

**Study of Tenebrionid Fauna of Sulawesi**  
III. Genera *Apteromaia* KULZER and *Aptereucyrtus* GEBIEN  
(Coleoptera, Tenebrionidae, Cnodalonini)

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**Abstract** The species of the genera *Apteromaia* KULZER, 1952 and *Aptereucyrtus* GEBIEN, 1921 from Sulawesi are reviewed. Six new species, *Aptereucyrtus bakrii* sp. nov., *Apteromaia satorum* sp. nov., *Apteromaia rugiventris* sp. nov., *Apteromaia akikoeae* sp. nov., *Apteromaia sulawesiensis* sp. nov. and *Apteromaia butonensis* sp. nov. are described, with a key to the Sulawesi species of the genus. *Apteromaia hisamatsui* (ANDO et ICHIYANAGI, 2009) comb. nov. is transferred from the genus *Apterotheca* GEBIEN, 1920.

**Introduction**

This is the third part of a series of papers on the Tenebrionidae of Sulawesi (see ANDO & YAMASAKO, 2013). In this paper, we deal with two cnodalonine genera, *Aptereucyrtus* GEBIEN, 1921 and *Apteromaia* KULZER, 1952, both of which were previously unknown from Sulawesi.

We describe one new species of the genus *Aptereucyrtus* and five new species of the genus *Apteromaia* from Sulawesi, with a key to the species of Sulawesi *Apteromaia*. Also the colour photographs of the types of known species are provided (see ANDO & ICHIYANAGI, 2009: fig. 17 for *Apterotheca hisamatsui*, and see ANDO, 2009: figs. 7 & 8 for *Aptereucyrtus ohbayashii* and *A. borneensis*).

Abbreviation applied in the descriptions: EL = length of elytra along midline; EW = maximum width of elytra; IE = width of interspace between eyes; PL = length of pronotum along midline; PW = maximum width of pronotum; TD = transverse diameter of an eye in dorsal view.

Acronyms of specimen depositories: The holotypes to be designated will be deposited in the Ehime University Museum, Matsuyama, Japan (EUMJ). The paratypes are deposited in the private collection of Kiyoshi ANDO, Osaka, Japan (CKAO) or in the Department of Zoology, Hungarian Natural History Museum (HNHM).

**Tribe Cnodalonini** GISTEL, 1856

**Genus *Aptereucyrtus*** GEBIEN, 1921

*Aptereucyrtus* GEBIEN, 1921: 477, pl. 1, fig. 8. Type species. *Aptereucyrtus hemichalceus* GEBIEN, 1921.

**Notes.** The genus *Aptereucyrtus* GEBIEN, 1921 was established for *Aptereucyrtus hemichalceus* GEBIEN, 1921 from Mittel-luzon (Luzon: the Philippines; and this species was also recorded from Taiwan). Later, three species from the Philippines were added by KULZER (1952) and two from the Philippines and Borneo by ANDO (2009). Until now, this genus contained these six species.

As the name of the genus implies, absence of hind-wings was one of the most important characteristics when the genus *Aptereucyrtus* was described by GEBIEN (1921). However, the new species described later have fully developed hind-wings. Reduction or absence of hind-wings within a beetle genus is common in many families all over the order Coleoptera. If all other morphological characters are the same, winglessness alone does not justify separation of genera.

*Aptereucyrtus bakrii* ANDO et MERKL, sp. nov.

(Figs. 1–4, 28)

Holotype. ♂, C. Sulawesi, Palolo Palu, Indonesia, VIII–2012, Sainuddin BAKRI leg. (EUMJ). Paratype. 1♂, Palolo Palu, C. Sulawesi, IV–2012, native collector leg. (CKAO).

*Etymology.* The species name is dedicated to the collector of the holotype, Mr. Sainuddin BAKRI, Makassar, Indonesia.

*Measurements.* Body length: 11.7–11.8 mm; width: 4.5–4.6 mm.

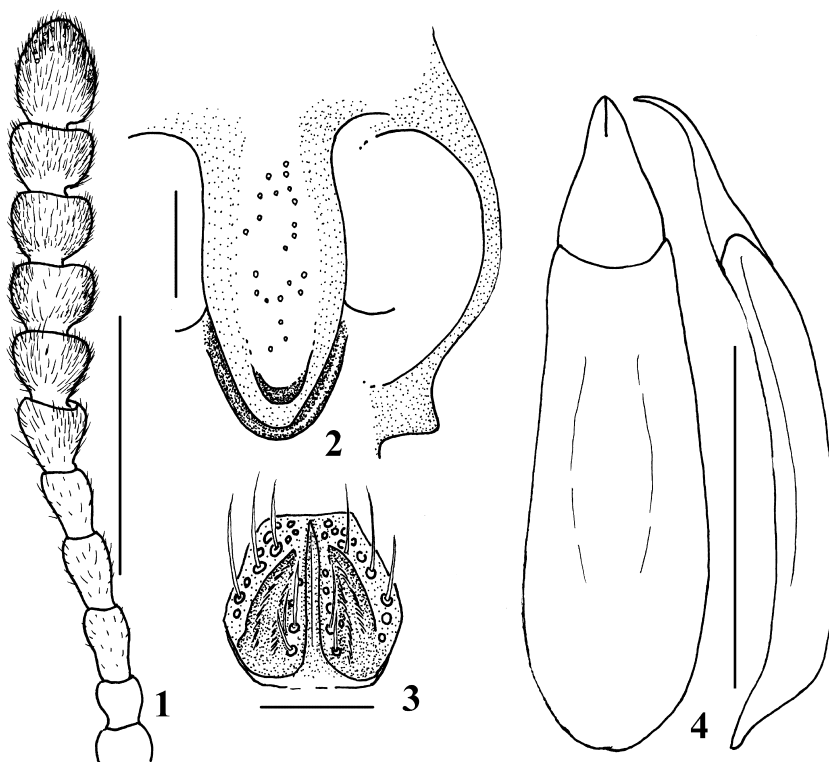
*Diagnosis.* This new species is similar to *Aptereucyrtus hemichalceus* GEBIEN, 1921 (Fig. 29) from the Philippines and Taiwan, but differs from the latter by the following points: Pronotum different in shape, with distinct sulci along lateral margins, inner ocular sulci narrow, mentum hexagonal, more broadened anteriorly, prosternal process not depressed in middle, humeral angle with a hook for receipt of posterior angle of pronotum, inner margin of mesotibiae with a row of pubescence, elytral intervals vitreous, metaventrite between meso- and metacoxae longer than diameter of mesocoxae, different body colour, and fifth abdominal ventrite depressed at apex.

*Description.* Male. Oblong, weakly convergent and distinctly convex posteriorly, shiny. Colour black, head and pronotum metallic dark blue, elytra iridescent, metallic green, with aeneous reflection viewed in certain angle, elytral intervals vitreous, legs and venter metallic deep blue, mouthparts dark reddish brown.

Head trapezoidal, sloping forwards; clypeus weakly convex, weakly depressed near lateral portions of clypeal suture, minutely and sparsely punctate, punctures gradually becoming smaller apicad, anterior margin slightly emarginate in middle and roundly produced at anterior angles; fronto-clypeal suture tenuous, distinct laterally; genae flattened, feebly produced laterad, sparsely punctulate; frons moderately convex, punctures dense and coarse, obviously larger than on clypeus, IE/TD = 2.65 (n = 1); eyes large, roundly and moderately produced laterad, inner ocular sulci deep and broad. Antennae rather slender, reaching middle of pronotum; six distal antennomeres dilated, and not compactly articulate, forming weak club (Fig. 1). Terminal maxillary palpomere thick, weakly securiform. Mentum hexagonal, distinctly carinate in middle, coarsely punctate, with long setae (Fig. 3). Gula narrow triangular, gular suture obscure.

Pronotum quadrate, widest before middle, PW/PL = 1.34 (n = 1); disc convex forwards, steeply sloping in anterior fifth, gently so in posterior third, distinctly sulcate along lateral margins, punctures dense and irregular, a little larger than on frons, but becoming smaller near marginal areas; anterior margin gently emarginate, narrowly beaded except interrupted median third; lateral margins sinuate before base, thence gradually divergent towards widest point, curvature somewhat uneven near the widest point; basal margin weakly bisinuate, very tenuously beaded; anterior angles rounded, obtusely produced antero-downwards, posterior angles acute angled, a little produced. Scutellum triangular, depressed and smooth.

Elytra elongate, weakly divergent posteriorly, widest at apical three-eighths, EL/EW = 1.76 (n = 1), fairly convex above, strongly depressed behind base, striate-punctate, but the striae at places obsolete and interrupted, striae punctures rather small, irregular in size and in distance from each oth-



Figs. 1-4. *Aptereucyrtus bakrii* sp. nov. — 1, Antenna; 2, prosternal process (right: lateral view; left: dorsal view); 3, mentum; 4, aedeagus (right: lateral view; left: dorsal view). Scales: 0.25 mm for 3, 0.5 mm for 2, 1.0 mm for 1 and 4.

er, those in 7th and 8th striae smaller than the rest; intervals flat, vitreously shiny, with sparse microscopic punctures; lateral margins not sulcate except for humeral portions and visible only in posterior third from above, humeral corners with a distinct hook for receipt of posterior angle of pronotum. Hind wings fully developed.

Prosternum alutaceous, broad, coarsely and sparsely punctate, longitudinally rugose along anterior margin; prosternal process subparallel-sided, broadened in middle, distinctly bent inwards in posterior third, rounded at apex (Fig. 2). Hypomeron nearly smooth, sparsely punctate laterally. Mesoventrite with V-shaped ridge weak and oblique, densely rugose, rounded at anterior angles. Metaventrite long, raised towards middle, very finely and sparsely punctate, with anterior process distinctly convex individually, space between meso- and metacoxae 1.23 times as long as diameter of mesocoxa. Abdominal ventrites moderately punctate; fifth ventrite depressed at apex.

Aedeagus small; parameres strongly curved inwards in apical third, and steeply narrowed forwards at sides from basal third, not pointed at apex (Fig. 4).

Legs rather short; femora robust, thickened behind middle, shallowly grooved ventrally about in apical third; tibiae weakly incurved, apical portions of meso- and metatibiae thickened, inner margins moderately pubescent and with a row of dense pubescence in apical three-eighths (mesotibia) or in apical three-sevenths (metatibia); tarsi compact and simple, claw segment of protarsi shorter than the preceding four tarsomeres combined.

Genus *Apteromaia* KULZER, 1952

*Apteromaia* KULZER, 1952: 719. Type species. *Eucyrtus ovipennis* GEBIEN, 1913.

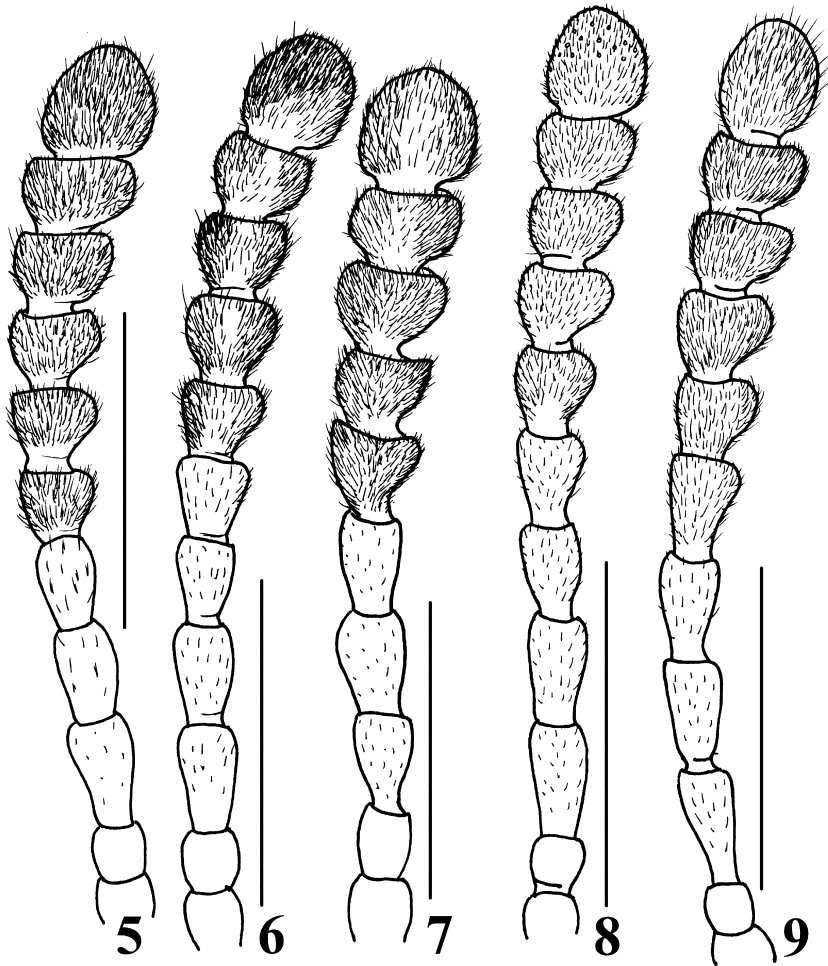
*Notes.* The genus *Apteromaia* KULZER, 1952 was established for *Eucyrtus ovipennis* GEBIEN, 1913 from Luzon (the Philippines). Five further species were described by KULZER in the same paper, four from Luzon and one from Java. Later, KASZAB (1979) added two species from South India, raising the number of known species to eight.

ANDO and ICHIYANAGI (2009) described *Apterotheca hisamatsui* from Luzon. The genus *Apterotheca* GEBIEN, 1920 is very similar to *Apteromaia*, but *Apterotheca* is endemic to the high elevation rainforests of northeastern Australia (BOUCHARD, 2002). Therefore, the following new combination is proposed:

*Apterotheca hisamatsui* ANDO et ICHIYANAGI, 2009 = *Apteromaia hisamatsui* (ANDO et ICHIYANAGI, 2009), comb. nov.

Key to the Species of Sulawesian *Apteromaia* (in male)

1. Prothoracic hypomeron densely and coarsely punctate, with deep rugosities, inner margin of metatibia with a row of pubescence or tuft of dense pubescence, pronotum with lateral margins not undulate, elytra with strial punctures small, becoming larger laterally. .... 2
- Prothoracic hypomeron impunctate or minutely and sparsely punctate, without deep rugosities, inner margin of metatibia without row or tuft of dense pubescence, pronotum with lateral margins weakly undulate in median portions, elytra with strial punctures small even in lateral portion. .... 4
2. Inner margin of metatibia with dense and moderately long pubescence in apical half, gular suture indistinct anteriorly because of transverse rugosities, inner ocular sulci deep and narrow, pronotum widest at middle, with punctures as large as those on frons, elytral striae interrupted in part, metaventricle with anterior process convex. .... *Apteromaia rugiventris* sp. nov.
- Inner margin of metatibia with a row of dense and short pubescence in apical half, gular suture narrow and distinct anteriorly, hardly rugose, inner ocular sulci shallow and broad, pronotum widest at apical two-fifths, with punctures larger than those on frons, elytral striae not interrupted, metaventricle with anterior process flat or unevenly flat. .... 3
3. Mentum subhexagonal, frons coarsely punctate, clypeus distinctly emarginate, pronotum hardly sulcate along lateral margin, not sinuate before base, prosternal process deeply bent inwards, with two short elevations in middle, mesoventrite with anterior angles of V-shaped ridge obtusely rounded, inner margin of protibia shallowly emarginate between apical sixth and basal third, claw segment of protarsi nearly as long as the preceding four tarsomeres combined. .... *Apteromaia saitorum* sp. nov.
- Mentum semicircular, frons finely punctate, clypeus deeply notched, pronotum weakly sulcate along lateral margin, slightly sinuate before base, prosternal process moderately bent inwards, with two longitudinal shallow sulci, mesoventrite devoid of anterior angles of V-shaped ridge, inner margin of protibia not emarginate, claw segment of protarsi longer than the preceding four segments combined. .... *Apteromaia akikoeae* sp. nov.
4. Mentum subtrapezoidal, with longitudinal carina at middle, gular suture obscure anteriorly, eyes hardly produced laterad, pronotum feebly sinuate before base, with punctures coarse, elytral striae tenuous and weak, interrupted in part, prosternal process deeply bent inwards, with a longitudinal wide sulcus, metaventricle with anterior process weakly convex, inner margin of protibiae

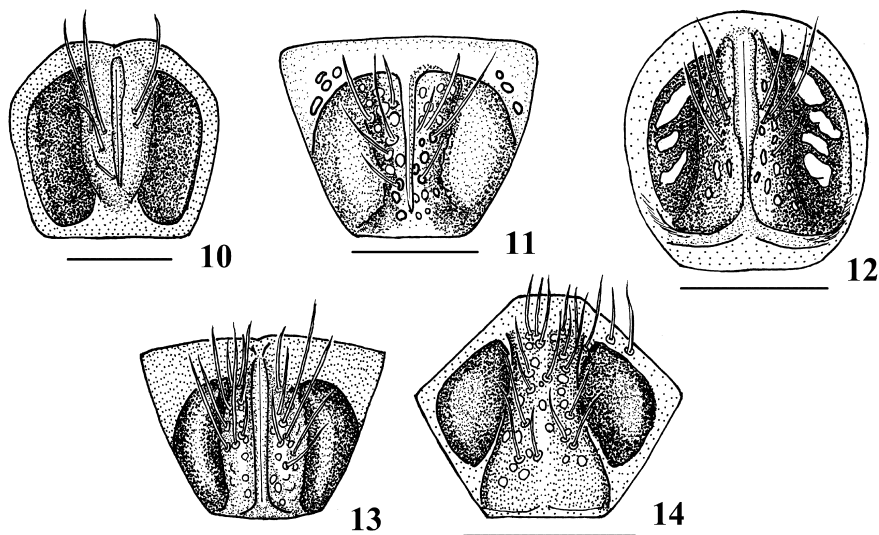


Figs. 5-9. Antennae of *Apteromaia* spp. — 5, *Apteromaia satorum* sp. nov.; 6, *A. rugiventris* sp. nov.; 7, *A. akikoeae* sp. nov.; 8, *A. sulawesiensis* sp. nov.; 9, *A. butonensis* sp. nov. Scale: 1.0 mm.

slightly bisinuate. .... *Apteromaia sulawesiensis* sp. nov.

- Mentum hexagonal, without median carina, gular suture distinct anteriorly, eyes moderately produced laterad, pronotum not sinuate before base, with punctures fine, elytral striae tenuous and clear, not interrupted, deepened laterally, prosternal process deeply oblique, with a pair of longitudinal sulci along median elevation, metaventrite with anterior process flattened, inner margin of protibiae slightly emarginate in apical half. .... *Apteromaia butonensis* sp. nov.

*Diagnosis.* The following five new species are similar to *Apteromaia gebieni* KULZER, 1952 from the Philippines, but all species are different from the latter by the following points: Pronotum distinctly emarginate anteriorly, pronotal disc distinctly punctate, elytral striae weak or tenuous, not deepened apically, elytral intervals never flattened on disc, third to fifth abdominal ventrites densely and distinctly punctate, and body different in colour.



Figs. 10–14. Mentum of *Apteromaia* spp. — 10, *Apteromaia saitorum* sp. nov.; 11, *A. rugiventris* sp. nov.; 12, *A. akikoae* sp. nov.; 13, *A. sulawesiensis* sp. nov.; 14, *A. butonensis* sp. nov. Scales: 0.25 mm.

*Apteromaia saitorum* ANDO et MERKL, sp. nov.

(Figs. 5, 10, 15, 20, 25, 33)

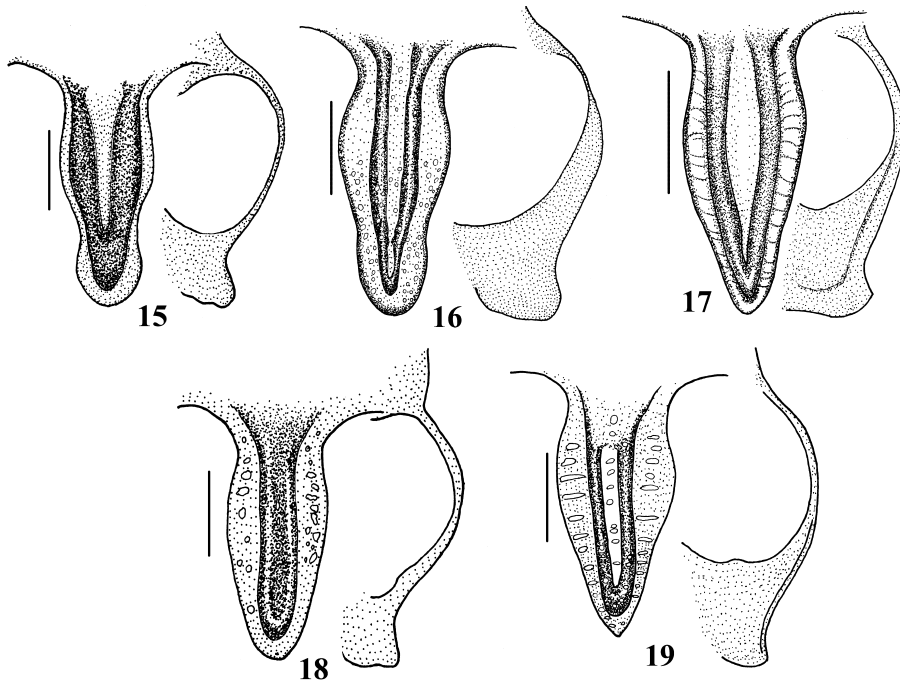
*Type series.* Holotype. ♂, Tambea (70 m), Pomalaa, Kolaka, S.E. Sulawesi, Indonesia, 4-I-2000, Akiko SAITO leg. (EUMJ). — Paratypes. 1 ♂, same data as for the holotype (CKAO); 2 ♂♂, 4 ♀♀, Tambea (70 m), Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 30-XII-1999, Akiko SAITO leg. (2 ♂♂, 2 ♀♀: CKAO, 2 ♀♀: HNHM); 1 ♂, Tambea (70 m), Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 30-XII-1999, Shusei SAITO leg. (HNHM); 1 ♂, Telkom Popalia (160 m), Wolasia, Konda, Kendari, SE. Sulawesi, at light, 31-XI-2001, Shusei SAITO leg. (CKAO); 1 ♂, Patiyoso, 30–50 m alt., Kolaka, SE. Sulawesi, Indonesia, 25-XII-1999, Akiko SAITO leg. (CKAO); 1 ♂, ditto, native collector leg. (HNHM); 1 ♂, 1 ♀, Patiyoso, 100 m alt., Kolaka, SE. Sulawesi, Indonesia, at light, 25-XII-1999 to 3-I-2000, Akiko SAITO leg. (CKAO); 1 ♀, Sapura, Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 30-XII-1999, Akiko SAITO leg. (CKAO).

*Etymology.* The new species is named in honor of the collectors of the type series, Dr. Akiko SAITÔ and Mr. Shusei SAITÔ.

*Measurements.* Body length: 10.0–13.1 mm; width: 4.0–5.4 mm.

*Description.* Oblong, distinctly calabash-shaped, strongly convex, shiny dorsally, weakly so ventrally. Colour dark reddish brown, head, pronotum, and legs black, elytra with strong aeneous and/or greenish brassy lustre, antennae opaque.

*Male.* Head transverse, weakly convex; clypeus convex posteriorly and sloping anteriorly, produced forwards, and distinctly emarginate in median two-thirds, moderately punctate, punctures gradually becoming smaller apicad; fronto-clypeal suture tenuous and distinct; genae almost flat, broadened laterad, steeply narrowed in apical half, punctation close, almost similar in size to those on basal part of clypeus; frons broadened, weakly convex, slightly sloping forwards, sparsely and obliquely rugose, punctures dense and coarse, larger than those on clypeus, IE/TD = 3.20–3.64 (n = 9); eyes strongly convex above and produced laterad, inner ocular sulci shallow and broad. An-



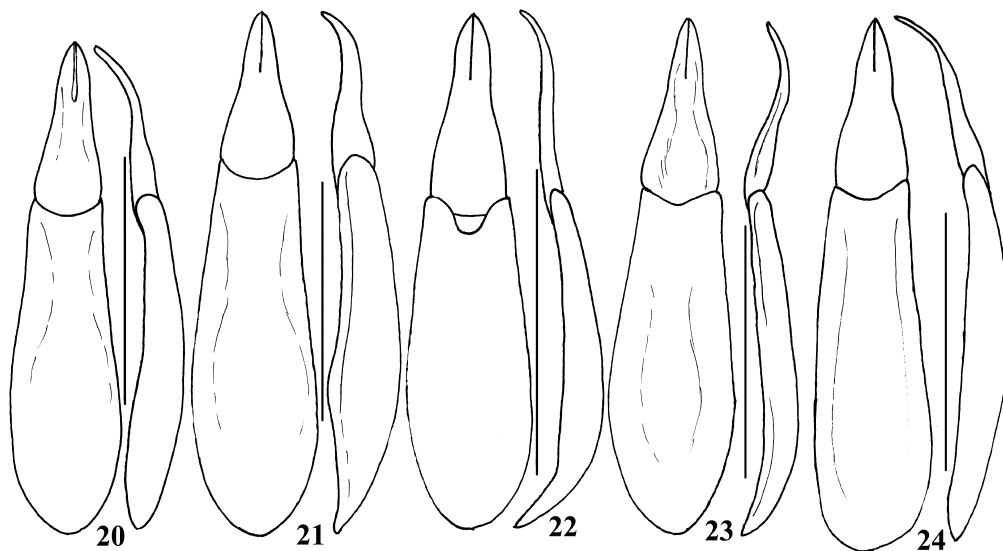
Figs. 15–19. Prosternal processes of *Apteromaia* spp. (right: lateral view; left: dorsal view) — 15, *Apteromaia saitorum* sp. nov.; 16, *A. rugiventris* sp. nov.; 17, *A. akikoe* sp. nov.; 18, *A. sulawesiensis* sp. nov.; 19, *A. butonensis* sp. nov. Scales: 0.5 mm.

tennae rather long, reaching before base of pronotum; six distal antennomeres dilated and loosely articulate, forming weak club (Fig. 5). Terminal maxillary palpomere thick, weakly triangular. Mentum subhexagonal, unevenly raised in median half and excavate at sides, raised part irregularly and minutely punctate, carinate in middle, with long setae (Fig. 10). Gula narrow, subparallel in anterior portion.

Pronotum quadrate, widest at apical two-fifths, thence roundly narrowed to apex and evenly so to base, PW/PL = 1.23–1.31 (n = 9); anterior margin shallowly emarginate, finely beaded in lateral fourth; lateral margins with bead narrow; basal margin weakly bisinuate, with bead limited in the lateral portions; anterior angles angulate, slightly obtuse than rectangle, posterior angles rectangular; disc moderately convex, sloping laterally, slightly deepened along lateral beads, but not forming distinct sulci, punctures dense and coarse, larger than those on frons, and becoming smaller in marginal portions. Scutellum small, impunctate, minutely rugulose.

Elytra oblong, strongly convex above, widest at middle, EL/EW = 1.46–1.65 (n = 9); striae tenuous, reaching apex, strial punctures rather sparse, small in inner three striae, large and irregular in outer striae; intervals moderately convex, strongly so in apical portions of 7th interval, finely and rather densely punctate.

Prosternum broad, coarsely and densely punctate, somewhat rugulose; prosternal process cuneiform, broadened in middle, deeply bent inwards in posterior third, shortened apically, not acute at tip, widely depressed along middle, with two short longitudinal elevations in middle (Fig. 15). Hypomeron densely and coarsely punctate, densely and closely rugose and uneven between punctures (Fig. 25). Mesoventrite with weak V-shaped ridge, with uneven surface, anterior angles obtusely rounded.



Figs. 20–24. Aedeagi of *Apteromaia* spp. (right: lateral view; left: dorsal view) — 20, *Apteromaia saitorum* sp. nov.; 21, *A. rugiventris* sp. nov.; 22, *A. akikoe* sp. nov.; 23, *A. sulawesiensis* sp. nov.; 24, *A. butonensis* sp. nov. Scales: 1.0 mm.

Metaventricle strongly convex, very short, sparsely and minutely punctate, space between meso- and metacoxae 0.43 times as long as diameter of mesocoxa; anterior process unevenly flat, excavate in posterior end. Abdominal ventrites gently convex, densely and coarsely punctate; fifth ventrite not depressed.

Aedeagus rather short in length; parameres beak-shaped, distinctly curved in lateral view, tapering towards apex at sides and slightly sinuate before middle (Fig. 20).

Legs robust and rather short; femora robust, thickened near apical third, shallowly grooved ventrally about in apical three-fourths; tibiae hardly incurved, inner margin of protibiae slightly bisinuate, and shallowly emarginate between apical sixth and basal third, inner margins of metatibiae with row of dense and short compact pubescence in apical half; tarsi slender and simple, claw segment of pro-tarsi nearly as long as the preceding four tarsomeres combined.

**F e m a l e.** Metatibiae without rows of pubescence along inner margins, IE/TD = 3.33–3.64 (n = 6); PW/PL = 1.27–1.33 (n = 6); EL/EW = 1.50–1.57 (n = 6).

***Apteromaia rugiventris* ANDO et MERKL, sp. nov.**

(Figs. 6, 11, 16, 21, 34)

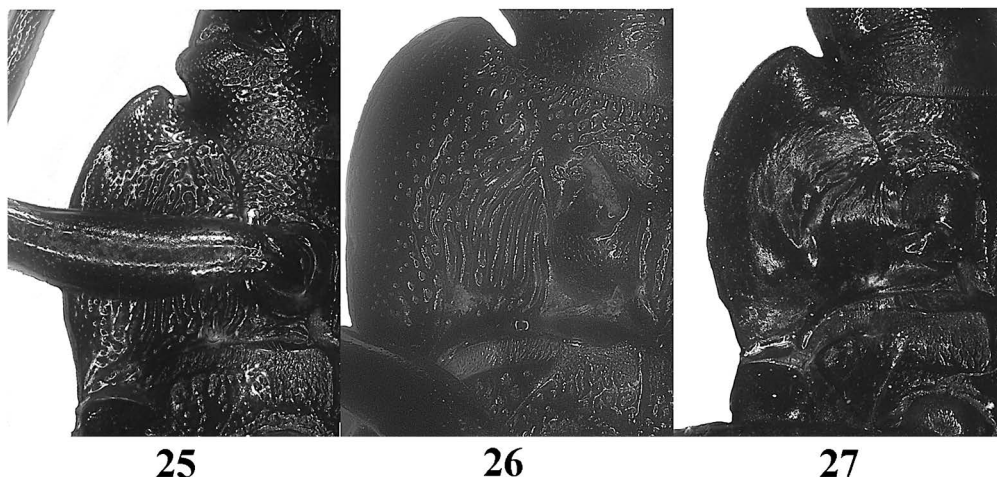
**Type series.** Holotype. ♂, Keiso (390 m), Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 28–XII-1999, Shusei SAITO leg. (EUMJ). — Paratypes. 1 ♂, same data as for the holotype. (CKAO).

**Etymology.** The specific name refers to the distinctively rugose hypomeron.

**Measurements.** Body length: 11.4–12.1 mm; width: 4.6–4.8 mm.

**Description.** **M a l e.** Oblong, calabash-shaped, strongly convex, dorsally. Colour dark reddish brown, femora and tibiae tended to blackish, mouthparts paler, head and pronotum black, elytra with purplish brassy lustre.





Figs. 25–27. Hypomera of *Apteromaia* spp. — 25, *Apteromaia saitorum* sp. nov.; 26, *A. akikoeae* sp. nov.; 27, *A. butonensis* sp. nov.

Head transversely hexagonal, gently convex; clypeus convex medially and sloping antero-laterad, produced forwards, and slightly emarginate at apex in median two-thirds, punctures dense, gradually becoming smaller apicad; fronto-clypeal suture tenuous and distinct, obscure laterally; genae slightly convex, roundly narrowed at sides in basal third, then steeply and evenly narrowed to apex, punctures coarse, a little smaller than those in basal part of clypeus; frons moderately convex, broadened, slightly sloping forwards, obliquely rugose, punctures dense and coarse, somewhat oblong, nearly as large as those in basal part of clypeus,  $IE/TD = 3.33$  ( $n = 2$ ); eyes fairly convex above and laterad, inner ocular sulci deep and distinct. Antennae rather slender, reaching beyond middle of pronotum; six distal antennomeres dilated, but very loosely articulate, forming a very feeble club (Fig. 6). Terminal maxillary palpomere thick, weakly triangular. Mentum subtrapezoidal, raised along median half and at sides, raised part coarsely and densely punctate, carinate in middle, with long setae (Fig. 11). Gula narrow, devoid of gular suture.

Pronotum quadrate, widest at middle, roundly narrowed to apex and weakly so to base, clearly sinuate before base,  $PW/PL = 1.27-1.32$  ( $n = 2$ ); anterior margin shallowly and evenly emarginate, narrowly beaded in lateral fourth; lateral margins with beads narrow; basal margin weakly bisinuate, not beaded; anterior angles angulate, slightly obtuse, posterior angles almost rectangular; disc rather weakly convex compared to average in the genus, gently sloping laterally, with very narrow sulci along lateral beads, punctures dense and coarse, nearly as large as those in frons, and becoming smaller in marginal portions. Scutellum small and smooth.

Elytra oblong, strongly convex above, widest at middle,  $EL/EW = 1.51-1.56$  ( $n = 2$ ); striae weak and tenuous, interrupted at places, strial punctures sparse, small in inner three striae, large and irregular in outer striae; intervals weakly convex, moderately so laterally, and strongly so in apical portions of 7th and 8th intervals, minutely and sparsely punctate.

Prosternum very broad, coarsely and densely punctate; prosternal process cuneiform, broadened in middle, weakly bent inwards in posterior third, sharpened at apex, with pair of longitudinal shallow sulci (Fig. 16). Hypomeron densely and coarsely punctate, densely and closely rugose between punctures. Mesoventrite with oblique V-shaped ridge, with uneven surface, without anterior angles. Metaventricle raised towards middle, very short, finely and sparsely punctate, space between meso-

and metacoxae 0.54 times as long as diameter of mesocoxa, anterior process coarsely punctate and weakly convex. Abdominal ventrites moderately convex, densely and coarsely punctate; fifth ventrite not depressed, flattened near apex.

Aedeagus small; parameres gently incurved in apical half, moderately tapering towards apex at sides although tapering lines feebly constricted in middle (Fig. 21).

Legs rather short; femora robust, thickened nearly in middle, shallowly grooved ventrally about in apical third; tibiae weakly incurved, inner margin of protibiae weakly emarginate in basal three-fourths, inner margins of metatibiae shallowly emarginate and with very dense and medium-length pubescence in apical half; tarsi simple, claw segment of protarsi longer than the preceding four tarsomeres combined.

F e m a l e. Unknown.

*Apteromaia akikoae* ANDO et MERKL, sp. nov.

(Figs. 7, 12, 17, 22, 26, 35)

*Type series.* Holotype. ♂, Patiyoso, 100 m alt., Kolaka, SE. Sulawesi, Indonesia, at light, 25–XII–1999 to 3–I–2000, Akiko SAITO leg. (EUMJ). — Paratypes. 1 ♂, same data as for the holotype (CKAO); 1 ♂, 2 ♀♀, Patiyoso (one male label is misprinted as [Pativoso]), 30–50 m alt., Kolaka, S. E. Sulawesi, Indonesia, 25–XII–1999, Akiko SAITO leg. (CKAO); 1 ♂, Telkom Popalia (160 m), Wolasia, Konda, Kendari, SE. Sulawesi, at light, 31–XI–2001, Shusei SAITO leg. (HNHM); 1 ♀, Sapura, Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 30–XII–1999, Akiko SAITO leg. (HNHM); 1 ♀, Toari, 45–60 m alt. Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 31–XII–1999, A. SAITO leg. (CKAO); 1 ♀, Tamba (70 m), Pomalaa, Kolaka, SE. Sulawesi, Indonesia, 4–I–2000, Akiko SAITO leg. (CKAO); 1 ♂, ditto, 31–XII–1999, Shusei SAITO leg. (CKAO).

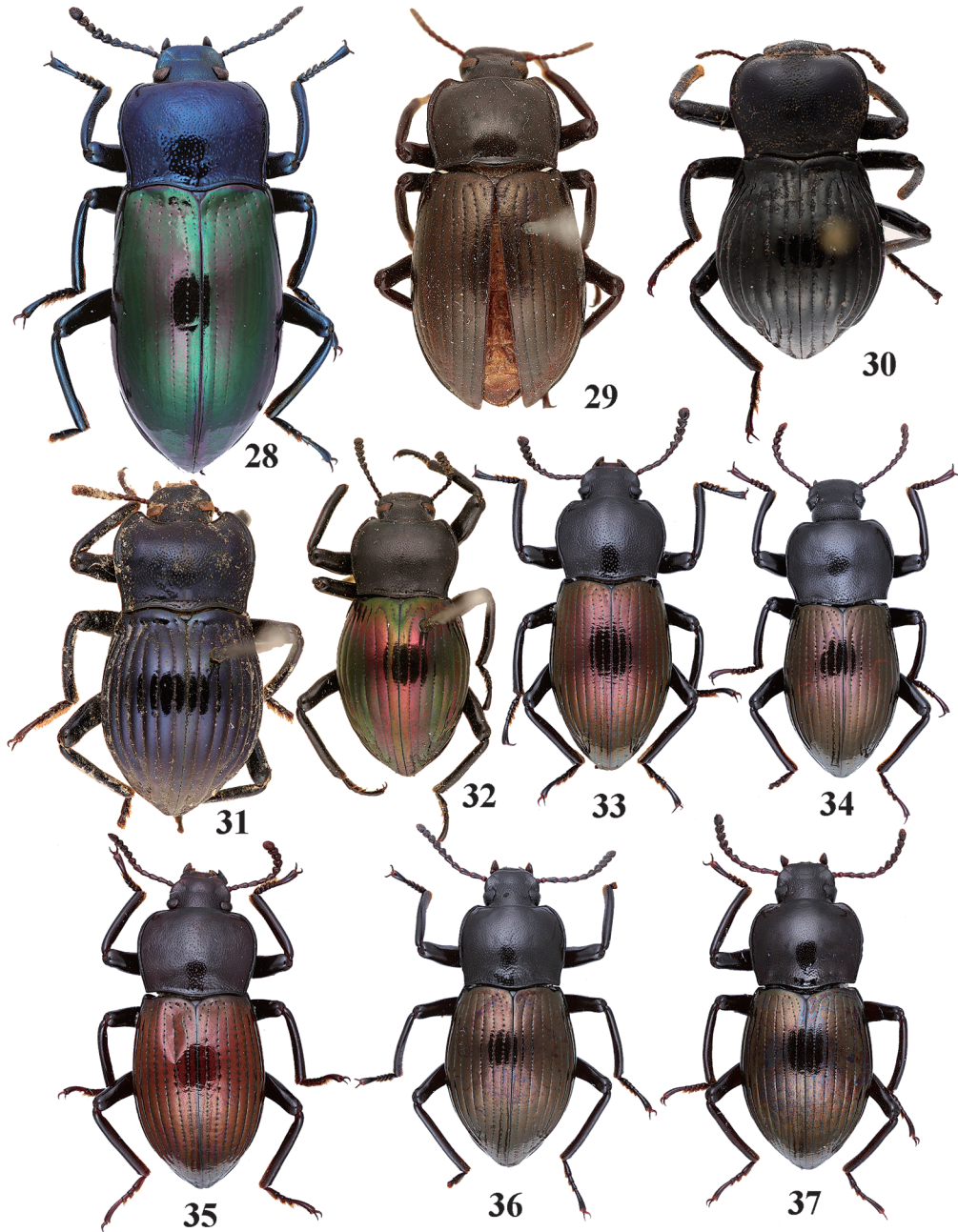
*Etymology.* The new species is named after Dr. Akiko SAITÔ, specialist of Cerambycidae in Japan, and collector of the holotype of this species.

*Measurements.* Body length: 10.3–13.0 mm; width: 4.0–5.2 mm.

*Description.* Oblong, calabash-shaped, convex, shiny. Colour black, tarsi more or less lighter, antennae and mouthparts dark reddish brown, elytra with brassy or aeneous lustre.

*M a l e.* Head transverse, weakly convex, punctures evenly fine and rather dense, those on frons in some specimens a little larger than rest of head; clypeus evenly to weakly convex, rather deeply notched at median two-thirds of anterior margin; fronto-clypeal suture tenuous, weakly engraved; genae weakly convex, subparallel in basal third to basal half, then steeply narrowed to apex; frons broadened, moderately convex, sloping forwards, IE/TD = 3.33–4.00 (n = 5); eyes strongly convex above and produced laterad, inner ocular sulci shallow and broad, not forming distinct sulcus. Antennae slender, reaching behind middle of pronotum; six distal antennomeres dilated and loosely articulate, forming weak club (Fig. 7). Terminal maxillary palpomere thick, triangular. Mentum semi-circular, irregularly raised in median half and excavate at sides, carinate in middle, with long setae (Fig. 12). Gula narrow triangular in anterior portion.

Pronotum quadrate, widest at apical two-fifths, roundly narrowed to apex and weakly roundly so to base, slightly sinuate before base, PW/PL = 1.27–1.30 (n = 5); anterior margin shallowly to moderately emarginate, finely beaded in lateral fourth; lateral margins with beads narrow; basal margin weakly bisinuate, not beaded or the bead limited in the lateral portions; anterior angles obtusely angulate, posterior angles rectangular or a little more acute; disc moderately convex, sloping laterally, weakly sulcate along lateral beads, punctures dense, coarse and irregular, obviously larger than those on head, somewhat smaller along marginal portions. Scutellum small, broadened triangular, nearly



Figs. 28–37. Habituses of *Aptereucyrtus* and *Apteromaia* spp. — 28, *Aptereucyrtus bakrii* sp. nov.; 29, *Aptereucyrtus hemichalceus* GEBIEN, 1921, cotype; 30, *Aptereucyrtus kaszabi* KULZER, 1952, holotype; 31, *Aptereucyrtus freyi* KULZER, 1952, holotype; 32, *Aptereucyrtus schultzei* KULZER, 1952, holotype; 33, *Apteromaia satorum* sp. nov.; 34, *Apteromaia rugiventris* sp. nov.; 35, *Apteromaia akikoeae* sp. nov.; 36, *Apteromaia sulawesiensis* sp. nov.; 37, *Apteromaia butonensis* sp. nov.



Figs. 38–49. Habitus of *Apteromaia* spp. and type labels of *Aptereucyrtus*. — 38, *Apteromaia gebieni* KULZER, 1952, paratype; 39, *A. violaceoniger* KULZER, 1952, holotype; 40, *A. ovipennis* (GEBIEN, 1913), type; 41, *A. simulatrix* KULZER, 1952, holotype; 42, *A. picea* KULZER, 1952, holotype; 43, *A. subaptera* (KULZER, 1951), holotype; 44, *A. batesi* KASZAB, 1979, paratype; 45, *A. nigra* KASZAB, 1979, paratype; 46, *Aptereucyrtus hemichalceus* GEBIEN, 1921; 47, *A. kaszabi* KULZER, 1952; 48, *A. freyi* KULZER, 1952; 49, *A. schultzei* KULZER, 1952.



Figs. 50–57. Type labels of *Apteromaia* spp. — 50, *Apteromaia gebieni* KULZER, 1952; 51, *A. violaceoniger* KULZER, 1952; 52, *A. ovipennis* (GEBIEN, 1913); 53, *A. simulatrix* KULZER, 1952; 54, *A. picea* KULZER, 1952; 55, *A. subaptera* (KULZER, 1951); 56, *A. batesi* KASZAB, 1979; 57, *A. nigra* KASZAB, 1979.

smooth, impunctate except for two paratypes (those of these specimens are punctate).

Elytra oblong, distinctly convex above, widest before middle, EL/EW = 1.46–1.62 (n = 5); striae tenuis and shallow, reaching apex, striae punctures rather sparse, small in inner three striae, large and irregular in outer striae; intervals weakly convex on disc, moderately so in lateral portions, but strongly so in apical portions of 6th, 7th and 8th intervals, finely and densely punctate.

Prosternum broad, coarsely and densely punctate, punctures mingled with rugosities; prosternal process cuneiform, broadened in middle, oblique posteriorly, bluntly pointed at apex, with two shallow longitudinal sulci deepened apically (Fig. 17). Hypomeron strongly rugose in inner portion, densely and coarsely punctate (Fig. 26). Mesoventrite with V-shaped ridge weak, short and broad, without anterior angles. Metaventrite strongly convex, very short, coarsely punctate laterally and sparsely and minutely punctate medially, space between meso- and metacoxae 0.57 times as long as diameter of mesocoxa; anterior process unevenly flat, deeply excavate in posterior end. Abdominal ventrites gently convex, densely and moderately punctate; fifth ventrite flattened near apex.

Aedeagus small; parameres similar in shape to those of *Apteromaia saitorum* sp. nov. (Fig. 22).

Legs robust; tibiae hardly incurved, protibiae ventrally depressed basally, inner margins of metatibiae decorated with a row of dense and short pubescence in apical half; tarsi slender and simple, claw segment of protarsi longer than the preceding four tarsomeres combined.

F e m a l e. Elytra more tumid, metatibiae without rows of pubescence along inner margins, IE/TD = 3.64–4.44 (n = 5), PW/PL = 1.29 (n = 5), and EL/EW = 1.42–1.47 (n = 5).

*Apteromaia sulawesiensis* ANDO et MERKL, sp. nov.

(Figs. 8, 13, 18, 23, 36)

*Type series.* Holotype. ♂, UPT. Wolowa, alt. 45 m, Pasar Waio, Buton Is., SE. Sulawesi, at light, 27–XII–2001, Akiko SAITO leg. (EUMJ). — Paratype. 1 ♀, same data as for the holotype. (CKAO).

*Etymology.* The new species is named after the island of the type locality.

*Measurements.* Body length: 9.9–11.2 mm; width: 4.2–5.1 mm.

*Description.* Oblong, calabash-shaped, strongly convex, shiny. Colour dark reddish brown, head, pronotum, and legs black, elytra with strong aeneous lustre, antennae more or less opaque.

*Male.* Head hexagonal, weakly convex; clypeus convex medially and sloping anteriorly, produced forwards, and distinctly emarginate in median two-thirds, coarsely and densely punctate, punctures gradually becoming smaller apicad; fronto-clypeal suture tenuous, hardly impressed; genae raised laterad, broadened laterad and not parallel-sided in basal half, steeply narrowed in apical half, punctation as coarse and dense as on clypeus; frons broadened, slightly convex, punctures dense and coarse, somewhat oblong and larger than those on clypeus, space between punctures raised in part, IE/TD = 3.08 (n = 1); eyes moderately convex above, and hardly produced laterad, inner ocular sulci deep and narrow. Antennae slender, reaching behind middle of pronotum; six distal antennomeres forming loosely articulated club (Fig. 8). Terminal maxillary palpomere thick, weakly securiform. Mentum subtrapezoidal, weakly raised along median half and excavate at sides, carinate in middle, with long setae (Fig. 12). Gula narrow and obscure in anterior portion.

Pronotum quadrate, widest before middle, PW/PL = 1.31 (n = 1); anterior margin arcuately emarginate, finely beaded in lateral fourth; lateral margins arcuately narrowed to apex and weakly so to base from widest point, slightly undulate between apical two-fifths and basal fifth, feebly sinuate before base, with beads narrow; basal margin weakly bisinuate, faintly bordered in the lateral portions; anterior angles angulate, slightly obtuse, posterior angles rectangular; disc moderately convex, sloping laterally, depressed before base, depressed but not forming clear sulci along lateral beads, punctures dense and coarse, somewhat obscure because of microsculpture, smaller than those on frons, and becoming smaller in marginal portions. Scutellum small and flat, minutely and obscurely punctate.

Elytra oblong, distinctly convex above, widest at basal two-fifths, EL/EW = 1.39 (n = 1); striae weak and tenuous, interrupted in part, strial punctures small and sparse, becoming denser apically and sparser laterally; intervals weakly convex on disc, strongly so in lateral portions, almost carinate in apical portions of 7th interval, rather densely and minutely punctate.

Prosternum broad, impunctate and microsculptured; prosternal process cuneiform, deeply bent inwards in posterior third, rounded at apex, with wide longitudinal sulcus in middle (Fig. 18). Hypomeron alutaceous, sparsely and minutely punctate laterally, impunctate in inner portion. Mesoventrite with weak V-shaped ridge, without anterior angles. Metaventrite very short, strongly convex, sparsely and minutely punctate, space between meso- and metacoxae half of diameter of mesocoxa; anterior process weakly convex, depressed in posterior end. Abdominal ventrites gently convex, densely and coarsely punctate; fifth ventrite not depressed.

Aedeagus robust; parameres strongly curved in lateral view, steeply tapering from base to apical two-thirds, then sinuate and tapering again to apex (Fig. 23).

Legs rather slender; tibiae slightly incurved, inner margin of protibiae slightly bisinuate, inner margin of metatibiae without row of dense pubescence; claw segment of protarsi longer than the preceding four tarsomeres combined.

*F e m a l e.* No apparent morphologic differences from male except for shorter antennae, IE/

TD = 3.64 (n = 1); PW/PL = 1.33 (n = 1); EL/EW = 1.41 (n = 1).

*Apteromaia butonensis* ANDO et MERKL, sp. nov.

(Figs. 9, 14, 19, 24, 27, 37)

Holotype. ♂, Buton Is. SE., Sulawesi, Indonesia, III–2011, native collector leg. (EUMJ).

*Etymology.* The new species is named after the island of the type locality.

*Measurements.* Body length: 12.0 mm; width: 5.2 mm.

*Diagnosis.* This new species is quite similar to *Apteromaia sulawesiensis* sp. nov. in having undulate lateral margins of pronotum, and lacking a row of pubescence in inner margin of metatibia, but different from the latter by the more robust body and different shaped mentum.

*Description.* Male. Oblong, robust, calabash-shaped, strongly convex, shiny dorsally, weakly so ventrally. Colour dark reddish brown, head and pronotum black, legs blackish brown, elytra with strong aeneous and/or greenish brassy sheen in angles of view, antennae opaque in distal five antennomeres.

Head hexagonal, moderately convex; clypeus convex medially and sloping anteriorly, roundly produced forwards, and distinctly emarginate in median two-thirds, punctures dense, becoming smaller in lateral portions; fronto-clypeal suture obscure, tenuously traced laterally; genae almost flat, slightly raised laterad, weakly rounded in basal half and steeply narrowed in apical half, similarly punctate as on clypeus; frons broadened, weakly convex, with dense oblong punctures larger than those on clypeus, space between punctures weakly elevated in lateral portions, IE/TD = 2.86 (n = 1); eyes strongly convex above and moderately produced laterad, inner ocular sulci deep and narrow. Antennae rather long, reaching basal third of pronotum; six distal antennomeres forming loosely articulated club (Fig. 9). Terminal maxillary palpomere thick, weakly securiform. Mentum small, hexagonal, raised along median three-fourths and depressed at sides, without median carina, with several pairs of long setae (Fig. 14). Gula narrow and clear, triangular in anterior portion.

Pronotum quadrate, widest before middle, PW/PL = 1.28 (n = 1); anterior margin shallowly emarginate, narrowly beaded in lateral fourth; lateral margins weakly undulate in a short distance between apical two-fifths and basal fifth, roundly narrowed to apex and weakly so to base from widest point, not sinuate before base, with beads narrow, somewhat broadened posteriorly; basal margin weakly bisinuate, feebly beaded in lateral ninth; anterior and posterior angles angulate, slightly obtuse; disc moderately convex, oblique basally, slightly depressed along lateral beads, but not forming clear sulci, punctures fine and dense, even in size all over surface and smaller than those on frons. Scutellum small, microsculptured, with a few punctures.

Elytra oblong, strongly convex above, widest at basal two-thirds, EL/EW = 1.46 (n = 1); striae tenuous, deepened laterally and reaching apex, striae punctures minute and rather dense, those in lateral portions also minute but sparser; intervals weakly convex on disc, strongly so on 6th to 9th intervals, somewhat carinate in apical portions of 7th interval, finely and densely punctate.

Prosternum broad, rugulose, obscurely punctate laterally; prosternal process cuneiform, deeply oblique in posterior third, rounded but more or less produced at apex, with a pair of wide longitudinal sulci along median elevation (Fig. 19). Hypomeron alutaceous, rugulose and almost impunctate (Fig. 27). Mesoventrite with V-shaped ridge broad, weakly raised, without anterior angles. Metaventrite strongly convex, very short, microscopically and moderately punctate, space between meso- and metacoxae 0.53 times as long as diameter of mesocoxa, anterior process flattened, shallowly excavate in posterior end. Abdominal ventrites rather strongly convex, densely and finely punctate, fifth ventrite not depressed.

Aedeagus robust; parameres strongly curved in lateral view, roundly tapering from base to middle, then sinuate and evenly tapering again to apex (Fig. 24).

Legs rather slender; tibiae slightly incurved, inner margin of protibiae slightly emarginate in apical third, inner margins of metatibiae without row of dense pubescence; claw segment of protarsi longer than the preceding four tarsomeres combined.

F e m a l e. Unknown.

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### 要 約

安藤清志・Ottó MERKL：スラウエシ産ゴミムシダマシ相の研究。III。—— 3報目としてニジゴミムシダマシ族の、*Aptereucyrtus*属と*Apteromaia*属を扱った。両属ともに後翅が退化した仲間で、フィリッピンを中心に栄えている属であるが、スラウエシからは初めての記録となる。*Aptereucyrtus*属の種は1新種*Aptereucyrtus bakrii* sp. nov.を記載したが、本種は属としての外部形態的特徴が一致するのにもかかわらず、その後翅はよく発達しており、きわめて興味深い。*Apteromaia*属は5種を記録したが、後翅の退化した種によく見られるように種内の変異が豊かである。参考のため付図に示した交尾器などの相違は変異幅の内にあり、種を確定する要素とはならないが、一部の器官に安定的な相違がみられ、すべて新種と考えられたため次の名を与え記載した。*Apteromaia satorum* sp. nov., *Apteromaia rugiventris* sp. nov., *Apteromaia akikoe* sp. nov., *Apteromaia sulawesensis* sp. nov., *Apteromaia butonensis* sp. nov. また、*Apteromaia*属を扱ったなかで、*Apterotheca hisamatsui* ANDO et ICHIYANAGI, 2009を本属に移行した。

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