3): LB = 8.3–9.5 mm, WB = 3.6–4.1 mm.

Body varied from dark green to dark brown. Head, pronotum, and elytra clothed with creamy-white and brown pubescence, of which the brown pubescence forms several markings arranged into two irregular transverse lines on basal 1/5 and near middle of elytra, and with light orangish-brown pubescence on gena, occiput, disk of pronotum and along suture of elytra. Antenna with scape with same pubescence as pronotum; pedicel and each base of antennomeres III–XI with white pubescence, and the remainder with sparse brown pubescence. Ventral surface and legs with creamy-white pubescence.

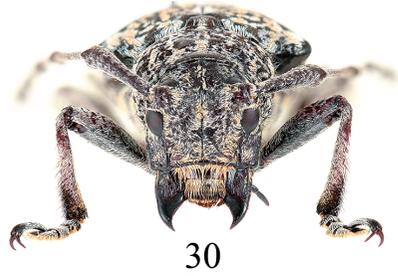
Head with frons transverse; antennal tubercle slightly elevated. Eye subdivided into upper and lower lobes connected posteriorly by narrow line without ommatidium; lower lobe transverse, LL/WL = 0.8; LL/LG = 0.7. Antenna 1.2–1.3 times as long as LB; scape slightly thickened apically, with small cicatrix on outer side of apex; relative lengths of each segment as follows: 1.4 : 0.2 : 1.2 : 1.6–1.7 : 1.0 : 0.9 : 0.8–0.9 : 0.8 : 0.7–0.8 : 0.7 : 0.7. Pronotum transverse, widest near middle, LP/WP = 0.6–0.7, WP/WEH = 0.9, swollen laterally, scattered with fine sparse granules, with three tubercles on disk, rugged swelling on latero-dorsal side before middle which is usually obtuse but sometimes well developed, and distinct small projection on each lateral side near apex and spinous small projection under the former. Elytra moderate in length, LE/LB = 0.6–0.7, LE/WEH = 1.5, with fine sparse granules on each basal part, obtuse swelling on each middle behind base, and fine punctures reduced apically; humeri projected laterally; sides slightly narrowed evenly toward apical 1/3, arcuately narrowed and rounded apically; apices with subquadrate inner angles. Prosternal process with weakly ridged lateral margins, roundly sloped in lateral view. Mesosternal process with projection near apex, nearly truncated in lateral view. Pro-leg elongate; pro-tibia without projection; mesotibia without distal notch.

Male genitalia (n = 1) as in Figs. 59–66. Tegmen slender rhombic, widest at middle in dorsal view, slightly curved in lateral view; paramere slender, slightly curved, slightly narrowed toward rounded apex, with several short setae arising from apical half and concentrated at apex; ringed part gently expanded laterally near middle of tegmen, evenly narrowed basally. Median lobe somewhat thick in dorsal view, weakly curved in lateral view; basal strut bifurcated after middle of median lobe; ventral plate with apex obtuse. Endophallus subdivided into BPH, MPH (MT+CT & PB), and APH;

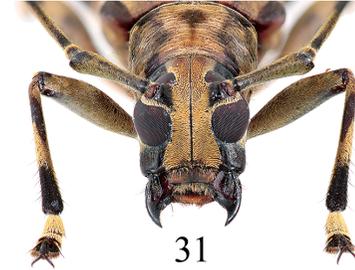
Figs. 29–38. Frontal view of new Mesosini spp. from Borneo. — 29 & 30, *Agelasta (Dissosira) antennata* n. sp.; 31 & 32, *Ereis thoracicus* n. sp.; 33, *Metacoptops nagaii* n. sp.; 34, *Pseudoclyzomedus borneensis* n. sp.; 35 & 36, *Silgonda borneensis* n. sp.; 37 & 38, *Paraclyzomedus albobasalis* n. gen. et sp. — 29, 31, 33, 35 & 37, Holotype, male; 30, 32, 36 & 38, paratype, female; 34, holotype female.



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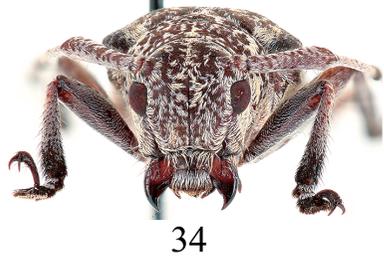
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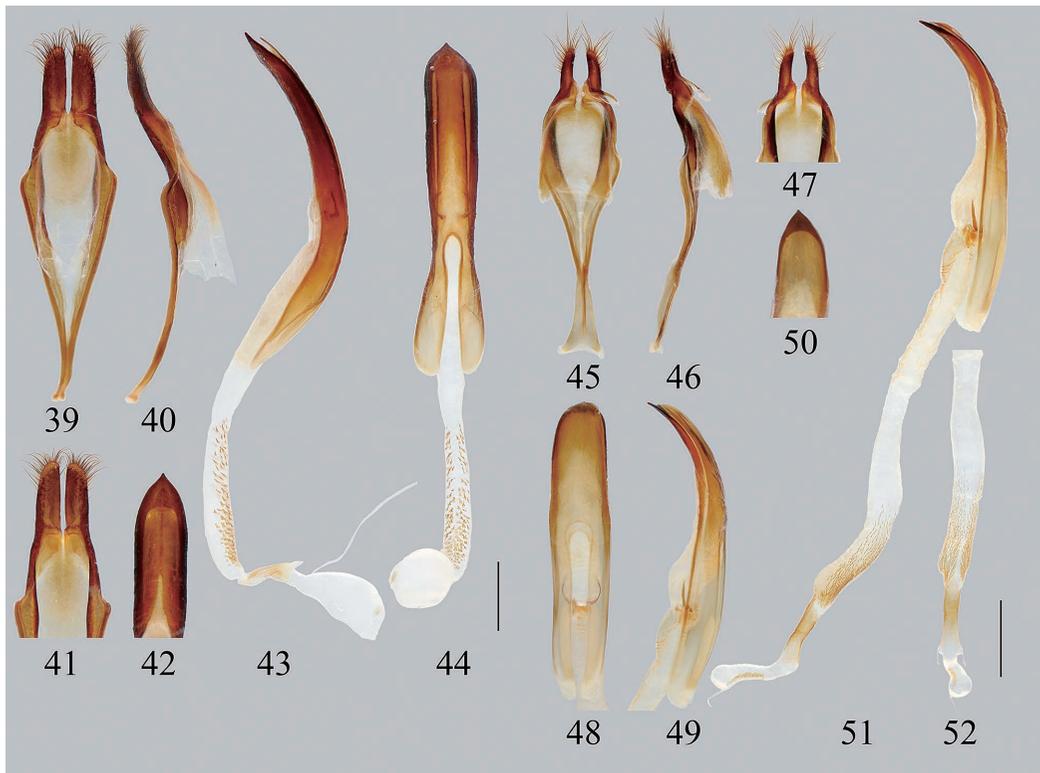
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Figs. 39–52. Male genitalia of new Mesosini spp. from Borneo. — 39–44, *Agelasta (Dissosira) antennata* n. sp. (paratype); 45–52, *Ereis thoracius* n. sp. (holotype). — 39, 40, 45 & 46, Tegmen; 41 & 47, paramere; 42 & 50, apex of median lobe; 43, 44 & 51, median lobe with endophallus; 48 & 49, median lobe; 52, distal part of endophallus. — 39, 44, 45, 48 & 52, Dorsal view; 40, 43, 46, 49 & 51, lateral view; 41, 42, 47 & 50, ventral view. Scale: 1.0 mm.

BPH short, subequal to 1/3 length of median lobe, with rudimentary CS; MPH with MT+CT almost twice as long as median lobe, slender, with MSp in proximal 2/3 and LSp in distal 1/3; PB short, weakly constricted proximally, with SSp; APH long, swollen in elongate pyriform, with uncolored rod like AS on dorsal side and single ED arisen near distal end of AS. MSp minute, indistinct and uncolored, sparsely distributed; LSp long and thin, unidentate, arranged into two lines on dorsal side of distal 1/3 of MT+CT; SSp minute, densely and evenly arranged on PB.

F e m a l e (Figs. 19 & 20, n = 1): LB = 10.3 mm, WB = 4.9 mm. Similar to male, but pro-leg normal length and antenna 1.1 times as long as LB.

Diagnosis. This new species is similar to *Silgonda rufipes* HELLER, 1924 from Negros Is., the Philippines (Figs. 23 & 24), but different from the latter by the following characteristics: body more or less greenish; pronotum and elytra with relatively distinct granules; elytra with orangish brown pubescence only partly along suture; pro-tibia normal, without projection [*S. rufipes*: body dark brown; pronotum and elytra with relatively indistinct granules; elytra with orangish pubescence except for basal part; pro-tibia of male more or less curved, with small projection on inner side near apex].

Etymology. The species name is derived from its distribution.

Distribution. Borneo (Sabah).



Figs. 53–66. Male genitalia of new Mesosini spp. from Borneo. — 53–58, *Metacoptops nagaii* n. sp. (paratype); 59–66, *Silgonda borneensis* n. sp. (holotype). — 53, 54, 59 & 60, Tegmen; 55 & 61, paramere; 56 & 64, apex of median lobe; 57, 58 & 65, median lobe with endophallus; 62 & 63, median lobe; 66, distal part of endophallus. — 53, 58, 59, 62 & 66, Dorsal view; 54, 57, 60, 63 & 65, lateral view; 55, 56, 61 & 64, ventral view. Scale: 1.0 mm.

Remarks. Previously, the genus *Silgonda* was comprised of a single species, *S. rufipes*, since the genus was established by HELLER (1924). According to the original description and BREUNING (1939), the projection of the pro-tibia is one of the defining characters for this genus, however it is plausibly due to sexual dimorphism. Based on our examination with additional materials of *S. rufipes*, this structure is variable in the male and not present in the female. Furthermore, it is absent in both sexes of *S. borneensis* n. sp. Except for this structure, these two species share the other general features defined by HELLER (1924) and BREUNING (1939), and also the male genital structures with each other. Thus, the projection of the pro-tibia is not a generic trait and should be omitted from the definition of the genus.

***Paraclyzomedus* n. gen.**

Type species. *Paraclyzomedus albobasalis* n. sp.

Description. Body relatively small within Mesosini. Head with frons transverse; antennal tubercle gently elevated. Eye subdivided into upper and lower lobes connected posteriorly by narrow line without ommatidium; length of lower lobe subequal to width. Antenna well long; scape elongate, sub-

equal to antennomere III, thickened apically, with developed cicatrix on outer side of apex; antennomere III longer than IV. Pronotum transverse, with three distinct small tubercles on center of disk, similar one on each latero-dorsal side, and two lateral projections on each side near middle and apex. Elytra each somewhat short, with obtuse but distinct swelling on middle behind base. Prosternal process weakly projected below, roundly sloped or nearly truncated in lateral view. Mesosternal process with tubercle on center near apex, nearly truncated in lateral view. Mesotibia provided with indistinct furrow near middle of outer margin.

Male genitalia with tegmen elongate rhombic in dorsal view; paramere approximately 1/4 of length of tegmen. Endophallus long, subdivided into BPH, MPH (MT+CT & PB), and APH; BPH short, less than half length of median lobe, with CS; MPH with MT+CT provided with small uni-dentate LSp in proximal half; PB long; APH moderately developed, well swollen in round shape.

Etymology. The generic name refers to its similar appearance with the genus *Clyzomedus*. The gender is masculine.

Remarks. This new genus is unique within the tribe Mesosini in a combination of the characteristics described above. It is somewhat similar to the genus *Clyzomedus* PASCOE, 1864 and *Anipocregyes* BREUNING, 1939 in its small body and tubercular pronotum, but well different from *Clyzomedus* in having the distinct swelling on elytra and endophallus with long PB and roundly swollen APH without AS [*Clyzomedus*: elytra without distinct swelling (BREUNING, 1939); endophallus with short PB and AS on APH (YAMASAKO & OHBAYASHI, 2011, p. 37, fig. 7)], and from *Anipocregyes* in having the elongate scape, simple paramere, and long PB of endophallus [*Anipocregyes*: scape moderately short, paramere with distinct concave on ventral side, PB short (see redescription and figures in YAMASAKO & MAKIHARA, 2017)].

***Paraclyzomedus albobasalis* n. sp.**

(Figs. 25–28, 37, 38 & 67–72)

Type locality. Indonesia, Kalimantan Barat (West Kalimantan), Gunung Bawang (Mt.), Alt. 200–300 m.

Type series. Holotype (EUMJ; Figs. 25–26, 37 & 67–72): ♂, “Mt. Bawang / alt. 200–300 m / W. Kalimantan / INDONESIA / IV. 1990”. Paratypes: 1 ♀, same locality as the holotype, but Alt. 500–700 m, V.1991; 1 ♀ (Figs. 27, 28 & 38), same locality, but Alt. 200–300 m, IX.1990; 1 ♂, same locality, but Alt. 500–700 m, IV.1991.

Description. Male (Figs. 25, 26 & 37; n = 2): LB = 11.7–11.8 mm; WB = 4.7–5.0 mm.

Body reddish-brown, clothed with pearl white pubescence on head, antenna, pronotum, and legs except for each apical part of antennomeres III–XI, each apex of tibiae, each basal 2/3 of femora, and tarsomeres which are covered with black, dark brown and/or grayish light brown pubescence; elytra with pearl white pubescence on base and basal 2/3 of each lateral area, and brown and/or grayish light brown pubescence along suture and apical 1/3 as in Fig. 25; ventral surface and scutellum with brown and/or grayish light brown pubescence.

Eye with LL/WL = 0.9; LL/LG = 0.6. Antenna 1.8 times as long as LB; relative lengths of each segment as follows: 1.6 : 0.2 : 1.5–1.6 : 1.2 : 0.9–1.0 : 0.9 : 0.8 : 0.7 : 0.7 : 0.7 : 0.7. Pronotum widest near middle, LP/WP = 0.7, WP/WEH = 0.8. Elytra LE/LB = 0.6–0.7, LE/WEH = 1.5–1.6, with fine sparse granules on each base; sides weakly constricted behind humeri, almost straight toward apical 1/3, arcuately narrowed and rounded apically; apices with subquadrate inner angles.

Male genitalia (n = 2) as in Figs. 67–72. Tegmen slender rhombic, widest behind middle in dorsal view, gently curved in lateral view; paramere hardly narrowed toward rounded apex, with short se-



Figs. 67–72. Male genitalia of *Paraclyzomedus albobasilis* n. gen. et sp. (holotype). — 67 & 68, Tegmen; 69, paramere; 70, apex of median lobe; 71 & 72, median lobe with endophallus. — 67 & 71, Dorsal view, 68 & 72, lateral view; 69 & 70, ventral view. Scale: 1.0 mm.

tae in apical half and long setae concentrated at apex; ringed part gently expanded laterally behind middle of tegmen, slightly arcuately narrowed basally. Median lobe slightly expanded laterally just before middle in dorsal view, weakly curved in lateral view; basal strut bifurcated near middle of median lobe; ventral plate with apex roundly pointed. Endophallus with BPH short, subequal to $1/3$ length of median lobe; MPH with MT+CT slightly longer than median lobe, with small uni-dentate LSp in proximal half; PB slightly longer than half length of median lobe, bended at distal $1/3$, with minute SSp in distal $1/3$; APH curved ventrally at proximal area, well swollen in pyriform.

F e m a l e (Figs. 27, 28 & 38; $n = 2$): LB = 10.7–11.5 mm, WB = 4.5– 4.7. Very similar to male, but antenna 1.3 times as long as LB.

Etymology. The species name is derived from its whitish pubescence on the anterior half of body, from the head to elytral bases.

Distribution. Borneo.

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要 約

山迫淳介・Daniel J. HEFFERN：ボルネオ島からのゴマフカミキリ族（鞘翅目カミキリムシ科）1新属6新種の記載。———筆者らは、ボルネオのまとまった標本群を検査する機会を得て、そのなかから1新属1新種を含むゴマフカミキリ族の6新種を見出したため、それぞれ *Agelasta (Dissosira) antennata* n. sp. (西カリマンタン), *Ereis thoracius* n. sp. (サバ), *Paraclyzomedus albobasalis* n. gen et sp. (西カリマンタン), *Pseudoclyzomedus borneensis* n. sp. (サバ), *Metacoctops nagaii* n. sp. (サバ), *Silgonda borneensis* n. sp. (サバ) として記載した。これらのうち3属 (*Pseudoclyzomedus*, *Metacoctops*, *Silgonda*) は、設立以降の追加記録が少ないため、それぞれのタイプ種も比較図示した。今回の新種を含めてボルネオ島からは、ゴマフカミキリ族75種が知られることとなるが、この地域が世界有数の生物多様性を誇ることを考えると、まだ全体像が解明されたいと言いがたく、いまなお多くの未記録や新種が存在すると考えられる。

References

- BREUNING, S., 1939. Études sur les Lamiaires (Coléop. Cerambycidae). Huitième tribu Mesosini THOMSON. *Novitates Entomologicae, Troisième Supplément*, (47–66) : 365–526. [1938–1940].
- HEFFERN, D. J., 2005. Catalog and bibliography of longhorned beetles from Borneo (Coleoptera: Cerambycidae) [online]. Available from: http://www.zin.ru/animalia/coleoptera/pdf/borneo_catalog_electronic_version_2005-1.pdf [accessed on 28 November, 2017].
- HELLER, K. M., 1924. Neue, vorwiegend philippinische Bockkäfer. *Entomologische Mitteilungen*, **13** (4/5): 195–214, 16 figs.
- HOLZSCHUH, C., 2017. Neue Arten von Bockkäfern aus der Tribus Clytini und der Unterfamilie Lamiinae (Coleoptera, Cerambycidae) vom asiatischen Festland. *Acta Musei Moraviae, Scientiae biologicae, Brno*, **102** (2): 93–138.
- YAMASAKO, J., 2009. A new genus and species of the tribe Mesosini (Coleoptera, Cerambycidae, Lamiinae) from Laos [Studies on Asian Mesosini, II]. *Special Bulletin of the Japanese Society of Coleopterology, Tokyo*, (7): 281–287.
- YAMASAKO, J., & H. MAKIHARA, 2017. Review of the genus *Anipocregyes* BREUNING, 1939 with two new species from Borneo (Coleoptera, Cerambycidae, Lamiinae, Mesosini). *Zootaxa*, **4250** (5): 461–474.
- YAMASAKO, J., & N. OHBAYASHI, 2011. Review of the genus *Paragolsinda* BREUNING, 1956 (Coleoptera, Cerambycidae, Lamiinae, Mesosini), with reconsideration of the endophallic terminology. *Zootaxa*, **2882**: 35–50.

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Appendix. Data of the Specimens Figured for Comparison

Pseudoclyzomedus ohbayashii YAMASAKO, 2009: ♂ (paratype, Figs. 15 & 16), Phou Samsoum (Mt.), Xieng Khouang Prov., Laos, 13.V.2008, J. YAMASAKO leg.

Metacoctops fasciculata (AURIVILLIUS, 1911): ♂ (Figs. 11 & 12), Tongod, 500 m, Sabah, Malaysia, 18.III.2014, local coll.

Silgonda rufipes HELLER, 1924: ♂ (Figs. 23 & 24), Surigao, Mindanao Is., Philippines, local coll. (unknown date).