

## Taxonomic Study on the Subfamily Osoriinae (Coleoptera, Oxytelidae) from Japan, I\*

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**Abstract** This is the first part of a revision of the subfamily Osoriinae of Japan. A key to the Japanese genera of the subfamily is given, and the two genera *Osorius* LATREILLE and *Atopocnemius* BERNHAUER are dealt with. The latter genus is discovered for the first time from Japan. Description of a new species, *Atopocnemius nomurai*, is presented.

In the family Oxytelidae (NAOMI, 1985), the Osoriinae form a large subfamily composed of about 60 genera. They are distributed in all zoogeographical regions, but almost all of the members are restricted to the subtropical and tropical areas.

From Japan, SHARP (1874) first described a new species, *Osorius angustulus*. After that, SHARP (1889) added two new species, *Osorius taurus* and *O. microps*. As the latter species was transferred to the genus *Mimogonus* FAUVEL by BERNHAUER and SCHUBERT in 1911, two genera and three species of the subfamily Osoriinae have hitherto been recorded from Japan.

In the present study, I intend to revise the Japanese Osoriinae which are composed of four genera and six species in all. In this first paper, a definition of this subfamily and a key to the genera are given, and the two genera, *Osorius* LATREILLE and *Atopocnemius* BERNHAUER are dealt with. Description of a new species *Atopocnemius nomurai* is also presented, together with illustrations of important characters.

### Subfamily Osoriinae

- Osorini ERICHSON, 1840, Gen. spec. staph., p. 753.  
Osoriini BERNHAUER & SCHUBERT, 1911, Coleopt. Cat., (29): 141; CAMERON, 1920, Trans. ent. Soc. Lond., p. 348; NOTMAN, 1925, Proc. U. S. natn. Mus., 67: 2; CAMERON, 1930, Fn. Brit. India, Coleopt. Staph., 1: 289; SCHEERPELTZ, 1931, S.-B. Akad. Wiss. Wien, I, (140): 369; SCHEERPELTZ, 1933, Coleopt. Cat. Suppl., (129): 1127; COIFFAIT, 1981, Senckenb. biol., 62: 136; COIFFAIT, 1984, Ent. basil., 9: 118.  
Osoriinae PORTEVIN, 1929, Encycl. ent., (A), 12 (1): 408; FAGEL, 1955, Expl. Parc natn. Upemba, Miss. WITTE, (39): 3; FAGEL, 1959, Expl. Parc natn. Garamba, Miss. SAEGER, (12): 3; FAGEL, 1969, Mus. roy. Afr. centr., Terv. Belg. Ann. 8°, Sci. zool., (173): 1; COIFFAIT, 1978, Ent. basil.,

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3: 113; COIFFAIT, 1979, Fn. Madagascar, 51: 7.

This subfamily is characterized by the following points: 1) Body cylindrical and elongate, 2) head large, not or scarcely constricted behind the middle, 3) posterior walls of tentorium fused mesially, with anterior and dorsal arms reduced or absent, 4) gular sutures confluent, 5) fore coxae about as long as fore femora, and 6) abdomen not marginate, without paratergites.

The species in this subfamily are collected under bark, in decayed trees, and also in leaf litter.

### Key to the Genera of the Subfamily Osoriinae from Japan

- 1 (4) Pronotum moderately or weakly narrowed posteriorly; fore tibiae with setiferous denticles along outer margins.
- 2 (3) Antennae with 9th and 10th segments each globular, about as long as broad; tarsal formula 5-5-5 ..... *Osorius* LATREILLE.
- 3 (2) Antennae with 9th and 10th segments each transverse; tarsal formula 4-4-4 ..  
..... *Atopocnemius* BERNHAUER.
- 4 (1) Pronotum parallel-sided in anterior 3/4, then abruptly constricted at base; fore tibiae with hairs and/or spinules along outer margins.
- 5 (6) Pronotum with a pair of large foveae inside the basal constrictions; parameres of male genitalia fused into a median stalk ..... *Mimogonus* FAUVEL.
- 6 (5) Pronotum without foveae; parameres of male genitalia separated .....  
..... *Saegerius* FAGEL.

### Genus *Osorius* LATREILLE

*Osorius* LATREILLE, 1829, Règne anim., 4: 438. (Type species: *Osorius brasiliensis* GUÉRIN-MÉNEVILLE, designated by GUÉRIN-MÉNEVILLE, 1830.)

See BERNHAUER & SCHUBERT (1911) and SCHEERPELTZ (1933) for synonymy.

Body medium in size (5.3-8.5 mm), elongate, cylindrical, shiny.

Head (Fig. 1 A, B) large, about as long as pronotum. Eyes small. Antennae (Fig. 1 D) strongly geniculate, 11-segmented, 1st segment slender, and at least 6th to 10th moniliform. Labrum trapezoidal, anterior margin sparsely haired, and straight or shallowly widely emarginate (Fig. 1 F). Mandibles (Fig. 1 G, H) very robust, inner margins uneven, with small teeth; mandibular prosthecae small, yellow. Maxillae (Fig. 1 E) moderately sclerotized; lacinia elongate, with inner margin sparsely spinous; galea spinous at apical part; maxillary palpus 4-segmented, 4th segment longer than 3rd. Labium (Fig. 1 C) with submentum trapezoidal, with a pair of hairs; mentum elongate-trapezoidal, anterior and posterior corners rounded, with a reverse V-shaped groove; prementum with a pair of very long setae; ligula fused into a plate with pointed apex; labial palpus 3-segmented, 3rd segment narrower and shorter than 2nd.

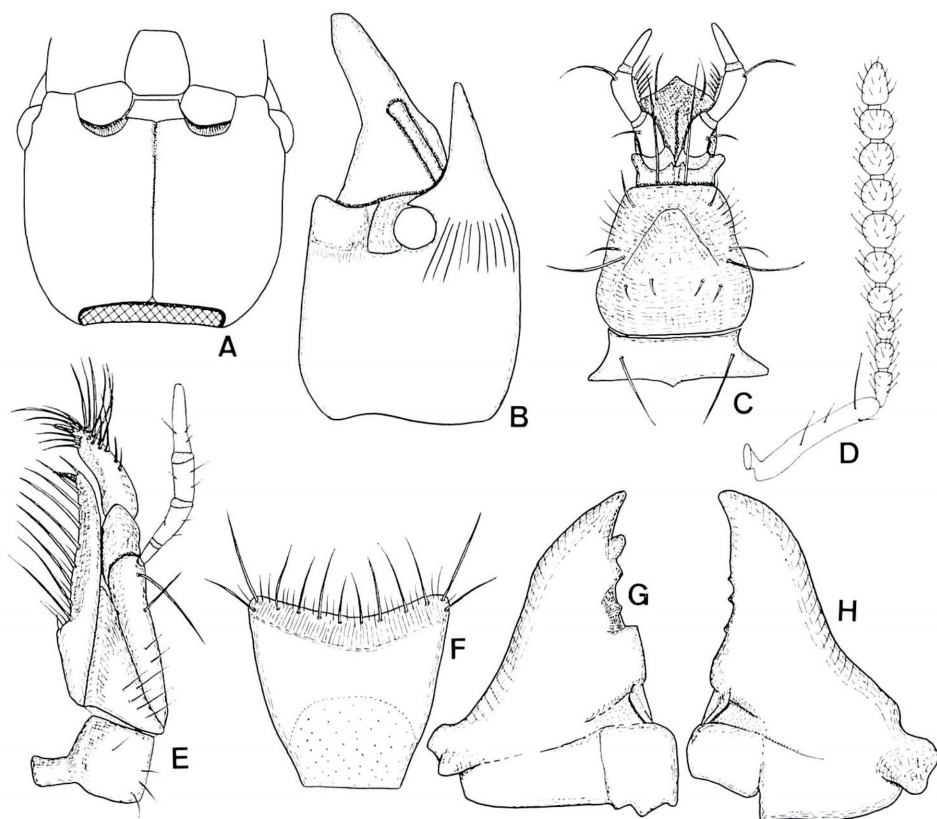


Fig. 1. *Osorius taurus* SHARP. A, Head in ventral view; B, head in lateral view; C, labium; D, antenna; E, maxilla; F, labrum; G, right mandible; H, left mandible.

Prothorax (Fig. 2 A) large, narrowed posteriorly, anterior foramen about as broad as pronotum; pronotum weakly marginate at sides; hypomera protruding behind fore coxae, pointed; prosternum large, with prosternal process pointed at apex. Mesothorax (Fig. 2 B) with mesonotum subtriangular, postnotum developed; mesepisterna, mesepimera and prepectus present; mesosternum narrow, with intercoxal process pointed and separated from metathoracic intercoxal process; mid coxal cavities ovoidal, deep, contiguous and situated mesially. Metathorax (Fig. 2 B) with elongate metepisterna and metepimera; metasternum broad, long, with anterior intercoxal process pointed. Metendosternite (Fig. 2 C) Y-shaped, with anterior arm branched near the middle of furcal arm.

Elytra parallel-sided; elytral epipleura distinct, broad, invisible from above. Legs robust; fore tibia weakly curved inward, outer margin bearing a row of setiferous denticles on anterior 2/3, inner margin finely ciliate; mid tibia broadened apically, outer margin with setiferous denticles; hind tibia with a row of setae along outer margin, without denticles; tarsal formula 5-5-5.

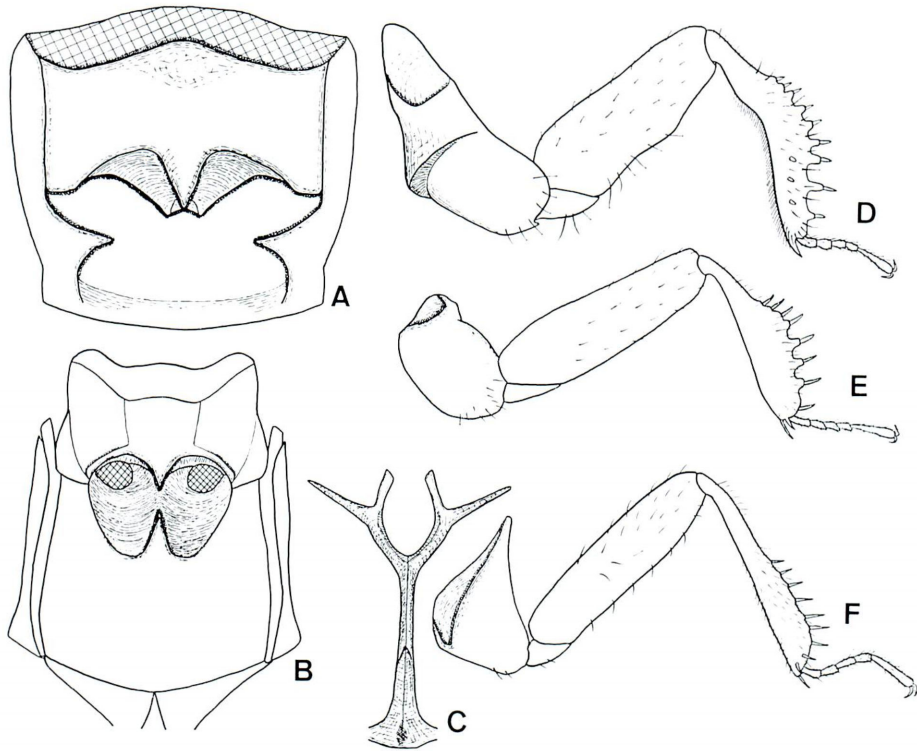


Fig. 2. *Osoarius taurus* SHARP. A, Prothorax in ventral view; B, meso- and metathoraces in ventral view; C, metendosternite; D, fore leg; E, mid leg; F, hind leg.

Abdomen (Fig. 3 A) elongate, cylindrical, spiracles absent in 2nd to 7th segments and reduced in 8th; 3rd sternum (Fig. 3 C) with a basimedial longitudinal keel.

*Male*. Eighth sternum (Fig. 3 D) weakly sinuate in apical margin; 9th tergum (Fig. 3 E) composed of a pair of separated plates, without ventral struts; 9th sternum absent. Genitalia (Fig. 3 G–K) with median lobe bulbous in ventral view; parameres absent.

*Female*. Ninth tergum (Fig. 3 F) composed of a pair of plates which are larger than in male; 9th sternum reduced into a pair of small plates or absent. Spermatheca spherical (Fig. 3 B) or ovoidal.

*Remarks*. This genus is allied to *Neosorius* FAGEL, 1959 and *Indosorius* COIFFAIT, 1978, but is distinguishable from them by the mesothoracic intercoxal process detached from the metathoracic one and the parameres of the male genitalia absent.

### *Osoarius taurus* SHARP

(Figs. 1–2, 3A–I)

*Osoarius taurus* SHARP, 1889, Ann. Mag. nat. Hist., (6), 3: 411; BERNHAUER & SCHUBERT, 1911, Coleopt.

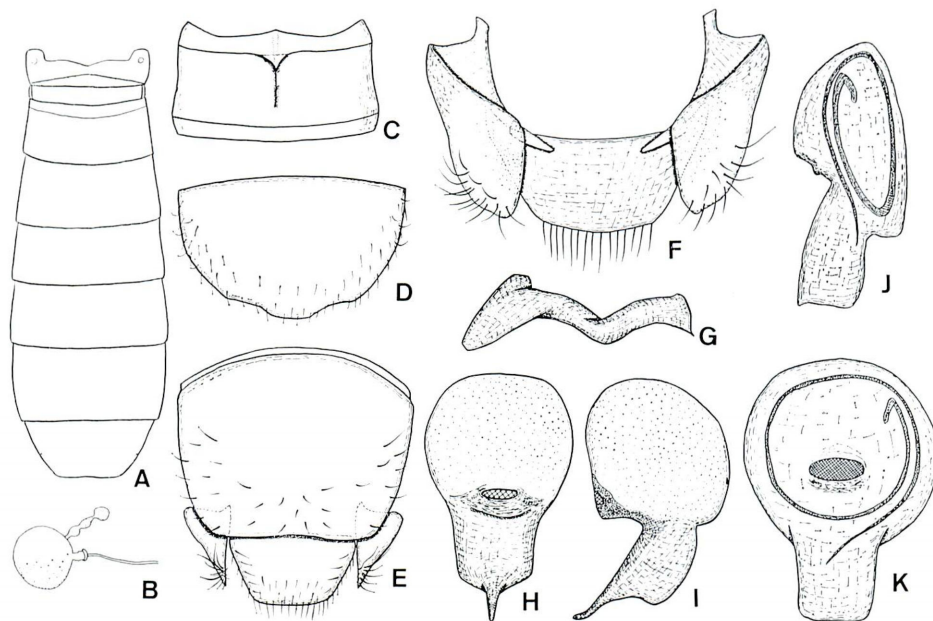


Fig. 3. A-I, *Osorius taurus* SHARP; J-K, *O. angustus* SHARP. A, Abdomen in dorsal view; B, spermatheca; C, 3rd abdominal sternum in ventral view; D, 8th abdominal sternum in male; E, 8th to 10th abdominal terga in male; F, 9th to 10th abdominal segments in female; G, internal armature of male genitalia; H, K, male genitalia in ventral view; I, J, male genitalia in lateral view.

Cat., (29): 145; ADACHI, 1950, Icon. Ins. Japon., p. 992; SAKAGUTI & SAWADA, 1955, Col. III. Ins. Jap. Coleopt., p. 51; ADACHI, 1957, J. Tôyô Univ., (11): 193; NAKANE, 1963, Icon. Ins. Jap. Col. nat. ed., 2: 84; SHIBATA, 1976, Annual Bull. Nichidai Sanko, (19): 169; WATANABE, 1985, Coleopt. Japan Col., Osaka, 2: 276.

Body length: 7.1–8.5 mm.

Body reddish brown to blackish; antennae, mouth parts and legs reddish.

Head a little narrower than pronotum, frons with a pair of horns projecting horizontally and anteriorly, pointed apically; surface roughly striolate, sparsely pubescent, with a median longitudinal smooth space on anterior 3/4 of head, and with a pair of curved setae on outer basal parts of horns, occipital region very smooth. Eyes small, moderately convex, about 0.4 times as long as temporal regions. Antennae (Fig. 1 D) reaching the middle of pronotum, 1st segment slender, about as long as 2nd to 6th taken together, 2nd a little longer than 3rd, 5th to 10th moniliform, subequal in width to one another, 11th a little narrower than 10th.

Pronotum broader than long, trapezoidal, narrowed posteriorly, side margins sinuate just before impressed posterolateral corners, impressed areas very narrow; surface strongly coarsely punctured, with a median longitudinal smooth space. Mesoscutellum subtriangular, smooth, shiny.

Elytra longer than pronotum, side margins gently rounded; surface sparingly coarsely punctured, with sparse and suberect hairs.

Abdomen broadened posteriorly, strongly punctured, 3rd to 6th segments haired as on elytra, hairs on 7th and 8th longer than those on preceding segments.

*Male.* Genitalia (Fig. 3 G-I) strongly sclerotized in apical half; median lobe bulbous at basal part, constricted near the middle, curved ventrally before the middle, with apex thin and pointed; parameres completely absent.

*Specimens examined.* 46 exs. collected from Tokyo (Mt. Takao), Kanagawa Pref. (Monomi Pass), Hyôgo Pref. (Otomizu Valley), Wakayama Pref. (Mt. Ôtô), Ôita Pref. (Shin'yabakei; Mt. Kurodake, Kujû), Nagasaki Pref. (Nomozaki; Mt. Mayu, Shimabara; Kamigotô Isls.; Tsushima Is.), Saga Pref. (Imari C.), Kumamoto Pref. (Amakusa-chô; Gokanoshô; Hitoyoshi C.; Mt. Ichifusa), Miyazaki Pref. (Iwato), Kagoshima Pref. (Mt. Eboshi; Mt. Kirishima; Sata Cape).

*Distribution.* Japan (Honshu, Shikoku, Kyushu, Tsushima Is., Yakushima Is.).

*Remarks.* This species is allied to *Osorius rugicollis* KRAATZ, 1859, but is separable from the latter by the head with the outer basal parts of horns smooth and the pronotum strongly and coarsely punctured.

### *Osorius angustulus* SHARP

(Fig. 3 J-K)

*Osorius angustulus* SHARP, 1874, Trans. ent. Soc. Lond., p. 89; BERNHAUER & SCHUBERT, 1911, Coleopt. Cat., (29): 143; ADACHI, 1950, Icon. Ins. Japon., p. 992; SAKAGUTI & SAWADA, 1955, Col. Ill. Ins. Jap. Coleopt., p. 51; ADACHI, 1957, J. Tôyô Univ., (11): 193; NAKANE, 1963, Icon. Ins. Jap. Col. nat. ed., 2: 84; SHIBATA, 1976, Annual Bull. Nichidai Sanko, (19): 169; WATANABE, 1985, Coleopt. Japan Col., Osaka, 2: 276.

Body length: 4.6–6.0 mm.

Body reddish brown to blackish; frons and elytra reddish to reddish brown; antennae, mouth parts and legs yellowish red to reddish.

Head a little narrower than pronotum, frons narrowed anteriorly, deflected before antennal insertions, with anterior margin straight and irregularly crenulate; surface irregularly rugose, sparsely covered with suberect hairs on anterior 4/5 of head, but a median longitudinal space sparsely punctured and weakly elevated, occipital region smooth. Eyes small, moderately convex, about a half as long as temporal regions. Antennae with 1st segment slender, constricted near the middle, a little longer than 2nd to 5th taken together, 3rd longer than 4th, 6th to 10th moniliform, 11th longer than 10th, pointed.

Pronotum shorter than elytra, transverse, narrowed posteriorly, with side margins gently rounded in anterior 2/3, weakly sinuate near posterolateral corners; surface sparsely coarsely punctured, except for a median longitudinal space which is smooth and weakly elevated. Mesoscutellum U-shaped, smooth, very shiny. Elytra a little longer than pronotum, sparsely punctured and pubescent.

Abdomen broadened posteriorly, broadest at basal margin of 7th segment; surface

sparsely punctured and haired, hairs yellowish, suberect.

*Male.* Genitalia (Fig. 3 J–K) moderately sclerotized; median lobe at basal part circular in ventral view and flat dorsally in lateral view, constricted just before basal orifice, apical part about 0.4 times as broad as basal one and truncate, internal armature whip-shaped; parameres absent.

*Specimens examined.* 84 exs. collected from Ibaragi Pref. (Mt. Hanazono), Kanagawa Pref. (Monomi Pass), Tokyo (Mt. Takao), Kyoto (Kibune), Fukuoka Pref. (Mt. Hiko; Mt. Tachibana; Hakozaki, Fukuoka C.), Saga Pref. (Mt. Tara; Mt. Seburi; Ryûmon Valley), Nagasaki Pref. (Nomozaki, Shimabara; Mt. Mayu; Mt. Iwaya; Hirado Is.; Kamigotô Isls.), Kumamoto Pref. (Kikuchi Valley; Hitoyoshi C.; Amakusa Is.), Okinawa Pref. (Mt. Omoto, Ishigaki Is.).

*Distribution.* Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima Is., Ishigaki Is.).

*Remarks.* This species is allied to *Osorius peguanus* BERNHAUER, 1914, but is separable from the latter by the pronotum weakly and narrowly impressed at the posterolateral corners and the elytra sparsely punctured.

### Genus *Atopocnemius* BERNHAUER

*Atopocnemius* BERNHAUER, 1914, Verh. zool.-bot. Ges. Wien, **64**: 92; NOTMAN, 1925, Proc. U. S. natn. Mus., **67**: 2; SCHEERPELTZ, 1933, Coleopt. Cat. Suppl., (129): 1137. (Type species: *Atopocnemius moultoni* BERNHAUER, by monotypy.)

Body small, elongate, shiny.

Head (Fig. 4 A) large, narrower than pronotum. Eyes small. Antennae geniculate, 11-segmented, gradually broadened apically. Labrum transverse, with anterior margin rounded. Mandibles (Fig. 4 C) robust, each bidentate at apex, with a large blunt tooth near the middle; mandibular prosthecae absent. Maxillae (Fig. 4 B) sclerotized; lacinia elongate, with side margin sparsely setous; galea with 5 or 6 setae, outer and inner side margins sinuate; maxillary palpus 4-segmented, 3rd transverse, 4th large, about 4 times as long as 3rd, pointed. Labium (Fig. 4 D) with mentum bisinuate at apical margin, with two pairs of setae; prementum with a pair of very long setae; ligula composed of a broad plate, anterior margin rounded, with a pair of setae at sides; labial palpus 3-segmented, 3rd segment about 2.5 times as long as 2nd.

Prothorax (Fig. 4 A) large, pronotum clearly marginate laterally; hypomero-sternal suture absent; hypomera strongly projecting behind fore coxae, pointed; prosternum transverse, with a minute protrusion in the middle of anterior margin. Mesothorax with mesepisterna fused to mesosternum; mesepimera present, mesothoracic intercoxal process pointed, mid coxal cavities separated, situated mesially. Metathorax with metepisterna partially fused with metepimera; metasternum large, with anterior intercoxal process pointed. Metendosternite Y-shaped.

Elytra subparallel-sided; elytral epipleura distinct, broad. Legs robust; fore

tibia broadened apically, setaceous, with U-shaped emargination on outer margin; mid tibia weakly broadened apically, with two setiferous denticles and 6 to 10 spines on outer margin; hind tibia slender, sparsely setous on outer margin; tarsal formula 4-4-4.

Abdomen broad, 3rd sternum with a basimedial longitudinal keel.

*Male.* Eighth sternum weakly sinuate in apical margin; 9th tergum composed of a pair of small and separated plates, without ventral struts; 9th sternum absent; 10th tergum small, truncate. Genitalia composed of median lobe and a pair of parameres.

*Remarks.* This genus is allied to *Baculopsis* CAMERON, 1929, but is distinguished from the latter by the antennae geniculate and the fore tibiae with the U-shaped emarginations on the outer margins. This is the first record of the genus from Japan.

*Atopocnemius nomurai* sp. nov.

(Fig. 4)

Body length: 2.6–3.2 mm.

Body dark brown to black; antennae, mouth parts, legs, mesoscutellum, elytra along suture and posterior margins of abdominal segments reddish to reddish brown; surface very shiny, almost glabrous.

Head (Fig. 4 A) narrower than pronotum, frons narrowed anteriorly, deflected in front of antennal insertions, with anterior margin straight; surface finely sparsely punctured, with 3 or 4 pairs of erect hairs. Eyes relatively flat, minutely faceted, about a half as long as temporal regions. Antennae reaching near the middle of pronotum, 1st segment about as long as 2nd to 7th taken together, 2nd a little longer than 3rd, 3rd to 10th gradually broadened apically, 7th to 10th each distinctly transverse, 11th about twice as long as 10th, pointed.

Pronotum as broad as elytra, trapezoidal, broadest near anterior margin, weakly narrowed posteriorly; surface moderately punctured, punctures composed of larger and smaller ones, with two pairs of small foveae, one pair near anterior margin and the other near basal margin. Mesoscutellum triangular, smooth, very shiny. Elytra a little broader than long, weakly asperous, with a pair of shallow grooves along suture.

Abdomen gently broadened posteriorly, sparsely with fine and obscure punctures.

*Male.* Genitalia (Fig. 4 E–F) weakly sclerotized at base; median lobe at base bulbous in ventral view and relatively flat in lateral view, curved ventrally before basal orifice, pointed at apex, with a pair of plates on apical surface of median lobe, internal armatures twig-shaped; parameres separated, short, tapering apically, not reaching apex of median lobe.

Holotype, 1 ex., (Type No. 2580, Kyushu Univ.), Mt. Yuidake, Amami-Ōshima Is., Kagoshima Pref., 10. viii. 1984, S. NOMURA leg. Paratypes, 4 exs., same data as holotype; 1 ex., Yamatoson, Amami-Ōshima Is., Kagoshima Pref., 30. v. 1963, H.



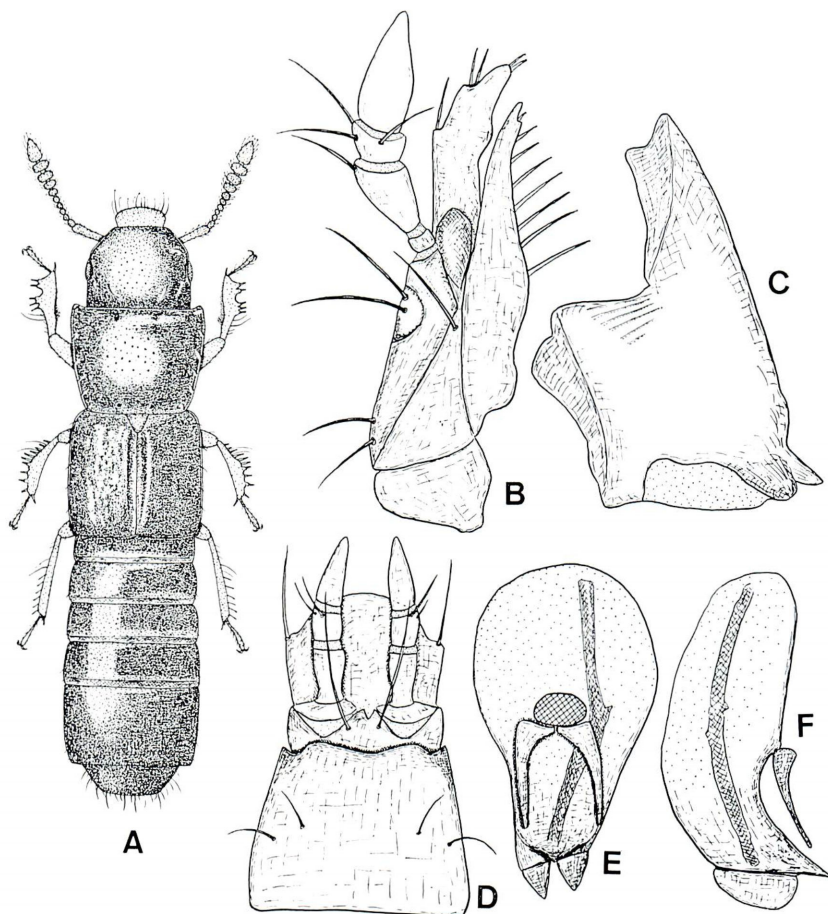


Fig. 4. *Atopocnemius nomurai* sp. nov. A, Whole body; B, maxilla; C, left mandible; D, labium; E, male genitalia in ventral view; F, male genitalia in lateral view.

YAMAZAKI leg.

*Distribution.* Japan (Amami-Ōshima Is.).

*Remarks.* This new species is related to *Atopocnemius moultoni* BERNHAUER, 1914, and *A. quadrifoveatus* CAMERON, 1929, but is separable from them by the pronotum weakly narrowed posteriorly and the abdomen covered only with sparse punctures.

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### 摘 要

本論文は、日本産ツツハネカクシ亜科の分類学的研究の第1報である。日本産の属への検索表を作成し、*Osorius* LATREILLE および *Atopocnemius* BERNHAUER の2属の分類を行った。このうち、後者は日本から初めて記録される属である。また、1新種 *Atopocnemius nomurai* の記載を行った。

## A New Rhipiphorid Beetle (Coleoptera, Rhipiphoridae) from Malaysia

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**Abstract** A new rhipiphorid beetle, *Ohananomia malayana* gen. et sp. nov., is described from West Malaysia. It belongs to the subfamily Hemirhipidiinae.

The rhipiphorid subfamily Hemirhipidiinae is mainly distributed in Australia. In the Oriental Region, only four species have been known from Japan and Taiwan.

Through the courtesy of Mr. Toshio TOMITA, I had an opportunity to examine a single specimen of a strange rhipiphorid beetle from West Malaysia. After my close examination, it became evident that the beetle should be placed in an undescribed genus belonging to the subfamily Hemirhipidiinae. In this paper, I am going to describe it under the new name of *Ohananomia malayana* gen. et sp. nov. The holotype is deposited in the National Science Museum (Nat. Hist.), Tokyo.

Before going further, I wish to express my sincere gratitude to Dr. Yoshihiko KUROSAWA of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance, and to Dr. Shun-Ichi UÉNO of the same museum for his critical reading of the original manuscript. I am also indebted to Mr. Toshio TOMITA for his kind offer of the material.

### Genus *Ohananomia* gen. nov.

Type species: *Ohananomia malayana* sp. nov.

Body elongate, subparallel.

Head slightly bisinuate at base in dorsal aspect; occiput produced over apex of pronotum; clypeal suture absent; clypeus transverse; eyes distinctly convergent above in frontal aspect, rather densely pubescent, each divided into a smaller upper and a larger lower parts by a strong inferior emargination, the two parts being connected by narrow piece; antennal cavities small and simple; antennae arisen just along the inferior rims of lower eye parts, eleven-segmented, pectinate from the fourth segment; mouth parts perfect. Pronotum distinctly convergent anteriorly; lateral ridges short; disc convex. Scutellum subquadrate. Elytra short, not separated from each other. Prosternum with the anterior margin roundly emarginate; prosternal process narrowly ridged between anterior coxae, which are closed by a very narrow sclerotized band. Legs slender; anterior and middle tibiae without spine at apices; posterior tibiae with a spine at each apex; tarsal segments all cylindrical. Claws simply cleft, distinctly

pectinate. Hind wing without radial cell; vein  $R_2$  visible.

*Remarks.* The present genus is classified into the subfamily Hemirhipidiinae, and is allied to the genus *Nephrites* SHUCKARD, 1838, but can be easily distinguished from it by the following characteristics: 1) scutellum flattened, without any projection, while in *Nephrites*, it bears upper and lower small projections; 2) middle tibia without spine at apex, while in *Nephrites*, it has a distinct spine, 3) claws distinctly pectinate, while in *Nephrites*, they are not pectinate; 4) vein  $R_2$  present on hind wing, instead of being absent.

*Ohananomia malayana* sp. nov.

(Fig. 1)

Body elongate, subparallel; head reddish testaceous, though the parts between upper and lower lobes of eyes black; pronotum and elytra entirely black and lustrous; prosternum reddish testaceous; meso- and metasterna and abdomen entirely black; antennae black except for reddish testaceous basal segments; legs black except for reddish testaceous anterior and middle femora.

Head slightly bisinuate at base in dorsal aspect; occiput produced over apex of pronotum; frons evenly convex, densely and finely punctate, and clothed with fine erect hairs; clypeus transverse, densely punctate, with the anterior margin truncate; eyes distinctly convergent above in frontal aspect, rather densely pubescent, divided into a smaller upper and a larger lower parts by a strong inferior emargination, the two parts being connected by narrow piece; antennal cavities small and simple; antennae eleven-segmented, distinctly pectinate from the fourth segment, with the first segment curved, distinctly expanded apically, about 1.5 times as long as the

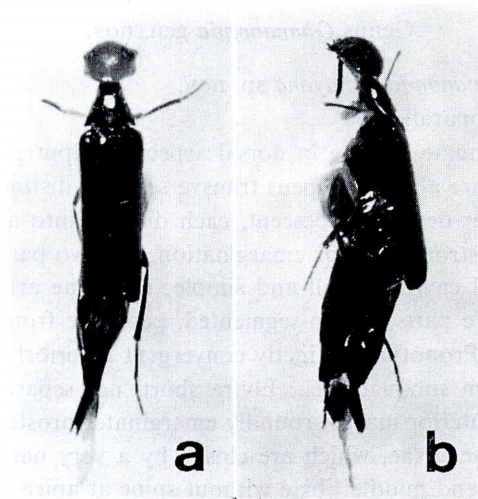


Fig. 1. *Ohananomia malayana* sp. nov. (holotype); a, dorsal view; b, lateral view.

following two united, the second short, subglobular, the third slightly longer than the second, the fourth subtriangular, about as long as the second and third united, and distal ones short and distinctly pectinate.

Pronotum slightly narrower than elytra at base, distinctly convergent anteriorly; sides evenly expanded posteriorly, though very slightly sinuate just behind anterior angles; basal margin about twice as wide as the anterior, slightly bisinuate, with the median lobe very broad, and truncate at the middle; lateral ridges extending from posterior angles to the posterior third; disc convex, obsoletely depressed medially, transversely grooved along base; surface evenly and finely punctate, densely clothed with blackish semierect hairs. Scutellum subquadrate, arcuately rounded at apex, distinctly and broadly depressed in the middle posteriorly.

Elytra short, reaching the fourth abdominal tergite, about 3.7 times as long as pronotum; sides subparallel, separately rounded at the tips; disc almost convex, with an obsolete basal depression; surface very finely punctate and pubescent.

Prosternum with the anterior margin roundly emarginate; prosternal process very narrowly ridged between anterior coxae, which are closed by a narrow sclerotized band. Mesosternum convex. Metasternum evenly convex, without median groove. Abdomen with the last ventral segment rounded at apex, without any depression. Legs slender; anterior and middle tibiae without spine at apices; posterior tibiae with a spine at each apex; tarsal segments all cylindrical. Claws simply cleft, distinctly pectinate.

Length: 8.6 mm; width: 1.2 mm.

Holotype: ♀, Top of Mt. Jasar, Cameron Highlands, W. Malaysia, 1. V. 1984, T. TOMITA lgt.

*Remarks.* This new species is easily distinguished from the other relatives by the generic characteristics.

## 摘 要

オオハナノミ科ホソコバネオオハナノミ亜科に属する1新属新種 *Ohananomia malayana* gen. et sp. nov. をマレー半島より記載した。

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## Two New Pterostichine Carabids from the Islands of Shikoku and Kyushu, Southwest Japan

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**Abstract** Two new pterostichine carabids are described from Southwest Japan, namely *Pterostichus* (*Pterostichus*\*) *itoi* sp. nov. from the Island of Shikoku and *P. (P.) arcuaticarinatus* sp. nov. from that of Kyushu. Both the new species are closely allied to *P. (P.) kyushuensis* HABU, and are found in coexistence with the latter, on which some notes are also given.

A medium-sized apterous pterostichine carabid beetle, *Pterostichus* (*Pterostichus*) *kyushuensis* HABU (1955, pp. 143–144, 152–156), has been known from the Island of Kyushu, and its local forms also occur in the westernmost area of Honshu and the Island of Shikoku. There are two relatives of the species, each of which is found in coexistence with the latter in Shikoku and Kyushu, and may have probably been confused with one another.

One of the undescribed species, from Shikoku, was previously known from only one female found at Tsuchigoya on the Ishizuchi Mountains in Ehime Prefecture. Recently, I was able to examine its male specimens through the courtesy of Mr. Yoshiyuki Irô, who had obtained them on Mt. Takanosu-yama in Kôchi Prefecture, about 12 km distant to the east from the first locality. It is somewhat similar to *P. kyushuensis* HABU, but is readily separable from the latter by certain external and genitalic details.

The other species was found on the Kyushu Mountain Range in both Kumamoto and Miyazaki Prefectures. It agrees well with *P. kyushuensis* HABU in general appearance, but its aedeagus is peculiar and evidently different from that of the latter. It must be new to science like the preceding one.

In the present paper, I will describe the former under the name of *P. (P.) itoi*, and the latter under that of *P. (P.) arcuaticarinatus*, and will also give some supplementary notes on the local variation of *P. kyushuensis* HABU, which has hitherto been poorly known. The abbreviations used herein are the same as those explained in the foregoing papers of mine.

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance and reading through the original manuscript of this paper, and to Dr. Kazuo TANAKA of the Laboratory of Teiso Kasei Co., Shizuoka, for his advice. Thanks are also due

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\* *Sensu* TANAKA (1985, p. 113).

to Messrs. Shōichi IMASAKA, Yoshiyuki ITŌ, Seiji MORITA and Norio OHTANI for their kind help in various ways.

*Pterostichus (Pterostichus) itoi* KASAHARA, sp. nov.

[Japanese name: Itō-nagagomimushi]

(Figs. 1-2, 4)

*Description.* Length (measured from apex of labrum to apices of elytra) 11.2–12.8 mm. Width 3.9–4.5 mm. Black, shiny; labrum and mandibles dark reddish brown; basal four segments of antennae blackish, the remaining reddish brown, tending to become paler towards apices; palpi and tarsi light reddish brown.

Head moderately convex, shiny; labrum and mandibles normal; eyes convex; tempora short, strongly contracted behind, slightly tumid; genae almost smooth or feebly rugose near buccal fissure; frontal furrows rather shallow, though distinct and wide, more or less divergent behind in posterior extremities, and reaching the level of anterior supraorbital setae; supraorbital areas convex in front; clypeal suture fine; lateral grooves deep, extending to a little behind the post-eye level; surface sparsely minutely punctate, microsculpture slightly visible, forming isodiametric meshes; both maxillary and labial palpi normal; antennae more or less thick, extending beyond shoulders of elytra, scape twice as long as wide, 1.2 times as long as segment 3, which is 1.5 times as long as segment 2, the latter ventrally unisetose at apex.

Pronotum distinctly cordate, moderately convex and shiny, widest at apical third, 1.3 times as wide as head (PW/HW 1.22–1.38, mean 1.33), 1.2 times as wide as long (PW/PL 1.21–1.29, mean 1.24), 1.6 times as wide as basal width (PW/PBW 1.51–1.63, mean 1.57); lateral margins evenly well arcuate in apical half, then strongly convergent posteriad and fully sinuate before base, basal part with small irregular notches; lateral reflexed borders narrow, though becoming more or less wider towards apices; marginal grooves vaguely punctate on basal halves; anterior marginal setae inserted a little before the widest level; apical margin gently or weakly emarginate, not bordered, apical angles produced, rounded at the tips; basal margin always narrower than the apical, gently and widely emarginate at the median part, and rather oblique or often weakly sinuate on each side, which is vaguely bordered, basal angles rather variable, obtuse though usually almost rectangular; basal foveae deep, more or less divergent anteriad in front, with linear impressions at the bottoms, coarsely though rather strongly punctate; median line moderately impressed; apical crescent depression relatively weak, basal transverse one weak or obsolete; surface impunctate, though often with transverse wrinkles, microsculpture slightly visible, forming fine transverse meshes.

Apterous. Elytra oblong-ovate, moderately convex, shiny in both sexes, fused with each other at the suture, widest at the middle, 1.2 times as wide as pronotum (EW/PW 1.16–1.30, mean 1.22), 2.5 times as long as pronotum (EL/PL 2.34–2.59, mean 2.51), 1.7 times as long as wide (EL/EW 1.59–1.74, mean 1.68); basal border



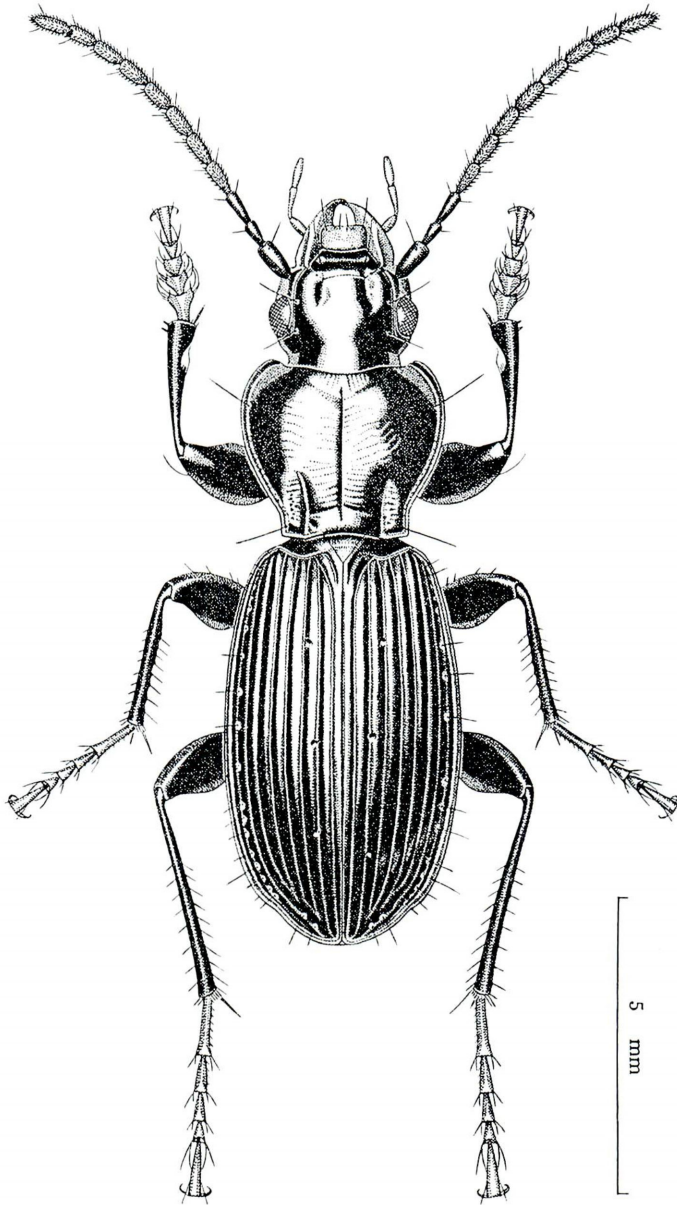


Fig. 1. *Pterostichus (Pterostichus) itoi* KASAHARA, sp. nov., ♂, from Mt. Takanosu-yama in Kōchi Prefecture.

complete, curved at the base of stria 4, thence obliquely extending to shoulder, and joining lateral border at an obtuse angle; shoulders widely rounded; lateral margins evenly gently arcuate from behind shoulders to preapical emarginations, which are

shallow; apices more widely rounded in the female than in the male; inner plica hardly visible; scutellar striole short, lying on interval 1; striae deeply impressed, almost smooth; intervals moderately convex, interval 3 with three dorsal pores, anterior one at about basal fourth and adjoining stria 3, while the posterior two adjoin stria 2 at about middle and apical fourth, respectively; marginal series of pores 16–18 in number, widely spaced at middle; microsculpture weakly impressed in both sexes, forming transverse meshes.

Basal three segments of meso- and metatarsi externally sulcate.

Ventral surface moderately shiny; pro- and mesepisterna and mesosternum punctate; prosternal process furrowed at middle, vaguely bordered at apex; terminal sternite concave in apical half in the male, the concavity longitudinally and weakly raised at middle, somewhat warped downwards at apex, which is more or less truncate or weakly emarginate.

Aedeagus strongly bent at about 90 degrees at basal third, rather abruptly curved downwards at apical fourth, apical lobe small, obtusely pointed at apex; left paramere wide, square; right one thick, blunt at apex.

*Type series.* Holotype: ♂, Mt. Takanosu-yama, 1,300 m alt., Hongawa-mura, Kôchi Pref., 4. VI. 1983, Y. ITÔ leg.; allotype: ♀, Tsuchigoya, 1,550 m alt., Ishizuchi Mountains, Ehime Pref., 1. IX. 1978, S. KASAHARA leg.; paratypes: 2 ♂♂, Mt. Takanosu-yama, 1,300 m alt., Hongawa-mura, Kôchi Pref., 4. VI. 1983, Y. ITÔ leg.; 1 ♂, 2 ♀♀, Mt. Takanosu-yama, 1,150–1,550 m alt., Hongawa-mura, Kôchi Pref., 1. VI. 1986, Y. ITÔ leg.; 1 ♂, Heikedaira, 1,520 m alt., Ôkawa-mura, Kôchi Pref., 15–19. VIII. 1982, Y. ITÔ leg.; 1 ♀, Tsuchigoya, 1,550 m alt., Ishizuchi Mountains, Ehime Pref., 1. IX. 1978, S. KASAHARA leg.; 1 ♀, Tsuchigoya, Ishizuchi Mountains, Ehime Pref., 4–7. IX. 1980, S. MORITA leg.

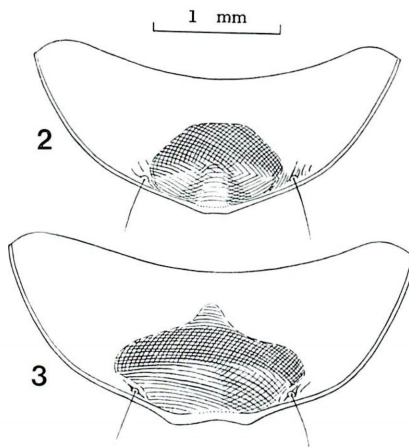
The holo- and allotypes are deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. The paratypes are separately deposited in the above collection and those of the collectors.

*Notes.* The present new species is somewhat allied to *P. (P.) kyushuensis* HABU, but is easily separable from the latter by having the following points: smaller body; shorter antennae with darker coloration; wider and more strongly cordate pronotum, with the basal margin clearly narrower than the apical; elytral microsculpture almost equally impressed in both sexes; peculiar terminal sternite in the male; aedeagus not tumid on the right side at apical third.

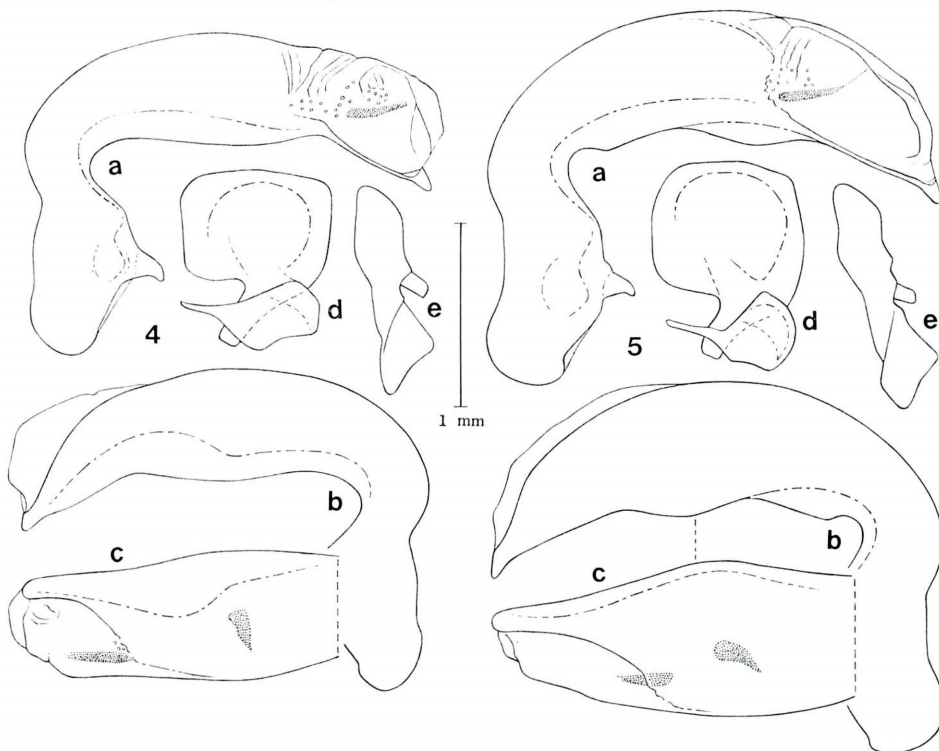
It also resembles *P. yoshikawai* ISHIDA (1958, p. 32), known from the Kii Peninsula, southwestern Honshu, but can be distinguished from the latter by having clearly punctate basal foveae of pronotum, smaller number of dorsal pores on elytra, and so on.

It is often found with *P. kyushuensis* HABU, whose occurrence in the Island of Shikoku was already noticed (KASAHARA, 1980, p. 121). This is almost the same in general features as the typical one, known from Mt. Hiko-san and its vicinities in the Island of Kyushu, though certain difference in the conformation of aedeagus can be detected between the two. In the typical form, the aedeagus is evidently tumid

Figs. 2-3. Terminal sternites in the males of *Pterostichus* (*Pterostichus*) spp. — 2, *P. (P.) itoi* KASAHARA, sp. nov., from Mt. Takanosu-yama in Kôchi Prefecture; 3, *P. (P.) kyushuensis* HABU from the same locality.



Figs. 4-5. Male genitalia of *Pterostichus* (*Pterostichus*) spp. — 4, *P. (P.) itoi* KASAHARA, sp. nov., from Mt. Takanosu-yama in Kôchi Prefecture; 5, *P. (P.) kyushuensis* HABU from the same locality. a-c, Aedeagus; a, left lateral view; b, right lateral view; c, apical half in ventral view; d, left paramere; e, right paramere.



latero-ventrad on the right side at apical third (Fig. 11 b), whereas the tumidity atrophies in the Shikoku form (Fig. 5 b). The difference appears to be of subspecific importance, but I prefer to refrain from naming it until the range of variation within

each population is examined on ampler material.

*Pterostichus (Pterostichus) arcuaticarinatus* KASAHARA, sp. nov.

[Japanese name: Nise-kyushu-nagagomimushi]

(Figs. 6–7, 10)

*Description.* Length (measured from apex of labrum to apices of elytra) 12.2–14.0 mm. Width 4.0–4.9 mm. Black, wholly shiny in the male, with less shiny elytra in the female; labrum and mandibles dark reddish brown; femora, tibiae and basal four segments of antennae blackish, remaining antennal segments tending to become paler towards apices.

Head moderately convex and shiny; labrum and mandibles normal; eyes convex, more or less prominent; tempora short, strongly contracted behind, hardly tumid; genae rugose near buccal fissure; frontal furrows distinct and wide, divergent behind in posterior parts, and extending to the level of anterior supraorbital setae; supra-orbital areas convex in front; clypeal suture fine; lateral grooves deep, extending to a little behind the level of posterior supraorbital setae, which are inserted at the post-eye level; surface sparsely and very minutely punctate, microsculpture slightly visible, forming isodiametric meshes; both maxillary and labial palpi normal; antennae rather thick, extending beyond shoulders of elytra, scape more than twice as long as wide, 1.2 times as long as segment 3, which is a half as long again as segment 2, the latter ventrally unisetose at apex.

Pronotum cordate, moderately convex and shiny, widest at about apical fourth, 1.3 times as wide as head (PW/HW 1.27–1.32, mean 1.29), as wide as long in almost the same proportion (PW/PL 1.22–1.30, mean 1.27), half as wide again as basal width (PW/PBW 1.46–1.56, mean 1.50); lateral margins evenly well arcuate in apical two-thirds, then fully convergent posteriad and sinuate before base, basal part with minute notches; lateral reflexed borders narrow, though becoming somewhat wider towards apices; marginal grooves almost smooth or vaguely punctate; anterior marginal setae inserted at a level a little before the widest part; apical margin gently emarginate, unbordered, apical angles produced, rounded at the tips; basal margin widely emarginate at median part, rather oblique on each side, which is vaguely bordered, basal angles rectangular, rounded at the tips; basal foveae deep, with linear impressions at the bottoms, somewhat divergent in front, sparsely and vaguely punctate; median line moderately impressed, not reaching apical margin, often indistinctly reaching basal one; apical crescent depression weak, basal transverse one obsolete; surface impunctate, microsculpture slightly visible, forming fine transverse meshes.

Apterous. Elytra oblong-ovate, moderately convex, shiny in the male, rather mat in the female, fused with each other at the suture, widest at about middle, 1.2 times as wide as pronotum (EW/PW 1.17–1.31, mean 1.23), 2.6 times as long as the latter (EL/PL 2.60–2.81, mean 2.64), 1.7 times as long as wide (EL/EW 1.63–1.76, mean 1.70); basal border complete, rather obliquely extending to shoulder and meeting

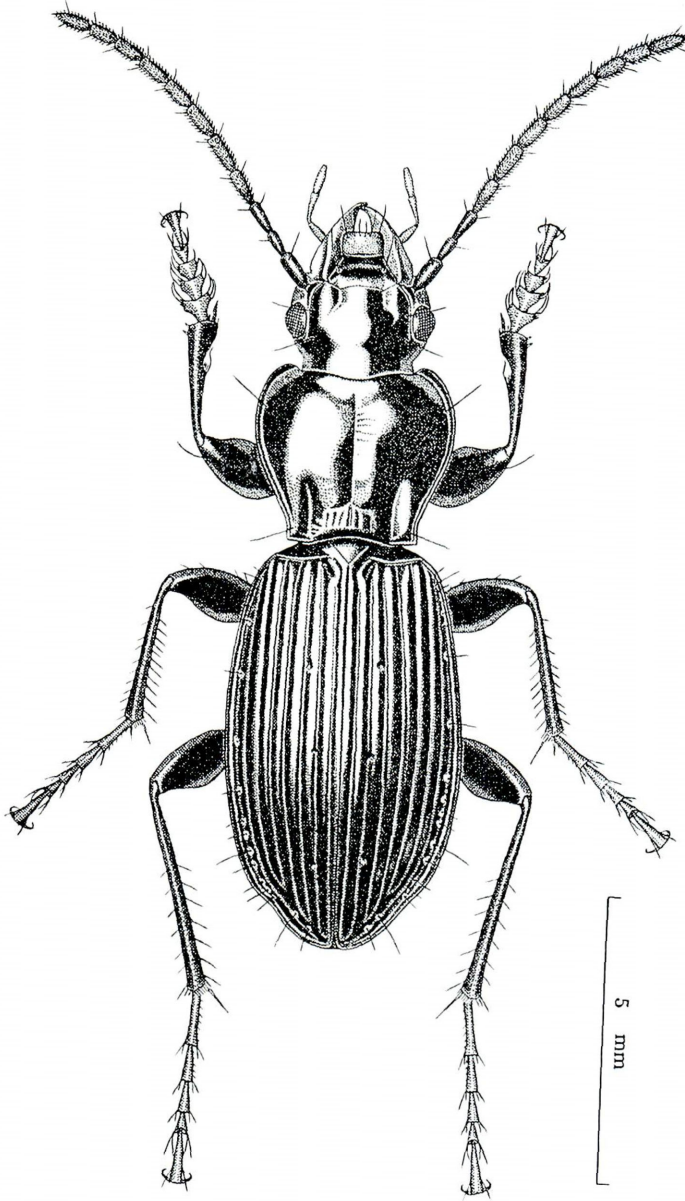


Fig. 6. *Pterostichus (Pterostichus) arcuaticarinatus* KASAHARA, sp. nov., ♂, from Mt. Haku-chô-zan in Kumamoto Prefecture.

with lateral margin at an obtuse angle; shoulders widely rounded; lateral margins gently divergent from behind shoulder to the widest part, then gently roundly convergent to preapical emarginations, which are shallow; apices rounded, sutural angles rather

angulate though rounded at the tips in the male; inner plica scarcely visible; scutellar striole short, often rudimentary; striae deep, almost smooth; intervals moderately convex, interval 3 with three dorsal pores, anterior one at about basal fourth and adjoining stria 3, while the posterior two adjoin stria 2 at about middle and apical fourth, respectively; marginal series of pores 17–19 in number, widely spaced at middle; microsculpture weakly impressed, forming fine transverse meshes in the male, while it is strongly impressed and forms wider meshes in the female.

Basal three segments of meso- and metatarsi externally sulcate.

Ventral surface moderately shiny; pro- and mesepisterna, mesosternum and sternites 3–4 sparsely or weakly punctate in part; prosternal process furrowed at middle, unbordered at apex; terminal sternite concave in apical half in the male, the concavity being longitudinally carinate at the middle, and narrowly but distinctly emarginate at apex.

Aedeagus strongly bent at more than 90 degrees at basal third, distinctly tumid latero-ventrad on the right side at apical third, rather abruptly curved downwards at apical fourth; apical lobe small and pointed, though rounded at the tip; ventral surface with arcuate fin-like carina at the middle, being concave and transversely wrinkled between the carina and the right edge; left paramere wide, square; right one thick, somewhat pointed though blunt at the tip.

*Type series.* Holotype: ♂, allotype: ♀, Mt. Hakuchô-zan, 1,400 m alt., Kumamoto Pref., 17. VI. 1984, S. KASAHARA leg.; paratypes: 1 ♂, 1 ♀, Mt. Hakuchô-zan, 1,400 m alt., Kumamoto Pref., 7. VIII. 1983, S. IMASAKA leg.; 1 ♂, 1 ♀, Mt. Hakuchô-zan, 1,400 m alt., Kumamoto Pref., 17. VI. 1984, S. KASAHARA leg.; 1 ♂, 2 ♀♀, Shiiya-tôge, 1,250 m alt., Miyazaki Pref., 21–22. VI. 1984, S. KASAHARA leg.; 1 ♂, Mt. Shiraiwa-yama, Miyazaki Pref., 7. VIII. 1978, S. IMASAKA leg.

The holo- and allotypes are deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. The paratypes are separately deposited in the private collection of Mr. IMASAKA and mine.

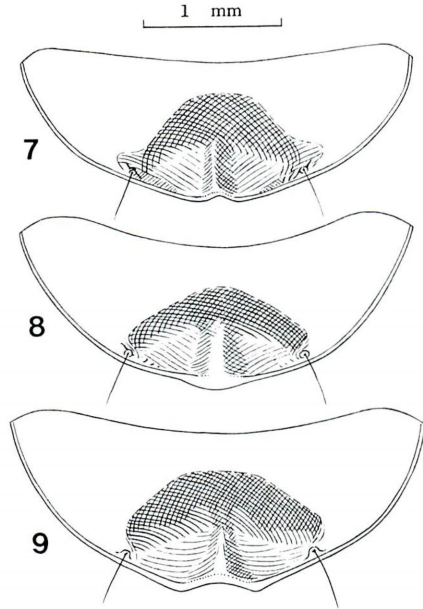
*Notes.* The present new species is so closely allied to *P. kyushuensis* HABU that the external differences are rather slight, but it is clearly distinguished from the latter by the peculiarity of its aedeagus, which is quite unique among its allies.

It is often found in coexistence with *P. kyushuensis* HABU. The latter is almost the same in general appearance and conformation of aedeagus as the topotypical form, but is slightly different in the shape of terminal sternite in the male. It is distinctly emarginate at apex in the topotypical individuals (Fig. 9), but is somewhat roundly produced in the Hakuchô-zan and Shiiya-tôge specimens (Fig. 8). However, this seems to be a mere geographical variation.

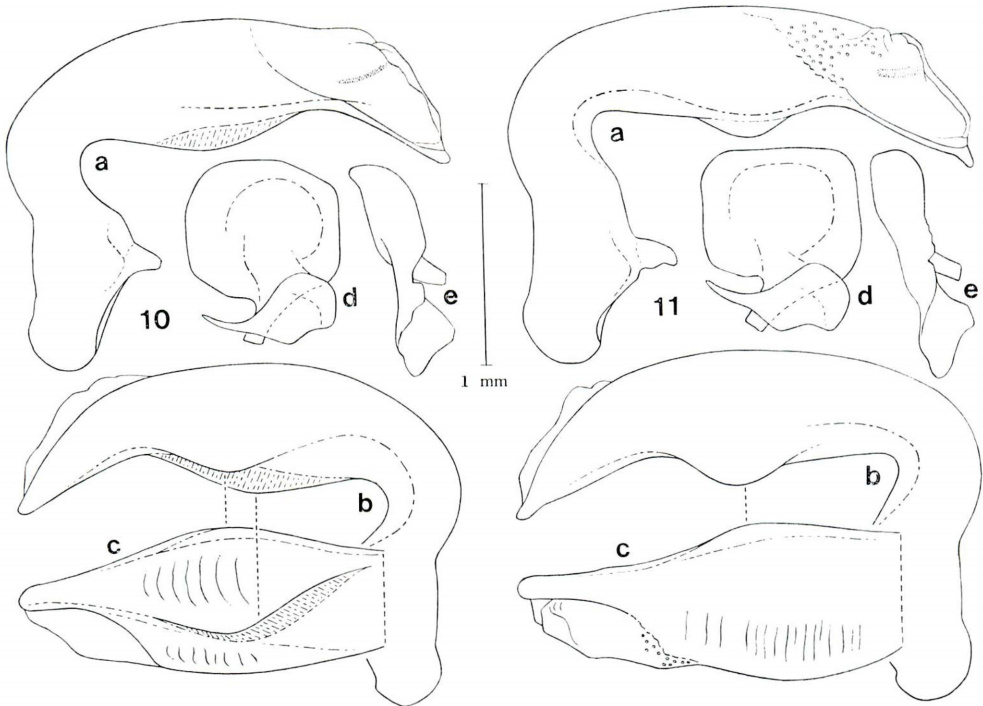
## 摘 要

四国と九州から、ナガゴミムシ属 *Pterostichus* の2新種を記載した。すなわち、四国の石鎚山系に産する、イトウナガゴミムシ *P. (Pterostichus) itoi* と、九州の九州山地に産する、ニセキュウシュウナガゴミムシ *P. (P.) arcuaticarinatus* である。両種とも、キュウシュウナガゴミムシ *P. (P.) kyushuensis*

Figs. 7-9. Terminal sternites in the males of *Pterostichus* (*Pterostichus*) spp. — 7, *P. (P.) arcuaticarinatus* KASAHARA, sp. nov., from Mt. Hakuchô-zan in Kumamoto Prefecture; 8, *P. (P.) kyushuensis* HABU from the Shiiya-tôge in Miyazaki Prefecture; 9, same from Mt. Hiko-san in Fukuoka Prefecture.



Figs. 10-11. Male genitalia of *Pterostichus* (*Pterostichus*) spp. — 10, *P. (P.) arcuaticarinatus* KASAHARA, sp. nov., from Mt. Hakuchô-zan in Kumamoto Prefecture; 11, *P. (P.) kyushuensis* HABU from the Shiiya-tôge in Miyazaki Prefecture. a-c, Aedeagus; a, left lateral view; b, right lateral view; c, apical half in ventral view; d, left paramere; e, right paramere.



*shuensis* HABU に近縁で、各産地では同時に見出される。また因みに、これまで知見のとぼしかったキュウシュウナガゴミムシの、四国と九州における地理的変異についても、補足的に触れておいた。

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## Notes on the Buprestid Genus *Neosambus* (Coleoptera, Buprestidae)

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**Abstract** *Neosambus cupricollis* FISHER, 1921, *N. ornatus* FISHER, 1921, *N. viridipennis* FISHER, 1921, *N. glabrus* FISHER, 1921, and *N. cyaneus* FISHER, 1922, are transferred to the genus *Nalanda* THÉRY, 1904. *Neosambus papuanus* OBENBERGER, 1924, is transferred to the genus *Sambus* DEYROLLE, 1864. A new name, *Nalanda kurosawai* nom. nov. is proposed for *Nalanda cupricollis* (FISHER, 1921).

The buprestid genus *Neosambus* FISHER, 1921, was established on the basis of four new species from the Philippines, and *N. cupricollis* FISHER, 1921, was originally designated as the type species. Another species, *N. cyaneus*, was described from the Philippines by FISHER in 1922. On the other hand, the genus *Brachycisseis* THÉRY, 1931, was established on the basis of two new species, *B. dohertyi* and *B. rhodei*, both from New Guinea, and the former was designated as the type species. The genus *Brachycisseis* was, however, regarded as a synonym of the genus *Cisseoides* KERREMANS, 1893, and *B. dohertyi* was transferred to that genus by OBENBERGER in 1931. On the other hand, *B. rhodei* was regarded as a synonym of *Neosambus papuanus* OBENBERGER, 1924, at the same time.

In 1970, *Neosambus* was regarded by Y. KUROSAWA as a synonym of the genus *Nalanda* THÉRY, 1904, though no further comment was given on the classification of the species placed by OBENBERGER, in the genus *Neosambus*. Through the courtesy of Dr. Svatopluk BÍLÝ of the National Museum, Prague, and Professor Masataka SATÔ of Nagoya Womens' University, I was able to examine the type specimen of *Neosambus papuanus* OBENBERGER, 1924, and photographs of FISHER's type specimens, respectively. After my study on these materials and descriptions, it became apparent that all the species described by FISHER should be classified into the genus *Nalanda* THÉRY, 1904, and that *Neosambus papuanus* OBENBERGER must be transferred to the genus *Sambus* H. DEYROLLE, 1864.

Before going further, I wish to express my sincere gratitude to Dr. Yoshihiko KUROSAWA of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance, and to Dr. Shun-Ichi UÉNO of the same museum for his critical reading of the original manuscript. I am also indebted to Dr. Svatopluk BÍLÝ of the National Museum of Natural History, Prague, and Professor Masataka SATÔ of Nagoya Womens' University for their kind help during the course of this study.

Genus *Nalanda* THÉRY, 1904

*Nalanda* THÉRY, 1904, Ann. Soc. ent. Belg., **48**: 160. Type species: *Nalanda horni* THÉRY, 1904 (monotypy).

*Neosambus* FISHER, 1921, Philip. J. Sci., **18**: 351. Type species: *Neosambus cupricollis* FISHER, 1921 (original designation).

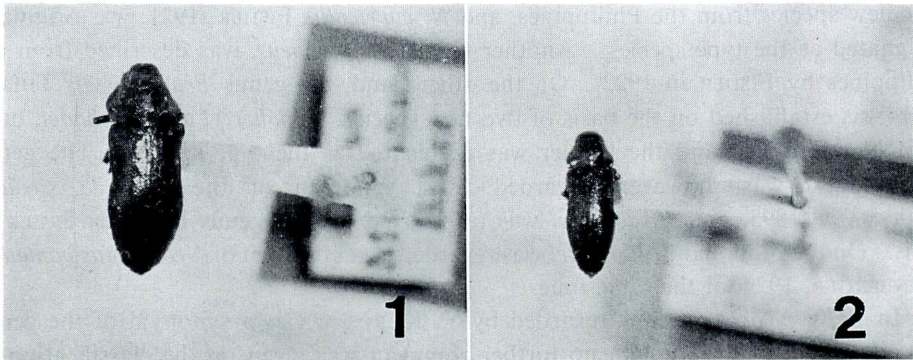
Five species belonging to the genus *Neosambus* were described by FISHER, from the Philippines. Judging from the original descriptions and photographs of the type specimens, however, they are apparently classified into the genus *Nalanda* THÉRY, 1904, as follows.

*Nalanda kurosawai* comb. et nom. nov. (Fig. 1)

*Neosambus cupricollis* FISHER, 1921, Philip. J. Sci., **18**: 352–353 (nec SAUNDERS, 1866, Trans. ent. Soc. Lond., (3), **5**: 314).

*Nalanda ornatus* (FISHER, 1921), comb. nov.

*Neosambus ornatus* FISHER, 1921, Philip. J. Sci., **18**: 353–354.



Figs. 1–2. *Nalanda* spp. — 1, *Nalanda kurosawai* comb. et nom. nov. (type); 2, *Nalanda viridipennis* (FISHER, 1921), comb. nov. (type).

*Nalanda viridipennis* (FISHER, 1921), comb. nov. (Fig. 2)

*Neosambus viridipennis* FISHER, 1921, Philip. J. Sci., **18**: 354–355.

*Nalanda glaber* (FISHER, 1921), comb. nov.

*Neosambus glabrus* FISHER, 1921, Philip. J. Sci., **18**: 355.

*Nalanda cyaneus* (FISHER, 1922), comb. nov.

*Neosambus cyaneus* FISHER, 1922, Proc. U. S. natn. Mus., **61** (7): 16–17.

Genus *Sambus* H. DEYROLLE, 1864

*Sambus* H. DEYROLLE, 1864. Ann. Soc. ent. Belg., **8**: 210–211. Type species: *Sambus lafertei* H. DEYROLLE, 1864 (present designation).

Many Oriental and African species are included in the present genus. They are very variable in the structure of prosternum; some of them bear distinct longitudinal

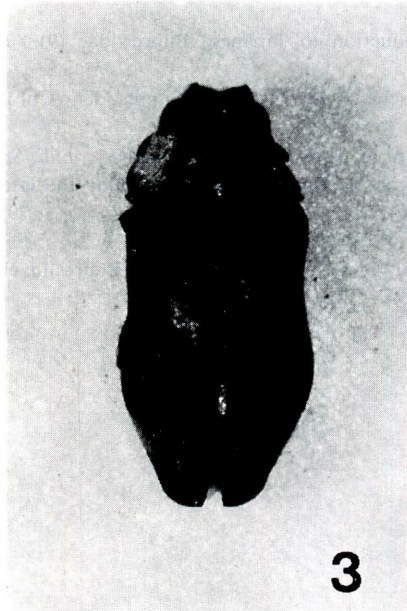


Fig. 3. *Sambus papuanus* (OBENBERGER, 1924), comb. nov. (type).

depressions along the sides of prosternum, while some are lacking in such depressions. *Neosambus papuanus* OBENBERGER, 1924, bears distinct depressions along the sides, but they do not form antennal grooves as seen in the genus *Nalanda*. Judging from this and other characteristics, the species must be classified into the genus *Sambus* DEYROLLE, 1864.

*Sambus papuanus* (OBENBERGER, 1924), comb. nov. (Fig. 3)

*Neosambus papuanus* OBENBERGER, 1924, Arch. Naturg., (A), **90** (3): 103.

*Brachycisseis rhodei* THÉRY, 1931, Bull. Soc. ent. Fr., **1931**: 28–29.

### 摘 要

タマムシ科に属する *Neosambus* 属は、黒沢 (1970) によって *Nalanda* 属のシノニムとされたが、本属に含まれていた 6 種の所属についてはいまだに決定がなされていなかった。本文ではこの 6 種のうち、フィリピン産の 5 種を *Nalanda* 属に、ニューギニア産の 1 種を *Sambus* 属に移し、この処置によって新たにホモニムとなった *Nalanda* 属の 1 種に対して代置名を与えた。

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## Tenebrionidae of East Asia

### (III) A New Genus and Three New Species from Taiwan

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**Abstract** A new genus allied to the genera *Menephilus* and *Cryphaeus* (Tenebrionini) is erected for a new Taiwanese species, and two new species of the tribe Cnodalonini from Taiwan are also described.

Through the courtesy of Professor Dr. CHU Y.-C., National Taiwan University, I had an opportunity of collecting tenebrionid beetles in the southern part of Taiwan.

I took many specimens in Liukuei Forest in Kaohsiung Hsien, and in Taimali Forest in Taitung Hsien, both being the experimental forest stations of the Taiwan Forestry Research Institute. As I found some very interesting species in this collection, I am going to describe three new species in the present report.

The first exciting new species belongs to a new genus, which is allied to the genus *Menephilus* in having general characteristics of the latter, though it is also related to the genus *Cryphaeus*, whose eyes are divided into the dorsal and ventral portions. The second new species belongs to the genus *Platycrepis* of the tribe Cnodalonini, and has been confused with *P. violaceus* KRAATZ, 1880, since GEBIEN (1913) recorded the latter from Taiwan. The third is a species allied to *Addia nakanei* MASUMOTO, 1982 (Cnodalonini). This occurs isolately in southeastern Taiwan, though the latter species is widely distributed in central Taiwan.

I wish to express my sincere gratitude to Professor Dr. CHU Y.-C., National Taiwan University, Dr. YANG C.-C., chief of the Liukuei Station, and Mr. TSAI T.-C., chief of the Taimali Station, Taiwan Forestry Research Institute, for their kind arrangement for my field survey. I am also indebted to Mr. T. INOMATA, Hachiôji City, who took photographs of the new species for this paper, and to Mr. T. SHIBATA and the members of the Osaka Coleopterological Society, who gave me valuable advice for this research.

The holotypes of the new species to be described are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Genus *Taiwanomenephilus* gen. nov.

Type species: *Taiwanomenephilus chui* sp. nov.

Body medium-sized (nearly 10 mm), elongate and subparallel-sided; gently convex longitudinally; winged.

Head moderately produced and nearly horizontal against pronotum in repose, gently depressed in middle; frons with a longitudinal ridge at the inner side of each eye; eyes medium-sized and divided into dorsal and ventral portions; ocular sulcus fairly clear. Antennae medium-sized, with 6 apical segments weakly flattened and somewhat club-like.

Pronotum trapezoidal with all margins bordered though the apical one is interrupted in medial 1/3; disc gently convex above, faintly depressed medially in apical portion in male. Scutellum triangular.

Elytra a little wider than pronotum; dorsum moderately, longitudinally convex, slightly flattened in baso-medial portion; disc noticeably punctate-striate; intervals gently convex; sides steeply declined to clearly bordered lateral margins, enveloping the under side; epipleura entire.

Prosternum trapezoidal, intercoxal space gently raised; mesosternum fairly short with a triangular excavation in middle, whose tip almost reaches the posterior margin, the posterior edge of the excavation being slightly ridged and pointed at each external end; metasternum medium-sized. Abdomen medium-sized, 3rd and 4th sternites each with a membranous posterior margin.

Legs rather robust; male protibia dilated in apical 2/5.

Male genitalia small, with lateral lobes prolonged in apical half.

*Notes.* This new genus is related to the genus *Menepphilus* MULSANT, 1854 (Tenebrionini), but can be distinguished from the latter by the following characteristics:

- 1) The head is neither convex nor longitudinally bisulcate but gently flattened and longitudinally ridged at the inner side of each eye.
- 2) The eyes are divided into the dorsal and ventral portions.
- 3) The pronotum is faintly depressed medially in the anterior portion in male.
- 4) The mesosternum is excavated in the posterior portion, and the posterior edge of the excavation is slightly ridged and pointed at each external end.
- 5) The male protibiae are neither prolonged nor curved but dilated in the apical portion.

*Taiwanomenepphilus chui* sp. nov.

(Figs. 1 & 4-7)

Reddish brown, with dorsal surface slightly darker, moderately shining. Elongate and subparallel-sided; gently convex longitudinally.

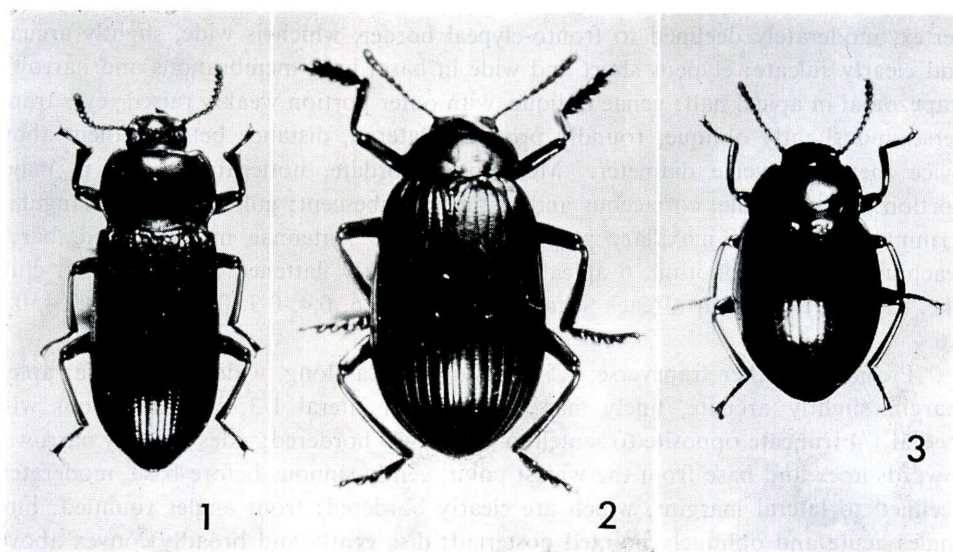
Head subhexagonal, rather closely punctate throughout; frons gently depressed, inner portion of each eye longitudinally ridged; clypeus rather broad, clearly separated by a sulcus from both frons and genae, feebly convex in middle, apical margin sub-linear with each end roundly curved and connecting with the outer margin of gena; genae somewhat auriform, weakly raised in outer portions, slightly depressed before eyes; eyes rather small and obliquely oval in dorsal portion, distance between them slightly more than 4 times their diameter, ventral portion of eye larger than the dorsal,

with ocular sulci rather deep; occiput gently raised. Mentum subcordate with basal portion briefly truncate, roughly sculptured, ridged medially; gula nearly parabolic; terminal segment of maxillary palpus gently dilated. Antennae reaching apical  $1/3$  of pronotum, 6 apical segments weakly flattened and somewhat club-like, ratio of the length of each segment from basal to apical: 0.4, 0.2, 0.4, 0.3, 0.3, 0.3, 0.3, 0.3, 0.3, 0.3, 0.5.

Pronotum trapezoidal, about 1.5 times as wide as long; apical margin feebly arcuate, finely bordered in each lateral  $1/3$ ; base gently bisinuous, bordered with punctate groove and rimmed; sides widest at basal  $2/5$ , gradually narrowed towards apex, rather strongly so towards base, and feebly sinuous slightly before base; moderately declined to lateral margins, which are noticeably bordered; front angles subrectangular with rounded corners; hind angles obtuse, with corners acutely pointed; disc gently convex above, faintly depressed medially in apical  $1/4$  in male, rather closely punctate, the punctures shallow, a little larger and sparser than cephalic ones. Scutellum triangular, with wide base and gently rounded sides, sparsely scattered with punctures, which are smaller than pronotal ones.

Elytra 1.8 times as long as wide, 2.8 times length and 1.1 times width of pronotum, widest at apical  $4/9$ , with apices slightly produced; dorsum moderately, longitudinally convex, slightly flattened in basal portion at middle; disc punctate-striate, the striae sometimes disappeared, the punctures in striae clearly notching intervals; intervals gently convex, scattered with fine punctures; sides gradually steeply declined to lateral margins, which are clearly bordered and hardly visible from above.

Prosternum rather trapezoidal, feebly coriaceous, apical margin arcuate and



Figs. 1-3. — 1. *Taiwanomenephilus chui* gen. et sp. nov. (holotype). — 2. *Platycrepis yangi* sp. nov. (holotype). — 3. *Addia tsaii* sp. nov. (holotype).

bordered, intercoxal space gently raised, prosternal process moderately depressed and obtusely pointed; mesosternum fairly short, triangularly in posterior portion; metasternum medium-sized, moderately closely punctate, shallowly wrinkled in antero-lateral portions, with a median groove in posterior 3/5. Abdomen medium-sized, moderately closely punctate, 3 basal sternites shallowly wrinkled anteriorly, 3rd and 4th sternites each with a membranous posterior margin; anal sternite rimmed along outer margin.

Legs rather robust; male protibia dilated in apical 2/5; ratio of the length of each tarsal segment from basal to apical: 0.4, 0.2, 0.2, 0.2, 1.2; 0.4, 0.2, 0.2, 0.2, 1.2; 0.4, 0.3, 0.2, 1.2, respectively.

Male genitalia very small, lateral lobes prolonged in apical half.

Body length: 9.5–11.5 mm.

Holotype: ♂, Malibulu, Kuinashan, Taitung Hsien, Taiwan, 28. IV. 1986, K. MASUMOTO leg. Paratypes: 10 exs., same data as the holotype; 6 exs., same locality, 29. IV. 1986, 5 exs., same locality, 26. VI. 1986, K. MASUMOTO leg.

*Platycrepis yangi* sp. nov.

(Figs. 2 & 8–9)

Blackish brown, with antennae, mouth-parts, outer margins of pronotum and elytra, and legs lighter in colour, dorsal surface bearing feeble coppery tinge; pronotum and elytra sericeously shining, ventral surface gently so. Oblong-oval, constricted between bases of pronotum and elytra; moderately convex above.

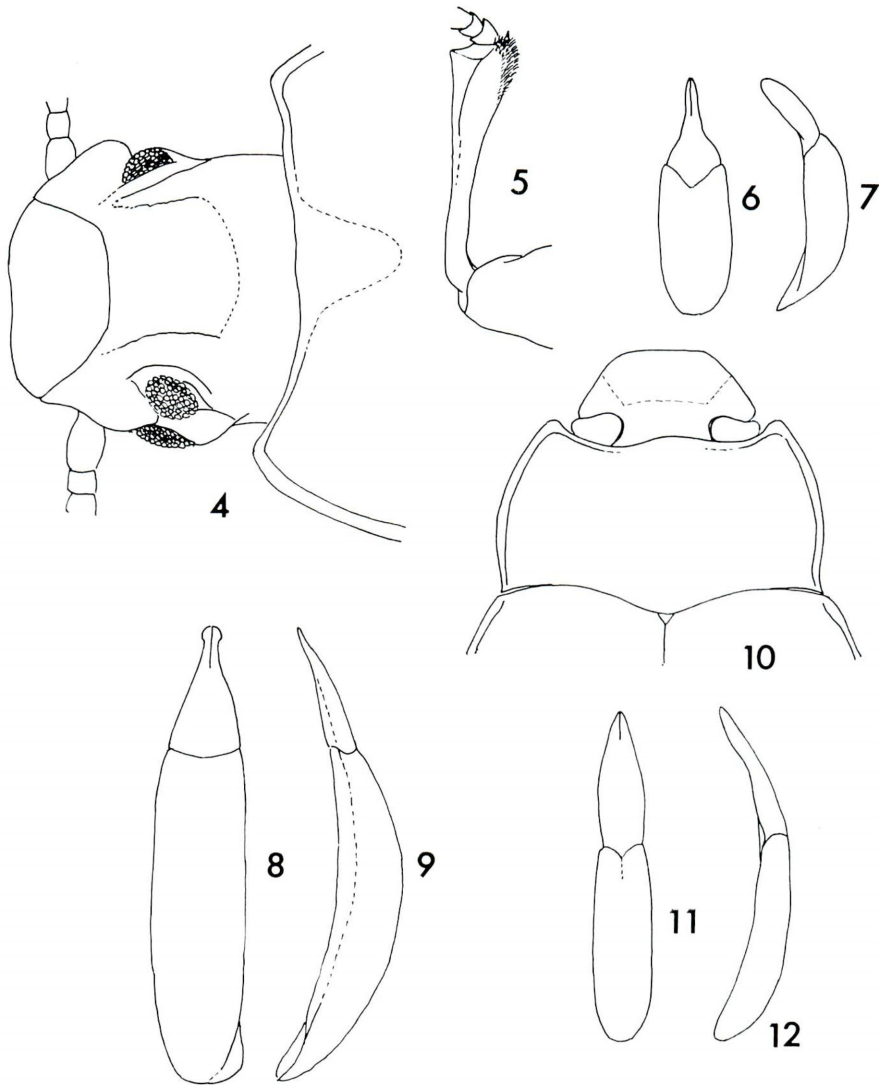
Head fairly transverse, irregularly and finely punctate, faintly impressed on vertex, moderately declined to fronto-clypeal border, which is wide, slightly arcuate and clearly sulcate; clypeus short and wide in basal half, membranous and narrowly trapezoidal in apical half; genae oblique, with outer portion weakly raised; eyes transverse and slightly oblique, roundly produced laterad, distance between them about twice their transverse diameter. Mentum subcordate, noticeably raised in major portion of the middle, coriaceous and distinctly pubescent; gula long and triangular; terminal segment of maxillary palpus securiform. Antennae medium-sized, barely reaching base of pronotum, 6 apical segments weakly flattened and somewhat club-like, ratio of the length of each segment: 0.6, 0.2, 0.6, 0.4, 0.3, 0.5, 0.4, 0.4, 0.4, 0.4, 0.6.

Pronotum rather transverse, 1.5 times as wide as long, widest at middle; apical margin slightly arcuate, finely margined in each lateral 1/3; base bisinuous with medial 1/4 truncate opposite to scutellum, shallowly bordered; sides roundly narrowed towards apex and base from the widest point, gently sinuous before base, moderately declined to lateral margins, which are clearly bordered; front angles rounded; hind angles acute and obliquely pointed posteriad; disc gently and broadly convex above, moderately closely and finely punctate, with a pair of oblique impressions in posterior 1/3. Scutellum subcordate, glabrous, scattered with punctures, which are a little



smaller than pronotal ones.

Elytra 1.6 times as long as wide, 3.6 times length and 1.5 times width of pronotum, widest at apical  $4/9$ ; dorsum rather strongly convex, thickest at basal  $1/3$ ; disc punctate-striate, the striae fine though clear, the punctures in the striae weakly



Figs. 4–12. — 4–7. *Taiwanomenephilus chui* gen. et sp. nov.; 4, fore body in obliquely lateral view; 5, protibia; 6, male genitalia, dorsal view; 7, same, lateral view. — 8–9. *Platycrepis yangi* sp. nov.; 8, male genitalia, dorsal view; 9, same, lateral view. — 10–12. *Addia tsaii* sp. nov.; 10, fore body in dorsal view; 11, male genitalia, dorsal view; 12, same, lateral view.

notching intervals; intervals rather wide and slightly convex, scattered with fairly shallow punctures, which are clearly smaller than pronotal ones; sides gently narrowed towards base and roundly so towards apices, steeply declined to lateral margins, which are noticeably bordered and narrowly explanate obliquely, thus barely visible from above.

Prosternum fairly short, moderately raised between coxae and bi-ridged longitudinally, apical margin finely edged, prosternal process triangular and rimmed, weakly depressed and pointed posteriad; mesosternum noticeably short, deeply excavated in dilated U-shape in posterior portion, posterior edge of the excavation slightly ridged and bluntly pointed at each external end, with surface rugose and pubescent; metasternum fairly broad, microshagreened and feebly wrinkled, scattered with shallow punctures, with a median groove in posterior 4/5. Abdomen medium-sized, 2 basal sternites and basal portion of 3rd microshagreened and shallowly wrinkled, remaining portion of abdomen finely punctate.

Legs finely punctate. Tibiae in male: protibia gently thickened to apex, densely haired on inner margin of apical half, meso- and metatibiae slightly incurved, thickened towards each apex, haired also in apical half. Tibiae in female: all a little shorter and slenderer than those in male, and indistinctly haired; tarsi except for terminal segments noticeably dilated and densely haired beneath, penultimate segments cordate, ratio of the length of each tarsal segment from basal to apical: 0.8, 0.8, 0.8, 0.8, 1.2; 0.9, 0.8, 0.8, 0.8, 1.3; 1.2, 0.8, 0.8, 1.3, respectively.

Male genitalia elongated fusiform with apex somewhat spatulate.

Body length: ca. 17 mm.

Holotype: ♂, Shanping, Liukuei, Kaohsiung Hsien, Taiwan, 1–2. V. 1986, K. MASUMOTO leg. Paratype: 1 ex., same data as the holotype.

*Notes.* GEBIEN (1913) recorded *Platycrepis violaceus* KRAATZ, 1880, from Taiwan, but I have been unable to examine any Taiwanese specimen of the species. The present new species is smaller than the southern one and the dorsal surface is less metallicly shining. It can be distinguished from *P. violaceus* also by having longer pronotum, shallower elytral striae, and the prosternal process not horizontal but depressed. GEBIEN's record may have been based on this new species.

### *Addia tsaii* sp. nov.

(Figs. 3 & 10–12)

This new species closely resembles *Addia nakanei* MASUMOTO, 1982, widely distributed in central Taiwan, but can be distinguished from the latter by the following characteristics:

Body more ovate, gently constricted between bases of pronotum and elytra, more strongly convex above; dorsal surface bearing purplish lustre.

Head slightly narrower, more convex above; genae less strongly produced laterad; eyes less transverse, distance between them about 2.5 times their diameter (about

twice in *A. nakanei*). Mentum wider and clearly subcordate; gula not parabolic but triangular; terminal segment of maxillary palpus with apical side less oblique against outer and inner sides. Antennae slightly shorter, reaching base of pronotum, 5 apical segments weakly flattened and somewhat club-like, ratio of the length of each segment from basal to apical: 0.9, 0.5, 0.8, 0.7, 0.6, 0.6, 0.7, 0.7, 0.7, 0.7, 1.2.

Pronotum wider and a little shorter, 1.7 times as wide as long, widest at basal 2/5; front margin widely, more deeply emarginate, slightly arcuate forwards in middle; base more clearly bisinuous; sides more strongly arcuate laterad, more steeply declined to lateral margins, which are more thickly rimmed; front angles subrectangular with rounded corners, rather noticeably produced forwards; hind angles acute and slightly pointed obliquely posteriad; disc more convex. Scutellum small and triangular, nearly the same as that of *A. nakanei*.

Elytra rather ovate, 1.3 times as long as wide, 3 times length and 1.3 times width of pronotum, widest at basal 2/5; dorsum more strongly convex, thickest at basal 1/3, with apices roundly produced; disc punctate-striate, the striae fine and often disappeared, the punctures in striae not foveolate but pitted, though clearly notching intervals, about 1.5–2.5 times their diameter apart; intervals rather wide and nearly flat, fairly sparsely scattered with microscopic punctures, feebly and transversely microreticulate; sides more steeply declined to lateral margins, which are more clearly bordered and explanate, visible from above.

Prosternum more strongly raised medially, more apparently depressed before coxae, prosternal process clearly produced with basal portion wider; mesosternum shorter, excavated not triangularly but semicircularly, posterior edge of the excavation less pointed at each external end; metasternum shorter, obliquely wrinkled, with median groove more clearly impressed. Abdomen narrower, more convex anteromedially, with basal portion more roughly wrinkled.

Legs a little more slender; tarsi with ratio of the length of each segment from basal to apical: 0.5, 0.3, 0.3, 0.2, 1.2; 0.5, 0.3, 0.3, 0.2, 1.3; 1.0, 0.3, 0.2, 1.3, respectively.

Male genitalia smaller and slightly more slender, more noticeably curved in lateral view.

Body length: 7.2–9.5 mm.

Holotype: ♂, Malibulu, Kuinashan, Taitung, 28. IV. 1986. K. MASUMOTO leg. Paratypes: 23 exs., same data as the holotype; 5 exs., same locality, 29. IV. 1986, 5 exs., same locality, 26. VI. 1986, K. MASUMOTO leg.

## 摘 要

台湾南部で実施した採集調査で得られたゴミムシダマシ科のうち、ゴミムシダマシ族 Tenebrionini に属する新属 *Taiwanomenephilus* とそれに含まれる新種 *T. chui*, およびニジゴミムシダマシ族 Cnodalonini に属する *Platycrepis* 属の新種 *P. yangi*, ならびに *Addia* 属の新種 *A. tsaii* を記載した。

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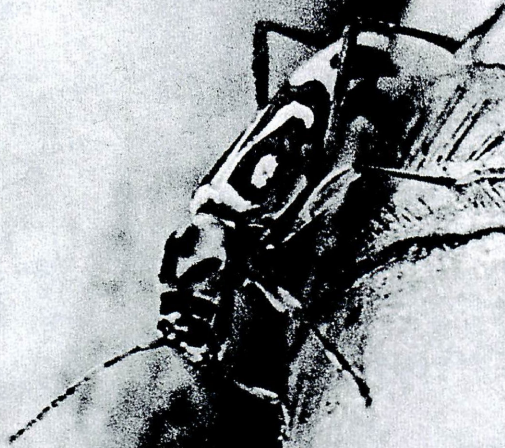
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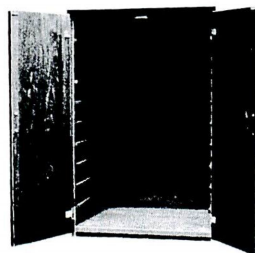
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あくまで虫屋さんの立場に立って製作した、使いやすく丈夫な昆虫用品を比較的安価で販売しております。

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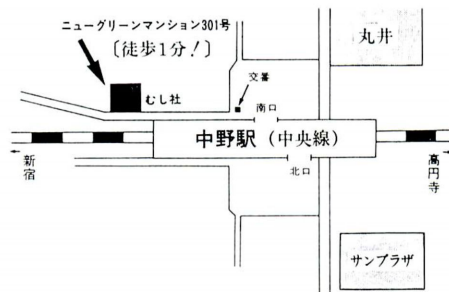
## ○むし社標本部

むし社の標本部では、日本産の昆虫はもとより、世界各地の昆虫標本を、愛好者の皆さんに比較的廉価で販売しております。ぜひ一度、当社の標本部より標本をお買い求め下さい。詳しくは当社標本部発行の「標本ニュース」(年6回発行、年間予約1500円)をご購読下さい。



▲標本箱ダンス(10箱用)

※) 詳しくは60円切手を添えて、当社パンフレットをご請求下さい。

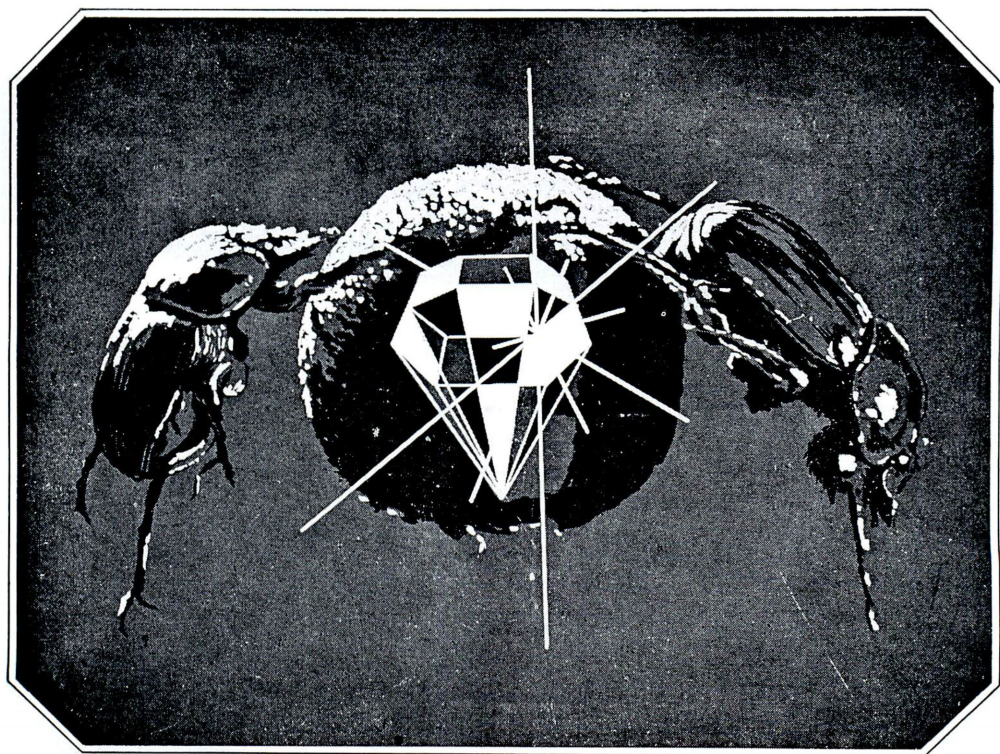


## お申し込み先

- 本社連絡先：〒164 東京都中野区中野郵便局 私書箱10番、(有)むし社
- 振替口座：東京6-159262番、(有)むし社

## 営業時間

- 編集部：9:00~17:00 Tel.03(383)1462
  - 昆虫用品部：14:00~19:00 Tel.03(383)1462
  - 標本部：12:00~19:00 Tel.03(383)1461
- 休日——日曜・祭日はお休みです。



# 真珠より美しく ダイヤより価値がある 大切な標本を永久に守る 《ドイツ型標本箱》

自然はますます大切なものとなってきました。この不思議な世界を解明する貴重な手掛りとなる昆虫標本は、価値あるものとして永久に保存したいものです。

そんな願いをこめて、タツミ製作所では、昆虫標本の保存に最適なドイツ型標本箱をお届けします。

## \*すばらしい特長

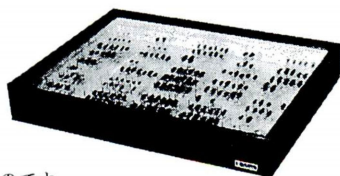
- くるいのこない良質な木材を使用
- 湿気や乾燥にも強い独特の構造
- パラゾールにも変化せず、標本がより美しく見える白色プラスチック底

- 高級ニス塗装の丈夫で美しい仕上げ

※標本箱のほか、展翅板など昆虫標本作成に必要な器材もあります。昆虫器材カタログ、昆虫関係輸入図書・委託図書リストもあり。

〒113 東京都文京区湯島二丁目二五番三(ハ)一(四五四七) ヨイシナ  
郵便振替 東京一三三七九

(有)タツミ製作所



大型  
5,000円 (送料別)

中型  
4,500円 (送料別)

この価格は昭和59年9月現在のものです