

## A New *Kurasawatrechus* (Coleoptera, Trechinae) from Northeastern Kwantô, Central Japan<sup>1)</sup>

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**Abstract** A new anophthalmic trechine beetle belonging to the genus *Kurasawatrechus* is described from the northeastern part of the Kwantô District, Central Japan, under the name of *K. ohkawai*. It is the second species of the group of *K. quadraticollis*, and is the first endogean trechine known from the Yamizo Range.

Near the end of 1974, an anophthalmic trechine beetle was collected by Mr. Masahide KUBOTA in an artificial cavity lying in Mito City at the northeastern part of the Kwantô District, Central Japan, and was submitted to me for taxonomic study. It looked like *Kurasawatrechus quadraticollis* S. UENO (1974, p. 112, figs. 7-9; 1985, p. 87, pl. 16, fig. 18), an isolated species characterized by the peculiarly shaped prothorax and elytra, the degenerated pubescence on pronotum, the presence of pronotal discal setae, and the presence of two copulatory pieces in the aedeagal inner sac, but differed from it in the configuration of male genitalia. Its discovery was important from the biospeological viewpoint, as the terrace in which lies the artificial cavity is very recent, having emerged after the Last Interglacial, or being less than 60,000 years old. Since no additional specimens are available, however, it has long been set aside, and the problem remains unsolved as to whether it is a close relative of *K. quadraticollis* or a geographical race of the latter.

In the autumn of 1987, Mr. Hideo OHKAWA collected a pair of the specimens of an endogean *Kurasawatrechus* on Amemaki-yama of the Keisoku Hills about 28 km west by north of the Mito locality, and submitted them to me for taxonomic examination. It belonged to the same species-group as *K. quadraticollis* beyond doubt, but differed from it in both external and genitalic features. A closer study proved that its male genitalia are identical with those of the Mito specimen, so that the two populations seemed to belong to the same species. At my request, Mr. OHKAWA and his friend searched for additional specimens on Amemaki-yama and finally obtained two more males, a careful examination of which verified the stability of genitalic peculiarities.

In the present paper, I am going to name the new trechine after its discoverer, Mr. OHKAWA. Though differing to some extent in external morphology, the Mito

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specimen is regarded herewith as a local variant of the same new species. This conclusion is of considerable interest, since the new trechine occurs at the same time on an old inland mountain and a young coastal terrace, and since it extends its distribution into an area from which no terrestrial troglobionts have hitherto been recorded (cf. UÉNO, 1987, p. 604, fig. 11B). Though not comparable with *Trechima terraenovae* S. UÉNO (1988, p. 46, figs. 1–5), a long-legged troglobiont differentiated in a young land, the present species can also be regarded as a proof of the recency of terrestrial cave animals.

The abbreviations used in this paper are the same as those explained in other papers of mine.

I wish to express my hearty thanks to Messrs. Hideo OHKAWA, Kazushige KUSANO and Masahide KUBOTA, who kindly submitted their findings to my study. Deep appreciation is also expressed to Professors Hiroshi MORINO and Yoshiaki KIKUCHI for providing information about the geological history of the Mito area.

***Kurasawatrechus ohkawai* S. UÉNO, sp. nov.**

[Japanese name: Ohkawa-mekura-chibigomimushi]

(Figs. 1–3)

Length: 3.05–3.35 mm (from apical margin of clypeus to apices of elytra).

Belonging to the group of *K. quadraticollis* and closely allied to its type species. Externally distinguished from the latter by smaller head, contracted apex of prothorax and broader elytra. Decisively different from *K. quadraticollis* in the configuration of aedeagus, which is smaller and regularly arcuate from base to apex, with broader and ventrally curved apical lobe and more elongate copulatory pieces.

Colour as in *K. quadraticollis*. Head similar to, though smaller than, that in *K. quadraticollis*, with frontal furrows a little less widely divergent in front; antennae reaching basal three-tenths of elytra. Pronotum obviously wider than head, wider than long, widest at about five-sevenths from base, and more strongly contracted towards apex than towards base; PW/HW 1.39–1.43 (M 1.42), PW/PL 1.15–1.21 (M 1.19), PW/PA 1.33–1.39 (M 1.36), PW/PB 1.07–1.13 (M 1.09); sides more strongly arcuate in front than in *K. quadraticollis*, a little more shallowly and widely sinuate at about basal third, with front angles a little more obtuse and hind angles somewhat sharper; apex always distinctly narrower than base, PB/PA 1.23–1.26 (M 1.24). Elytra ovate, broader and shorter than in *K. quadraticollis*, widest at about two-fifths from bases, with the sides less arcuate at prehumeral portions, more regularly so in basal three-fifths, and more evenly so in apical parts, with apices usually less pointed; EW/PW 1.49–1.59 (M 1.53) [1.49–1.53, M 1.51, in ♂♂, 1.59 in ♀], EL/EW 1.40–1.45 (M 1.42). Other external features as in *K. quadraticollis*.

Male genital organ very small and poorly sclerotized, basically similar in conformation to that of *K. quadraticollis* but different from the latter in many details.



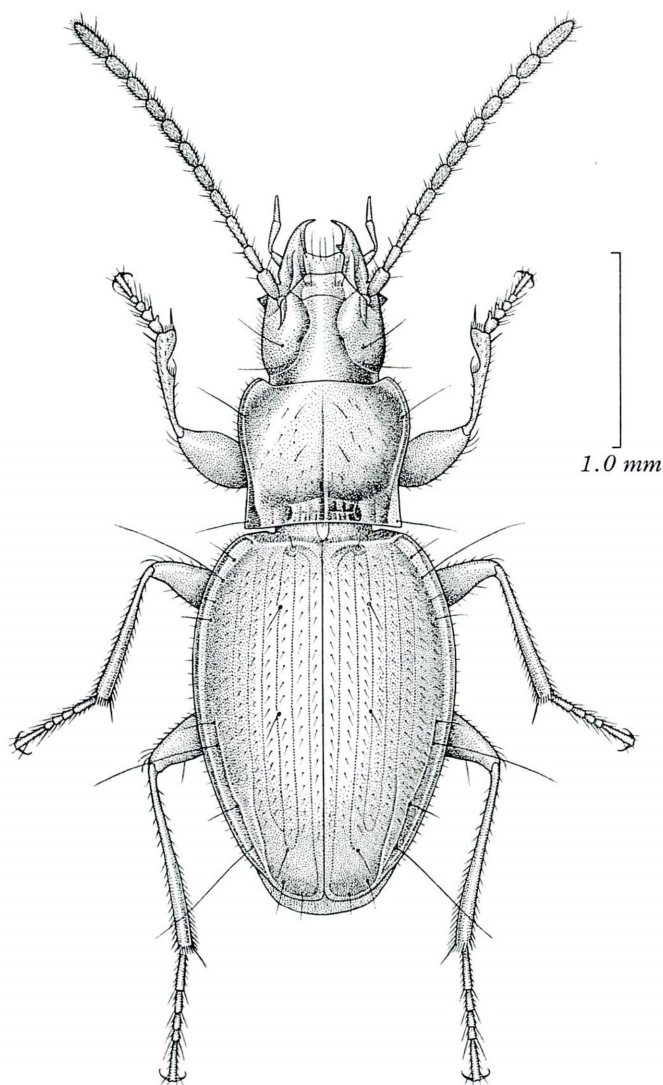
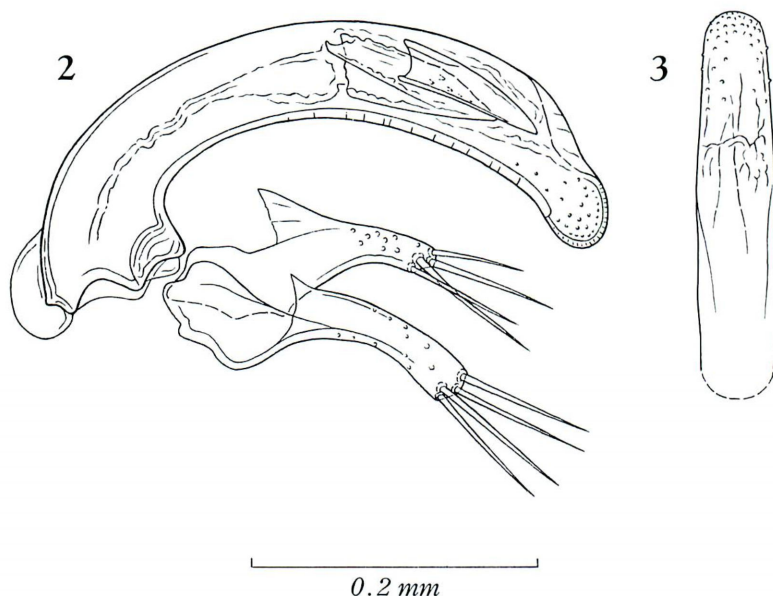


Fig. 1. *Kurasawatrechus ohkawai* S. UÉNO, sp. nov., ♂, from Amemaki-yama of the Keisoku Hills.

Aedeagus only one-fifth as long as elytra, tubular though compressed, regularly arcuate from base to apex, with the dorsal margin semicircularly rounded in profile; basal part small, rather strongly bent, and moderately emarginate at the sides of basal orifice; sagittal aileron fairly large though hyaline; viewed dorsally, apical lobe fairly broad and almost parallel-sided to near apex, which is widely rounded; viewed laterally, apical lobe large, broad, ovate and gently curved ventrad; ventral margin widely arcuate in profile. Copulatory pieces large and elongate, obviously more



Figs. 2–3. Male genitalia of *Kurasawatrechus ohkawai* S. UÉNO, sp. nov., from Amemaki-yama of the Keisoku Hills; left lateral view (2), and apical part of aedeagus, dorso-apical view (3).

elongate than in *K. quadraticollis* though structurally similar to those of the latter. Styles stout and more or less arcuate, left style larger than the right and devoid of ventral projection, each bearing four stout setae at the apex.

*Type series.* Holotype: ♂, allotype: ♀, 30-X-1987, H. OHKAWA leg. Paratypes: 2 ♂♂, 31-XII-1987, K. KUSANO leg. All preserved in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo.

*Type locality.* Amemaki-yama, 290 m alt. on the northern slope, at Ohkawado of Mashiko-machi in Tochigi Prefecture, Central Japan.

*Further specimen examined.* 1 ♂, Kairakuén-nangai-no-ana Mine, Tokiwa, Mito-shi, Ibaraki Pref., 22-XII-1974, M. KUBOTA leg. (NSMT).

*Notes.* The single specimen known from Kairakuén-nangai-no-ana (3.10 mm in the length of body) varies towards *K. quadraticollis* in all the diagnostic characters of external morphology, that is, it is intermediate between the type specimens of *K. ohkawai* and those of *K. quadraticollis* in the size of head and the configuration of prothorax and elytra. However, its male genitalia are identical with those of the former, showing that it is a geographical variant of *K. ohkawai*. The standard ratios of its body parts are as follows: PW/HW 1.31, PW/PL 1.17, PW/PA 1.30, PW/PB 1.13, PB/PA 1.15, EW/PW 1.48, EL/EW 1.48.

Amemaki-yama (533 m in height) is a southwestern head of the Keisoku Hills belonging to the Yamizo Range, which stretches from north to south along the



northeastern edge of the Kwantô Plain. At its northern foot, there is a hot spring called Ohkawado-kôsen. According to the collectors, the type specimens of *K. ohkawai* were taken in the gently sloping valley above the hot spring, at an altitude of 290 m. They were dug out from the sides of a gully on the right side of the main valley. The locality is about 43.5 km distant to the west-southwest from Ohkubo-no-kaza-ana Cave, the type locality of *K. quadraticollis*.

Kairakuén-nangai-no-ana is an artificial cavity, which was dug about 300 years ago into tuffaceous mudstone of the Late Miocene origin thickly covered with layers of the Kwantô tephra. Its location is about 28 km east by south of Amemaki-yama and about 23.5 km southwest of Ohkubo-no-kaza-ana. It is, therefore, nearer to the type locality of *K. quadraticollis* than to that of *K. ohkawai*. Topographically, however, Kairakuén-nangai-no-ana and Amemaki-yama lie on the same (right) side of the Naka-gawa River, and are separated from Ohkubo-no-kaza-ana at least by two rivers of moderate size and their alluvia. It is probable that reproductive isolation between two populations of their common ancestor was effected by the existence of ancient valleys of these rivers, and that the southwestern population has become differentiated into *K. ohkawai*, which is genitally stable but is variable to some extent in its external morphology.

## 摘 要

上野俊一：関東地方北東部で見つかったクラサワメクラチビゴミムシ属の1新種。—— 栃木，茨城両県の県境上に位置し，鶏足山地の最高点になる雨巻山から，クラサワメクラチビゴミムシ属アブクマメクラチビゴミムシ群の1新種を記載し，オオカワメクラチビゴミムシと命名した。また，水戸市内の人工洞，偕楽園南崖の穴で得られたメクラチビゴミムシの一種を，この新種の地方型として記録した。オオカワメクラチビゴミムシは，古い山地からきわめて新しい洪積台地までひろがっている点で注目に値し，陸生洞窟動物の起源がごく新しいことを示すひとつの証拠になる。

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## 千葉県におけるカワイヒラアシコメツキの記録

鈴木 互

Wataru SUZUKI: Record of *Ischiodontus kawaii* in  
Chiba Prefecture, Central Japan

カワイヒラアシコメツキ *Ischiodontus kawaii* ÔHIRA は、奄美大島を基準産地として、1967 年に命名記載された珍しいコメツキムシである。その後、九州（熊本県）、中甌島、屋久島、種子島などの各地から記録されたが、分布は西日本地域に限られていた。筆者は、松本俊信氏を通じて入手した千葉県産のコメツキムシのなかに本種の雄を見いだしたので、ここに記録しておきたい。

1♂, 千葉県木更津市小櫃川河口, 13.VIII.1986, 泉山茂之採集。

この記録によって、本種は奄美大島、屋久島、種子島から中甌島、熊本県をへて房総半島まで分布することが明らかになった。これまでのところ、九州南東部、四国、本州西部地域からは採集されていないが、その分布模様は、黒潮によって分布を拡げた動植物のものに似ている。本種の幼虫が朽ち木中で成育することを考えると、その可能性が高いのではないと思われる。

今後、調査がなされれば、四国、紀伊半島、伊豆半島、伊豆諸島などの太平洋沿岸地域や、九州の日本海側地域からも、本種が発見されるかもしれない。

末筆ながら、いつも標本の協力をいただいている松本俊信氏に厚くお礼を申し上げる。

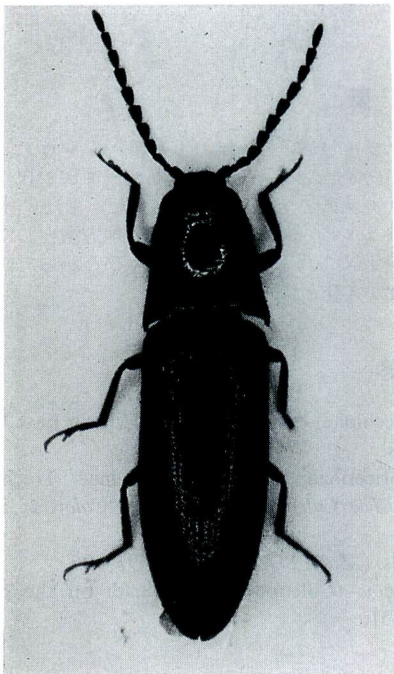


図 1. 千葉県小櫃川河口産カワイヒラアシコメツキ。

Fig. 1. *Ischiodontus kawaii* ÔHIRA, from the estuary of the Obitsu-gawa in Chiba Prefecture.

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## Three New Lepturine Beetles of the Genus *Ephies* (Coleoptera, Cerambycidae) from Celebes and the Malay Peninsula

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**Abstract** *Ephies taoi* and *E. notabilis* from Celebes and *E. alius* from the Malay Peninsula are described as new species. A key is given for the species of *Ephies* from Malaysia, Indonesia and the Philippines.

The genus *Ephies* PASCOE comprises about fifteen species which are mainly distributed in the Oriental Region, but some of them should be transferred to the genus *Pseudoparanaspia* HAYASHI, 1977. Almost all the species of these two genera are similar in coloration to lycid beetles which occur in the same habitat. I have had opportunities to examine specimens of two species belonging to the genus *Ephies* from Celebes. This is the first record of the genus from Celebes, though an undescribed species is known from Macassar (PASCOE, 1866, p. 506). I have another related species which resembles *E. dilaticornis* PASCOE in the collections from the Malay Peninsula collected by myself and Mr. K. SAKAI in 1976. These three species are described in this paper.

I wish to express my sincere thanks to Professor R. ISHIKAWA of Tokyo Metropolitan University for his critical reading of the manuscript of this paper and his advice. Many thanks are also due to Messrs. M. TAO (Yokohama), K. SAKAI (Tokyo) and K. SOHMA (Tokyo) for their kindness in giving me opportunities to examine valuable specimens for the present study, to Mr. M. ITÔ (Yokohama) for his offer of specimens from Borneo for comparison with the described species. Further, I am deeply indebted to Dr. S.-I. UENO of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo, for the loan of the type specimen of *E. apicalis* KANO under his care, to Mr. N. OHBAYASHI of Miura, Kanagawa, and Professor M. SATÔ of Nagoya Women's University for their kindness in giving me some negative films of the type specimens of the Lepturinae deposited in the British Museum (Nat. Hist.), London.

### *Ephies taoi* sp. nov.

(Figs. 1, 2, 5, 6, 9, 12, 17, 22 & 27)

This species is comparable with *E. philippensis* SCHWARZER in having longer elytra, according to the original description and figure, but it is distinguished from the other species of the genus by the presence of metallic blue tinge on the elytra with

only inconspicuous pubescence.

*Male.* Head black with median portion of mandibles and labium brown to dark brown; eyes light brown; prothorax dark red with black prosternum; scutellum black; elytra lustrous metallic blue, rarely with greenish or purplish tinge except for black sutural margin; legs black with femora dark blue; underside of mesothorax black; undersides of metathorax and abdomen dark metallic blue and much less shiny than elytra.

Head distinctly narrower than posterior width of prothorax (width across eyes: width of prothorax=1.0:1.3); in dorsal view, distance between tips of stretched mandibles and anterior margin of eye slightly longer than the distance between anterior margin of eye and angular temple (1.13–1.16: 1.0); frons with median sulcus reaching occiput but faded between anterior margin of antennal cavities, space between apical median sulcus and clypeofrontal suture feebly convex above; surface minutely and densely punctured from frons to occiput, the punctures on basal half of clypeus distinctly coarser than those of frons to occiput but apical half of clypeus glabrous; antennal tubercles distinctly raised at inner ridges; antennal apices surpassing apical third of elytra, each outer margin of 3rd to 10th segments strongly dilated apically and outer corner pointed (Fig. 5).

Prothorax strongly declivous anteriorly in lateral view (Fig. 9); relative length of anterior and posterior margins and of apex to base=3.5: 7.1: 5.9; surface minutely and densely punctured and densely covered with recumbent silky brownish-red pubescence. Scutellum narrow-triangular with black pubescence.

Elytra very elongate, about 2.6–2.8 times as long as the length from tips of mandibles to basal margin of prothorax and about 3.8–4.0 times as long as humeral width; each apex broadly truncate though slightly sinuate on apical margin, with an obtuse tooth at outer angle and a small tooth at sutural angle (Fig. 12); surface finely and sparsely punctured with short blackish pubescence.

Legs with hind femora distinctly thicker than fore and mid femora; basal three segments of hind tarsus in a ratio of 5.2: 2.1: 1.2 (Fig. 17).

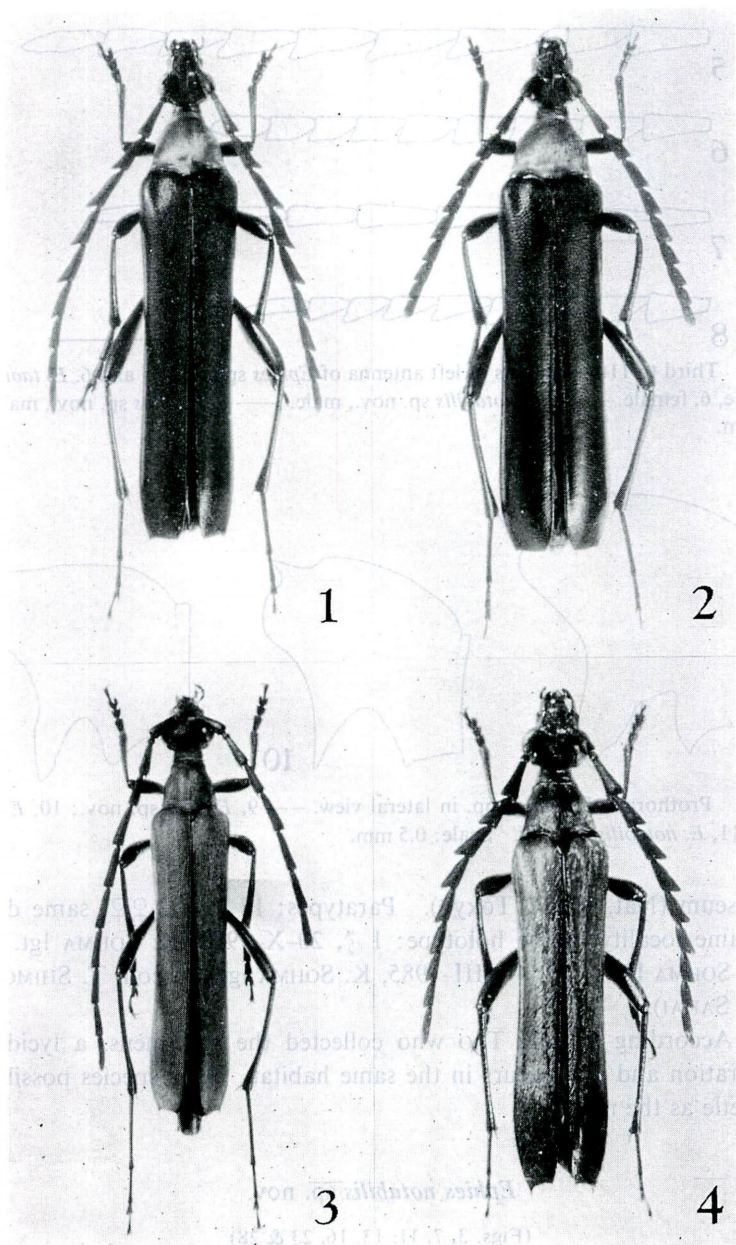
Abdominal sternites minutely punctured with short blackish pubescence, the punctures sparser towards apical segment from basal segment; 5th sternite barely emarginate on apical margin and slightly depressed at apicomedian portion.

Genitalia: lateral lobes comparatively long and slender in the genus (Fig. 22); median lobe strongly curved at middle in lateral view (Fig. 27 a), its apex bluntly pointed in dorsal view (Fig. 27 c) and narrowly truncate on apical margin in lateral view (Fig. 27 b).

*Female.* Similar to the male in general appearance, but differs from it in the following respects: body more robust; lateral sides of gena somewhat dark red and underside of gena and prosternum brighter red; antennae short, reaching basal half of elytra, 3rd to 10th segments less serrate (Fig. 6).

Length: ♂, 15.0–22.0 mm; ♀, 18.0–22.5 mm (measured from tips of mandibles to elytral apices); width: ♂, 2.6–3.5 mm; ♀, 3.5–4.4 mm (measured between humeral angles

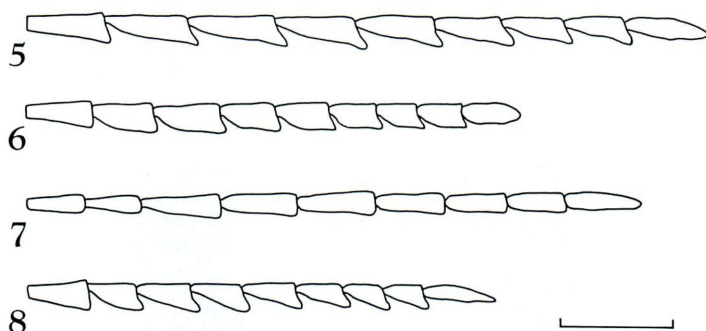




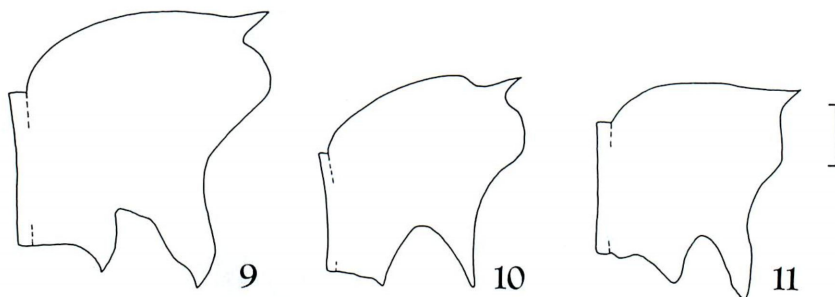
Figs. 1-4. — 1-2. *Ephies taoi* sp. nov.; 1, male, 2, female. — 3. *Ephies notabilis* sp. nov., male. — 4. *Ephies alius* sp. nov., male.

of elytra).

*Type series.* Holotype: ♂, Pedamaran, ca. 1,000 m alt., Rantepao, Tana Toraja, Celebes I., Indonesia, 10-14. II. 1985, M. TAO lgt. (deposited in the National



Figs. 5–8. Third to 11th segments of left antenna of *Ephies* spp. — 5 and 6. *E. taoi* sp. nov.; 5, male, 6, female. — 7. *E. notabilis* sp. nov., male. — 8. *E. alius* sp. nov., male. Scale: 2.0 mm.



Figs. 9–11. Prothorax of *Ephies* spp. in lateral view. — 9, *E. taoi* sp. nov.; 10, *E. alius* sp. nov.; 11, *E. notabilis* sp. nov. Scale: 0.5 mm.

Science Museum (Nat. Hist.), Tokyo). Paratypes: 17 ♂♂, 2 ♀♀, same data as the holotype; same locality as the holotype: 1 ♂, 20–X–1983, K. SOHMA lgt.; 1 ♂, 10–II–1985, K. SOHMA lgt.; 1 ♂, 4–VIII–1985, K. SOHMA lgt. (in coll. T. SHIMOMURA, M. TAO and K. SAKAI).

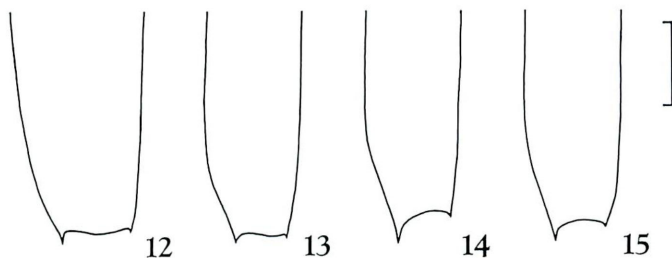
*Note.* According to Mr. TAO who collected the specimens, a lycid beetle of similar coloration and size occurs in the same habitat. This species possibly mimics the lycid beetle as the model.

### *Ephies notabilis* sp. nov.

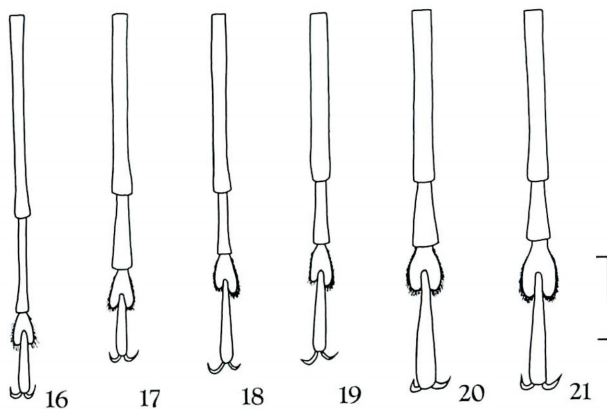
(Figs. 3, 7, 11, 13, 16, 23 & 28)

This species somewhat resembles *E. taoi* and *E. philippensis* in having longer elytra, but it is distinguished from the other known species of the genus by the following characters: 3rd to 10th antennal segments not serrate though each segment is weakly dilated apically (Fig. 7); legs slenderer, especially hind tarsus slenderer and longer (Fig. 16).





Figs. 12–15. Apex of left elytron of *Ephies* spp. — 12, *E. taoi* sp. nov.; 13, *E. notabilis* sp. nov.; 14–15, *E. alius* sp. nov. Scale: 1.0 mm.



Figs. 16–21. Left hind tarsus of male of *Ephies* spp. — 16, *E. notabilis* sp. nov.; 17, *E. taoi* sp. nov.; 18, *E. alius* sp. nov.; 19, *E. dilaticornis* PASCOE; 20, *E. nagaii* OHBAYASHI et SATÔ; 21, *E. nigrosericeus* HAYASHI. Scale: 16 and 17=1.0 mm, 18–21=0.5 mm.

*Male.* Head black with sides of frons, lateral and ventral sides of gena, mentum and maxillary cardo and stipes dark brownish red; prothorax dark red with underside of apical margin and each large spot of lateral side black; scutellum and elytra reddish brown; legs black with bases of fore and mid femora and procoxae brown; undersides of meso- and metathoraces and abdomen dull black.

Head width across eyes equal to posterior width of prothorax; in dorsal view, distance between tips of mandibles and anterior margin of eye distinctly shorter than the distance between anterior margin of eye and angular temple (1.0: 1.23); frons with median sulcus barely reaching occiput but faded between anterior margin of antennal cavities; surface finely and densely punctured from frons to occiput, sparsely with golden red pubescence; punctures on clypeus somewhat coarser than those of frons to occiput except for glabrous apical margin; antennal tubercles gently raised at inner ridges; antennae reaching apical fifth of elytra, not serrate and each outer margin of 3rd to 10th segments weakly dilated apically but each outer corner not

pointed (Fig. 7); relative lengths of antennal segments=2.7: 0.4: 2.7: 2.6: 3.6: 3.5: 3.4: 3.3: 3.0: 2.8: 3.7.

Prothorax weakly declivous anteriorly in lateral view (Fig. 11), with an extremely shallow depression at middle just behind anterior margin in slant rear view; relative lengths of anterior and posterior margins and distance from apex to base=2.8: 5.0: 4.4; surface minutely and densely punctured, covered with short recumbent golden red pubescence. Scutellum subtriangular with golden red pubescence.

Elytra elongate, about 2.6 times as long as the length from tips of mandibles to basal margin of prothorax and about 3.85 times as long as humeral width; each apex truncate though slightly sinuate at apical margin, with an obtuse tooth at outer angle and an inconspicuous tooth at sutural angle (Fig. 13); surface finely and moderately punctured with subrecumbent silky brownish pubescence.

Legs slender; hind tarsus slenderer and longer than those of the other species of this genus, with the three basal segments in a ratio of 6.3: 2.9: 1.0 (Fig. 16).

Abdominal sternites minutely punctured with short brownish pubescence; 5th sternite distinctly emarginate on apical margin between lateral angles and subtriangularly depressed from apical margin to basal fourth, the depression gradually becoming shallower towards base.

Genitalia: lateral lobes depressed from inner margin nearly to outer margin at about apical two-thirds (Fig. 23); median lobe short, apex slightly bent in lateral view (Fig. 28 b) and sharply pointed in dorsal view (Fig. 28 c).

Length: 14.5 mm (measured from tips of mandibles to elytral apices); width: 2.6 mm (measured between humeral angles of elytra).

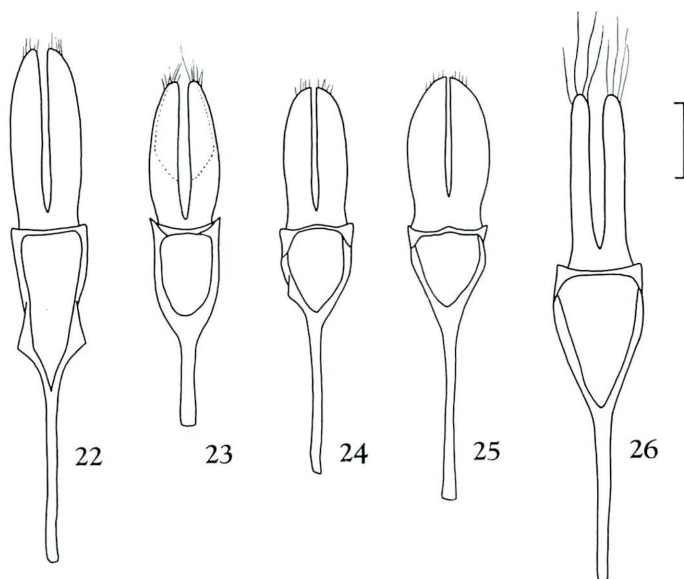
Holotype: ♂, Pedamaran, ca. 1,000 m alt., Rantepao, Tana Toraja, Celebes I., Indonesia, 4–VIII–1985, K. SOHMA lgt. (in coll. T. SHIMOMURA).

*Notes.* This species is distinguished from the other members of the genus by not serrate antennae, slenderer and longer hind tarsus and the shape of apical median lobe in male genitalia. I have concluded that it belongs to *Ephies* because the shape of lateral lobes of male genitalia is similar to that of *Ephies* but not to that of *Pseudoparanaspia* which is most closely allied to *Ephies*. This species is similar to *E. sericeus* FISHER from Java in the coloration of body according to the original description, but *E. sericeus* should be transferred to *Pseudoparanaspia*, because its body is much smaller and narrower, and its antennae are composed of shorter cylindrical segments.

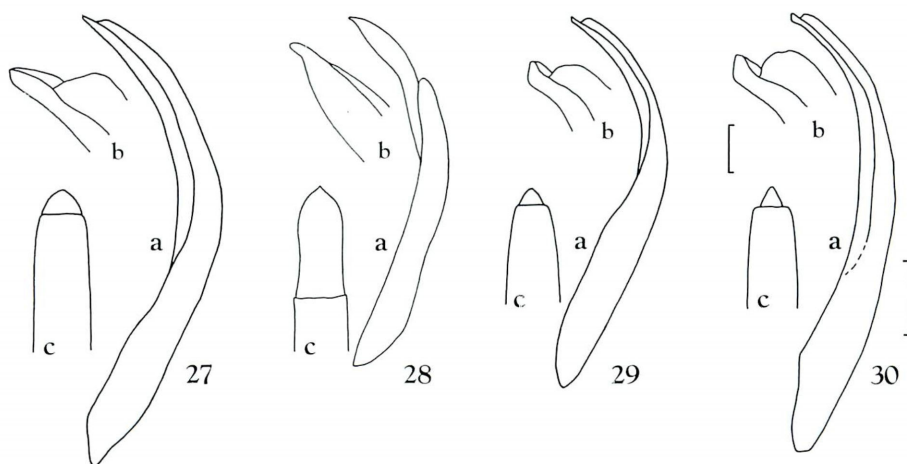
### *Ephies alius* sp. nov.

(Figs. 4, 8, 10, 14, 15, 18, 24 & 29)

This species is similar to *E. dilaticornis* PASCOE from Borneo and Sumatra and *E. sulcipennis* BATES from NW India in having metallic dark blue on the underside of body and bicolored elytra with red base and black apex, but it is distinguishable from the former by the following characters: frons to occiput and oculomalar spaces



Figs. 22-26. Parameres of male genitalia of *Ephies* spp. and *Pseudoparanaspia semiephies* HAYASHI in dorsal view. — 22, *E. taoi* sp. nov.; 23, *E. notabilis* sp. nov.; 24, *E. alius* sp. nov.; 25, *E. dilaticornis* PASCOE; 26, *P. semiephies* HAYASHI. Scale: 22-25=0.5 $\mu$ mm, 26=0.25 mm.



Figs. 27-30. Median lobe of male genitalia of *Ephies* spp. — 27, *E. taoi* sp. nov.; 28, *E. notabilis* sp. nov.; 29, *E. alius* sp. nov.; 30, *E. dilaticornis* PASCOE. a, lateral view; b, apex in sublateral view; c, apex in dorsal view. Large scale: a=0.5 mm; small scale: b=0.125 mm, c=0.25 mm.



of head and prothorax metallic dark blue; median black portion of pronotum narrower, almost linear; apical black area of elytra smaller; basal red area of elytra darker. Judging from the original description, it also differs from the latter in having metallic dark blue prothorax and larger apical black area in elytra.

*Male.* Head metallic dark blue and faintly shiny on dorsum; mandibles, palpi, labrum and clypeus dark brown to black; eyes light brown; antennae black with dark blue tint on 1st and 2nd segments; prothorax metallic dark blue; scutellum black; elytra deep red, darker from median portion towards completely black apical fourth; legs metallic dark blue, femora brighter than in tibiae and tarsi; underside of body lustrous metallic dark blue, partly with greenish sheen; underside of abdomen brighter than elsewhere.

Head narrower than posterior width of prothorax (width across eyes: width of prothorax=1.0:1.15); in dorsal view, distance between tips of stretched mandibles and anterior margin of eye equal to the distance between anterior margin of eye and angular temple; surface minutely and densely punctured from frons to occiput, the punctures on basal half of clypeus distinctly coarser than those of frons to occiput but apical half of clypeus glabrous, the punctures on basal half of clypeus coarser and sparser than those of *E. dilaticornis*; antennal apices not reaching apical third of elytra, each outer margin of 3rd to 10th segments strongly dilated apically and outer corner pointed (Fig. 8).

Pronotum finely and densely punctured, covered with recumbent silky red pubescence except for recumbent blackish pubescence on longitudinal median portion and near basal margin and with silky yellowish pubescence near basal corners; relative lengths of anterior and posterior margins and of apex to base=2.8:5.7:4.5. Scutellum narrow-triangular and covered with black pubescence.

Elytra distinctly bicostate on each disc as in *E. dilaticornis*, about 2.4 times as long as the length from tips of mandibles to basal margin of prothorax and about 3.6 times as long as humeral width; each apex narrowly emarginate on apical margin, with a sharp tooth at outer angle and a small tooth at sutural angle (Figs. 14–15); surface finely and sparsely punctured and covered with recumbent silky red pubescence on about basal three-fourths and with recumbent black pubescence on about apical fourth.

Legs with hind femora distinctly thicker than fore and mid femora; outer lobe of 3rd segment of hind tarsus shorter than its inner lobe; basal three segments of hind tarsus in a ratio of 2.8:1.0:0.7 (Fig. 18).

Abdominal sternites minutely and somewhat densely punctured with yellowish pubescence on each basal portion of 1st to 4th sternites but each apical portion of 1st to 4th sternites very sparsely punctured with blackish pubescence; space between the punctures polished; 5th sternite truncate apically with a sharp large tooth at each apical corner; its surface minutely and moderately punctured with blackish pubescence.

Genitalia: lateral lobes (Fig. 24) narrower than those of *E. dilaticornis* (Fig. 25);

median lobe curved at middle in lateral view (Fig. 29 a) and in dorsal view, less sharply pointed (Fig. 29 c) than that of *E. dilaticornis* (Fig. 30 c).

Length: 13.5–14.0 mm (measured from tips of mandibles to elytral apices); width: 2.5 mm (measured between humeral angles of elytra).

*Type series.* Holotype: ♂, nr. Kuala Kuba Bahru, Selangor, Malaysia, 24–III–1976, T. SHIMOMURA lgt. (in coll. T. SHIMOMURA). Paratype: 1 ♂, same data as the holotype, K. SAKAI lgt. (coll. K. SAKAI).

*Notes.* This species is similar to the following three species in the elytral color pattern: *E. nagaii* OHBAYASHI et SATÔ from Borneo, *E. cruentus* PASCOE from Penang I. off the Malay Peninsula and *E. apicalis* KANO from Taiwan, but it is distinguishable from them by metallic dark blue on underside of body instead of black in these three species.

#### Key to the Species of the Genus *Ephies* from Malaysia, Indonesia and the Philippines

1. Body smaller (length: 9.5 mm); antennae “robust and cylindrical”, composed of “compact” segments but slightly dilated at their apices; pronotum, scutellum and elytra brownish yellow; antennae and underside of body black; range: Java ..... *E. sericeus* FISHER (? *Pseudoparanaspia*).
- Body larger and broader (length more than 11.5 mm; width more than 2.0 mm); antennae composed of longer segments and usually distinctly serrate; lateral lobes of male genitalia broader and outer margins roundly extended ..... 2.
2. Hind tarsus longer, 2nd segment more than twice as long as 3rd segment; antennae not serrate; range: Celebes ..... *E. notabilis* sp. nov.
- Hind tarsus shorter, 2nd segment less than twice as long as 3rd segment; antennae distinctly serrate ..... 3.
3. Elytra longer, more than 3.7 times as long as humeral width and entirely metallic blue, or wholly red ..... 4.
- Elytra shorter, less than 3.7 times as long as humeral width and bicolored with red base and black apex, or completely black in ground color ..... 5.
4. Elytra metallic blue; range: Celebes ..... *E. taoi* sp. nov.
- Elytra red; range: Philippines (Baginis) ..... *E. philippensis* SCHWARZER.
5. Underside of body metallic dark blue ..... 6.
- Underside of body black, not metallic ..... 7.
6. Upper sides of head and prothorax metallic dark blue; median black portion of pronotum narrower; apical black area of elytra smaller (♂: apical fourth of elytra black); range: Malay Peninsula ..... *E. alius* sp. nov.
- Upper sides of head and prothorax black; median black portion of pronotum broader; apical black area of elytra broader (about apical third to half of elytra black in both sexes); range: Borneo and Sumatra ..... *E. dilaticornis* PASCOE.



7. Elytra entirely black covered with silky black pubescence, basal portion usually covered with silky red pubescence in male; range: Malay Peninsula ..... *E. nigrosericeus* HAYASHI.
- Elytra bicolored ..... 8.
8. Apical three-fifths to half of elytra black; oblique border line of red and black areas of elytra more clearly defined; range: Borneo ..... *E. nagaii* OHBAYASHI et SATÔ.
- Apical fourth of elytra black; transverse border line of red and black areas of elytra less clearly defined; range: Malaysia (Penang I.) ..... *E. cruentus* PASCOE.

### 摘 要

下村 徹: セレベスとマレー半島産モウセンハナカミキリ属の3新種。——下記の *Ephies* 属の3新種を記載した。また、マレーシア、インドネシア、フィリピン産のこの属に含まれる種に対して検索表をつけた。

1. *Ephies taoi* SHIMOMURA (セレベス産) は、金属光沢がある藍色の上翅によって、この属の他種とは容易に区別できる。

2. *Ephies notabilis* SHIMOMURA (セレベス産) は、鋸歯状でない触角、より長い後附節をもつこととでこの属としては異質であるが、類似の *Pseudoparanaspia* 属とは雄交尾器の側葉片の形状が異なり、この種を *Ephies* 属に含めるべきものと判断した。またジャワ産の *E. sericeus* とは、より長い体長、より長い触角節で区別できる。

3. *Ephies alius* SHIMOMURA (マレー半島産) は、ボルネオ、スマトラ産の *E. dilaticornis* と北西インド産の *E. sulcipennis* に似ているが、前者とは頭部背面と前胸が金属光沢を帯びる暗藍色、前胸背板の黒色部分がより狭く、ほとんど線状、上翅の先端黒色部分がより狭い、上翅基部の赤色がより濃いという特徴で区別できる。また後者とは、暗藍色の前胸背板、上翅先端の黒色部分が広いという点で区別できる。

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## A Review of the Genus *Melanoscython* FLEUTIAUX (Coleoptera, Eucnemidae), with Descriptions of New Species

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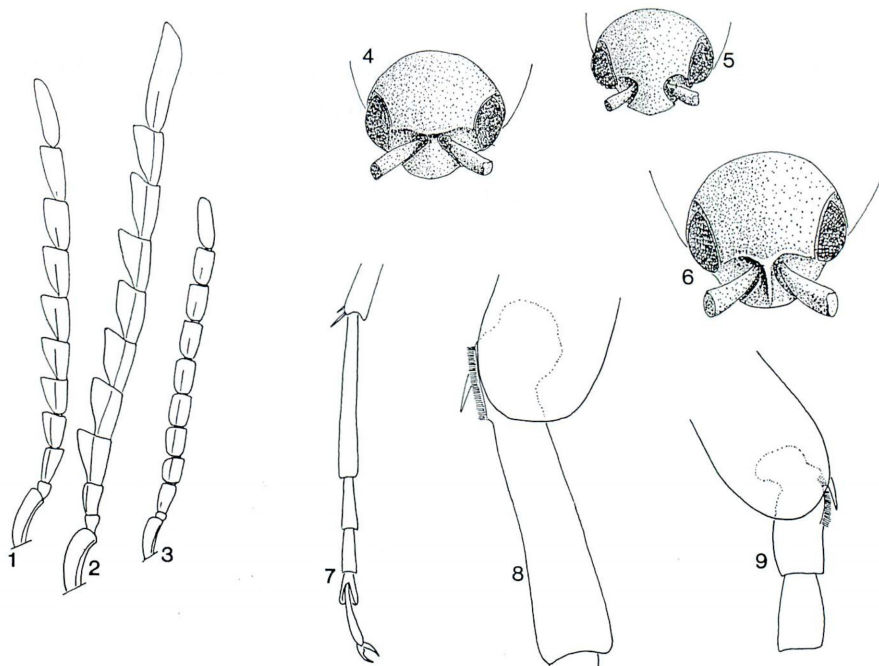
**Abstract** *Melanoscython ohmomo* n. sp. from Japan and *Melanoscython carinatus* n. sp. from Java are described. A key including all known *Melanoscython* species is given. Characters defining the genus and its relations to other genera are given.

*Melanoscython* FLEUTIAUX, 1926, is a little known Oriental genus. The type species is *Melanoscython denticornis* (FLEUTIAUX) (MUONA, 1987). It shows a number of derived characters uniting it with genera like *Dromaeolus* KIESENWETTER, 1858, and *Fornax* LAPORTE, 1835: aedeagus with lateral lobes partly fused with median lobe, median lobe with long struts, secondary lateral lobes well developed, male first protarsomere with basal sex comb and dorsal surface of meso- and metatibiae with rows of specialized spines. Within this lineage *Melanoscython* can be recognized by the combination of the following characters: claws simple, antennae flattened, densely pubescent and with dorsal keel on most segments, head and pronotum very densely punctate, dull, form elongated.

Most *Melanoscython* species, including the type species, have medially feebly defined lateral antennal grooves on hypomera. As FLEUTIAUX (1926: 71–72) already pointed out, this character is difficult to judge and thus of limited value. Both character states can be found in closely related species, e.g., the Nearctic *Dromaeolus basalis* LECONTE and *Dromaeolus striatus* (SAY). For this reason I will in the present paper include in *Melanoscython* one new species which has medially well limited antennal grooves. In all other respects it clearly belongs in this genus.

### A Key to the Species of the Genus *Melanoscython*

1. Frons with transverse keel across base of clypeus (Figs. 4, 6)..... 2.  
— Frons without transverse keel (Fig. 5)..... 3.
2. Clypeus with longitudinal median keel (Fig. 6)..... *M. carinatus* n. sp.  
— Clypeus without longitudinal median keel (Fig. 4)..... *M. denticornis* (FLEUTIAUX).
3. Colour yellow, elytra and pronotum with black spots.... *M. decoratus* FLEUTIAUX.  
— Dorsally unicoloured, dark brown or black species..... 4.
4. Third antennal segment about twice the length of fourth .....  
..... *M. monilicornis* FLEUTIAUX.



Figs. 1-9. — 1. *Melanoscythion denticornis* (FLEUTIAUX), antenna. — 2. *Melanoscythion carinatus* n. sp., holotype, antenna. — 3. *Melanoscythion ohmomoï* n. sp., paratype, antenna. — 4. *Melanoscythion denticornis* (FLEUTIAUX), head. — 5. *Melanoscythion ohmomoï* n. sp., paratype, head. — 6. *Melanoscythion carinatus* n. sp., holotype, head. — 7. *Melanoscythion ohmomoï* n. sp., holotype, mesotarsus. — 8. *Melanoscythion carinatus* n. sp., holotype, male first protarsomere. — 9. *Melanoscythion ohmomoï* n. sp., holotype, male first protarsomere.

- Third antennal segment slightly longer than fourth (Fig. 3) .....  
 ..... *M. ohmomoï* n. sp.

***Melanoscythion carinatus* n. sp.**

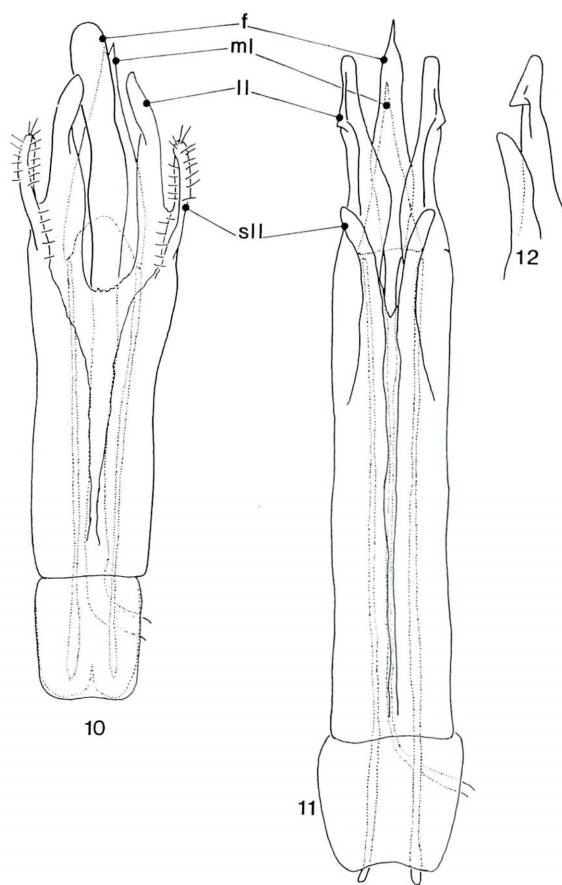
(Figs. 2, 6, 8, 10, 13)

*Type area.* Indonesia, Java.

*Type material.* Holotype male, Java Occ. Toegoe, J. D. PASTEUR, in MHNP.

*Description* (male only). Form oblong, elongated (Fig. 13). Length 7.5 mm. Colour black, legs brown, knees and tarsi yellowish.

Head orderly and very densely punctate. Clypeus very narrow at base, with basal transverse keel and well developed median keel (Fig. 6). Antennae flattened, densely pubescent, segments 3 to 10 dentate, all segments except for 2nd with dorsal keel (Fig. 2). Antennae slightly longer than length of half the insect. Pronotum very densely, orderly punctate with short basal keel in front of scutellum. Disc of pronotum with lateral impressions in middle and two basal impressions on both sides.



Figs. 10–12. — 10. *Melanoscython carinatus* n. sp., holotype, aedeagus. — 11. *Melanoscython ohmomoï* n. sp., holotype, aedeagus. f=sclerotized tip of ductus ejaculatoris, ll=lateral lobes, ml=median lobe, sll=secondary lateral lobes. — 12. *Melanoscython monilicornis* FLEUTIAUX, part of primary and secondary lateral lobes.

Elytra with weak striae, interstices flat, densely punctate, mostly rugose. Thoracic sterna and hypomera very densely punctate. Hypomera with medially well-defined, deep lateral antennal grooves. Abdomen shiny, densely punctate. Pubescence yellowish grey, inconspicuous.

Legs fairly slender, tarsi longer than tibiae in middle and hind legs, first meso- and metatarsomeres longer than rest of tarsi (partly missing in the only specimen seen). First protarsomere elongated, sex-comb nearly straight (Fig. 8).

Aedeagus with simple lateral lobes and well developed secondary lateral lobes (Fig. 10).

*Diagnosis.* This species is similar to *M. denticornis* (FLEUTIAUX). From that species it can be easily distinguished by the median keel on clypeus. The aedeagi of



the two species are quite different. The aedeagus of *M. denticornis* resembles that of *M. ohmomo* n. sp. In *M. denticornis* the lateral teeth of the apices of the lateral lobes are blunt and the median lobe is much shorter in relation to the lateral lobes than in *M. ohmomo*.

***Melanoscython ohmomo* n. sp.**

(Figs. 3, 5, 7, 9, 11, 14)

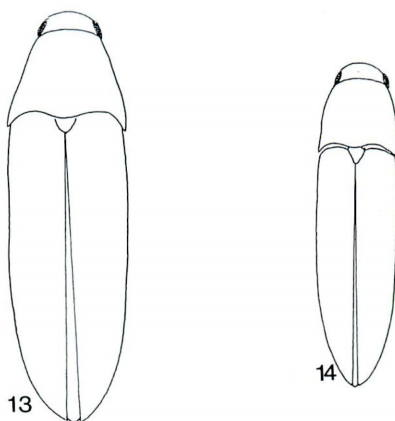
*Type area.* Japan.

*Type material.* Holotype male, Japan, Fukushima Pref., Shitokigawa Glen, 29. IV. 1982, leg. S. OHMOMO, in coll. National Science Museum (Nat. Hist.), Tokyo. Paratype male with same data, in coll. MUONA.

*Description* (male only). Form elongated (Fig. 14). Length 5.3–5.5 mm. Colour blackish brown, abdomen reddish brown, legs pale brown.

Head dull, very densely punctate, partly rugose. Clypeus at base narrower than distance from there to eye (Fig. 5). Antennae flattened, slender, densely pubescent with dorsal keel on all segments except for 2nd and 11th, slightly longer than half the insect (Fig. 3). Pronotum very densely punctate, partly rugose, dull. Elytra with well defined, non-punctate striae, interstices flat, densely punctate, largely granulose on basal third. Thoracic sterna and hypomera very densely punctate, mostly rugose. Hypomera with fairly deep, shiny lateral antennal grooves, these not limited medially by ridge. Abdomen shiny, densely punctate. Apex of 7th sternum feebly produced. Pubescence yellowish grey, inconspicuous.

Legs slender, tarsi longer than tibiae in middle and hind legs, first meso- and metatarsomeres longer than rest of tarsi (Fig. 7). First protarsomere short, sex-comb curved (Fig. 9).



Figs. 13–14. — 13. *Melanoscython carinatus* n. sp., holotype, habitus. — 14. *Melanoscython ohmomo* n. sp., holotype, habitus.

Aedeagus slender, apices of lateral lobes with smaller lateral tooth than those of *M. monilicornis*, secondary lateral lobes well developed (Figs. 11, 12).

*Diagnosis.* This species is closely related with *M. monilicornis*. From that species *M. ohmomoï* can be distinguished by its much longer antennae with short third segment, reddish brown abdomen and differently shaped aedeagus.

*Note.* Among the Japanese Eucnemidae, *M. ohmomoï* is unique in having medially not defined, well developed antennal grooves on pronotal hypomera. Some species belonging to the genera *Hylis* DES GOZIS, 1886, and *Proxyllobius* FLEUTIAUX, 1900, have antennae that greatly resemble those of *M. ohmomoï*. None of these species have, however, complete lateral antennal grooves and in addition to this their males do not have sex-combs on first protarsomere.

*Melanoscython decoratus* FLEUTIAUX

FLEUTIAUX, 1926, 69–70.

*Distribution.* Philippines, Butnan.

Only the holotype female is known to me (MHNP).

*Melanoscython monilicornis* FLEUTIAUX

(Fig. 12)

FLEUTIAUX, 1931, 74; 1947, 33.

*Distribution.* Laos, Haut-Mekong, Neme-Tiene.

Only the holotype male is known to me (MHNP).

*Melanoscython denticornis* (FLEUTIAUX)

(Figs. 1, 4)

FLEUTIAUX, 1916, 392 (as *Fornax*); 1929, 69; 1947, 33.

*Distribution.* Philippines, Mt. Makiling & Los Baños.

The holotype male is in MHNP. In addition to it I have seen two males from Los Baños (BPBMHH).

**Abbreviations**

BPBMHH — Bernice P. Bishop Museum, Honolulu, Hawaii. MHNP — Museum National d'Histoire Naturelle, Paris.

**Acknowledgements**

Mr. K. AKIYAMA (Yokohama) and Dr G. A. SAMUELSON (Honolulu) kindly pro-

vided material for this study. Dr. C. GIRARD and Mr. J. MENIER helped me in many ways during my visit to Paris. I am grateful for financial assistance from the Emil Aaltonen Foundation and the Finnish and French Ministries of Education.

### 摘 要

MUONA, J.: *Melanoscython* 属 (コメツキダマシ科) とその 2 新種について. — *Melanoscython* 属は、これまでフィリピンとラオスから 3 種が知られていたが、今回ジャワと日本から各 1 新種を記載するとともに 5 種の検索表を付した.

1. *Melanoscython carinatus* n. sp. *M. denticornis* に似ているが、頭盾中央に縦隆条をもつことで容易に区別されるほか、♂ 交尾器の形も異なっている。ジャワ産。

2. *Melanoscython ohmomi* n. sp. *M. monilicornis* に近縁だが、より長い触角、短い第 3 触角節、赤褐色の腹部、異なった ♂ 交尾器によって区別される。本新種はまた、前胸側板によく発達した触角溝をもつことで特異である。本州 (福島県産)。

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## Two New Pterostichine Carabid Beetles from Central Honshu, Japan

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**Abstract** Two new pterostichine carabid beetles, *Pterostichus (Nialoe) masahiroi* sp. nov. and *P. (N.) napaea* sp. nov. are described from central Honshu, Japan. The former is closely related to *P. (N.) asymmetricus* BATES, and the latter belongs to the *latistylis* group.

There occur two unnamed pterostichine carabids belonging to the subgenus *Nialoe* TANAKA in central Honshu, Japan. The existence of one of them was previously noticed by SASAJI and SAITO (1985) in their catalogue of Coleoptera from Fukui Prefecture. It has been known from the mountain range bordering Fukui, Gifu and Shiga Prefectures, and is closely related to *Pterostichus (Nialoe) asymmetricus* BATES. It is, however, clearly distinguished from the latter by having different external and genitalic features.

The other one, of which a single male was collected by myself on Mt. Kiso-komagatake in Nagano Prefecture more than ten years ago, has not been identified with confidence until recently. I looked for this species at the same locality, and finally succeeded in obtaining a long series of examples. It has become doubtless that the species belongs to the *latistylis* group in the characteristic shape of the terminal sternite in the male. However, it can be clearly separable from any of the known forms of that group by distinctly shorter elytra and different configuration of the male genitalia. It must be new to science like the preceding one.

In this paper, I will describe the former species under the name of *Pterostichus (Nialoe) masahiroi* sp. nov., and the latter under that of *P. (N.) napaea* sp. nov. The abbreviations used herein are the same as those explained in other 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 advice and for reading the manuscript of this paper. Hearty thanks are also due to Messrs. Toshio ARAI, Masaru OSADA and Masahiro SAITO for their kind aid in material and field works.

*Pterostichus (Nialoe) masahiroi* KASAHARA, sp. nov.

[Japanese name: Saito-nagagomimushi]

(Figs. 1–2, 4)

*Pterostichus* sp.: SASAJI & SAITO, 1985, p. 87.

*Description.* Length (measured from apex of labrum to apices of elytra) 13.0–14.7 mm. Width 4.9–5.5 mm. Black, shiny; labrum, mandibles and antennae dark reddish brown, the last one becoming paler towards apices; femora and tibiae blackish; palpi and tarsi reddish brown; ventral side reddish brown to dark reddish brown.

Head moderately convex, shiny; eyes relatively small, though convex; temporae shorter than eyes, rather tumid; genae almost smooth or feebly rugose near buccal fissure; frontal furrows rather deep, divergent towards posterior extremities; lateral grooves deep, extending a little beyond the level of posterior supraorbital setae, which are situated a little behind the post-eye level; surface sparsely and minutely punctate, microsculpture slightly visible, forming nearly isodiametric meshes; antennae moderately long, extending to behind shoulders of elytra; relative lengths of scape and segments 2–6 as follows:— 1 : 0.55 : 0.9 : 0.9 : 0.85 : 0.85; segment 2 with three to four setae at apex.

Pronotum cordate, moderately convex, shiny, widest at apical fourth, ca. 1.4 times as wide as head (PW/HW 1.37–1.41, mean 1.39), as wide as long in almost the same proportion (PW/PL 1.32–1.40, mean 1.36), about a half as wide again as basal width (PW/PBW 1.38–1.52, mean 1.45); lateral margins well arcuate in apical halves, thence strongly convergent posteriad and gently sinuate before base, basal part with small irregular notches; apical margin gently emarginate, not bordered; basal margin almost as wide as the apical, almost straight, though weakly emarginate at the median part; basal angles nearly rectangular, rather pointed or occasionally rounded at the tips; basal part relatively flat, densely and strongly punctate on each side, longitudinally and distinctly rugose at the median part; basal foveae shallow, divergent in front, linear impressions weak; median line moderately impressed; both apical crescent and basal transverse depressions weak or obsolete; surface with irregular transverse wrinkles, which often become more distinct on latero-basal areas; microsculpture slightly visible, formed by fine transverse meshes.

Apterous. Elytra oblong-ovate, moderately convex, shiny, widest at about middle, less than 1.3 times as wide as pronotum (EW/PW 1.23–1.28, mean 1.25), one and half as long again as pronotum (EL/PL 2.45–2.64, mean 2.54), a half as long again as wide (EL/EW 1.47–1.51, mean 1.49); basal border gently curved, obliquely extending to shoulder, and joining lateral border at an obtuse but distinct angle; shoulders rounded; lateral margins gently arcuate; preapical emarginations shallow, though distinct; apices rounded, sutural angles dull; scutellar striae very short or obsolete, lying on interval 1 and connecting with basal border; striae finely and deeply impressed, almost smooth; intervals moderately convex, interval 3 with four to five dorsal pores, anterior one or two at basal fourth to third and adjoining stria 3, the remainings adjoin stria 2 and irregularly arranged behind middle; marginal series of pores 17–18 in number; microsculpture formed by transverse meshes.

Basal two or three segments of meso- and metatarsi sulcate on each side. Ventral side more or less shiny; mes- and metepisterna, metasternum and sternites 3–4 par-

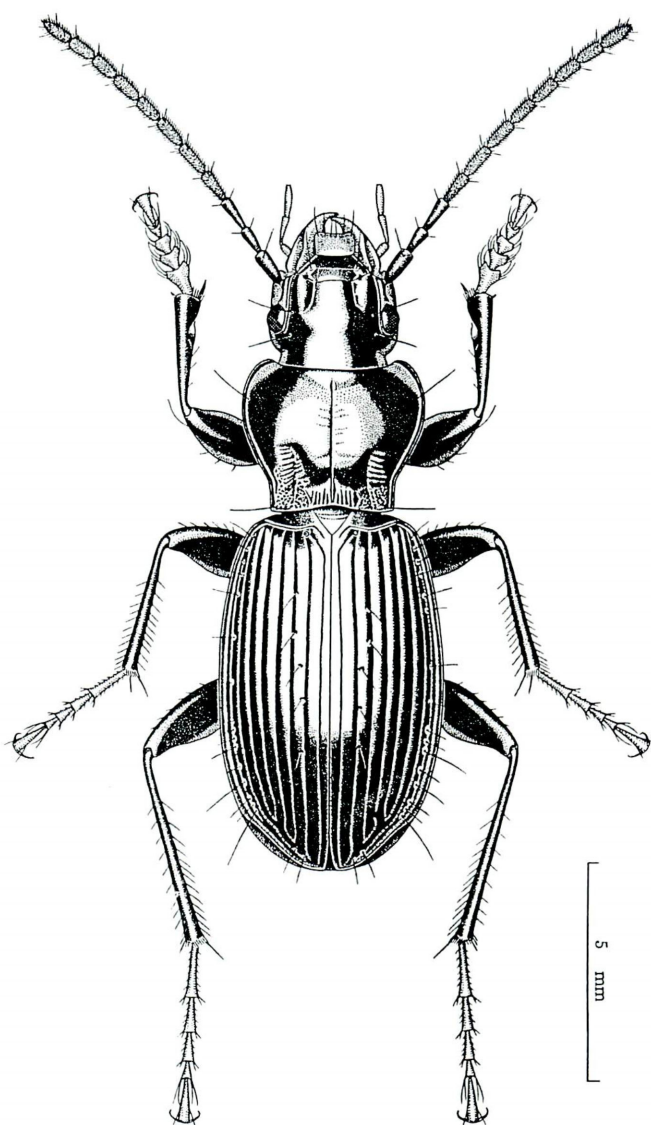


Fig. 1. *Pterostichus (Nialoe) masahiroi* KASAHARA, sp. nov., ♂, from Mt. Kanmuri-yama, Fukui Prefecture.

tially punctate; in the male, terminal sternite deeply concave in apical half, its apical margin bearing asymmetrical emarginations and a projection like the other relatives belonging to the subgenus *Nialoe*, though the projection is relatively wide.

Aedeagus acutely bent at basal third, thence almost straightly extending to apex in lateral view, gently curved and widely tumid on the right side at apical third in



dorsal view, apical lobe simply rounded at apex; left paramere wide, square; right one slender, gently arcuate at apical third, blunt at apex.

*Type series.* Holotype: ♂, Mt. Kanmuri-yama, Ikeda-chô, Fukui Pref., 15. VIII. 1981, M. SAITO leg.; allotype: ♀, Yashagaike, Imajô-chô, Fukui Pref., 9–10. X. 1981, M. SAITO leg.; paratypes: 1 ♂, Mt. Kanmuri-yama, Ikeda-chô, Fukui Pref., 15. VIII. 1981, M. SAITO leg.; 1 ♂, 3 ♀♀, Yashagaike, Imajô-chô, Fukui Pref., 9–10. X. 1981, M. SAITO leg.; 1 ♂, Sannomata-dani, Ohno-shi, Fukui Pref., 4. VI. 1983, M. SAITO leg.; 1 ♀, Shimo-uchinami, Ohno-shi, Fukui Pref., 24. IV. 1982, M. SAITO leg.; 1 ♀, Mt. Nôgô-hakusan 1,550 m alt., Ohno-shi, Fukui Pref., 17–18. IX. 1984, M. OSADA leg.

The holo- and allotype are deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. The paratypes are preserved in my collection.

*Notes.* The present new species is so closely related to *P. (N.) asymmetricus* BATES, that it could be regarded as a local race of the latter. However, it has robuster body, wider pronotum with strongly punctate basal part, besides robuster aedeagus with simply rounded apical lobe. These peculiarities suffice for the recognition of a full species. Its locality is probably at the western limit of the distributional range of the *asymmetricus* group.

This species is named after Mr. Masahiro SAITO who found it while investigating the coleopterous fauna of Fukui Prefecture.

***Pterostichus (Nialoe) napaea* KASAHARA, sp. nov.**

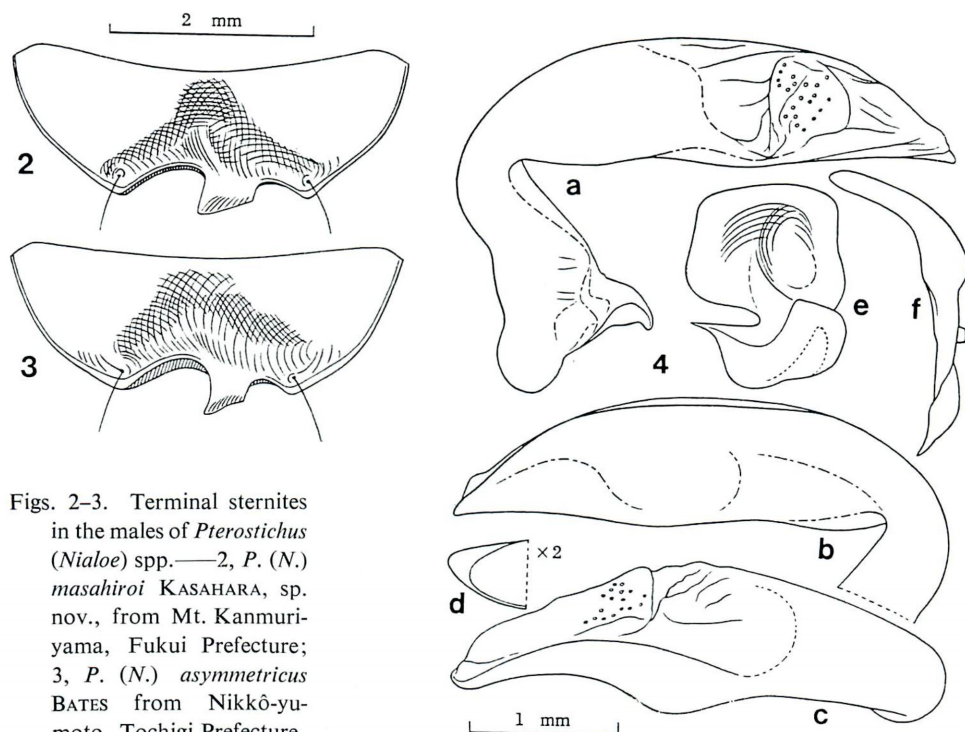
[Japanese name: Kisokoma-nagagomimushi]

(Figs. 5–6, 8)

*Description.* Length (measured as in the preceding species) 10.0–11.45 mm. Width 3.8–4.2 mm. Black, shiny; labrum, mandibles and antennae dark reddish brown to blackish brown, the last one becoming paler towards apices; palpi and tarsi reddish brown; ventral side almost black.

Head moderately convex, shiny; eyes convex; temporae short, oblique, slightly tumid; genae rather distinctly rugose near buccal fissure; frontal furrows deep, smooth, divergent towards posterior extremities; lateral grooves deep, extending to the level of posterior supraorbital setae, which are situated a little behind the post-eye level; surface very smooth, punctures and microsculpture hardly visible; antennae relatively long, fully reaching the basal fourth of elytra; relative lengths of scape and segments 2–6 as follows:— 1:0.55:0.75:0.8:0.8:0.8; segment 2 usually trisetose at apex.

Pronotum cordate, moderately convex, shiny, widest at apical fourth, ca. 1.3 times as wide as head (PW/HW 1.27–1.37, mean 1.31), ca. 1.4 times as wide as long (PW/PL 1.33–1.43, mean 1.38 in ♂; 1.36–1.50, mean 1.42 in ♀), as wide as base in



Figs. 2-3. Terminal sternites in the males of *Pterostichus (Nialoe)* spp.—2, *P. (N.) masahiroi* KASAHARA, sp. nov., from Mt. Kanmuri-yama, Fukui Prefecture; 3, *P. (N.) asymmetricus* BATES from Nikkō-yu-moto, Tochigi Prefecture.

Fig. 4. Male genitalia of *Pterostichus (Nialoe) masahiroi* KASAHARA, sp. nov., from Mt. Kanmuri-yama, Fukui Prefecture; a-d, aedeagus; a, left lateral view; b, right lateral view, basal part omitted; c, dorsal view; d, apical lobe; e, left paramere; f, right paramere.

almost the same proportion (PW/PBW 1.33–1.48, mean 1.42); lateral margins evenly well arcuate in apical halves, thence strongly convergent posteriad and fully sinuate before base, basal part more or less divergent posteriad, and with irregular small notches; apical margin gently emarginate, not bordered; basal margin a little narrower than the apical, not bordered, emarginate at the median part, rather oblique on each side, basal angles rectangular, pointed though blunt at the tips; basal foveae deep and smooth, divergent in front, with linear impressions at the bottoms; median line deep; both apical crescent and basal transverse depressions shallow, though often distinct; microsculpture partially and slightly visible, forming fine transverse meshes.

Apterous. Elytra oblong-ovate, short, especially in the male, widest at about middle, a fourth as wide again as pronotum (EW/PW 1.19–1.29, mean 1.25), one and half as long again as pronotum (EL/PL 2.33–2.55, mean 2.45 in ♂; 2.42–2.64, mean 2.53 in ♀), ca. 1.4 times as long as wide (EL/EW 1.36–1.49, mean 1.42); basal border gently curved, obliquely extending to shoulder, and joining lateral border at an obtuse and mal-defined angle; shoulders rounded; lateral margins feebly sinuate from behind shoulders to the widest level, thence roundly convergent to apices; scutellar striae

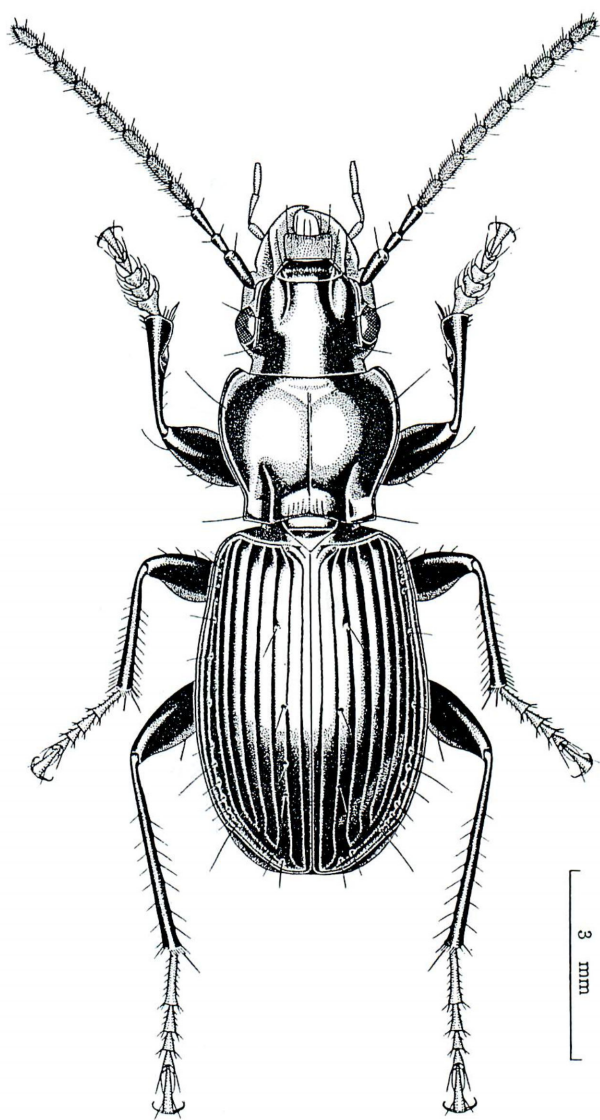
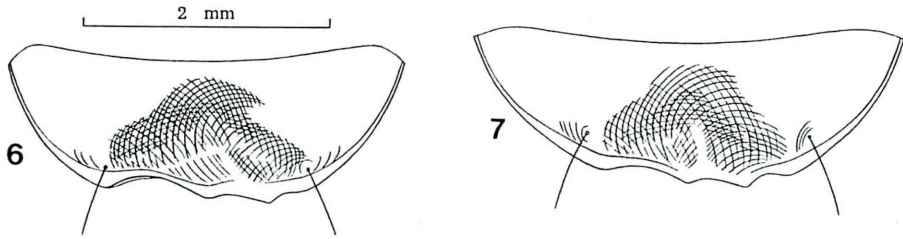


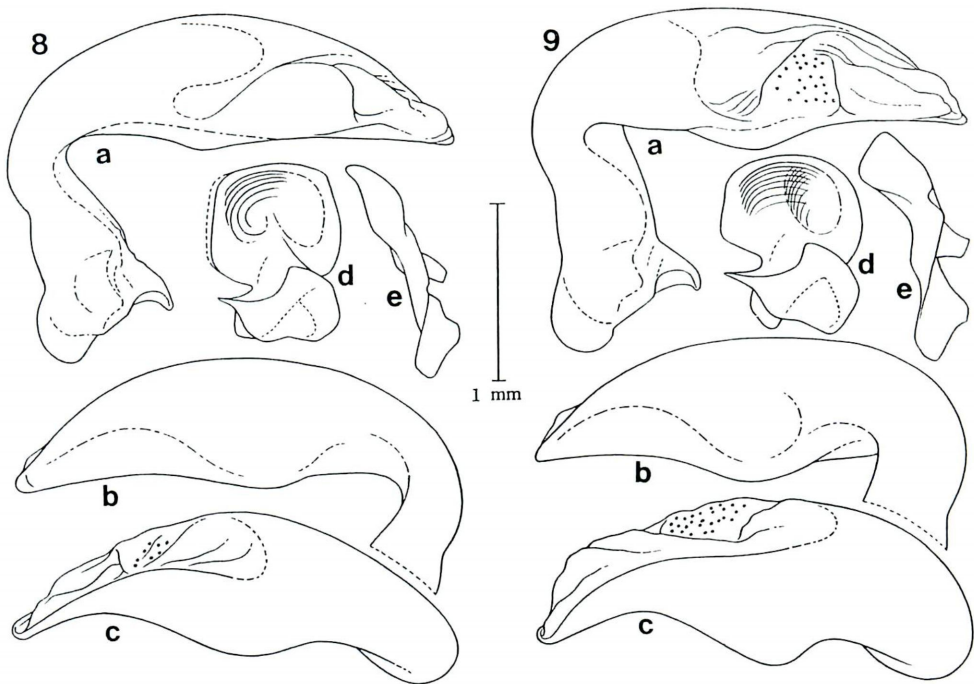
Fig. 5. *Pterostichus (Nialoe) napaea* KASAHARA, sp. nov., ♂, from Isedaki, Mt. Kiso-komagatake, Nagano Prefecture,

short, lying on interval 1 and connecting with basal border; striae fine, though moderately impressed, almost smooth or weakly notched at the bottoms; intervals convex, interval 3 with three or occasionally four dorsal pores, anterior one adjoining stria 3 at basal fourth, while the posterior two adjoin stria 2 at about middle and apical fourth, respectively; marginal series of pores 14–16 in number; microsculpture slightly visible, forming fine transverse meshes.





Figs. 6–7. Terminal sternites in the males of *Pterostichus (Nialoe)* spp. — 6, *P. (N.) napaea* KASAHARA, sp. nov., from Isedaki, Mt. Kiso-komagatake, Nagano Prefecture; 7, *P. (N.) latistylis* TANAKA from Mt. Mitake-san, Ohme-shi, Tokyo.



Figs. 8–9. Male genitalia of *Pterostichus (Nialoe)* spp. — 8, *P. (N.) napaea* KASAHARA, sp. nov., from Isedaki, Mt. Kiso-komagatake, Nagano Prefecture; 9, *P. (N.) latistylis* TANAKA from Mt. Mitake-san, Ohme-shi, Tokyo; a–c, aedeagus; a, left lateral view; b, right lateral view, basal part omitted; c, dorsal view; d, left paramere; e, right paramere.

Metatarsi almost as long as the width of head; basal two segments of meso- and metatarsi externally sulcate. Ventral surface more or less shiny, almost smooth; terminal sternite in the male similar to that of *P. (N.) latistylis* TANAKA.

Aedeagus strongly bent at basal third, thence almost straightly extending to apex in lateral view, gently arcuate to the right and widely swollen on the right side

at apical third in dorsal view, apical lobe small, rounded at apex; left paramere wide, square; right one narrow, tapered in apical fourth, blunt at apex.

*Type series.* Holotype: ♂, Isedaki, Mt. Kiso-komagatake 1,800 m alt., Miyadamura, Nagano Pref., 1. VII. 1986, S. KASAHARA & T. ARAI leg.; allotype: ♀, same data as the holotype; paratypes: 27 ♂♂, 9 ♀♀, same data as the holo- and allotypes; 1 ♂, Shimizu-daira, Mt. Kiso-komagatake 2,000 m alt., Miyadamura, Nagano Pref., 9. IX. 1975, S. KASAHARA leg.; 4 ♂♂, Shioji-daira 1,450 m alt., Iijima-chô, Nagano Pref., 29. VI. 1986, S. KASAHARA & T. ARAI leg.; 1 ♂, Shirabi-daira, Mt. Kiso-komagatake 1,700 m alt., Miyadamura, Nagano Pref., 1. VII. 1986, S. KASAHARA & T. ARAI leg.

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

*Notes.* This new species seems to have certain relationship with *P. (N.) latistylis* TANAKA in view of the possession of several characteristics. It is, however, easily distinguished from the latter by the following points: smaller body; distinctly shorter elytra, with smaller number of dorsal pores; shorter metatarsi; slender aedeagus, with less tumid swelling on the right side; narrower right paramere and so on. All the examples I have examined were found, often with *P. (Epinialoe) cristatoides* STRANEO, from under stones and rock debris lying on wet places at the bottom of a ravine. Their habitats on Mt. Kiso-komagatake seem to be the highest for the members of the *latistylis* group.

## 摘 要

笠原須磨生：本州中部産ナガゴミムシ属の2新種。——本州中部から、ミズギワナガゴミムシ亜属 *Nialoe* に属するナガゴミムシ属 *Pterostichus* の2新種を記載した。すなわち、サイトナガゴミムシ *P. (N.) masahiroi* は、福井、岐阜、滋賀各県の境界山地を中心に分布し、本州中部以北に広く分布するミズギワナガゴミムシ *P. (N.) asymmetricus* BATES に近縁である。後者の地方型ともみえるが、外形や雄交尾器の形態的特徴は、十分に種特異的なものとする。また、当該産地は近縁種群の分布域の西限でもある。

もう1種のキソコマナガゴミムシ *P. (N.) napaea* は、長野県木曾駒ヶ岳とその附近に産し、タナカナガゴミムシ *P. (N.) latistylis* TANAKA と類縁が深い。本州に広く分布し、地域変異のみられる後者とは、短小な上翅と細い雄交尾器などからように区別しうる特徴的な種で、近縁種群のなかではもっとも高所に生息している。

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*Elytra*, Tokyo, 16 (1): 31, May 15, 1988

## フジタナガゴミムシ四国に産す

笠原須磨生・伊東善之

Sumao KASAHARA and Yoshiyuki ITÔ: Occurrence of *Pterostichus fujitai* (Carabidae) in the Island of Shikoku

フジタナガゴミムシ *Pterostichus fujitai* TANAKA et ISHIDA は、奈良、三重両県にまたがる大台ヶ原山を基準産地とする種で、大峯山地から歌山県南部まで分布するが、これまでに紀伊半島以外からは知られていなかった。ところが最近、四国南東部にも本種の生息していることが明らかになった。生物地理学的に両地の関連が深いことを示す興味深い例証のひとつとして、ここに報告しておく。

1 ♀, 高知県香美郡香北町神賀山, 11. IX. 1976, 伊東善之採集; 2 ♂♂, 2 ♀♀, 同, 7~8. VI. 1987, 伊東善之採集。

紀伊半島各地では、本種の主として雄の交尾器に若干の地域変異が認められる。四国产の個体は、外形では紀伊半島産のものと異ならないが、雄交尾器を基準産地のものと比較すると、陰茎の先端片がよりまるくて舌状を呈し、和歌山県南部の各地にみられる個体群のものによく似ている。なお、伊東の採集経験によると、四国ではあまり多くないようである。

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## 新刊紹介

「蝶の学名—その語源と解説—」平嶋義宏著, ii+i+ii+i+269 ページ; 1987 年 7 月 10 日発行. 九州大学出版会. 3,400 円. [1988 年 2 月 4 日第 2 版発行]

動植物の学名を構成する古典語について書かれた解説書は、かなり古くから何種類も出版されているが、ある特定の群を包括的に取り扱ったものは、とくに動物関係ではひじょうに少なく、分類学に携わる研究者にとって大きい障害になってきた。われわれ日本人にとってことに厄介なのは、ギリシャ語に由来する学名で、ラテン語化の規則も簡単ではなく、複合語のつくり方もむずかしい。それで、最近に発表された学術論文のなかにも、ギリシャ語とラテン語、あるいはラテン語とギリシャ語を組み合わせた好ましくない学名、いわゆる混成語が散見されるし、連結母音の使い方にも誤りが少なくない。

ところが昨年になって、たいへん有用な書物が 2 篇あいついで刊行された。そのひとつは、内田清一郎、島崎三郎共著の「鳥類学名辞典」(ii+xix+1207 ページ; 1987 年 3 月 31 日発行; 東京大学出版会) で、世界の鳥類すべての学名の意味を解説したものであり、他のひとつが、ここに紹介する上掲の書物である。昆虫の関係者には、鳥類よりも蝶類の方が馴染み深いばかりでなく、大きさも価格も手頃であるうえに (ちなみに「鳥類学名辞典」は 22,000 円)、解説も親切で使いやすい。

内容は 5 章に分けられているが、主体となるのは第 2 章「蝶の学名」で、全体の 7 分の 4 を占める。日本産の全部と国外産の重要な属がアルファベット順に配列され、その性、語源、命名の由来などが要領よく記述されている。また、それぞれの属に含まれる種名の語源と、形容詞の場合などの語尾変化が示されている。これらの解説の大きい特徴は、複合語の語源が構成分子の単語まで分解して説明されていることで、著者の意図するところが単なる意味の解説ではなく、新しく学名を造語する人にも役立つようにという構想であったことをうかがわせる。このことは、第 1 章「学名の基礎的知識」をみるとさらによくわかる。ここでは、国際動物命名規約の学名構成に関する条項を引用しながら、チョウばかりでなくさまざまな動物の学名を実例に挙げて、どのような名称が学名として望ましいか、どのような名称がたとえ好ましくなくても学名として使われているか、属名の性を決めるにはどうすればよいか、新しい学名を造語するときにはどのような点に留意すべきか、などの問題が、ていねいに説明されている。この章を通読するだけでも、学名そのものについての知識は大幅に増えることだろう。残念なのは、複合語の前節と後節とを結びつける方法、とくに連結母音に関する事項が欠けていることである。問題が複雑なうえに例外も多いので、省略された著者の心情はわかるが、一通りの解説ぐらいは欲しかった。学名の発音に関する片仮名表記 (第 2 章) にも気になる点は少なくないが、アクセントの位置が示されていないので、これはもともと無理な作業なのだろう。なお、第 3 章から 5 章までは参考書や索引にあてられ、第 4 章の種名索引には学名の意味が併記されている。

この労作は、チョウの学名の解説という体裁をとってはいるが、甲虫類の研究者にも十分に役立つものである。ハチ類の著名な研究者である本書の著者が、題材にわざわざチョウを選ばれた理由は、おそらくこの類が手頃な大きさの一群であるうえに、学名の変化にも富んでいるからだだろう。初版の不備を補った第 2 版が最近に出版されたが、初版本の購入者には「第 2 版での改訂事項一覧表」を無料で配布される由である。この機会にぜひ座右の書とされるようお勧めしたい。

(上野 俊一)

## Studies on the Subfamily Steninae (Coleoptera, Oxyporidae) from Japan

### VI. Subgenus *Parastenus* of the Genus *Stenus*, Part 1\*

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**Abstract** Five new taxa, *Stenus cirriformis*, *S. punctifer*, *S. amamiensis*, *S. hagaromo* and *S. guttalis ishigakiensis* of the subgenus *Parastenus* HEYDON are described, and their male genitalia are figured.

The subgenus *Parastenus* HEYDON has been traditionally defined by the following three characters: 1) 4th tarsomeres bilobed, 2) hind tarsi more than 1/2 times as long as hind tibiae, and 3) abdomen with developed paratergites. In the 1st character, however, the 4th tarsomeres are strongly (or weakly) bilobed or simple in the Japanese species. In the 3rd character, three types are observed for the development of the paratergites. The paratergites are broad in the 1st type (*Stenus bicolon* SHARP, etc.), but are very narrow in the 2nd type (*Stenus gestroi takara* NAKANE, etc.). In the 3rd type, the paratergites are much reduced but are visible in the 3rd (and 4th) segment(s), while the terga and sterna are separated only by sutures (the paratergites are absent) in the 4th (5th) to 8th segments (*Stenus guttalis* FAUVEL, etc.). Therefore, the traditional definition mentioned above is insufficient for this heterogeneous subgenus. The subgenus is more sufficiently defined by taking the spermatheca into consideration. In this paper, it is defined on the basis not only of the traditional characters, but of the spermatheca "strongly sclerotized in the female" as shown by PUTHZ (1967). Five new taxa are described and their male genitalia are figured here. They all belong to the group with the 3rd type paratergites.

#### Subgenus *Parastenus* HEYDON

*Parastenus* HEYDON, 1905, Wien. ent. Ztg., 24: 262. Type species: *Stenus impressus* GERMAR, designated by TOTTENHAM, 1939.

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\* Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 3, No. 245).

*Stenus cirriformis* sp. nov.

(Fig. 1 A-B)

*Male and female.* Body length: 4.2–4.5 mm.

Body black, very shiny; antennae except for dark brown 9th to 11th segments, maxillary palpi, anterior margin of labrum and legs yellow to yellowish brown.

Body slender, cylindrical.

Head a little broader than elytra (1.05: 1), 1.59 times as broad as long, fronto-clypeal area deflected, sparsely punctate, interocular area shallowly concave, with a pair of longitudinal depressions, median part between the depressions moderately elevated, almost smooth; punctures dense, round, interstices between punctures much narrower than diameters of punctures outside the depressions; pubescence short, sparse. Antennae reaching posterior 1/4 of pronotum, slender, 3rd to 8th segments subequal in breadth, 9th to 10th each globose, with relative lengths of segments from base to apex as 9: 8: 15: 11: 10: 9: 6: 5: 5: 6: 8.

Pronotum shorter than elytra (0.92: 1), a little longer than broad (1.05: 1), broadest at anterior 2/5, moderately constricted at base, side margins rounded; surface uneven, with dense and subrugose punctures.

Elytra a little broader than long (1.05: 1), side margins rounded, hind margin with a broad and arcuate emargination; punctures large, subrugose, a little larger than those on pronotum.

Abdomen elongate, narrowed toward apex; paratergites very narrow, punctate on 3rd to 4th segments, absent in 5th to 7th; 3rd to 5th terga each with a weak transverse depression at base and crenulate before the depression; punctures moderate on 3rd tergum, very fine and sparse on 4th to 8th; pubescence reddish brown, sparse and erect.

Legs slender, hind tarsi 0.81 times as long as hind tibiae, 4th tarsomeres simple.

*Male.* Eighth sternum with a small emargination at the middle of posterior margin; 9th sternum with a broad arcuate emargination at posterior margin. Genitalia (Fig. 1 A) with median lobe acutely pointed at apex; parameres reaching apex of median lobe, densely haired on apico-internal parts.

*Female.* Abdomen robuster than in male; 8th sternum entire; spermatheca sclerotized as in Fig. 1 B.

Holotype, male (Type No. 2617, Kyushu Univ.), Sandankyô, Hiroshima Pref., 13. viii. 1986, I. OKAMOTO leg. Paratopotypes: 1 female, 30. viii. 1986, I. OKAMOTO leg.; 1 female, 6. ix. 1986, I. OKAMOTO leg.

*Distribution.* Japan (Honshu).

*Remarks.* This new species is closely allied to *Stenus cirrus* BENICK, 1940, but is separable from the latter by the larger body (4.2–4.5 mm) and the robuster spermatheca (Fig. 1 B).



*Stenus punctifer* sp. nov.

(Fig. 1 C-D)

*Male and female.* Body length: 3.6–4.1 mm.

Body dark reddish black to black, very shiny; antennae and labrum reddish brown, legs yellow to yellowish brown.

Body slender, cylindrical.

Head broader than elytra (1.11: 1), 1.71 times as broad as long, frontoclypeal area sparsely punctate, interocular area shallowly concave, with a pair of shallow depressions converging anteriorly, median part between the depressions weakly elevated, with a very narrow smooth area; punctures uniform, dense and round; pubescence short, sparse. Antennae slender, almost reaching posterior margin of pronotum, 3rd segment very slender, a little narrower than 8th, 9th to 10th each elongate oval, with relative lengths of segments from base to apex as 6: 5: 12: 6: 5: 4: 4: 3: 3: 4: 5.

Pronotum about as long as elytra, as long as broad, broadest at about anterior 2/5, side margins rounded; surface moderately convex, with punctures uniform, round, a little larger and denser than those on head.

Elytra broader than long (1.16: 1), weakly constricted at base, broadened posteriorly, hind margin with a wide and arcuate emargination; punctures similar to those on pronotum.

Abdomen elongate, subparallel-sided; paratergites very narrow in 3rd segment, absent in 4th to 7th; punctures very fine, sparse; pubescence yellowish red, erect and very sparse.

Legs elongate, hind tarsi 0.77 times as long as hind tibiae, 4th tarsomeres strongly bilobed.

*Male.* Seventh sternum with a shallow emargination at posterior margin; 8th sternum with a V-shaped emargination at posterior margin; 9th sternum bi-emarginate at posterior margin. Genitalia (Fig. 1 C) robust, median lobe pointed, with a short median longitudinal keel at dorso-apical part; parameres extending beyond apex of median lobe, moderately haired on apico-internal parts.

*Female.* Seventh sternum very weakly depressed at posteromedian part; 8th sternum entire; spermatheca sclerotized as in Fig. 1 D.

Holotype, male (Type No. 2618, Kyushu Univ.), Yona, Okinawa-Hontô Is., Okinawa Pref., 15. iii. 1985, S. NOMURA leg. Paratypes: 1 ex., same data as the holotype; 1 ex., same locality as the holotype, 13. iii. 1985, S. NOMURA leg.; 1 ex., Mt. Nagodake, Okinawa-Hontô Is., Okinawa Pref., 11. iii. 1985, S. NOMURA leg.; 2 exs., Ie-Rindô, Okinawa-Hontô Is., Okinawa Pref., 22. iv. 1986, S. NOMURA leg.; 1 ex., same locality, 14. iii. 1985, S. NOMURA leg.

*Distribution.* Japan (Okinawa-Hontô Is.).

*Remarks.* This new species is similar to *Stenus echiniventris* PUTHZ, 1981, but

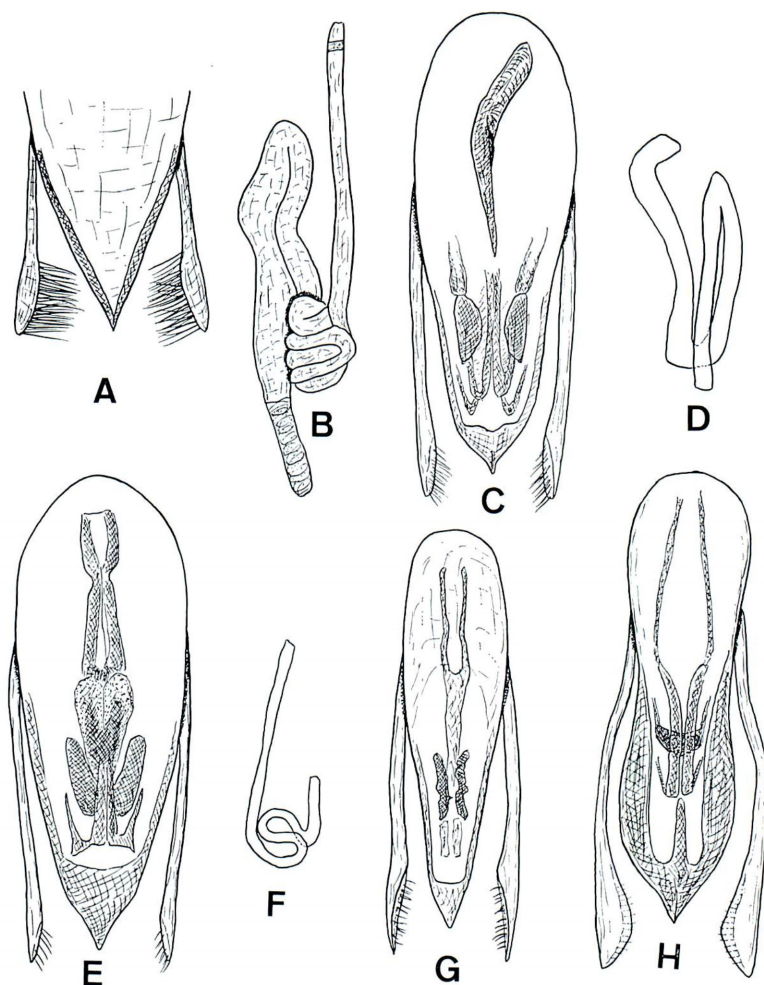


Fig. 1. A–B, *Stenus cirriformis* sp. nov.; C–D, *S. punctifer* sp. nov.; E–F, *S. amamiensis* sp. nov.; G, *S. hagoromo* sp. nov.; H, *S. guttalis ishigakiensis* subsp. nov. A, Apical part of male genitalia in dorsal view; B, D, F, spermatheca in female; C, E, G, H, male genitalia in dorsal view.

the elytra are broader than long and the male genitalia are differently shaped (Fig. 1 C).

***Stenus amamiensis* sp. nov.**

(Fig. 1 E–F)

*Male and female.* Body length: 3.8–4.1 mm.

Body dark reddish black to black, very shiny; antennae, maxillary palpi, anterior

margin of labrum and legs yellow to yellowish brown.

Body slender, cylindrical.

Head broader than elytra (1.24: 1), 1.54 times as broad as long, frontoclypeal area almost glabrous, impunctate, interocular area shallowly concave, with a pair of longitudinal and obscure depressions, median part between the depressions weakly elevated, smooth; punctures moderate, almost regular near inner margins of eyes. Antennae reaching posterior margin of pronotum, 3rd to 8th segments thin, 9th to 11th forming a loose club, with relative lengths of segments from base to apex as 10: 8: 17: 12: 10: 9: 8: 5: 5: 6: 9.

Pronotum about as long as elytra, as long as broad, broadest at anterior 2/5, gently constricted at base, side margins rounded; surface almost even, with an ill-defined median longitudinal depression, punctures dense, round, interstices between punctures much narrower than diameters of punctures.

Elytra a little broader than long (1.07: 1), constricted at base, then broadened posteriorly, hind margin with a broad and arcuate emargination; punctures rough, irregular, sometimes continuous to neighboring ones, a little larger than those on pronotum; pubescence very sparse.

Abdomen slender, subparallel-sided; paratergites very narrow in 3rd segment, absent in 4th to 7th; punctures fine, very sparse; pubescence yellowish red, erect and very sparse.

Legs with femora thick, hind tarsi 0.71 times as long as hind tibiae, 4th tarsomeres strongly bilobed.

*Male.* Sixth sternum shallowly depressed at posteromedian part, with a shallow emargination at posterior margin; 7th sternum with a median longitudinal depression in full length, the depression weakly broadened posteriorly, sides of the depression weakly ridged, with an arcuate and shallow emargination at the middle of posterior margin; 8th sternum with a V-shaped emargination at posterior margin; 9th sternum minutely pointed at apex, without apicolateral projection. Genitalia (Fig. 1 E) elongate oval, median lobe pointed at apex; parameres extending a little beyond apex of median lobe, sparsely haired on apico-internal parts.

*Female.* Abdomen a little broader than in male; 7th sternum truncate at the middle of posterior margin, flat and almost smooth before the truncation; spermatheca strongly sclerotized (Fig. 1 F).

Holotype, male (Type No. 2619, Kyushu Univ.), Hatsuno, Amami-Oshima Is., Kagoshima Pref., 27. iii. 1978, S. NAOMI leg. Paratypes: 5 exs., same data as the holotype.

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

*Remarks.* This new species is allied to *Stenus punctifer* sp. nov., but the punctures on the elytra are rough and irregular, a median longitudinal depression is present on the 7th sternum in the male, and the spermatheca is different in shape in the female (Fig. 1 F).



*Stenus hagoromo* sp. nov.

(Fig. 1 G)

*Male and female.* Body length: 2.8–3.1 mm.

Body blackish, elytra dark reddish black, moderately shiny; labrum reddish brown to blackish, antennae, maxillary palpi and legs yellowish brown.

Body small, broad and thick.

Head a little broader than elytra (1.03: 1), 1.63 times as broad as long, fronto-clypeal area punctate, interocular area not concave, with a pair of broad, shallow and longitudinal depressions, median part between the depressions weakly elevated, with a narrow smooth area; punctures dense, round, umbilicate, denser near inner margins of eyes than those on the middle. Antennae reaching posterior 1/3 of pronotum, 8th segment smallest, 8th to 10th each globose, with relative lengths of segments from base to apex as 8: 7: 11: 8: 6: 5: 4: 3: 4: 5: 7.

Pronotum as long as elytra, about as long as broad, broadest at the middle, convex above; surface with a narrow median impunctate space, punctures rough, dense and round, sometimes continuous to neighboring ones, larger than those on head.

Elytra broader than long (1.23: 1), side margins rounded, hind margin with a broad emargination; surface similarly punctate as on pronotum.

Abdomen broadest at base, strongly narrowed posteriorly; 8th tergum about 0.4 times as broad as 3rd at posterior margin; paratergites very narrow and punctate on 3rd to 4th segments, absent in 5th to 7th; punctures fine, sparse; pubescence reddish, very short and sparse.

Legs short, hind tarsi 0.74 times as long as hind tibiae, 4th tarsomeres strongly bilobed.

*Male.* Fourth sternum weakly depressed at posteromedian part; 5th sternum with a crescent and deep depression at posteromedian part which is very densely covered with short whitish hairs, sides of the depression ridged, with a weak emargination at posterior margin; 6th sternum similarly modified as in 5th, but the depression is deeper, ridges at the sides higher and robuster, and posterior margin more deeply emarginate; 7th sternum depressed at base, with yellowish hairs along the median line, posterior margin straight; 8th sternum with a V-shaped emargination at posteromedian part; 9th sternum with a wide emargination at posterior margin, with a pair of acute apicolateral projections. Genitalia (Fig. 1 G) elongate, median lobe narrowed apically, pointed at apex; parameres extending beyond apex of median lobe, haired on apico-internal parts.

*Female.* Eighth sternum weakly angulate at posteromedian part.

Holotype, male (Type No. 2620, Kyushu Univ.), Mt. Omoto, Ishigaki Is., Okinawa Pref., 20. iii. 1978, S. NAOMI leg. Paratypes: 8 exs., same data as the holotype; 10 exs., same locality as the holotype, 21–22. iii. 1984, S. NOMURA leg.; 2 exs., same

locality, 9. iv. 1986, S. NOMURA leg.; 3 exs., Kanpira Fall, Iriomote Is., Okinawa Pref., 27. iii. 1984, S. NOMURA leg.; 3 exs., same locality, 14. iv. 1986, S. NOMURA leg.; 2 exs., Mt. Urabu, Yonaguni Is., Okinawa Pref., 6. vi. 1983, S. IMASAKA leg.

*Distribution.* Japan (Ishigaki Is., Iriomote Is., and Yonaguni Is.).

*Remarks.* In general appearance, this new species is similar to *Stenus* (*Stenus*) *riukiensis* PUTHZ, 1973(a), but the 4th tarsomeres are distinctly bilobed. *S. hagaromo* sp. nov. is allied to *S. dajac* PUTHZ, 1973(b), but is separable from the latter by the body smaller, the head a little broader than the elytra and the 9th sternum with a pair of acute apicolateral projections.

*Stenus guttalis ishigakiensis* subsp. nov.

(Fig. 1 H)

*Male.* Body length: 5.5 mm.

Body black, moderately shiny; elytra with a pair of ill-defined reddish markings; antennae, maxillary palpi, anterior margin of labrum and legs yellowish brown.

Body slender, cylindrical.

Head broader than elytra (1.05: 1), 1.60 times as broad as long, frontoclypeal area with punctures fine and dense, pubescence golden yellow, moderate in length and decumbent anteriorly; interocular area deeply concave, with a pair of shallow longitudinal depressions, median part between the depressions weakly elevated; punctures uniform, round and dense; pubescence very short. Eyes strongly convex. Antennae reaching posterior 1/3 of pronotum, 3rd to 7th segments subequal in breadth, 8th smallest, 9th to 10th each subglobose, with relative lengths of segments from base to apex as 14: 11: 23: 16: 15: 14: 9: 6: 7: 7: 11.

Pronotum shorter than elytra (0.88: 1), about as long as broad, broadest at about anterior 2/5, side margins rounded; surface uneven, with a small smooth space at center, punctures dense, strongly rugose, larger than those on head.

Elytra broader than long (1.15: 1), robust, side margins gently rounded, hind margin with a wide emargination; surface uneven, with punctures round, very dense.

Abdomen weakly narrowed posteriorly; paratergites very narrow in 3rd and 4th segments, almost invisible in 5th to 7th; 3rd to 6th terga each with a weak transverse depression at base; 8th sternum with a moderate V-shaped emargination at posterior margin; 9th sternum with a wide and shallow emargination; punctures on terga elliptical to round, dense, becoming gradually finer toward apex, interstices between punctures minutely sculptured, a little broader than those on pronotum; pubescence very short. Genitalia (Fig. 1 H) very similar to those of the nominotypical subspecies (ROUGEMONT, 1983, fig. 11 b), median lobe weakly constricted at the middle, pointed at apex; parameres extending beyond apex of median lobe, curved, broadened apically, obliquely truncate at apices, each with a line of hairs on its ventral side.

Legs slender, hind tarsi about 0.57 times as long as hind tibiae, 4th tarsomeres broad, strongly bilobed.



*Female.* Unknown.

Holotype, male (Type No. 2621, Kyushu Univ.), Yoshihara, Ishigaki Is., Okinawa Pref., 27. v. 1983, H. IRIE leg.

*Distribution.* Japan (Ishigaki Is.).

*Remarks.* *Stenus guttalis* FAUVEL, 1895 was recorded from Burma and Thailand. This species is recorded from Japan for the first time, and is represented by a new subspecies there. The subspecies is separable from the nominotypical one by the elytral markings ill-defined and the 7th sternum straight at the posterior margin.

### Acknowledgements

I wish to express my hearty thanks to Prof. Y. HIRASHIMA and Assoc. Prof. K. MORIMOTO of the Entomological Laboratory, Kyushu University, for their constant guidance and encouragement. I am grateful to Mr. G. DE ROUGEMONT (London) for literature. My thanks go also to Mr. I. OKAMOTO (Kure City), Mr. S. IMASAKA (Shimabara City), Mr. S. NOMURA (Kyushu University), Mr. H. IRIE (Fukuoka Pref.) for valuable specimens.

### 摘 要

直海俊一郎：日本産メダカハネカクシ亜科の研究. VI. メダカハネカクシ属 *Parastenus* 亜属, 1. — 本論文で *Parastenus* 亜属に含まれる4新種1新亜種を記載し, これらの雄交尾器を図示した. *Stenus cirriformis* は *S. cirrus* BENICK に似ているが, 体はより大きく (4.2–4.5 mm), 雌の受精嚢はより太い点で区別がつく. *S. punctifer* は *S. echiniventris* PUTHZ に似ているが, 上翅はより幅が広く, 雄交尾器 (図1C) が異なる点で区別がつく. *S. amamiensis* は *S. punctifer* に似ているが, 上翅の点刻は粗く不規則であり, 雄の第7腹板中央に縦長の凹陷部がある. また, 雌の受精嚢 (図1F) は形態がまったく異なるなどの点で容易に区別がつく. *S. hagaromo* は *S. dajac* PUTHZ に似ているが, 体はより小さく (2.8–3.1 mm), 頭部は上翅よりわずかに幅広く, 雄の第9腹板後縁両側に1対の鋭く尖った突起がある点で区別がつく. *S. guttalis ishigakiensis* は, ビルマ, タイに分布する基亜種とは, 上翅斑紋が不明瞭であり, 雄の第7腹板後縁が直線状である点で区別がつく.

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## A New Genus and New Species of the Tribe Melandryini (Coleoptera, Melandryidae)

Naoya MORISHIMA

1833, Hanaishi-cho, Nikko-shi, Tochigi-ken, 321–14 Japan

**Abstract** A new melandryid beetle, *Phryganophilodes elegans* gen. et sp. nov., is described from central Honshu, Japan. It belongs to the tribe Melandryini, and seems to have a relationship with *Phryganophilus*.

### Genus *Phryganophilodes* gen. nov.

Type species: *Phryganophilodes elegans* sp. nov.

Body moderately small-sized, subdepressed, elongate oblong, above moderately coarsely and densely punctured. Head rather broad, not constricted behind eyes, with well-defined frontal suture; eyes obsoletely emarginate in front and more or less prominent. Maxillary palpus moderately long, with apical segment enlarged, cultriform. Antenna subfiliform, slightly shorter than head and prothorax combined; 2nd segment shortest, about a half as long as 1st; 4th longest, 1.2–1.4 times as long as 1st; 5–7th each slightly longer than wide, 8–10th each about as broad as long; terminal segment ovate, subequal to 1st in length. Pronotum transverse, widest before the middle; sides arcuate in front, briefly parallel before subacute hind angles; lateral ridges clear, but obsolete near anterior margin; basal margin trisinuate, lying loosely over the base of elytra. Elytra subparallel-sided, not wider than prothorax; surface almost smooth, with neither longitudinal ridge nor groove. Front coxae contiguous to each other; prosternal process very short, gently pointed toward apex; procoxal cavity broadly angulate laterad, with trochantine visible. Mesocoxae also contiguous to each other. Legs slender, relatively long; protarsus decidedly dilated in male; penultimate segment of metatarsus elongate, subcylindrical with apex excavated; all tibiae nearly straight with terminal spurs small, similar in shape respectively; claws simple. Abdominal segments nearly equal in length to one another.

This new genus is related to the genus *Phryganophilus* SAHLBERG, 1834, but can be distinguished from the latter by the following characteristics: prothorax with trisinuate base, the penultimate segment of metatarsus elongated, apical segment of maxillary palpus enlarged, and so on.

*Phryganophilodes elegans* sp. nov.

[Japanese name: Kinutsuya-nagakuchiki]

(Plate 1)

Body subdepressed, elongate oblong, black, somewhat shiny; elytra and pronotum feebly with greenish or purplish metallic tinge; latero-posterior parts of pronotum and posterior parts of hypomera rufo-testaceous; clypeus and mouth-parts dark brown.

Head rather broad,  $2/3$  times as wide as prothorax; frons slightly convex, with well-defined frontal suture; clypeus transverse, finely and sparsely punctate, with frontal margin weakly bisinuate; disc densely, coarsely, and rather confluent punctate, and sparsely clothed with moderately long, suberect black hairs; eyes obsoletely emarginate in front, more or less prominent; interocular distance about 3 times as wide as eye in dorsal view. Maxillary palpus moderately long; 2nd segment about 3 times as long as the 3rd which is the shortest; terminal one longest, twice as long as wide in female, 3 times so in male, strongly dilated, knife-shaped with the apical margin slightly arcuate. Antenna subfiliform, relatively short, not reaching base of elytra, densely bearing rather long, black setae; scape clavate, twice as long as wide; 4th longest, equal in length to 2nd and 3rd combined; 5th to 7th subtriangular, 5th 1.5–1.7 times as long as wide, 6th 1.2–1.5 times so, 7th scarcely longer than broad; 8th to 10th trapezoidal, each about as broad as long; terminal segment ovate, 2–2.2 times as long as wide.

Prothorax transverse, about  $3/5$  times as long as wide, widest just before the middle; lateral ridge often extending beyond basal  $4/5$ ; sides arcuate in front, sub-oblique behind; hind angle more or less projecting posteriorly, with the tip rounded; basal margin trisinate (lateral sinuations distinct and the median indistinct); disc slightly convex anteriorly, with three basal impressions, of which the middle one is transverse and the lateral two are shallow and triangular; surface moderately coarsely, rather densely punctate, except for a short impunctate median line.

Scutellum trapezoidal, sparsely and shallowly punctured.

Elytra elongate, 2.0–2.2 times as long as wide, more than 3 times as long as prothorax, very slightly narrower than the latter, subdepressed; sides slightly dilated posteriorly, widest at about apical  $2/5$ , then narrowed toward apices which are separately rounded; disc almost smooth, with neither longitudinal costae nor furrows; upper surface densely, rather rugosely, and minutely punctured, more finely so toward apices.

Ventral surface scattered with some fine hairs; prosternum slightly convex, sparsely but rugosely punctured, with the hind margin bisinuate and triangularly projecting apicad at middle; metasternum sparsely punctured, with a rhombic scabrous area in the middle, and with the posterior margin bi-emarginate; mesosternum and abdominal segments sparsely and/or finely punctured, each of the latter being equal in length.

Legs relatively long and slender; all femora gently swollen to the middle, elongate elliptical in lateral view, coarsely punctured; all tibiae nearly straight, with terminal spurs small, similar in shape to each other; basal 4 segments of protarsus dilated in male, with the 3rd and 4th broader than long respectively; penultimate segment of hind tarsus elongate, about twice as long as broad, with the tip excavated; basal segment of hind tarsus as long as the following ones united; claws simple.

Body length: 6.3–8.5 mm.

*Type series.* Holotype, ♀, Yunohana, Minamiaizu-gun Fukushima Pref., May 28–29, 1983, K. KINUGASA leg. (deposited in the National Science Museum (Nat. Hist.), Tokyo). Paratypes: 1 ♀, Eda, Iwaki-shi, Fukushima Pref., May 22, 1977, S. OHMOMO leg.; 1 ♀, same data as the holotype; 1 ♂, same locality as the holotype, June 3, 1984, S. TSUYUKI leg.; 2 ♀♀, same locality as the holotype, May 26, 1985, N. MORISHIMA leg.; 1 ♀, Dorobu, Kuriyama-mura, Tochigi Pref., Jul. 6, 1986, W. SUZUKI leg.

*Range.* Central Honshu (Fukushima and Tochigi Prefs.)

This new species can be easily distinguished from other melandryids occurring in Japan by the unique coloration. It is somewhat similar to *Phryganophilus auritus* MOTSCHULSKY from Siberia in the coloration, but is decisively different from the latter in the generic peculiarities.

### Acknowledgement

The author wishes to express his deep gratitude to Mr. Masatoshi TAKAKUWA of the Kanagawa Prefectural Museum, Yokohama, for his kindness in critically reading the original manuscript of this paper. Hearty thanks are also due to Drs. K. KINUGASA, S. OHMOMO and W. SUZUKI and Messrs. S. TSUYUKI and K. KIMURA for their kindness in supplying with valuable materials.

### 摘 要

森島直哉：日本産ナガクチキムシ科の1新属新種。——本邦産ナガクチキムシ科甲虫の1新属新種キヌツヤナガクチキ *Phryganophilodes elegans* MORISHIMA, gen. et sp. nov. を記載した。この属は Melandryini 族に属し、扁平な体形、触角第4節が最長であること、上翅に線条や縦隆を認めないことなどから、*Phryganophilus* 属に近い。しかしそれとは前胸背板後縁が湾入すること、後肢第3跗節が二葉状とはならず筒形に近いことなどから区別できる。

また本種は、全体黒色で弱い金属光沢をもち、前胸背板両側がオレンジ色を呈するという特異的な色調から、他の本邦産ナガクチキムシとは一見して区別できる。

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### Explanation of Plate 1

*Phryganophilodes elegans* MORISHIMA, gen. et sp. nov., holotype female,  
from Yunohana in Fukushima Prefecture.



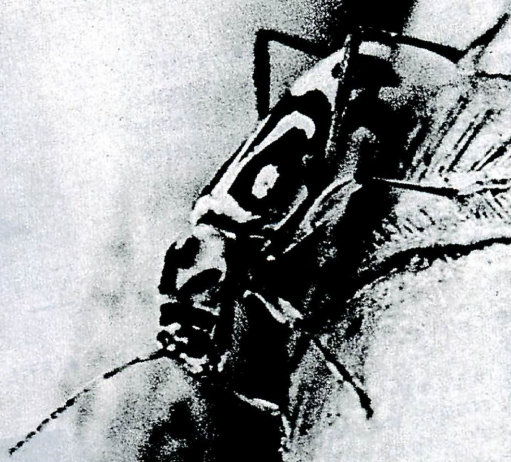




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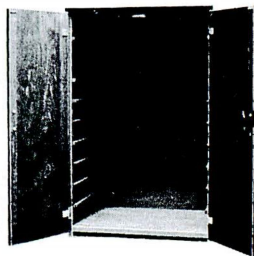


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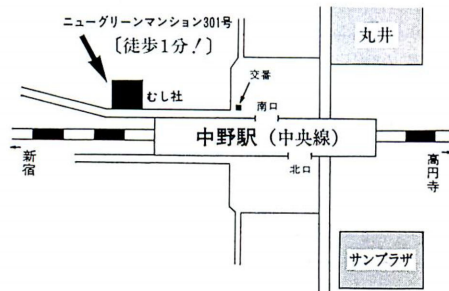


▲標本箱ダンス(10箱用)

## ○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。

※) 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。



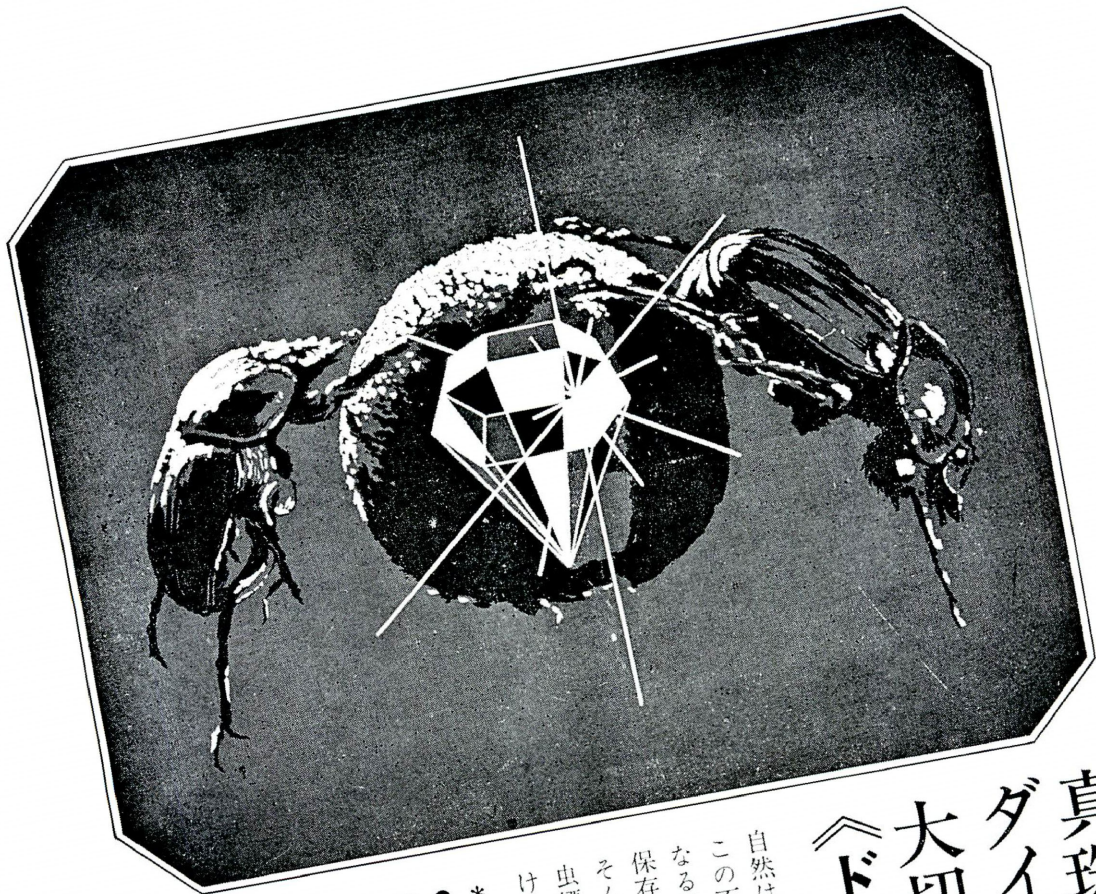
## お申し込み先

- 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
- 白色プラスチック底

る白色プラスチック底の丈夫で美しい仕上げ

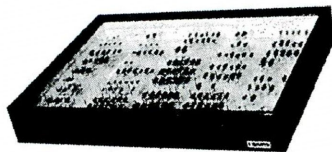
●高級ニス塗装の丈夫で美しい仕上げ

※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  
郵便振替 東京 一三四七九

(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



