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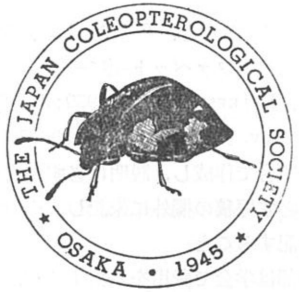

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昆 蟲 学 評 論

THE ENTOMOLOGICAL REVIEW OF JAPAN

VOL. XXIV, NOS. 1/2. SEPT., 1972.

Description of a New Species Allied to *Agonum* (*Metacolpodes*) *kurosonense* HABU (Coleoptera, Carabidae)

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The present paper is based on a specimen found in Yakushima Is., South Japan, by Mr. YUKIHIKO HIRANO who kindly allowed of depositing the specimen in our Laboratory.

Agonum (*Metacolpodes*) *hiranoi* sp. nov.

"Hirano-mori-hirata-gomimushi"

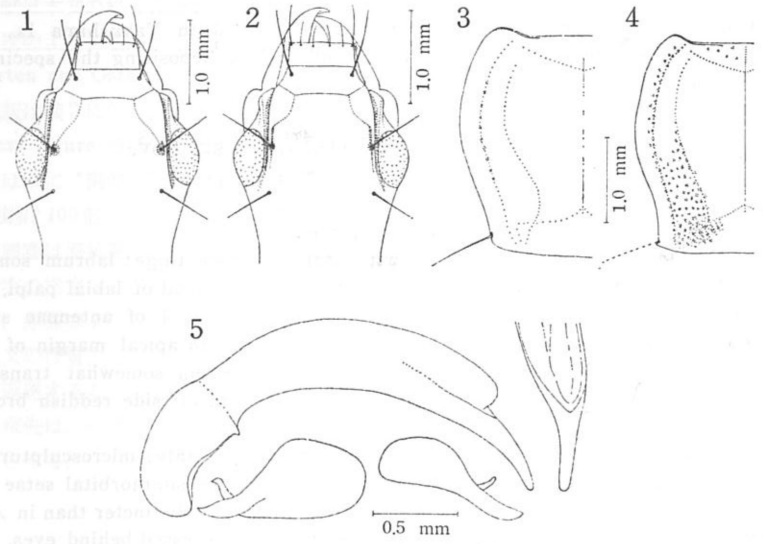
Description. Length 13.0 mm. Width 4.4 mm.

Dark reddish brown, shiny, elytra with metallic green tinge; labrum somewhat yellowish, palpi and antennae yellowish brown, apical segment of labial palpi, apical and penultimate segments of maxillary palpi and segment 1 of antennae slightly reddish, lateral explanate areas of pronotum and lateral to apical margin of elytra pale yellowish brown, lateral explanate areas of pronotum somewhat translucent, legs yellowish brown. femora a little more brownish; ventral side reddish brown on head and pronotum, yellowish brown on other areas.

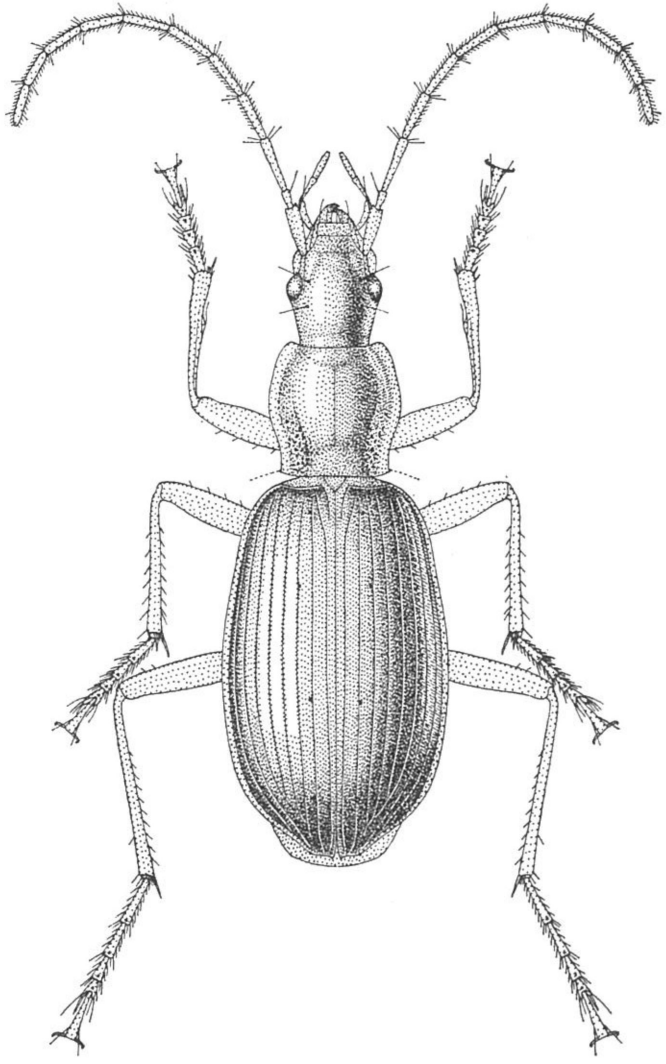
Head (Fig. 2) rather long, convex; dorsal side not punctate; microsculpture very faint and isodiametric except at lateral areas near posterior supraorbital setae where transverse meshes well visible; neck-constriction somewhat distincter than in *A.* (*M.*) *kurosonense* on dorsal side; temporae elongate, slightly depressed behind eyes, gently oblique, oblique parts one and one-third times as long as eyes; eyes smaller and less convex (compared with *A.* (*M.*) *buchanani*), fairly distant from buccal fissures; posterior supraorbital setae fairly distant from eyes, behind level of hind margin

of eyes, interspace a little wider than interspace of anterior supraorbital setae which inserted in small foveae; frontal impressions rather shallow, diverging posteriorly, approaching lateral frontal furrows on level with front margin of eyes, then running posteriorly along furrows beyond anterior supraorbital setae, terminating between anterior and posterior setae; areas between frontal lateral furrows and extending part of frontal impressions finely carinate; antennae fully long, reaching middle of elytra, segment 2 glabrous except for one ordinary seta at apex, segment 3 one and one-tenth times as long as segment 4; apical segment of maxillary palpi as long as penultimate segment; tooth of mentum stout, bifid at apex; submentum with two setae on either side.

Pronotum (Fig. 4) gently convex, widest before middle, a little less than one and two-fifths times as wide as head, slightly wider than long (width of pronotum/width of head=1.38, width of pronotum/length of pronotum=1.05, width of pronotum/width of base of pronotum=1.24, in single ♂); surface with rather dense punctures in and near basal foveae and in lateral furrows, with some faint punctures at apical area; microsculpture rather faint (distinct on basal punctate area), forming transverse meshes; apex well emarginate, straight, border abbreviate at median area; apical angles well prominent, rounded; base slightly emarginate at median area, fairly oblique at lateral areas, unbordered; basal angles obtuse but distinct, protrudent laterally as small tooth at extreme tip; lateral margins not bordered, gently contracted towards apex and base, with slight sinuation before widest part, with distinct sinuation before basal angles; lateral areas rather widely explanate and reflexed, more reflexed at posterior half; anterior marginal setae absent, posterior setae near



Figs. 1-5. *Agonum* (*Metacolpodes*) spp.
1, 2. Heads; 3, 4. Pronota; 5. Genitalia.
1, 3. *A.* (*M.*) *kurosonense* Habu, ♀.
2, 4, 5, *A.* (*M.*) *hiranoi* sp. nov., ♂.



(A. HABU del.)

basal angles (seta on either side fallen off in single specimen); median line fine but distinct, reaching apex, abbreviate at basal area; anterior and posterior transverse impressions somewhat deep; basal foveae rather deep, reaching lateral reflexed areas, shallowly extending forwards parallel with lateral margins, almost reaching anterior transverse impression near apical angles.

Wings atrophied. Elytra fairly convex (most convex at about middle of interval 1), widest a little before middle, one and two-thirds times as wide as pronotum (width of elytra/width of pronotum=1.68), one and two-thirds times as long as wide; surface without punctures; microsculpture rather distinct, forming fully transverse meshes; basal border almost level, gently sinuate, forming obtuse wide angle at shoulder; shoulder not distinct, widely rounded off; lateral margin a little more rounded than in *A. kurosonense*; apical sinuation shallow; apical truncation short, distinct, outer angle obtuse, somewhat rounded, inner angle with small triangular tooth, tooth dull at apex; striae deep, not punctate; scutellary striole a little shorter compared with *A. buchanani*; basal pore present; intervals rather convex, interval 3 with four pores, first pore at one-fifteenth, adjoining stria 2 (remote from stria 2 on right elytron in single specimen), second pore at one-fourth, adjoining stria 3, third pore at three-fifths, fourth pore at five-sixths, third and fourth pores adjoining stria 2; marginal series not interrupted, composed of seventeen to eighteen pores.

Legs slender; fore tibiae distinctly sulcate; segment 1 of fore tarsi of ♂ sulcate on inner area; segments 1 to 3 of mid and hind tarsi bisulcate (inner sulcus a little shallower, in segment 3 of mid tarsi inner sulcus almost absent), with rather dense setae and without longitudinal glabrous space on ventral side; segment 4 well bilobed in all tarsi, lobes almost equal in fore tarsi, outer lobe a little longer in mid and hind tarsi, lobes in hind tarsi a little shorter and narrower than in mid tarsi; tarsal segment 5 glabrous except for a few very short and fine cilia.

Ventral side with some punctures on mesepisterna and sternite 1; prosternal process glabrous; metepisterna relatively short, more than one and one-third times as long as wide (length/width=1.37), distinctly bordered at front and inner sides, shallowly bordered at outer side except anterior area; sternite 6 (♂) faintly emarginate at apex, with one seta on either side.

Aedeagus (Fig. 5) slender, uniformly and well curved, gently bent ventrally before apex, apical part prolonged; surface not rugose; basal bulb rather long; apical lamella fully elongate, gently curved to left margin, so that left margin more sinuate than right margin, both margins gently contracted at basal half, almost parallel at apical half, apex narrowly rounded. Parameres normal in form and size.

Distribution. Satsunans, Japan.

Type-specimen. Holotype: ♂, VIII. 22, 1969, Miyanoura, Yakushima Is., Y. HIRANO leg.

Remarks. *A.* (*M.*) *hiranoi* sp. nov. and *A.* (*M.*) *kurosonense* HABU from Kuroson, Kôchi Prefecture, Shikoku, form a group apparently different from the group to which *A.* (*M.*) *buchanani* (HOPE), the type-species of *Metacolpodes*, belongs. The differential characteristics of the new species from *A. kurosonense* are as follows:— the head is with the frontal impressions extending beyond the anterior supraorbital setae which are placed in smaller foveae than in *A. kurosonense* (Figs. 1, 2); the pronotum is densely punctate in and near the basal foveae and in the lateral furrows, its basal

angles are with a distinct small tooth at the apex, and the lateral margins are fairly sinuate before the basal angles (Figs. 3, 4); the wings are reduced; the elytra are more convex, widest a little before the middle, and a little shorter and wider (in the holotype of *A. kurosonense* width of elytra/width of pronotum=1.54, one and four-fifths times as long as wide); the metepisterna are distinctly shorter.

Explanation of Plate 1.

Agonum (*Metacolpodes*) *hiranoi* sp. nov.

Synonymical Notes on Two *Pterostichus* Species (Coleoptera, Carabidae)

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Pterostichus (*Bothriopterus*) *subovatus* (Motschulsky)

Platysma subovata Motschulsky, 1860, Étud. Ent., 4: 6 ("Japon").

Pterostichus kirishimanus Habu, 1954, Bull. Nat. Inst. Agr. Sci., (C) no. 4: 290–292, figs. 7, 8 (Japan: Mts. Kirishima). Junior synonym, designated here.

Specimens from Hokkaido and Honshu are with an aeneous tinge on the dorsal side, while the specimens of the type-series of *T. kirishimanus* are wholly black. Lately I have examined some aeneous individuals from Mts. Kirishima (H. Maebara leg.). I have also examined two specimens from Shikoku: one from Tsuchigoya, Kôchi Pref. (K. Morimoto leg.) is wholly black, whereas the other from Mt. Tsurugi, Ehime Pref. (S. Nagao leg., through Mr. I. Okamoto) is aeneous.

Pterostichus (*Rhagadus*) *polygenus* Bates

Pterostichus (*Omaseus?*) *polygenus* Bates, 1883, Trans. Ent. Soc. Lond.: 247 (Japan: Nikkô).

Pterostichus freyellus Jedlička, 1958, Ent. Arb. Mus. G. Frey, Tutzing, 9: 910, fig. 3 (Japan: Mt. Takao). Junior synonym, designated here.

I sent one specimen of *P. polygenus* from Mt. Takao, Tokyo Metropolitan District, to the Frey Museum, where Dr. R. Kadlec kindly compared it with the type-specimen of *P. freyellus*.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, p. 4, Sept., 1972]

Studies on the Genus *Pterostichus* from Japan (VI) (Carabidae, Coleoptera)

By Kazuo Tanaka[1] & Kuniaki Suga[2]

Pterostichus (*Nialoe*) *fujisanus* sp. nov.

(Pl. 2 , figs. 1 & 2; Text fig. 1)

Length: 14⅘–16½ mm. Width: 5–5½ mm. Apterous.

Body convex, black, shining; ♀ elytra opake; mouth parts, antennae and legs reddish brown, sterna brownish.

Head (width: 3.1–3.6 mm) smooth; apical margin of clypeus a little concave, frontal furrows subparallel, not very deep, extending onto clypeus anteriorly, diverging behind at posterior end and reaching level of front supraorbital pores; spaces outside frontal furrows a little convex; supraorbital grooves straight, just extending beyond level of hind supraorbital pores which are even with posterior eye margin or slightly behind it; eyes convex; tempora scarcely swollen, less convex than and ½–⅗ as long as eye; genae beneath eye smooth. Ultimate joint of maxillary palpi compressed-cylindrical, 3.6–4.0 times as long as wide, usually slightly longer than penultimate; ultimate joint of labial palpi 4.0–4.5 times as long as wide, subequal to penultimate in length. Antennae about ⅗ as long as body length, subfiliform, joint VI 2.7–2.9 (♂) or 2.3–2.5 (♀) times as long as wide, II with 4–7 setae.

Prothorax cordate, widest a little before apical third, 1.11–1.21 (av. 1.17) (♂) or 1.18–1.26 (av. 1.20) (♀) times as wide as long, 1.28–1.39 times as wide as head, smooth on disk, flattened in middle of basal area, rugose and punctured on laterobasal parts; apical margin concave, unbordered; lateral margins well arcuate in apical ⅘, sinuate-narrowed behind, parallel-sided, diverging or converging before base, bordered throughout, lateral grooves vaguely punctured; basal margin moderately or deeply concave, usually shortly bordered laterally, 0.61–0.72 (av. 0.67) as wide as widest part, a little narrower than apical margin; basal angles acute or right, sharp at tip; apical crescent depression narrow and rather shallow, sometimes indistinct; median line sharply impressed, extending from base to beyond apical crescent depression but not reaching apical margin; basal foveae sulciform, diverging anteriorly; front marginal pore at or just before widest part, single, rarely doubled; hind marginal pore slightly before the angle, single.

Elytra oblong, 1.54–1.63 (av. 1.58) (♂) or 1.50–1.57 (av. 1.53) (♀) times as long as wide, widest a little before middle, 2.08–2.29 (av. 2.18) times as long and 1.09–1.23

1) Sagamidaidanchi 2-2-203, Sagamihara City, Kanagawa Pref.
2) 1-31, Tamagawa-Okusawa, Setagaya-ku, Tokyo.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp 5–7, pl. 2, Sept., 1972]

(av. 1.19) times as wide as prothorax; shoulders 0.60–0.67 (av. 0.63) as wide as widest part, the angles obtuse, edentate; striole on interstice I, short, continuous to basal border; striae distinct throughout, smooth; interstices convex in ♂, flat in middle of ♀ elytra, impunctate; preapical sinuation distinct; inner plica barely visible; dorsal pores 3 (rarely 4) on interstice III, anterior 1 adjoining stria III, posterior 2 or 3 adjoining stria II.

Underside smooth except mesepisterna and metepisterna which are usually sparsely punctured; prosternum shallowly furrowed, the process truncate at apex; metepisterna 1.19–1.32 (av. 1.24) times as wide as long; ♂ apical ventral segment (Fig. 1: a, b) 2-setose, deeply and widely excavated at middle of apex, apical margin with 2 sinuses separated by a median process which is directed downwards, left sinus (in ventral view) very slightly deeper and wider than right one; ♀ apical ventral segment 4-setose, simple.

Legs long, hind tibia and tarsus combined together 1.07–1.18 (av. 1.12) (♂) or 1.03–1.09 (av. 1.07) (♀) times as long as elytral length; basal 3 joints of meso- and metatarsi with a sulcus on outer side, basal 2 joints of meso- and metatarsi with a faint sulcus on inner side.

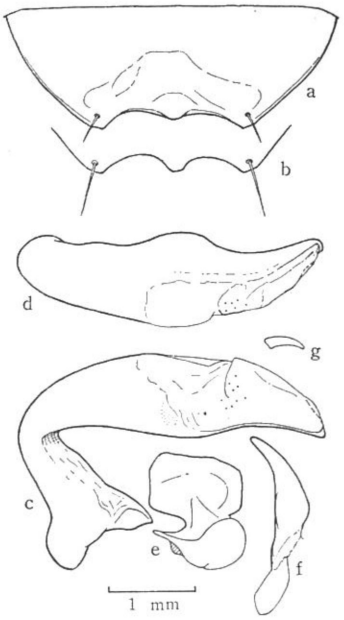


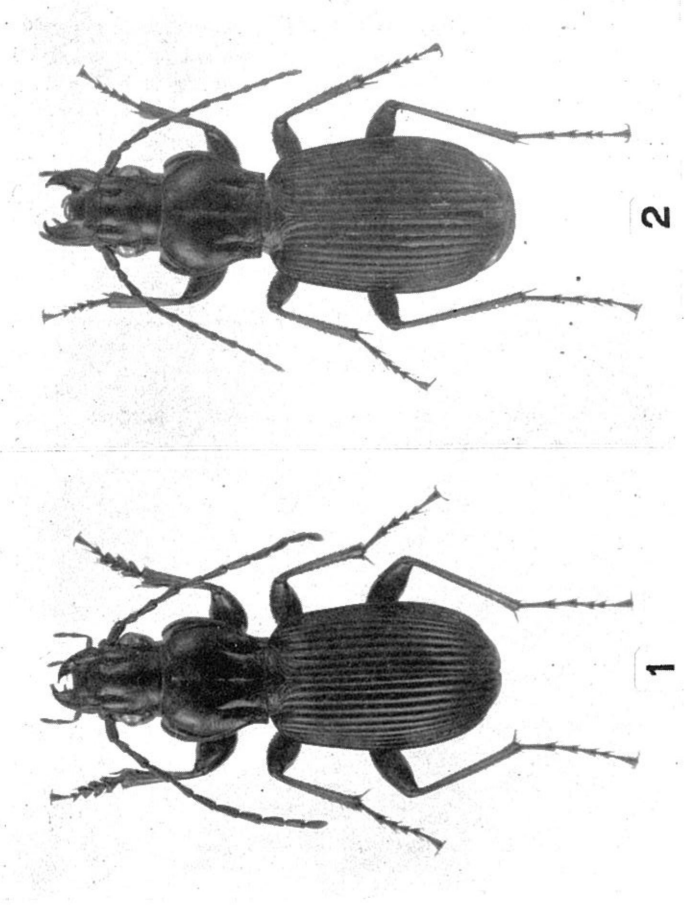
Fig. 1. *Pterostichus* (*Nialoe*) *fujisanus* sp. nov. a & b, male apical ventral segment (a, ventral view; b, apical margin of anterior ventral view). c–g, male genitalia (c, median lobe, left side; d, id., dorsal side of apical part; e, left paramere; f, right paramere; g, a chitin tooth of inner sac).

Microsculpture formed by very fine isodiametric meshes on head, extremely fine transverse meshes, often indistinct, on prothorax, fine but distinct isodiametric meshes on ♂ elytra and very deeply sculptured isodiametric meshes on ♀ elytra.

Genitalia ♂ (Fig. 1: c–g): tumour of right-ventral side of median lobe protrudent; left paramere wide, with apical margin sinuous; right paramere long, gently curved, tapering towards apex.

Type locality. Mt. Fuji, Shizuoka and Yamanashi Prefectures, Honshû, Japan.

Type specimens. Holotype: ♂, south side, alt. 1,400 m (VII 31 1971, TANAKA & SUGA leg.), in K. TANAKA's collection. Paratypes: 16♂♂, 16♀♀ in total. South side, alt. 900–1,750 m: 1♂ (VII 4 1970, SUGA); 1♂ (VIII 2 1970, ARAI); 1♂, 1♀ (VIII 2 1970, MASUMOTO); 1♂ (VI 12 1971, TANAKA); 1♂ (VI 27 1971, SUGA); 2♂♂, 3♀♀ (VII 11 1971, SUGA); 1♀ (VII 18 1971, TANAKA); 1♂, 5♀♀ (VII 18 1971, SUGA & OKUMURA); 1♂, 1♀ (VII 19 1971, FUKUDA); 1♂ (VII 25 1971, TANAKA); 2♂♂, 3♀♀ (VII 28 1971, TANAKA & SUGA); 1♂, 1♀ (VII 31 1971, TANAKA & SUGA); 1♂ (VIII 13 1971, TANAKA); 1♀ (IX 4 1971, TANAKA). North side, alt. 990–1,100 m: 1♂ (VI 27 1971, TSUYUKI); 1♂ (VIII 23 1971, UÉNO). One male paratype (north side, UÉNO) in the collection of National Science Museum, Tokyo, the others in the authors' collections.



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1

(K. TANAKA photo.)

All the specimens were found in virgin forests of *Picea* and *Abies* and also in a plantation area of *Cryptomeria*.

Among the species of the subgenus *Nialoe*, the present new species is unique in the almost symmetric structure of the male apical ventral segment and in the median process directed vertically downwards. *Pt. muranishii* TANAKA[3] has also nearly symmetric apical ventral segment but the median process is directed backwards; though the senior author attributed the species to *Nialoe*, it may be excluded from it. The present new species is most closely allied to *Pt.* (*Nialoe*) *kongosanus* NAKANE[4] but distinguishable from it, besides the structure of the male apical ventral segment, in the deeper frontal furrows and the deep and sulciform basal foveae of the prothorax. The male genitalia resembles quite well, but the median lobe of *Pt. kongosanus* has a fairly deep depression on the left ventral side.

The authors wish to express their gratitude to Messrs. H. ARAI, FUKUDA, K. MASUMOTO, T. OKUMURA, S. TSUYUKI and Dr. S. UÉNO for valuable material.

Explanation of Plate 2.

Pterostichus (*Nialoe*) *fujisanus* sp. nov.
1. Male; 2. Female.

3) TANAKA, 1958, Kontyû, 26: 80.
4) NAKANE, 1963, Fragmenta Coleopterologica, pars 6: 24.

A New Species of the Genus *Pterostichus* BONELLI from Shikoku, Japan (Coleoptera : Caraboidea)

By TAKEHIKO NAKANE[1)]

Division of Entomology, Department of Zoology, National Science Museum, Tokyo

Pterostichus omogoensis sp. nov.

Black or reddish black, moderately shining but not iridescent, with the antennae, palpi, labrum, mouth parts, basal half of mandibles, apical margin of clypeus, legs and under surface of hind body more or less reddish, and the elytra sometimes partly reddish.

Head of moderate size, weakly convex, smooth and sparsely microscopically punctulate; microsculpture isodiametric, but somewht transverse on the neck. Labrum flat, twice as wide as long, very slightly emarginate and 6-setose in front and linearly truncate behind, with the surface bearing isodiametric microsculpture. Clypeus very slightly emarginate in front and obsoletely transversely sulcate behind; frontal furrows subparallel, straight, deep and a little divergent in front, each with an oblique outer branch between eyes. Eyes relatively small, convex, with visible ommatidia. Tempora tumid and scarcely shorter than eyes. Posterior supraorbital seta slightly behind the level of hind margin of eyes. Apex of terminal joint of palpi a little obliquely truncate. Tooth of mentum bifid with obtusely rounded apices; median part of mentum longitudinally costate in middle, deeply hollowed on both sides, with a pair of setiferous pores behind the tooth. Antennae long, with basal three joints glabrous, the 2nd joint bearing two or three setae near the apex and the 3rd with five or six setae.

Pronotum cordate, depressed, widest at about apical fourth, a little longer than wide, gently narrowed in front and strongly constricted behind, with the sides broadly rounded anteriorly and weakly but rather broadly sinuate posteriorly bearing a few notches along the sinuation; surface impunctate but with strong transverse wrinkles closely set, except for the anterior and posterior borders, where the wrinkles are shallower and mostly run longitudinally; microsculpture not so distinct and partly obliterated; front margin arched-emarginate and the angles a little produced and subrounded; lateral channel narrow, impunctate and slightly widened in front, with the anterior seta at apical fourth and the posterior one just before the hind angle, which is nearly rectangular; frontal and basal transverse impressions slightly im-

1) Contribution from JIBP-CT No. 125.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 8–10, pl, 3, Sept., 1972]

pressed and indefinite; median line well-marked but fine and not quite attaining both margins; basal fovea on each side long and linear, deep and relatively wide; basal margin sinuous, unbordered and a little shorter than the apical.

Elytra oblong-ovate, depressed, widest at about apical third and not fused with each other; surface smooth with distinct microsculpture consisting of transverse meshes and that of basal border bearing nearly isodiametric microsculpture as in scutellum, which is flat, broadly triangular and slightly depressed at the centre; sides only slightly and sublinearly diverging from rounded shoulder to the middle, gently rounded behind middle and the apical margin weakly sinuous, with the sutural angle usually obtusely rounded; striae strongly impressed but impunctate; scutellary striole rather short and situated on the 1st interval; intervals slightly convex and outer ones a little more distinctly so; the 3rd interval bearing 6-9 dorsal pores, which are variable in position, basal one or two usually adjoining 3rd stria and the remainder nearly always adjoining 2nd stria; basal umbilicate pore placed at base of 1st stria, but sometimes also adjoining 2nd stria; marginal pores 21-28 in number. Hind wing reduced.

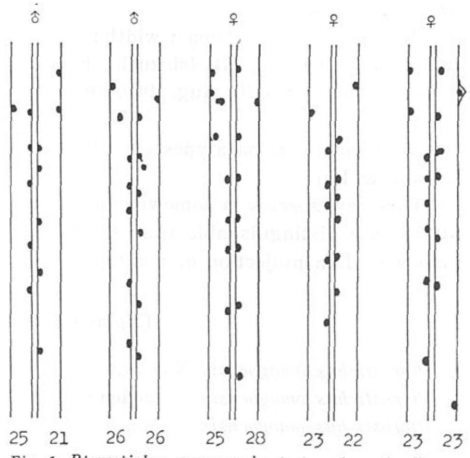


Fig. 1. *Pterostichus omogoensis* ♂ ♀, schematic figure of 3rd elytral intervals showing variable position of dorsal pores. Number of marginal pores on each elytron is indicated just below the figure of interval.

Male protarsi with basal three joints triangularly dilated, longer than or nearly as long as wide, the 4th joint much more weakly dilated than the preceding, with the apex bilobed beneath; basal three joints of meso- and metatarsi sulcate dorsally along outer margin; 5th tarsal joint glabrous beneath. Metatrochanters elongate, a little less than half as long as the femora, which is nearly as long as the tibiae.

Under side of body nearly smooth; mesepisterna sparsely and obsoletely punctulate and the punctures becoming somewhat coarser on basal half: mesosternum impunctate but largely subopaque by the microsculpture; metepisterna and metepimera often bearing a few minute punctures; base of 1st abdominal sternite usually rather densely punctulate and the sides of abdomen with numerous fine irregular wrinkles; prosternal process longitudinally grooved along middle, unbordered and rather broadly truncate at apex with the apical angles rounded.

Anal sternite of male strongly transversely excavated with a rather broad longitudinal elevation across the middle of the excavation, and the apical margin bearing one marginal seta on each side and two deep emarginations, of which the right is deeper and larger than the left, and the median projection between two emarginations rather narrow and quadrate, with both angles nearly rectangular; anal sternite of female transversely depressed in apical half with a faint longitudinal carina at middle and the apical margin very broadly truncate bearing two marginal setae on

each side.

Penis robust, very strongly bent before the middle, gradually widened to the base of membranous field, which is long and triangular, and then strongly narrowed towards triangularly projected apex, where it is narrowly obtusely rounded at the tip; right paramere moderately long, slender, nearly straight, but gently arcuate at apical third; left paramere large, transversely ovate in apical half with the surface hollowed in middle.

Body length: 20–22 mm.; width: 7–7.5 mm.

Locality: Omogo, Mt. Ishizuchi, Ehime Prefecture, Shikoku, Japan.

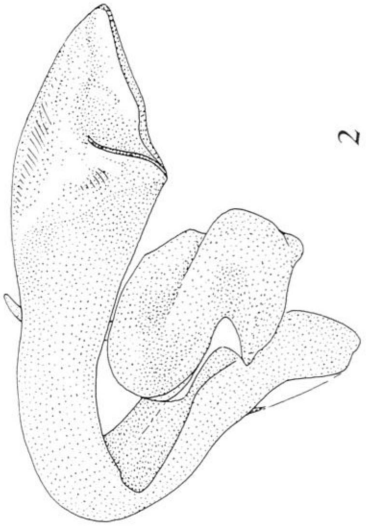
Holotype (♂): 5–15. Aug. 1969, captured by bait trap (IBP-CT in Biol. Inst., Tohoku Univ.)

Allotype (♀) & paratypes (1 ♂ 2 ♀): 5–15. Aug. 1969, K. Ito lgt. (Nat. Sci. Mus., Nakane & Ito)

This new species is somewhat allied to *P. biexcisus* Straneo and its subspecies, but at once distinguishable from the latter in having deeply wrinkled pronotum and narrow median projection of male anal sternite.

Explanation of Plate 3.

1. *Pterostichus omogoensis* Nakane, ♂.
2. *Pterostichus omogoensis* ♂, aedeagus.
3. *Pterostichus omogoensis* ♂, anal sternite.



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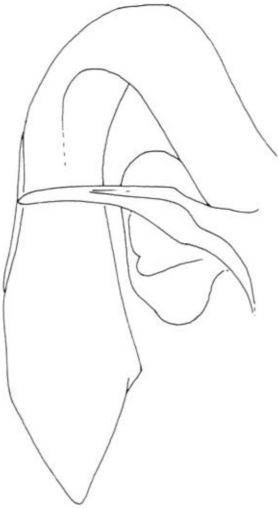

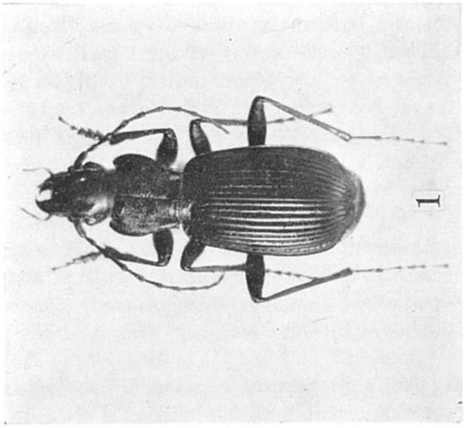

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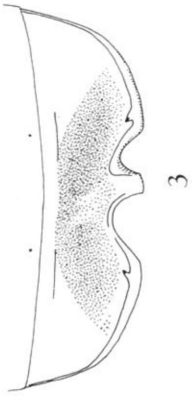

3

(T. NAKANE photo. & del.)

A New Species of Genus *Palaeocallidium* from C. Japan (Col., Cerambycidae)

By Hajime Yokoyama

In this paper the author describes a new species of the genus *Palaeocallidium.*

The material on which the present work is based was collected from the South Alps of Japan by Prof. Michio Kurata and offered to the present author from him.

At first glance, this new species is closely allied to *P. chlorizans* (Solsky) from Siberia, Korea, Mongolia, N. E. China and Hokkaido (N. Japan), therefore some specimens have been recorded as *P. chlorizans* (Solsky) from Honshu (C. Japan) should be reexamined.

Before going further, the author wishes to express his hearty thanks to Prof. Michio Kurata for his kind aid to offer a valuable material.

Cerambycinae

Callidiini

Palaeocallidium (*Palaeocallidium*) *kuratai* sp. nov. (Pl. 4, figs. 1, 3)

Female: Body elongate and slender, more or less dorso-ventrally depressed; head, prothorax and elytra dark metallic green, frons, prothorax with dark bluish reflection, mouth parts, antennae and legs reddish brown, under side of body dark brown; body and appendages sparsely covered with reddish brown hairs.

Head broadened basally, as wide as apical margin of prothorax, broadly shallowly and triangularly concaved between antennal insertions and with a fine median longitudinal furrow from frons to vertex, closely provided with large punctures; terminal segment of maxillary palpus broad scalene triangle, with inner margin shorter than outer one, apical one shortest, the apical and inner angles obtusely angulate; frons short, deeply transversely concaved apically and with several small punctures; gena sparsely punctured, gula impunctate, gena and gula provided with several transverse rugae.

Eyes strongly emarginate and finely facetted.

Antennae short, not arriving at middle of elytra, coarsely punctured on scape, more or less shallowly so on second to fourth segments, sparser shallower so on fifth and sixth ones, the succeeding segments impunctate and more or less flattened, comparative length of each antennal segment is as follows:— 10 : 4 : 9.5 : 9 : 10.5 : 9.5 : 9 : 7 : 6.5 : 5 : 5.5.

Prothorax scalene hexagon, broader than long (ratio of length : broadest width = 45 : 60), broadly arcuately and shallowly emarginate on apical margin, broadened posteriorly on apical half, broadest and obtusely angulate laterally a little before

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middle, then strongly narrowed basally; disc closely provided with large deep punctures which becoming larger laterally and with three callosities which are irregularly connected each other, two of which transversely arranged before middle and median one placed a little before base.

Scutellum blackish violet, tongue-shaped, impunctate, with a broad shallow median sulcus.

Elytra slender, about 2.77 times as long as the basal width, slightly broadened posteriorly on basal one-third, then gradually narrowed apically and separately rounded at apex, sutural angle of which dully angulate; disc densely rugosely punctured, the punctures more or less becoming smaller posteriorly.

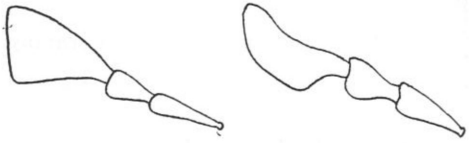
Under side of body shallowly sparsely punctured on mesosternal process and metasternum, finely sparsely so on abdomen; apical margin of fifth abdominal segment shallowly emarginate at middle.

Legs moderately long, femora clavate.

Length, 10 mm.; width, 2.2 mm.

Holotype, ♀, Nikengoya (South Alps of Japan), Shizuoka Pref., Aug. 12, 1969, leg. M. KURATA (in coll. YOKOYAMA).

This new species is closely allied to *P. chlorizans* (SOLSKY) (1870) from Siberia, Korea, Mongolia, N. E. China and Hokkaido (N. Japan), but it is easily distinguished from the latter by quite different colouration of body and callosities of prothorax, additionally the following points.



1 2

Figs. 1-2. Maxillary palpus.
1. *Palaeocallidium kuratai* sp. nov.
2. *Palaeocallidium chlorizans* (SOLSKY).

P. kuratai sp. nov. (♀)

Body and appendages sparsely covered with reddish brown hairs.

Terminal segment of maxillary palpus triangle (Text fig. 1).

Punctures on head large, gula with several rugae.

Antennae short, not arriving at middle of elytra.

Prothorax hexagon, punctures of disc becoming larger laterally (Pl. 4, fig. 3).

Elytra narrow, 2.77 times as long as basal width, without costae, elytral punctures gradually becoming smaller posteriorly.

Punctures of ventral surface shallow and sparse.

Apical margin of fifth abdominal segment shallowly emarginate.

P. chlorizans (SOLSKY) (♀)

Body and appendages closely covered with white hairs.

Terminal segment not thus (Text fig. 2).

Punctures on head small, gula without rugae.

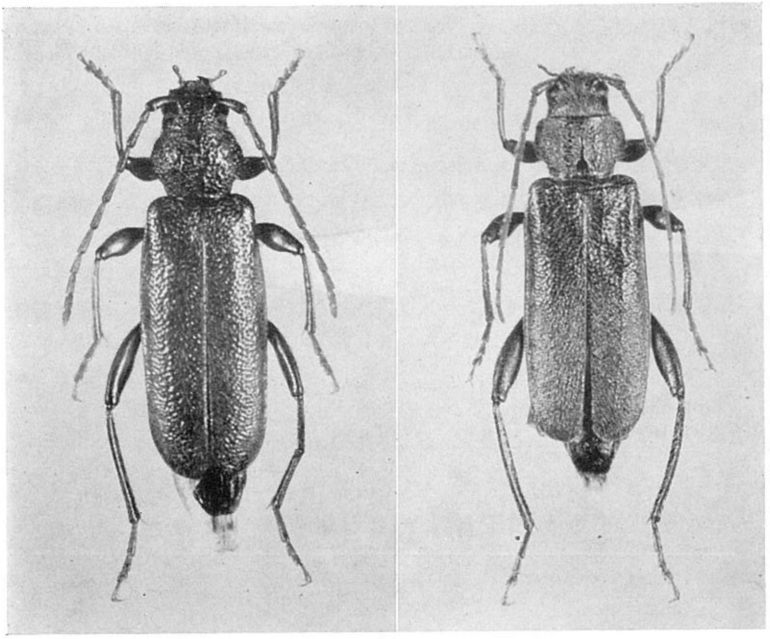
Antennae long, surpassing middle of elytra in the tenth segment in female.

Prothorax not thus, punctures of disc small besides central ones (Pl. 4, fig. 4).

Elytra broad, 2.5 times as long as basal width, with distinct narrow costae, elytral punctures suddenly becoming small on apical two-thirds.

Punctures of ventral surface fine and close.

Apical margin of fifth abdominal segment deeply triangularly emarginate.



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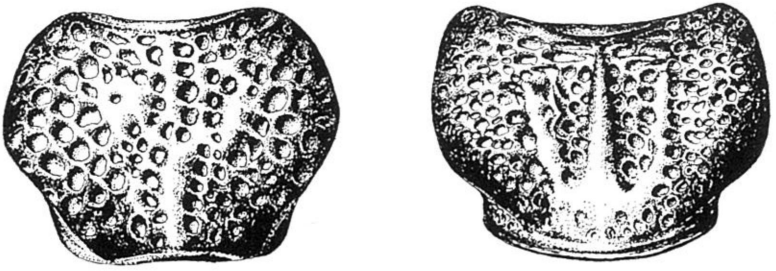

3 4

(H. YOKOYAMA Photo. & del.)

Explanation of Plate 4.

1. *Palaeocallidium* (*Palaeocallidium*) *kuratai* sp. nov., ♀.
2. *Palaeocallidium* (*Palaeocallidium*) *chlorizans* (SOLSKY), ♀.
3-4. Prothorax.
3. *Palaeocallidium* (*Palaeocallidium*) *kuratai* sp. nov.
4. *Palaeocallidium* (*Palaeocallidium*) *chlorizans* (SOLSKY).

摘　　要

シベリア・北海道等に分布する *Palaeocallidium chlorizans* (SOLSKY) アオヒメスギカミキリによく似た南アルプス産の標本を検したところ，明らかに区別し得る新種と認め記載した．従来，本州からアオヒメスギカミキリの記録がいくつかあるが，それ等は本新種ではないかとの疑いが持たれる．

本新種を採集され，その研究をゆだねられた京都大学教授倉田道夫博士に敬意を表し種名に *kuratai* を付与した．なお，新和名はミドリヒメスギカミキリとしたい．

クロスジチャイロコガネ対馬に産す

楠　井　善　久

Sericania fuscolineata fuscolineata MOTSCHULSKY クロスジチャイロコガネはシベリア・満州・朝鮮・樺太・北海道に分布していることが知られている．今回入江平吉氏のご好意により対馬に産するコガネムシ類を検する機会を得たが，その中に本種が採集されていたので新産地として報告する．

4♂♂，3♀♀，Mt. Mokkokuyama, Izuhara-machi, Tsushima Is., 18. V. 1971, H. IRIE leg.

なお，同定に当っては三宅義一氏にご教示を得た．貴重な標本をご恵与下さった入江平吉氏とともに深く感謝の意を表する．

Studies on the Genus *Pterostichus* from Japan (VII) (Carabidae, Coleoptera)

By Kazuo Tanaka[1] & Hiroshi Ishida[2]

Pterostichus amagisanus sp. nov.

(Pl. 5, figs. 1 & 2; Text fig. 1)

Length: 9½–11⅓ mm. Width: 3½–4⅖ mm. Apterous.

Body moderately convex, black, shining; front margin of clypeus, antennae, mouth parts and legs brown; apex of mandibles, mentum, coxae and femora partly infuscated; underside partly brownish.

Head (width: 2.0–2.3 mm) convex, smooth, with vestiges of punctures on both sides of neck; frontal furrows moderately deep, diverging posteriorly and reaching level of front supraorbital pores; hind supraorbital pores even with or just behind posterior eye margin; supraorbital grooves deep, straight; spaces between supraorbital grooves and frontal furrows convex; eyes distinctly convex; tempora not swollen, ⅓–½ as long as eye; genae beneath eye smooth. Labium truncate. Apical joint of maxillary palpi somewhat fusiform, truncate at apex, 3.2–3.7 (av. 3.5) times as long as wide, longer than penultimate; apical joint of labial palpi parallel-sided in apical ⅖, narrowed towards base, truncate at apex, 3.4–3.8 (av. 3.6) times as long as wide, usually as long as penultimate. Antennae subfiliform, joint I longest, II unisetose, VI 2.23–2.33 (♂) or 2.07–2.17 (♀) times as long as wide; apical 2½ (♂) or 2 (♀) joints extending beyond base of prothorax.

Prothorax broadly cordate, widest at apical 3/10, 1.20–1.29 (av. 1.25) times as wide as long, 1.32–1.43 (av. 1.37) times as wide as head; apical margin slighlty concave, narrowly bordered laterally; apical angles not protrudent; lateral margins arcuate in apical 6/7, sinuate and with fine indentations before hind angle, bordered throughout; basal margin 0.72–0.78 (av. 0.76) as wide as widest part, a little wider than apical margin, straight or shallowly concave in middle, slightly oblique laterally, bordered laterally; disk moderately convex, punctured in lateral grooves, on flattened basal area, in basal foveae and on a small area in middle of each side behind apical margin; apical crescent depression distinct; median line sharply impressed, extending from base but not reaching apex; two basal foveae on each side, inner one longer, outer one bordered with a distinct carina externally; front marginal pore at or just before widest part, hind one at basal angle.

Elytra ovate, moderately convex, 1.38–1.51 (av. 1.45) times as long as wide, 2.20–2.40 (av. 2.32) times as long and 1.21–1.34 (av. 1.28) times as wide as prothorax; shoulders 0.63–0.71 (av. 0.65) as wide as widest part, the angles obtuse, edentate, a little

1) Sagamidaidanchi 2-2-203, Sagamihara City, Kanagawa Pref.
2) No. 17-32, Taidera 1-chôme, Akashi City, Hyogo Pref.

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produced anteriorly; basal border arcuate; striole short, on interstice I; striae sharply impressed throughout, punctured on basal half or more; interstices convex, smooth, III with 3 dorsal pores, anterior one adjoining stria III or II, or between them, posterior two adjoining stria II, rarely only two dorsal pores; preapical sinuation weak in ♂, only traceable in ♀; apex simple; inner plica extending beyond apex of epipleuron, but invisible from above

Underside punctured on sides of prosternum, prepisterna, mesosternum, mesepisterna, sides of metasternum, metepisterna and sides of abdominal segments I–III; prosternal process shortly converging posteriorly before truncate and unbordered apex, the vertical side a little constricted, bordered on each side; metasternal process clearly bordered; metepisterna 1.04–1.13 (av. 1.07) times as long as wide, bordered on anterior and inner margins; mesepimera much wider than long; apical abdominal segment simple, 2-setose in ♂, 4-setose in ♀.

Legs: femora stouter in ♂ than in ♀; joints I–III of ♂ protarsi dilated; joints I–III of meso- and metatarsi sulcate on outer side; metatibia and metatarsus combined together 0.89–0.93 (av. 0.91) (♂) or 0.84–0.89 (av. 0.86) (♀) as long as elytra.

Microsculpture indistinct on head, of extremely fine and slightly transverse meshes on prothorax, of extremely fine transverse lines forming partly irregular meshes on elytra.

Genitalia ♂ (Fig. 1): median lobe curved rectangularly at basal third, apex widely rounded; apical membrane with a sclerotized plate on left side; inner sac with a narrow, strongly curved chitin tooth; left paramere wide; right paramere short, with rounded apex.

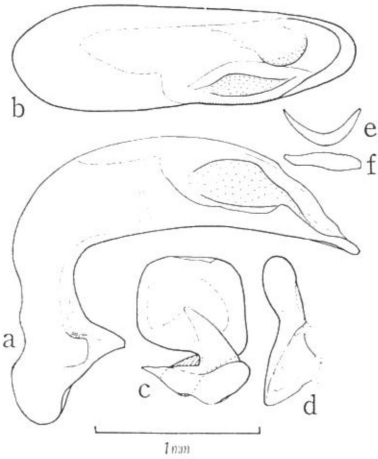


Fig. 1. *Pterostichus amagisanuus* sp. nov., male genitalia. a, median lobe, left side; b, id., dorsal side; c, left paramere; d, right paramere; e, chitin tooth of inner sac, lateral view; f, id., ventral view.

Distribution. Fuji Volcanic Mountain-range, Honshû, Japan.

Type locality. Mt. Amagi, Izu Peninsula, Shizuoka Pref.

Holotype: ♂, (Mt. Amagi-Manjirô) June 29, 1964, K. TANAKA leg., in K. Tanaka's collection. Paratypes: 1♀, (Mt. Amagi-Manjirô) June 23, 1964; 3♂♂, 1♀, (Mt. Amagi-Manjirô) June 29, 1964; 2♂♂, 7♀♀, (Mt. Amagi-Manjirô) June 25, 1966; 1♂, 1♀, May 30, 1970; K. TANAKA leg., in the authors' collections.

Examined specimens from other localities. 2♀♀, Mt. Kamiyama in Hakone Mts., Kanagawa Pref., May 31, 1971, K. TANAKA leg.; 2♂♂, Mt. Fuji, Shizuoka Pref., June 27 & July 31, 1971, K. TANAKA leg.

The present new species is allied to *Pterostichus yoritomus* BATES[3] (Pl. 5, f.

3) Trans. Ent. Soc. London 1873: 290.

3 & 4) and distinguishable from it in the following points. Body is in general smaller and less shiny; the prothorax is wider and more strongly rounded laterally; the apex of the elytron is simply rounded and the sutural angle is apicalmost, while in *P. yoritomus* the sutural angle is a little proximal to the apical end of the elytron and forms a blunt dent. The apex of the male genitalia is flat and simply rounded, while in *P. yoritomus* it is concave above and protrudent towards right.

Pterostichus fujitai sp. nov.

(Text fig. 2)

Length: 9½–11⅕ mm. Width: 3⅖–4 mm. Apterous.

Very closely allied to the preceding species. Differenciating characteristics as follows. Prothorax wider, slightly more constricted posteriorly; basal margin 0.68–0.76 (av. 0.72) as wide as widest part, equal to, or slightly wider or slightly narrower than apical margin; widest part placed a little more posteriorly (about apical ⅓). Striae of elytra without punctures or with vestigial ones; preapical sinuation deeper and distinct in both sexes; inner plica wider and visible from above beyond apex of epipleuron. Legs slightly longer, metatibia and metatarsus combined together 0.92–0.98 (av. 0.95) (♂) or 0.89–0.93 (av. 0.91) (♀) as long as elytra. Genitalia ♂ (Fig. 2): median lobe curved in an obtuse angle, not sinuate on dorsal side before base in profile, apical lamella markedly wider and longer; sclerotized plate on apical membrane sharply angulate dorsally; left paramere narrowed apically.

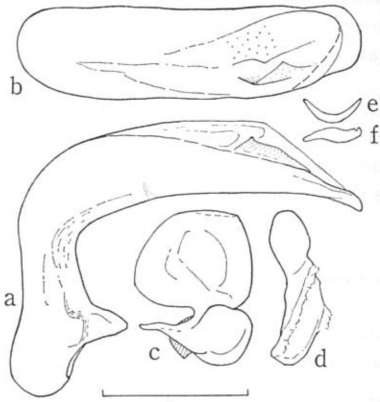


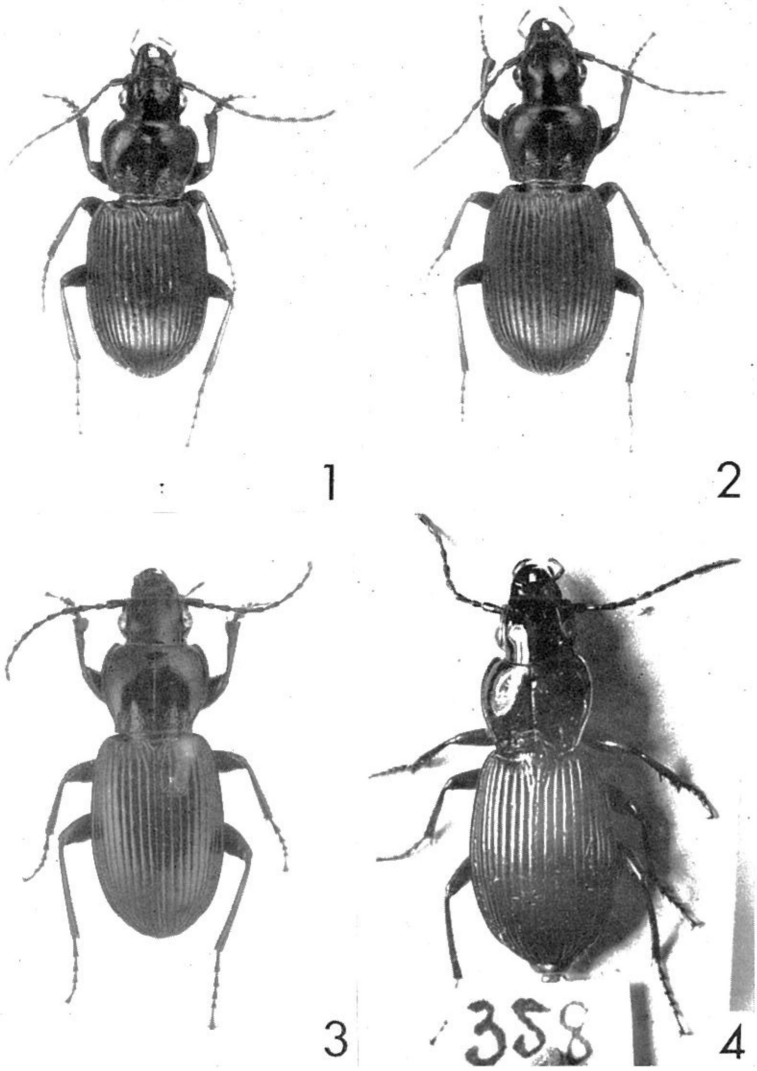
Fig. 2. *Pterostichus fujitai* sp. nov., male genitalia. a, median lobe, left side; b, id., dorsal side; c, left paramere; d, right paramere; e, chitin tooth of inner sac, lateral view; f, id., ventral view.

Distribution. Kii Mountain-range, Honshû, Japan.

Type locality. Mt. Ohdaigahara, Nara and Mie Prefectures.

Holotype: ♂, (Kimmeisui) July 21, 1953, H. ISHIDA leg., in K. TANAKA's collection. Paratypes: 1♂, (Dôkura-Okimitôgé) June 12, 1952, H. ISHIDA leg.; 2♂♂, 3♀♀, (Kimmeisui) July 21, 1953, H. ISHIDA leg.; 1♀, (Dôkura) July 22, 1953, H. ISHIDA leg.; 1♂, (Dôkura-Okimitôgé) July 22, 1953, H. ISHIDA leg.; 1♂, (Kimmeisui) July 23, 1953, H. ISHIDA leg.; 2♂♂, Aug. 6, 1956, K. FUIITA leg.; 1♂, June 22, 1957, M. YOSHIKAWA leg.; 1♂, (Kimmeisui-Mitsukôchi) June 29, 1959, H. ISHIDA leg.; 1♂, (Mitsukôchi-Ohdaikyôkai) June 29, 1959, H. ISHIDA leg.; in the authors' collections.

The authors are indebted to Dr. KATSURA MORIMOTO for a fine picture of the holotype specimen (♀) of *Pterostichus yoritomus*. He took it at the British Museum for the present study. They are also indebted to Messrs. KUNIO FUJITA and MASAHIKO YOSHIKAWA for the gift of valuable specimens.



1. *Pterostichus amagisanus* sp. nov., holotype, male.
2. Ditto, paratype, female.
3. *Pterostichus yoritomus* BATES, male.
4. Ditto, holotype, female.

(Figs. 1–3, K. TANAKA photo.)
(Fig. 4, K. MORIMOTO photo.)

On a Species of *Eupetedromus*, a Subgenus of *Bembidion*, found in Hokkaido, North Japan (Coleoptera, Carabidae)

By Akinobu Habu

Laboratory of Insect Identification and Taxonomy,
National Institute of Agricultural Sciences,
Nishigahara, Kita-ku, Tokyo, Japan-114

Recently Mr. Hisashi Inouye sent me some specimens of a *Bembidion* species. This belongs to the subgenus *Eupetedromus* Netolitzky, no species of which has hitherto been known in our fauna. *Eupetedromus* can be discriminated from the subgenus *Notaphus* by the unbordered metasternal process. According to Netolitzky's key (Netolitzky, 1942) it came near *B.* (*E.*) *sibiricum* (Motschulsky), but I could not determine the species inasmuch as all the species of *Eupetedromus* seem to resemble one another. I sent one male specimen to Professor C. H. Lindroth of the Lund University, who kindly examined it and informed me it was *B.* (*E.*) *sibiricum* (Motschulsky) sensu Netolitzky.

The name *sibiricum* has been used three times for three different species: the first is *Bembidium sibiricum* Dejean, 1831, Spec. Gén. Col., 5, pp. 66–67, regarded as a "var." of *B.* (*E.*) *dentellum* (Thunberg) by Csiki in his Coleopterorum Catalogus, the second is the present species, *Trachypachus sibiricus* Motschulsky, 1844, Mém. Acad. Sci. St.-Pétersb., 5, pp. 270–271, and the third is *Lopha sibirica* Motschulsky, 1850, Käf. Russl., p. 12, identical with *B.* (*Lopha*) *quadrimaculatum* (Linné). I give, therefore, a new name *inouyei* to the species and add a description in the present paper.

My sincere thanks are offered to Professor C. H. Lindroth for his kind aid in the identification and Mr. H. Inouye for his giving me the interesting material.

Bembidion (*Eupetedromus*) *inouyei* nom. nov. sensu Netolitzky

"Inoue-madara-mizugiwa-gomimushi"

Bembidion (*Eupetedromus*) *sibiricum* Motschulsky: Netolitzky, 1942, Kol. Rundsch., 28: 76.

Description. Length 4.7–5.4 mm. Width 2.0–2.3 mm.

Head including labrum, pronotum and scutellum black, dull metallic green or aeneous (labrum slightly reddish), somewhat opaque, mandibles pale brown at basal half, reddish brown at apical half, antennae and palpi black, segment 3 (apical seg-

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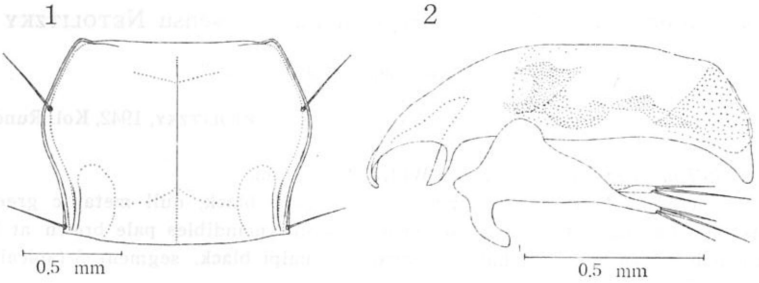
ment) of both palpi and segment 1 of maxillary palpi dark brown, segment 1 of antennae yellowish brown though somewhat dark on dorsal side, basal part of segments 2 to 4 of antennae reddish brown, legs brown, tibiae yellowish, tarsi reddish to slightly dark, dorsal apical area of femora and basal area of tibiae somewhat dark and slightly aeneous; elytra shiny, not aeneous (slightly aeneous only near scutellum) but somewhat iridescent, generally reddish brown, partially black, partially yellowish brown (humeral area wholly reddish brown), or sometimes light brown or yellowish brown, partially dark reddish brown; ventral side black, hypomera brown to dark brown, epipleurae brownish yellow.

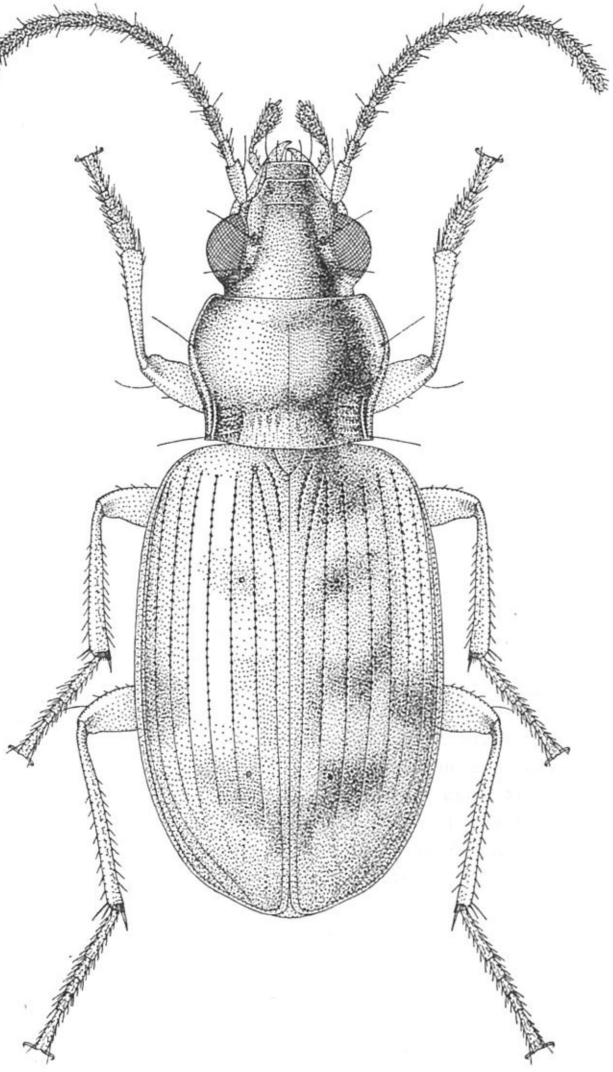
Head somewhat convex between frontal furrows, more convex on clypeus; dorsal side less shagreened and shinier on frontal carinae; frontal furrows somewhat deep; frontal carinae distinct.

Pronotum (Fig. 1) convex, widest before middle, one and one-half times as wide as head, at least one and one-third times as wide as long, base fairly wider than apex (in five ♂♂ and five ♀♀ width of pronotum/width of head=1.21–1.28, mean 1.25, width of pronotum/length of pronotum=1.33–1.42, mean 1.36, width of pronotum/width of base of pronotum=1.18–1.24, mean 1.21, width of base/width of apex=1.13–1.19, mean 1.15); surface a little less shagreened than on head; microsculpture forming slightly transverse meshes on disk; lateral apical sulci somewhat separated from apical margin; apical angles generally a little prominent; base gently oblique at lateral areas; basal angles rectangular, apex distinct; lateral margins bordered, evenly contracted towards apex, well arcuate at widest part, sinuation far before basal angles; lateral furrows somewhat distinct, fully narrow at apical half; basal carinae distinct; median line abbreviate just before apical margin, obscurely reaching basal margin; anterior and posterior transverse impressions rather distinct; basal foveae rather deep.

Elytra somewhat convex, shallowly depressed at basal one-fourth on intervals 2 to 5, widest at middle, one and one-half times as wide as pronotum (width of elytra/width of pronotum=1.44–1.58, mean 1.51, in five ♂♂ and five ♀♀), one and one-half times as long as wide; surface without punctures; microsculpture indistinct, consisting of faint, close, fine, transverse lines; lateral margin slightly and evenly, or weakly roundly, dilated from behind shoulder to middle; striae distinct, punctures distinct except on apical area, striae 2 to 6 becoming faint at apical area though complete.



Figs. 1, 2. *Bembidion* (*Eupetedromus*) *inouyei* nom. nov. sensu NETOLITZKY.
1. Pronotum; 2. Male genitalia.



(A. Habu del.)

Metepisterna one and two-thirds times as long as wide.

Aedeagus (Fig. 2) twisted to right side near apex, well bending ventrally before apex, apical part not prolonged; right and left parameres with three setae at apex.

Distribution. Japan: Hokkaido. Siberia.

Specimens examined. 3♂♂, 6♀♀, VI. 12, 1969, Nayoro, H. INOUYE leg.; 1♂, V. 18, 1957, 1♂, 1♀, VI. 10, 1957, Obihiro, H. INOUYE leg.

Explanation of Plate 6.

Bembidion (*Eupetedromus*) *inouyei* nom. nov. sensu NETOLITZKY.

On a Species of *Microlestes* of Japan (Coleoptera, Carabidae)

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In 1967 I recorded *Microlestes exilis* SCHMIDT-GOEBEL from Kyushu, Japan and Tsingtao, East China in Fauna Japonica, Carabidae, Truncatipennes-group based on a single female specimen from Japan and four specimens from China. Soon after the publication Messrs. T. SHIBATA and M. OHKURA sent me some specimens of my *M. exilis* found in Osaka Prefecture, Honshu, Japan.

Lately, however, I have found that I overlooked MATEU's paper entitled "Sur les *Microlestes* SCHMIDT-GOEBEL d l' Asie méridionale" (Rev. Franç. Ent., 26, pp. 135–157 (1959)) in which *M. exilis* is redescribed. His description and figure point out that my *M. exilis* is quite a different species, but I do not know any described one deserving of the present species. In this paper, therefore, I give it a new name, though I do not repeat the description, only referring to some characteristics.

Here I wish to express my heartfelt thanks to Messrs. M. OHKURA and T. SHIBATA for their kind offering of the specimens.

Microlestes imaii sp. nov.

"Imai-chibi-atokiri-gomimushi"

Microlestes exilis SCHMIDT-GOEBEL: HABU, 1967, Fauna Japonica, Carab., Truncatipennes-group: 231, 236–238, pl. 22, fig. 3 (partim); OHKURA, 1967, Ent. Rev. Japan, 19: 62.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 19–20, Sept., 1972]

Length 2.4–2.5 mm (from apex of mandible to apex of elytron) or 2.8–3.1 mm (to apex of abdomen). Width 0.9–1.0 mm.

Pronotum slightly wider than head (in six ♂♂ and two ♀♀ from Shinodayama width of pronotum/width of head=1.02–1.06, mean 1.04, width of pronotum/length of pronotum=1.25–1.32, mean 1.28, width of pronotum/width of base of pronotum=1.28–1.36, mean 1.31). Elytra one and three-fifths times as wide as pronotum (in five ♂♂ and one ♀ width of elytra/width of pronotum=1.56–1.61, mean 1.59), one and one-third times as long as wide.

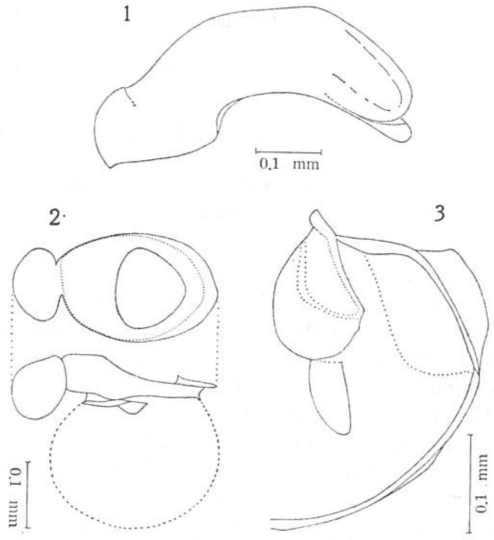
Aedeagus as in Fig. 1. Styluses, hemisternites and apical sclerite in Fig. 3, annulus receptaculi and receptaculum seminis in Fig. 2.

Distribution. Japan: Honshu and Kyushu.

Type-series. Holotype: ♂, VIII. 26, 1967, Shinodayama, Izumi, Osaka Pref., Y. IMAI leg. (through Mr. T. SHIBATA). Paratypes: 4 ♂♂, 1♀, same as holotype; 1 ♂, 1♀, IX. 24, 1967, same as holotype, M. OHKURA[1] leg.; 1 ♀, Yobuko, Saga Pref. (H. YAMAGUCHI leg.).

Remarks. M. imaii is different from *M. exilis* by having the stout aedeagus, not prolonged at the apical part and not protrudent ventrally at the apex. It also differs from *M. formosanus* JEDLIČKA by the state of the microsculpture—"Kopf und Halsschild längmaschig, Flügeldecken isodiametrisch genetzt" in the Formosan species

The specimens from China are almost similar to those of Japan, but in the female genitalia the annulus receptaculi is flat in the lateral view and the apical sclerite appears to be shorter. As I can not decide whether the Chinese form is a subspecies or not, I have left it out in this paper.



Figs. 1-3. *Microlestes imaii* sp. nov.
1. Aedeagus; 2. Annulus receptaculi and receptaculum seminis; 3. Stylus, hemisternite and apical sclerite.

1) According to OHKURA (1967) they were found near the roots of reeds at the margin of a pond.

Two New Species of the Family Languriidae from Taiwan (Coleoptera)

By Yôichi Maeda[1)]

In the present report which is my first study on Languriidae, I describe a new *Caenolanguria* from Lanyu Island and a new *Paederolanguria* from Taiwan with a list of the known species of the latter genus.

Before going further, I wish to express my deep gratitude to Messrs. Taichi Shibata and Sadanari Hisamatsu, for their sincere advices and kind help in literature, materials and several ways. I am very grateful to Prof. Dr. S. Ito, Messrs. S. Moriuchi and Y. Yasuda, of the Entomological Laboratory, University of Osaka Prefecture for their constant help in literature. I am also grateful to the following gentlemen: Messrs. M. Ohkura, Y. Hayashi, Y. Kimura, H. Nomura, Y. Kiyoyama, T. Kobayashi and K. Matsuda who kindly gave me many valuable materials.

Caenolanguria shibatai sp. nov. (Pl. 7, figs. 1-3; Text fig. 1)

Body rather robust, less convex and shining. Dark reddish brown to blackish brown, with lateral sides of the last three or four antennal segments (including apical half of the 11th), middle coxae, trochanters and lateral sides of ventral abdomen obscurely yellowish brown to reddish brown, (these colours somewhat various, paler or darker partly), elytra with a slight brassy tinge.

Head densely, finely punctured; clypeus transverse and more or less asymmetrical as in *C. insularis*, so the apex obliquely truncate, the left half of clypeus not so fully dilated as in the right; eyes coarsely facetted, small but well prominent. Antennae reaching behind the middle of pronotum, basal seven segments elongate, 8th segment triangularly widened, about as wide as long and much narrower than the succeedings, 9th to 11th forming a rather compact and not very wide club, 9th subtriangular, somewhat longer than 8th or 10th, 10th slightly wider or nearly as wide as 9th, 11th generally transverse.

Pronotum a little wider than long, widest before the middle; lateral margins bordered, rounded but rather straightly narrowed basad and/or slightly sinuate before basal angles (the curvature of lateral sides somewhat various); apical angles obtuse, basal ones acute and more or less produced; apical margin almost straight, basal margin normally bordered, bisinuate, and as wide as or a little narrower than the apical one; disc rather less convex, transversely depressed near base, densely and finely punctured as in the head except a median transverse area near the base, where

1) 6-115, Sumie-nishi, Sumiyoshi-ku, Osaka.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp, 21-24, pl. 7, Sept., 1972]

the punctures distinctly larger than the discal ones; basal foveae short, generally linear and subparallel.

Scutellum transversely pentagonal, smooth.

Wings vestigial, narrowly elongate and about only 0.6 time as long as the elytra, therefore the elytra without any humeral angle. Elytra relatively short, about 2.45 times as long as wide and a little wider than or about as wide as the maximum width of the pronotum; shoulders rounded, the humeral areas more strongly inclined laterobasally from disc; lateral sides in front half subparallel or slightly widened behind excepting for the humeral part, while the sides in hind half rather strongly narrowed apicad; apex separately rounded as usual; disc moderately punctate-striate, the intervals finely punctured in a single row; the elytra rather strongly slope down from middle to apex in lateral view.

Metasternum distinctly short, transverse, a little shorter at the length of middle line than the 1st sternite of abdomen, densely and finely pubescent and punctured. Ventral abdomen a little more sparsely and strongly pubescent and punctured on the 1st sternite than those on metasternum, the punctures of sternites becoming denser and finer apicad, and somewhat stronger on lateral area of each sternite. Metacoxal lines short, divergent. Legs normal in both sexes.

Secondary sexual feature almost indistinct, only the prothorax in female somewhat shorter than in male.

Male genitalia (text fig. A–E); apophysis (B) a little longer than penis (A); inner sac (C) about a half time as long as the apophysis, with four copulatory pieces, of two pieces (D) situating near extremity of the sac, robust and almost united together as in V-form, one piece of which being twice as long as another one, the rest two (E) situating near the penis, slender, less chitinous than the former two pieces, nearly parallel and subequal in length to each other.

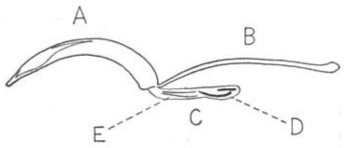


Fig. 1. The male genitalia of *C. shibatai* sp. nov.
A. penis; B. apophysis: C. inner sac; D. copulatory pieces; E. ditto.

Length: 4.5–9.0 mm.

Holotype: ♂, Is. Lanyu (Is. Botel-Tobago), 31. V. 1971, Y. MAEDA leg. (in coll. T. SHIBATA); paratypes: 17 exs., Is. Lanyu, 23–27. III. 1971, H. NOMURA, K. MATSUDA and M. MIHARA leg.; 24 exs., ditto, 30. V – 4. VI. 1971, Y. MAEDA leg. (in coll. T. SHIBATA, S. HISAMATSU, Osaka Mus. nat Hist., Ent. Lab., Univ. Osaka Pref. and mine).

The present species is somewhat allied to *C. insularis* MIWA et CHÛJÔ from Taiwan and Ryukyus, but may be easily separated from the latter by the quite different colouration and the following points: The former has reduced wings, therefore the shoulder is without humeral angle rather than rounded, and so the hinder parts of body are shortened, especially in elytra and metasternum, while the latter has well developed wings, with normal prominent shoulders and elongate hinder parts, the pronotum in the former is a little wider than its length and the widest point places before the middle, but in the latter it is well convex, about as long as wide and its point just in the middle is the widest, etc. In facies *Apterodastus ceylonicus* HAROLD from Ceylon is resembling the present species, but the former has incurved front and middle tibiae in male and different form of the pronotum, etc.

Paederolanguria hisamatsui sp. nov. (Pl. 7, figs. 4–5)

Body narrowly elongate. Orange-red, head and elytra violescent black, scutellum, metacoxae and ventral abdomen blackish, the 1st segment of antennae, mesosternum and middle and hind femora more or less black, apical parts of front femora sometimes infuscate.

Head strongly, sparsely punctured, but the punctures somewhat denser on latero-apical area and on clypeus. Antennae moderately long, 1st segment thickened, 2nd as long as and much thinner than 1st, 3rd a little longer than 2nd or 4th, 4th to 6th gradually decreasing in length but subequal in thickness, 7th a little longer and thicker than 6th, and widened apically; 8th to 11th forming a narrow and loosely articulated club, in which 8th smaller than 9th, but a little longer than 7th, so 7th to 9th appear to gradually increasing in size, 9th and 10th subequal in form and size, 11th oblong oval, slightly narrower but much longer than 10th.

Pronotum subquadrate, a little longer than wide; lateral margins bordered, widest in the middle, gently narrowed apicad and basad and sinuate before basal angles (the margins sometimes various in curve); apical angles obtuse, basal ones acute and produced; basal margin bordered, bisinuate; disc very convex, finely and sparsely punctured, with a longitudinal linear impression in the middle of basal half and with a transverse depression near the base, the depression strongly impressed between basal foveae; basal foveae divergent, deep and not very long.

Scutellum subtriangular, with rounded basal angles, as long as wide and almost smooth.

Elytra fully elongate, a little wider at shoulders than the maximum width of pronotum; lateral sides gradually narrowed behind but more strongly at apical part; each apex produced into a rather thick projection, its extremity not acuminate; disc regularly punctate-striate, the intervals finely punctured in a single row; each elytron with four transverse and shallow depressions, the 1st depression of which situated at about basal fourth, distinctly deeper (pl. 7, fig. 5) and wider than the following depressions, which are very shallow, gradually decreasing in depth and width towards apex.

Metasternum and ventral abdomen finely, sparsely punctured, but the punctures on the latter somewhat stronger, the last sternite densely pubescent and punctured on lateral and apical sides, its apex obtusely pointed. Metacoxal lines divergent, short and not extending to the middle of the 1st sternite.

The male unknown.

Length: 8.0–9.0 mm.

Holotype: ♀, Nanshanchi, Taiwan, 3, IV. 1971, K. MATSUDA leg. (in coll. T. SHIBATA); paratype: 1 ♀, the same locality of the holotype, 30. III. 1970, T. KOBAYASHI leg. (in my coll.).

The present species is nearly allied to *P. klapperichi* MADER from Fukien, China, but it is distinguishable from the latter as follows: In the former the elytra are entirely violescent black, while in the latter they are blackish and with a dark green or bluish green tinge on the basal part between the base and the 1st depression.

ZIA established the genus *Sinolanguria* for two new species (*alternata* and *tuberculata* from China) in 1959, however, so far as I showed in literature there is no distinction between the genera *Paederolanguria* and *Sinolanguria*. So I think fit to

regard as the genus *Sinolanguria* is synonymous with the genus *Paederolanguria*, and consequently his two species are transferred to *Paederolanguria*. Also I transfer two species in Ryukyus (*oshimana* MIWA and *okinawana* CHÛJÔ) from *Tetralanguria* to *Paederolanguria*.

List of the species of *Paederolanguria*

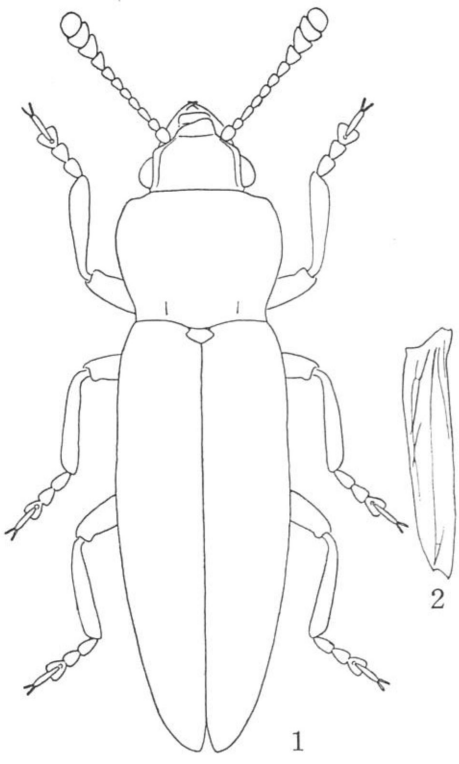
Paederolanguria MADER, Ent. Nachl. Bl., 13 (1/2): 44, 1939. (type species: *P. holdhausi* MADER).

Sinolanguria ZIA, Acta ent. Sinica, 9 (4): 366, 370, 1959. **-syn. nov.-**

1. *P. alternata* ZIA -comb. nov.-
   Sinolanguria alternata ZIA, Acta ent. Sinica, 9 (4): 366-367, 370, 1959.
   Distribution: S. China.
2. *P. hisamatsui* sp. nov.
   Distribution: Taiwan.
3. *P. holdhausi* MADER
   Ent. Nachl. Bl., 13 (1/2): 44-46, 1939.
   Distribution: C. China.
4. *P. klapperichi* MADER
   Koleopt. Rdsch., 33 (1/6): 64-65, 1955.
   Distribution: S. China.
5. *P. okinawana* CHÛJÔ -comb. nov.-
   Tetralanguria okinawana CHÛJÔ, Mem. Fac. Educ. Kagawa Univ., Part II, No. 192: 38-40, 1970.
   Distribution: Ryukyus (Is. Okinawa).
6. *P. oshimana* MIWA -comb. nov.-
   Pachylanguria oshimana MIWA, Trans. Kansai ent. Soc., 6: 17, 1936.
   Tetralanguria oshimana: VILLIERS, L'Abeille, Journ. d'Ent., Soc. ent. France, 37: 276, 1945.
   Distribution: Ryukyus (Is. Amami-Ôshima).
7. *P. tuberculata* ZIA -comb. nov.-
   Sinolanguria tuberculata ZIA, Acta ent. Sinica, 9 (4): 367-368, 370-371, 1959.
   Distribution: S. China.

Explanation of Plate 7.

1. *Caenolanguria shibatai* sp. nov.
2. ditto, the right wing.
3. ditto, in lateral view.
4. *Paederolanguria hisamatsui* sp. nov.
5. ditto, in lateral view.



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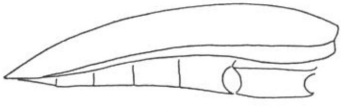

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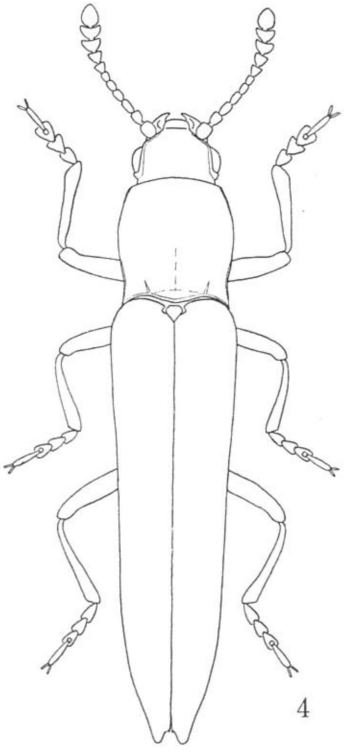

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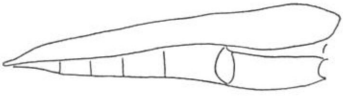

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(Y. MAEDA del.)

Studies on Cerambycidae from Japan and its Adjacent Regions (Col.), XIX

By Masao Hayashi

Through the courtesy of Messrs. Dr. T. Shirozu, Dr. K. Kojima, Prof. S-C. Chang, T. Shibata, Y. Kuroda, T. Aono, W. Watanabe and H. Irie, the present author could study the interesting specimens of longicorn beetles from various localities in Japan, collected by Messrs. Y. Kimura, H. Konishi J. Nagao, S. Moriya, H. Nomura, T. Okadome, M. Shimoi and further the named gentlemen appeared in the following description.

In the present report, an attention is especially called on the revision of the Japanese Apomecynini of Lamiinae, and additionally on other subfamilies and tribes. Three genera are firstly recorded from Japan, first of which, *Atimia* Haldeman has its allies previously in North America and also in East China, presently filling its blank between them, belonging to the distribution belt II, second, *Anaespogonius* Gressitt is a West Chinese element, to the distribution belt III and third, *Mycerinopsis* Thomson (*Zotale* Pascoe) is a Malayan, to the distribution belt IV, numerous new forms are described here, one new synonymy and two new statuses are also proposed on the basis of the examination of the type species.

His hearty thanks are due to the above-mentioned gentlemen who were so kind giving the present author the chance freely to study the interesting material.

Prioninae

Eurypodini

1. *Eurypoda* (*Eurypoda*) *unicolor* Hayashi
   f. *tsushimana* Ohbayashi, comb. nov.

Eurypoda (*Eurypoda*) *tsushimana* Ohbayashi, 1963, Fragm. Col., 2:7 (Tsushima).

Recently numerous specimens of *Eurypoda* (*Eurypoda*) collected in Tsushima, Amami-Ohshima and Yakushima Islands were presented to the present author's examination through the courtesy of Messrs. T. Shibata and H. Irie. These specimens should generally be identified as *E.* (*E.*) *unicolor* Hayashi, originally described from Yakushima, however, the punctations on pronotum and elytra are somewhat different individually, coarse or fine, close or sparse, even in the specimens quite samely collected under the same bark of dead trunks, in every three islands. So far as the difference of his *E.* (*E.*) *tsushimana* Ohbayashi from *E.* (*E.*) *unicolor* Hayashi which was stated by Mr. Ohbayashi, *E. tsushimana* seems to be better belonging to only a form of *E. unicolor*, as a representative of an extreme having coarse and close punc-

〔Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 25–41, Sept., 1972〕

tures on pronotum and elytra causing them in granule or rugulate outlook, and darker blackish brown body colour.

Aseminae

Atimini

2. *Atimia okayamensis* sp. nov.

Oblong, ovate, somewhat elongate, convex. Shining piceous black, covered with light fulvous yellow or greyish yellow pubescence which is appressed, somewhat long and coarse; very scarcely intermixed with long erect hairs on dorsal surface, and decorated with impubescent markings of piceous black, a short elongate one of which on the middle of occiput, two pairs of narrow vittae at lateral margins of pronotum and sides of procoxae on prosternum, small round or transverse markings on elytra which are variable in size, sometimes rather longitudinally related forming a pair of irregularly margined vittae along suture on disc.

Head short, rather broad, a little narrower than prothorax, frons transverse, finely irregularly closely punctured with a median ill-defined longitudinal furrow from the apex, through shallowly concave vertex to the base of occiput; eyes relatively large, deeply emarginate, connecting both superior and inferior lobes by a double row of eye facets; antennae arriving at the base of apical one-third of elytra, scape subconical, relative length of each antennal joint is as follows:— 2.5 : 0.7 : 1.8 : 2.6 : 3.2 : 2.3 : 2.4 : 2.3 : 2 : 2 : 2.6. Prothorax 1.2 times as broad as long, dully rounded at sides, widest at middle and subapical angles dully rounded; disc coarsely very closely punctured, leaving a large shining denuded hexagonal area where scant pubescence invades on the circumference at middle, broadly covered with paler pubescence than on the others at the sides of disc. Scutellum elongate. Elytra a little broader than prothorax, twice as long as the basal width, shallowly gradually tapering posteriorly to submarginally arcuately truncate and subsuturally emarginate at apex with dully produced sutural angles; disc convex coarsely rather closely punctured, chiefly on pubescent areas and almost impunctate on piceous black denuded areas. Legs of moderate length, finely pubescent, first hind tarsal joint shorter than the following two joints united together (ratio, 2 : 2.5). Length, 7 mm. Width, 2.5 mm.

Holotype, ♂, Nodani, Okayama Pref., W. Honshu, Japan, May 13, 1971, Y. ONO leg. (HAYASHI's coll.); paratype, 1 ♀, Hiba, Okayama Pref., W. Honshu, Japan, April 12, 1964, S. OKAMOTO leg. (on the flowers of *Rhododendron* sp.) (Kurashiki Insectarium's coll.).

This new species is allied in antennal structures to North American *A. confusa* (SAY), but it differs from the known congeners in having relatively shorter antennae with relatively longer third joint against to second, emarginate elytral apex, relatively shorter first hind tarsal joint, whitish pubescence margined on greyish yellow ground on dorsum and vittigerous denuded markings on elytra, etc. This genus, *Atimia* HALDEMAN is firstly reported here from Japan.

3. *Atimia fujimurai* sp. nov.

This new species is somewhat allied to *A. okayamensis* HAYASHI but differs from

the latter in having the following characteristics:—

The body smaller, greyish yellow appressed pubescence deeper in colour, denuded or scantly pubescent areas on dorsum different, on pronotum less developed a pair of longitudinal pubescent vittae at sides leaving broader but less denuded area on disc, smaller round or quadrate denuded markings and a pair of apical transverse bands on elytra which are not longitudinally related, not forming vittae. Third antennal joint shorter, about twice as long as second. Punctation on pronotum coarser. Elytral apex subemarginate especially on near sutural angles. Length, 5.5 mm. Width, 2 mm.

Holotype, ♂, Nippara, Okutama, Tokyo Pref., Honshu, Japan, July 13, 1952, T. FUJIMURA leg. (FUJIMURA's coll.).

This new species is also allied to North American *A. hoppingi* LINSLEY, but differs from the latter in having different denuded markings and not transversely truncate elytral apex, etc.

Cerambycinae

Cerambycini

4. *Nadezhdiella japonica* sp. nov.

Relatively small and parallel-sided in elytra. Body chestnut brown, very finely covered with pale greyish yellow silky pubescence, densely on head, prothorax and on meso- and metathoracic sterna, and not so on the others.

Head narrow and short, frons transverse with a narrow median longitudinal furrow extending backward to the middle of occiput through vertex, and additionally with a pair of parenthesis-shaped concavities at sides thereof, vertex very narrow, caused by the close approximity of both very much developed and somewhat overhanging antennal supports, occiput longitudinally deeply canaliculate between both superior eye lobes and then weakly excavated lateroposteriorly at each side, very finely rugulately punctured, genae short, but dully produced anteriorly on the inferior halves below mandibles. Antennae in male 1.25 times as long as body, scape short and stout, roughly uneven at basal half, very finely punctured, third to tenth joints weakly swollen and dully angulate at their apices, relative length of each joint is as follows:— 2.5 : 0.5 : 3.3 : 2 : 3.4 : 3.5 : 3.7 : 3.5 : 3.5 : 3.2 : 5.3. Prothorax distinctly broader than long, narrowly constricted just behind apex and before base, and also dully sinuately so at a short distance inward from said both constrictions, strongly expanded lateroapically between apex and median sharp lateral spines which are triangularly produced, the apex of which somewhat bending lateroposteriorly; disc strongly and roughly vermiculate in an irregular manner, with a pair of small sharp tubercles which are closely set each other on near apex of midline. Scutellum heart-shaped. Elytra a little broader than prothorax, parallel-sided, about 2.5 times as long as the basal width, rounded externally and subtruncate internally at apex with each short dull sutural spine; disc convex, smooth, microscopically punctulate throughout. Anterior coxal cavity acutely but weakly angulate externally, almost closed behind, prosternal intercoxal process nearly as high as the coxae with a median shining costa, dully tuberculate and subtruncate at apex; mesosternal process also as high as the coxae with a shining median costa, angulately emarginate at apex. Legs rather slender, of moderate

length, femora cylindrical, laterally depressed, tibiae dilated apically, tarsi moderately broadened apically, first joint shorter than the following two joints united together. Length, 34 mm. Width, 10 mm.

Holotype, ♂, Mt. Bannadake, Ishigaki Is., Yayeyama Islands, S. Ryukyu, Japan, July 2, 1971, S. OKAJIMA leg. (HAYASHI's coll.).

This new species differs from the type species of the genus, *N. cantori* (HOPE) from Taiwan, Hainan, South China and Thailand, in having the smaller, chestnut brown body, shorter antennae having terminally less dilated apical joints, shallower both excavations on posterior half of occiput, duller vermiculations and closely set small tubercles on pronotum, almost parallel-sided elytra, even in male, having longer pubescence, etc.

5. *Pyrestes yayeyamensis* sp. nov.

Body piceous black, prothorax, elytra and tarsal claws red, apex and base of prothorax infuscated. Antennae shining on basal four joints, fifth and succeedings mat. Breast mat and abdomen shining. Body covered with black pubescence, densely on undersurfaces of basal four antennal joints, femora and tibiae, and with brownish yellow hairs sparsely on breast and with yellow pubescence beneath the tarsi.

Head finely, very shallowly rugulosely punctured, narrowed in front with a deep longitudinal median furrow between well developed antennal tubercles, with a pair of round impressions just below the furrow. Antennae slightly longer than body in male, and arrive at apical one-fourth of elytra in female, finely closely punctured on scape to fourth, microscopically punctulate on fifth to apical joints, strongly dilated apically and angulate ectoapically from fifth to tenth, apically emarginate or subappendiculate on eleventh, relative length of each joint is as follows:— 4.5 : 1 : 4.4 : 3.5 : 6.5 : 7.5 : 8 : 7 : 7 : 7 : 10.5 (male); 5 : 1.5 : 4.5 : 3.7 : 5.5 : 5 : 5 : 5.5 : 4.8 : 4 : 6. Prothorax longer than broad, constricted just behind apex and at some distance before base, irregularly expanded at sides, disc convex, coarsely closely, somewhat rugosely punctured, with a transverse elevation just before centre. Scutellum elongate heart-shaped, uneven. Elytra fairly broader than prothorax, weakly constricted just behind shoulders for basal one-third and then broadened posteriorly and broadly rounded at apex, disc distinctly coarsely closely punctured, on basal half and slightly finely so at apical half, with three pairs of costae, two on disc and another at sides. Breast finely closely and abdomen finely sparsely punctured. Length, 15–20 mm. Width, 4–5.3 mm.

Holotype, ♂ (HAYASHI's coll.); paratypes, 4 ♂♂, 3♀♀, Mt. Omotodake, Ishigaki Is., Yayeyama Isl., S. Ryukyu, Japan, April 5, 1972, K. MATSUDA leg. (HAYASHI & MATSUDA's coll.).

This new species differs from the closest ally, *P. formosana* PIC in having longer antennae, less rugose prothorax, rather uniformly coarsely punctate elytra with distinct three pairs of costae and different colouration of body, etc.

Lamiinae

Homonoeini

6. *Bumetopia senkakuana* sp. nov.

Body reddish brown, shining, covered with fulvous yellow pubescence, densely

on the sides of head, prothorax and on a broad common vitta on elytra which is narrowed and divided into two elongate triangular branches posteriorly and undulate their external margins, and these densely pubescent areas occupied by paler pubescence than in general.

Head narrower than prothorax, coarsely irregularly sparsely punctured; inferior eye lobes fairly shorter than genae below them; antennae 1.2 times as long as body in male, and a little longer than body in female, relative length of each joint is as follows:— 5.5 : 1 : 10 : 8 : 5 : 4.5 : 4.5 : 4.3 : 3.8 : 3.6 : 5 (male), scape shallowly clavate, finely sparsely punctured. Prothorax transverse, weakly expanded laterally, each with a small bituberculations just behind middle of sides, disc somewhat coarsely sparsely punctured, the punctures counted less than 15 along the median line. Scutellum transverse, arcuately rounded posteriorly. Elytra nearly as broad as prothorax at base, slightly broadened posteriorly from the end of basal quarter of the length, broadest at middle, then gradually narrowed to apices which are separately narrowly rounded; disc coarsely very sparsely, partly substriately punctured in general. Length, 10.5 mm. Width, 3.7 mm.

Holotype, ♂, Uotsurijima Is., Senkaku Isl., S. Ryukyu, Japan, Oct. 10, 1970, TETSUO FURUKAWA leg.; paratype, 1 ♀, the same locality as holotype, Oct. 11, 1970, I. MATSUMOTO leg. (HAYASHI's coll.).

Differs from the nearest ally, *B. okinawana* HAYASHI from Okinawa Is., Central Ryukyu, Japan in having sparser punctations, smaller inferior eye lobes, shorter antennae with relatively longer scapes, relatively shorter elytra and paler and different pubescent patterns on body dorsum, etc.

Apomecynini

7. *Mycerinopsis* (*Zotale*) *apomecynoides* sp. nov.

Body reddish brown, partly blackish brown on prothorax, elytra and on femora, covered with greyish yellow pubescence in general, scattered with several small somewhat elongate white markings caused by the density of pubescence, just as in *Apomecyna historio* (FABRICIUS). Antennae furnished with hairs on their undersides from second joint to eleventh, additionally annulated with greyish pubescence on their basal halves from second and so far. Femora remain scattered impubescent small round markings.

Body elongate. Head narrower than prothorax, coarsely sparsely punctured, frons not retreated, transversal; vertex dull-triangularly concave between rather developed antennal tubercles which are approaching each other, with a short median longitudinal furrow, and somewhat planely depressed backward to occiput. Eyes coarsely facetted, strongly emarginate, inferior lobes longer than genae below them (ratio, 2 : 1.5); antennae fairly shorter than body in both sexes, relative length of each joint is as follows:— 5 : 1 : 6.3 : 7.5 : 4.5 : 4.2 : 3.7 : 3.3 : 2.8 : 2.3 : 2.3, scape shallowly clavate, broadest at middle. Prothorax broader than long, narrower at apex than in base, weakly arcuately rounded at sides, disc shallowly convex, somewhat uneven, coarsely sparsely punctured, with each narrow but deep transverse furrow just insides of apex and base, respectively. Scutellum transversal. Elytra fairly broader than prothorax, about 2 times as long as the basal width, almost parallel-sided for the basal two-thirds,

but slightly narrowed just behind base and broadened just behind middle and then narrowed posteriorly to apex which is narrowly and obliquely truncate; disc convex, but even for basal two-thirds and then inclined backward, weakly depressed longitudinally just along suture and obliquely on basal disc, coarsely sparsely and irregularly punctured. Legs rather long, femora clavate, middle tibia shallowly incised at preapical surface, first tarsal joint short, fairly shorter than the following two joints united together, tarsal claws divergent. Length, 11–12 mm. Width, 3.8–4 mm.

Holotype, ♂, Mt. Takada, Yamato-son, Amami-Ohsima Is., N. Ryukyu, Japan, June 27, 1970, HEIKICHI IRIE leg.; paratype, 1 ♀, the same locality as holotype, June 25, 1970, H. IRIE leg. (HAYASHI's coll.).

This new species differs from the known species of the subgenus *Zotale* in having shorter antennae, relatively smaller inferior eye lobes, narrowly obliquely truncate elytral apex without acute marginal angle, coarse and sparse punctures on dorsum and characteristic small white markings, etc.

8. *Nipposybra fuscoplagiata* BREUNING

Nipposybra fuscoplagiata BREUNING, 1939, Festschr. Prof. E Strand, V: 280 (Chuzenji, Honshu, Japan). Apomecynini

Doius adachii HAYASHI, 1958, Ent. Rev. Japan, 9 (2): 49, fig. 2 (Top of Mt. Kobushidake, Chichibu, Yamanashi Pref., Honshu, Japan). **Syn. nov.** (Estolini sense strict) Rhodopinini

The tarsal claws of the former species are divergent and the type specimen of the latter had the divaricate tarsal claws. Therefore, the latter was described as a new species belonging to the genus *Doius* MATSUSHITA by the present author, when the former species had been known only the type specimen deposited in the British Museum of Natural History.

Thereafter, numerous examples identified as *Doius adachii* from Kisofukushima, Nagano Pref., Honshu were kindly presented through the courtesy of Mr. T. SHIBATA. As a result of examining the examples, there are found the tarsal claws of *Doius adachii* are frequently varied from divaricate to divergent conditions.

The type specimen had the dominant white pubescent patterns on dorsal surface of body, but the specimens from Kisofukushima have the different conditions of the pubescence, less dominant and somewhat reddish than the type specimen. These features are quite agree with the former species, *Nipposybra fuscoplagiata*. Therefore, present author would like to synonymize the latter species, *Doius adachii* with the former species in the present time.

9. *Sybra* (*Sybra*) *sakamotoi* (HAYASHI) subsp. *kuri* OHBAYASHI et HAYASHI, comb. nov.

Sybra kuri OHBAYASHI et HAYASHI, 1962, Ent. Rev. Japan, 14 (2): 33 (Honshu, Japan); OHBAYASHI, 1963, Icon. Ins. Japon., Col. Nat. Ed., II: 311, pl. 156, fig. 5.

Sybra (*Sybra*) *kuri*: BREUNING, 1964, Ent. Abh. Tierk. Dresden, 30: 130, 249; KOJIMA et HAYASHI, 1969, Ins. Life Japan, I, Longic.: 102, pl. 31, fig. 7.

Material examined: Types of *Kirishimoopsis sakamotoi* HAYASHI and *Sybra kuri*

10. *Sybra* (*Sybra*) *pascoei* LAMEERE subsp. *miyakoensis* subsp. nov.

This new subspecies differs from *Sybra* (*Sybra*) *pascoei ishigakii* BREUNING et OHBAYASHI and *Sybra* (*Sybra*) *pascoei taiwanella* GRESSITT in having the obliquely truncate elytral apex, not emarginate, with only angulate marginal angles, not sharply produced; different denuded markings on elytra, such as a pentagonal common one on base, pairs of oblique bands just behind the pentagon and of C-shaped ones behind middle on disc. Body reddish brown to brown, sparsely covered with whitish pubescence.

Holotype, ♂, Takachiho, Shimoji-cho, Miyako Is., Sakishima Isl., S. Ryukyu, Japan, Oct. 18, 1963; paratypes, 6 exs., the same data as holotype; 4 exs., Karimata, Miyako Is., Oct. 19, 1963. (HAYASHI's coll.).

11. *Sybra* (*Sybra*) *baculina* BATES
subsp. *musashinoi* BREUNING et CHÛJÔ, comb. nov.

Sybra (*Sybra*) *musashinoi* BREUNING et CHÛJÔ, 1970, Mem. Fac. Educ. Kagawa Univ., II, 192: 56 (Uotsurijima Is., Senkaku Isl., S. Ryukyu, Japan).

Sybra (*Sybra*) *baculina* BATES
subsp. *carinatipennis* BREUNING et CHÛJÔ, comb. nov.

Sybra (*Sybra*) *mimogeminata carinatipennis* BREUNING et CHÛJÔ, 1970, loc. cit., II, 192: 56 (Taketomijima Is., off Ishigaki Is, S. Ryukyu, Japan).

According to the third report (1971) of Prof. M. CHÛJÔ on Coleoptera of the Loochoo Archipelago, *Sybra* (*Sybra*) *mimogeminata* BREUNING et OHBAYASHI belongs to a subspecies of *Sybra* (*Sybra*) *baculina* BATES, under the identification of Dr. BREUNING, showing the same conclusion of the present author (1968). Accordingly *carinatipennis* should automatically be included in subspecies-series of *baculina* BATES. Judging from the original description of *Sybra* (*Sybra*) *musashinoi* BREUNING et CHÛJÔ, this species was originally compared with *mimogeminata carinatipennis* and differenetiated by the relative length of inferior eye lobes, sparser coarser punctation on pronotum and a posteriorly reduced whitish marking on elytral apical portion, which these characteristics seem to be better to judge as subspecific, not specific, according to his revisional research of the present author which has been carried out on the Japanese Apomecynini. Therefore, *musashinoi* is here given a new combination with *Sybra* (*Sybra*) *baculina* BATES as a subspecies.

12. *Sybra* (*Sybra*) *baculina* BATES subsp. *miyakoana* subsp. nov.

This new subspecies differs from *Sybra* (*Sybra*) *baculina mimogeminata* BREUNING et OHBAYASHI in having the dark brown body covered with sparser greyish yellow pubescence and the different combinations of the denuded brown areas, such as a pair of longitudinal vittae or a broad vitta combined thereof on pronotum, pairs on elytral

disc of quadrate ones on base, of oblique inwardly directed bands on basal half, of transverse bands which broadened at suture on middle and of oblique lateroposteriorly directed bands before apex.

Holotype, ♂, Miyako Is., Sakishima Isl., S. Ryukyu, Japan, May 2, 1963, H. NOMURA leg. (HAYASHI's coll.); paratypes, 5 exs., Miyako Is., Oct. 18, 19, 1963 (HAYASHI's coll.).

13. *Sybra (Sybra) baculina* BATES subsp. *omoro* subsp. nov.

This new subspecies differs from *Sybra (Sybra) baculina oshimana* BREUNING, comb. nov. in having the darker, blackish brown body, denser pubescence on head and prothorax, the two median longitudinal vittae which reduced into very narrow ones, a larger wedge-shaped denuded dark area between a basal greyish yellow large pubescent marking and a posterior whitish large one.

Holotype, ♂, Nago, Okinawa, C. Ryukyu, Japan, April 4, 1962, K. KOJIMA & H. WATANABE leg.; paratype, 1♀, Shuri, Okinawa, May 15, 1962, K. KOJIMA & H. WATANABE leg. (HAYASHI's coll.); paratypes, 2 exs., Shuri, Aug. 20 & 21, 1961, M. OKABE leg.; 7 exs., Shuri, the same data as the first paratype; 2 exs., Yona, June, 1962, K. KOJIMA leg. (KOJIMA's coll).

14. *Sybra (Sybra) baculina* BATES subsp. *oshimana* BREUNING, comb. nov.

Sybra oshimana BREUNING, 1958, Bull. Soc. ent. France, 63: 34 (Amami-Oshima, N. Ryukyu, Japan).

Sybra (Sybra) oshimana: BREUNING, 1964, Ent. Abh. Tierk. Dresden, 30:129, 248; SAMUELSON, 1965, Pacific Ins., 7 (1): 112.

Sybra pascoei LAMEERE subsp. *oshimana*: HAYASHI, 1968, Ent. Rev. Japan, 21 (1): 16.

This form should more correctly be included in subspecies-series of *baculina* BATES, than of *pascoei* LAMEERE, because, careful reexamination of the original description and many specimens from Amami-Ohshima, the type locality of this form taught that the former treatment of the present author is a mistake.

Distribution: Amami-Ohshima Is., N. Ryukyu, Japan.

15. *Sybra (Sybra) baculina* BATES subsp. *nipponensis* subsp. nov.

This new subspecies differs from *Sybra (Sybra) baculina oshimana* BREUNING in having the darker body, a distinct median longitudinal denuded vitta on pronotum, a less developed common large yellowish grey pubescent marking on basal half and a more distinct, somewhat round-topped whitish large common marking which developed basally and more distinctly incised lateroposteriorly on its posterior portion on posterior half of elytra, lightly crested base and strongly impressed once just behind the crests on elytral disc.

Holotype, ♂, Anbou, Yaku Is., Kyushu, Japan, May 20, 1960, Y. KIMURA leg.; paratypes 1♀, Tane Is., Kyushu, Aug. 4, 1965, H. KONISHI leg.; 2 ♂♂, Kuchinoerabu Is., Kyushu, July 24 & 26, 1963, H. KONISHI leg. (HAYASHI's coll.).

16. *Sybra (Sybra) ordinata* BATES subsp. *okinoerabuensis* subsp. nov.

This new subspecies differs from *Sybra (Sybra) ordinata flavostriata* HAYASHI and

Sybra (*Sybra*) *ordinata subtesselata* BREUNING in having the relatively shorter fourth antennal joint and longer inferior eye lobes, and also differs from *Sybra* (*Sybra*) *ordinata loochooana* BREUNING in having triangularly produced marginal angles of elytral apex, less densely covered pubescence on body with the following denuded areas, pairs of rectangular ones on middle of base, lateral elongate ones on middle and of small ones before apex on elytral disc, five longitudinal yellow pubescent vittae on prothorax, several yellowish grey longitudinal interrupted vittae on the interspaces between punctures-rows on elytra with certain scattered small whitish dots.

Holotype, ♂, paratype, 1♀, Mt. Oyama, China-cho, Okinoerabu Is., N. Ryukyu, Japan, July 9 & 13, 1970, HEIKICHI IRIE leg. (HAYASHI's coll.); additional paratypes of same data (IRIE's coll.).

17. *Sybra* (*Sybra*) *ordinata* BATES subsp. *tokara* subsp. nov.

Sybra loochooana: HAYASHI (nec BREUNING), 1956, Bull. Osaka Mus. N. H., 9: 21, pl. IV, fig. 7 (Takarajima Is., Tokara Isl.).

Sybra punctatostriata: HAYASHI (nec BATES), 1956, loc. cit., 9:17 (Nakanoshima Is., Tokara Isl.).

This new subspecies differs from *Sybra* (*Sybra*) *ordinata ordinata* BATES in having the denser greyish brown pubescence on body, than the sparser yellowish grey one in subsp. *ordinata*, a pair of inwardly bent bands on middle of elytral disc, instead of round ones, etc. From other subspecies it fairly differs by the synopsis.

Holotype, ♀, Takarajima, Tokara Isl., Kagoshima Pref., Kyushu, Japan, July 6, 1960, Y. HAMA leg. (HAYASHI's coll.); additional paratypes of same data (SHIBATA's coll.).

18. *Sybra* (*Sybra*) *ordinata* BATES subsp. *miyakojimana* subsp. nov.

This new subspecies differs from *Sybra* (*Sybra*) *ordinata loochooana* BREUNING and *Sybra* (*Sybra*) *ordinata okinoerabuana* HAYASHI in having the following combination of characteristics, relatively short fourth antennal joint against third, shallowly triangularly produced marginal angles of elytral apex, dark reddish brown body covered with light brownish grey pubescence, leaving a pair of triangular discal blackish markings on middle of elytral disc, besides similar markings samely appearing in the other subspecies and more distinct interrupted longitudinal pubescent vittae on interspaces between punctures-rows.

Holotype, ♂, paratypes, 2 ♂♂, 2 ♀♀, Miyako Is., S. Ryukyu, Japan, Oct. 18, 19, 1963 (HAYASHI's coll.).

19. *Sybra* (*Sybra*) *basialbofasciata* sp. nov.

Body elongate, blackish brown, generally covered with yellowish brown pubescence, still leaving certain denuded areas. Elytra decorated with a broad undulate transverse band of white pubescence behind base, and also four pairs of interrupted longitudinal white vittae medioposteriorly on disc. Antennae annulated with yellow on the bases from third joint and so far. Legs reddish brown, apices of tibiae and all tarsi blackish brown.

Body rather slender and elongate, convex. Head sparsely coarsely punctured, frons broader than high, with a narrow median longitudinal furrow extending backward through vertex to occiput, vertex dully and broadly concave, occiput convex, antennal tubercles not so developed. Eyes deeply emarginate, inferior eye lobes about 1.5 times as long as genae below them. Antennae fairly longer than body in male, sparsely ciliate beneath, scape short, shallowly clavate, third fairly shorter than fourth, but longer than scape Prothorax a little broader than long, narrowed at apex and base, apex narrower than base, largely rounded at middle of sides, disc well convex, especially on both sides of a median line, coarsely sparsely punctured. Scutellum semicircular, depressed along middle. Elytra distinctly broader than prothorax at base, about 2.25 times as long as the basal width, almost parallel-sided for basal two-thirds, then gradually narrowed posteriorly and broadly obliquely truncate at apex; disc convex behind scutellum and depressed lateral and posterior portions of the convexities with two pairs of shallow longitudinal costae, generally not so closely punctured, the punctures a little smaller or finer than those on head and prothorax, and the interspaces themselves. Femora clavate. Length, 10 mm. Width, 2.8 mm.

Holotype, ♂, Hatsuno, Amami-Ohshima Is., N. Ryukyu, Japan, April 30, 1969, S. MORIYA leg. (HAYASHI's coll.).

This new species differs from *Sybra* (*Sybra*) *flavomaculata* BREUNING (1939) from Japan in having quite different ground colours and pubescent patterns, even if it has a similar structure of body and should apparently belong to the same specific group, *flavomaculata*-group, phylogenetically.

Key to Japanese species of *Sybra* PASCOE (*-marked is a foreign species, provided only for reference)

1. Body length, 3.3–7 mm.; small relatively short species 2
— Body length, 6–12 mm.; elongate species 12
2. Elytral apex almost rounded 3
— Elytral apex emarginate or truncate 4
3. Third antennal joint nearly as long as fourth; inferior eye lobes slightly longer than genae below them; body dark brown, decorated with white pubescent areas, such as sides of prothorax, surroundings of scutellum, a median transverse band and apical small patches on elytra ..... *sakamotoi kuri* OHBAYASHI et HAYASHI
— Third antennal joint fairly shorter than fourth; inferior eye lobes fairly longer than genae below them; body blackish brown, decorated with white pubescent areas, such as sides and base of prothorax, base, middle and apex of elytra ..... *sakamotoi sakamotoi* (HAYASHI)
4. Prothorax as long as broad, closely punctured, the punctures larger than the interspaces between them (*pascoei taiwanella*-group) 5
— Prothorax broader than long, sparsely punctured, the punctures smaller than the interspaces between them (*baculina*-group) 8
5. Inferior eye lobes longer than genae below them 6
— Inferior eye lobes as long as genae below them; elytral apex obliquely truncate, with produced marginal angles; body black to brown, covered with brown to light yellowish grey pubescence, decorated with denuded or scarcely pubescent dark brown areas, such as a broad median longitudinal vitta on pronotum, a diamond-shaped or pentagonal common marking on basal half of elytral disc .....

.....*pascoei okinawana* BREUNING et OHBAYASHI

6. Elytral apex obliquely truncate with only angulate marginal angles; elytra decorated with brown areas, such as a pentagonal common marking on base, an oblique band just behind the pentagon and a C-shaped one behind middle on each .....
..... *pascoei miyakoensis* HAYASHI

— Elytral apex obliquely narrowly emarginate with produced marginal angles..... 7

7. Prothorax slightly broader than long; dark brown markings on elytra very variable, but not vanished.....*pascoei ishigakii* BREUNING et OHBAYASHI

— Prothorax as long as or slightly longer than broad; elytra decorated with a large pentagonal common dark brown marking on basal half of disc, only leaving pubescent humeri at base.....*pascoei taiwanella* GRESSITT*

8. Basal crests on elytral disc developed 9

— Basal crests on elytral disc not developed 10

9. Inferior eye lobes almost as long as genae below them; prothorax rather coarsely sparsely punctured; a common large light yellowish pubescent marking on posterior half of elytral disc interrupted at apical one-fourth of elytra.....
..... *baculina musashinoi* BREUNING et CHÛJÔ

— Inferior eye lobes longer than genae below them; prothorax subfinely closely punctured; elytra more distinctly crested basally than *baculina mimogeminata*, with more acuminate marginal angles of apex .....
.....*baculina carinatipennis* BREUNING et CHÛJÔ

10. Elytral apex rather obliquely truncate with dull marginal angles; third antennal joint almost as long as or scarcely shorter than fourth 11

— Elytral apex obliquely truncate with sharp marginal angles; third antennal joint fairly shorter than fourth; body dark brown, covered with dusky yellow pubescence, decorated with a subdenuded median dark brown vitta on pronotum, and with a large common white pubescent marking on posterior half of elytra, which broadened to base and incised laterally on its posterior portion .....
..... *baculina baculina* BATES*

11. Body piceous brown, covered with brownish pubescence, elytra decorated with a large common greyish yellow pubescent marking on posterior half of disc, which broadened to base and narrowly incised laterally on its posterior portion; the pubescence more dominant, leaving less denuded areas than the other subspecies
..... *baculina mimogeminata* BREUNING et OHBAYASHI

— Body brown, not so densely covered with greyish yellow pubescence, decorated with denuded dark brown areas such as a pair of median longiudinal vittae on pronotum, and pairs of quadrate ones on base, of oblique, inwardly directed bands just behind the above, of transverse bands on middle and of oblique, lateroposteriorly directed bands before apex .....*baculina miyakoana* HAYASHI

— Body blackish brown, covered with greyish yellow pubescence, densely on head and prothorax, causing two denuded dark median longitudinal vittae on pronotum narrowly reduced; not so densely on elytra, leaving a larger wedge-shaped denuded area between a large basal greyish yellow marking and a large posterior whitish marking.....*baculina omoro* HAYASHI

— Body reddish brown, coverd with greyish pubescence, elytra decorated with an ill-defined common greyish marking on basal half, which is sometimes vanished,

and a large common white pubescent marking on posterior half which broadened to base and incised laterally on its posterior portion; prothorax with a distinct denuded median longitudinal vitta ..... *baculina oshimana* BREUNING

— Body dark reddish brown, covered with yellowish grey pubescence, decorated with a distinct denuded median longitudinal vitta on pronotum, and with an ill-defined large common yellowish grey pubescent marking on basal half and a rather distinct large common whitish marking on posterior half, which distinctly incised laterally on its posterior portion on elytra; body crested lightly on pronotum, strongly on base and once impressed just before middle of elytral disc ..... *baculina nipponensis* HAYASHI

12. Elytra rather depressed generally, striately punctured (*ordinata*-group) 13

— Elytra rather convex, irregularly, not striately punctured (*flavomaculata*-group) 20

13. Fourth antennal joint long, 1.35–1.4 times as long as third; elytral apex emarginate with sharply pointed marginal angles; inferior eye lobes 1.5 times as long as genae below them 14

— Fourth antennal joint short, 1.1–1.2 times as long as third 15

14. Body blackish brown, densely covered with yellowish grey pubescence, dominantly on head and prothorax; elytra decorated with yellow pubesecnt vittae, numerous white pubescent dots and additional two pairs of denuded elongate dark brown markings on sides of middle and before apex ..... *ordinata flavostriata* HAYASHI

— Body blackish brown, not so densely covered with greyish brown pubescence, decorated with denuded dark brown areas, such as an ill-defined pair of longitudinal vittae on pronotum, a broad transverse band on base, a pair of triangular ones on sides of middle and a pair of small discal ones before apex on elytral disc..... *ordinata subtesselata* BREUNING

15. Inferior eye lobes a little longer than genae (ratio, 3 : 2.5); elytral apex obliquely truncate 16

— Inferior eye lobes fairly longer than genae below them (ratio, 3 : 2); elytral apex obliquely emarginate 18

16. Fourth antennal joint 1.2 times as long as third 17

— Fourth antennal joint 1.25 times as long as third; elytral apex triangularly produced at marginal angles; body blackish to reddish brown, not so densely covered with yellowish grey pubescence, decorated with five longitudinally more densely pubescent vittae on prothorax; and with denuded areas, such as pairs of rectangular ones on middle of base, a lateral elongate ones on middle and of small ones before apex on elytral disc; elytra additionally decorated with denser pubescent interrupted longitudinal vittae on second, fourth, sixth and eighth intervals between punctures-rows.....*ordinata okinoerabuensis* HAYASHI

17. Elytral apex dull at marginal angles; body blackish brown densely and dominantly covered with yellowish grey pubescence; elytra decorated with denuded areas, such as pairs of inverted triangular ones on base near scutellum, lateral small elongate or round ones on middle and of small ones before apex..... *ordinata loochooana* BREUNING

— Elytral apex shallowly but triangularly produced at marginal angles; body dark

reddish brown, covered with light brownish grey pubescence, decorated with denuded areas, such as an ill-defined broad longitudinal vitta on pronotum, pairs of inverted triangular ones on base near scutellum, of dull triangular blackish ones on middle and elongate ones between middle and apex; interrupted longitudinal denser pubescent patterns rather distinct···*ordinata miyakojimana* HAYASHI

18. Elytral apex strongly obliquely emarginate with sharply acuminate marginal angles; body stout, generally convex, even; elytra strongly striately punctured, densely on basal half, the punctures becoming finer and almost vanished on posterior half to apex; body reddish brown, not so densely covered with yellowish brown pubescence, decorated with five longitudinal pubescent vittae on prothorax, four pairs of interrupted longitudinal pubescent vittae on elytral disc····· ····· *punctatostriata* BATES*

— Elytral apex shallowly obliquely emarginate with only triangularly produced marginal angles, not acuminate ·····19

19. Body blackish brown, densely covered with greyish brown pubescence, decorated with denuded areas, such as a pair of ill-defined median longitudinal vittae on pronotum, three pairs of rectangular markings on middle of base, of narrow inwardly bent bands on middle and of elongate ones before apex on elytral disc··· ····· *ordinata tokara* HAYASHI

— Body reddish to blackish brown, not so densely covered with yellowish grey pubescence, decorated with ill-defined five longitudinal pubescent vittae on prothorax, with denuded dark areas, such as three pairs of small markings on middle of base, of lateral round ones on middle and of elongate ones before apex, additionally with interrupted longitudinal pubescent vittae on the interspaces between punctures-rows····· *ordinata ordinata* BATES

20. Third antennal joint almost as long as fourth; body brown, not evenly covered with yellowish grey pubescence, leaving a broad transverse subdenuded band on middle of elytra····· *unifasciata* FUJIMURA

— Third antennal joint fairly shorter than fourth ·····21

21. Body (incl. appendages) reddish to blackish brown, densely covered with yellowish grey pubescence, forming two transverse bands before and behind middle of elytra which caused by the density of pubescence and varying sometimes to whitish, additionally decorated with several interrupted longitudinal pubescent vittae on elytra····· *flavomaculata* BREUNING

— Body blackish brown, antennae and legs light brown, partly densely covered with yellowish brown pubescence, elytra decorated with a broad undulate transverse white pubescent band between base and middle and four pairs of interrupted longitudinal white pubescent vittae on medioposterior portion ····· ····· *basialbofasciata* HAYASHI

20. *Ropica formosana* BATES subsp. *japonica* subsp. nov.

This new subspecies differs from the nominate subspecies from Taiwan in having the equally long inferior eye lobes as genae below them, dully truncate elytral apex, coarsely more closely punctured elytra, the punctures on which larger than the interspaces between them, stronger basal crest and more inwardly developed white pubescent band behind middle on elytral disc.

Holotype, ♂, Yaku Is., Kyushu, Japan, May 13, 1954, T. OKADOME leg.; paratype, 1 ♂, Onoaida, Yaku Is., May 21, 1960, Y. KIMURA leg. (HAYASHI's coll.).

This has hitherto been reported as *Ropica formosana* BATES from Yaku Is.

21. *Ropica formosana* BATES subsp. *tsushimensis* subsp. nov.

This new subspecies differs from *Ropica loochooana* (MATSUSHITA) from Ryukyu in having the longer third antennal joint (not as long as fourth), coarsely closely and irregularly punctured elytra (not striately on posterior half), more closely coarsely punctured prothorax, and not frontally emarginate white pubescent band behind middle on elytral disc.

Holotype, ♀, Mt. Mitaka, Tsushima Is., Kyushu, Japan, Aug. 1–5–6, 1959, J. NAGAO leg. (HAYASHI's coll.).

This has hitherto been questionally reported as *Ropica formosana* BATES.

22. *Ropica dorsalis* SCHWARZER, status nov.

Ropica formosana BATES var. *dorsalis* SCHWARZER, 1925, Ent. Blätt., 21: 145 (Formosa-Taiwan).

Ropica honesta (PASCOE), BREUNING, 1960, Cat. Lam. Monde: 161 (partim); HAYASHI, 1962, Ent. Rev. Japan, 14 (1): 14, pl. 3, fig. 12 (Amami-Ohshima, Northern Ryukyu, Japan); HAYASHI & NOMURA, 1964, Ent. Rev. Japan, 17 (2): 68 (Hateruma Is., Southern Ryukyu, Japan); SAMUELSON, 1965, Pacific Ins., 7 (1): 110 (Okinawa, Ishigaki, Iriomote, Central & Southern Ryukyu, Japan); KOJIMA & HAYASHI, 1969, Ins. Life Japan, I, Longic.: 103, pl. 31, fig. 15.

This species was originally described from Taiwan as a variety of *Ropica formosana* BATES, stating it had somewhat narrower body with smaller prothorax, than the nominate form, and was synonymized with *Ropica honesta* (PASCOE) by Dr. BREUNING in his world catalogue of Lamiinae. According to his revision (1964), Dr. BREUNING stated that *R. honesta* had the so combination of characteristics that third antennal joint as long as fourth, inferior eye lobes as long as genae below them. Many specimens from Taiwan and Ryukyu before the present author, identified as *dorsalis* indicate the different structural characteristics which longer third antennal joint against fourth, and longer inferior eye lobes against genae below them, and also shallower basal crest and medioposterior costae on each elytron. If the above-identification is correct, *Ropica dorsalis* SCHWARZER should be separated from not only *Ropica formosana* having shorter inferior eye lobes against genae below them and strong basal crest and tricostae on each elytron, but also *Ropica honesta*, giving new status as an independent species.

Through the courtesy of Mr. MAMORU SHIMOI of Kanagawa Pref., the author examined a specimen of this species collected by himself at Ohnuma, Sagamihara, Kanagawa, Central Honshu, Japan, at light.

Distribution: Japan (Honshu, Ryukyu), Taiwan.

Key to Japanese species of *Ropica* PASCOE (*-marked is a foreign species, provided here only for reference).

1. Third antennal joint longer than fourth 2

— Third antennal joint as long as fourth 7
2. Elytral apex rounded; inferior eye lobes longer than genae below them..... 3
— Elytral apex truncate; inferior eye lobes not longer than genae 4
3. Elytra with a common light reddish brown broad longitudinal discal vitta on basal two-thirds and a pair of small dentate white pubescent markings behind middle .....*dorsalis* SCHWARZER
— Elytra lacking such a light reddish brown discal vitta and with a pair of indistinct whitish transverse bands behind middle of disc ..... *formosana tsushimensis* HAYASHI
4. Inferior eye lobes as long as genae below them..... 5
— Inferior eye lobes shorter than genae below them..... 6
5. Elytra substriately punctured on medioposterior portion; decorated with yellow (sometimes varying from reddish yellow to whitish) pubescent markings, such as a pair of small ones near scutellum, a broad median transverse band, a pair of medioposterior ones and additional many scattered small ones···*hayashii* BREUNING
— Elytra irregularly, not striately punctured in general; decorated with a pair of undulate transverse white pubescent bands behind middle on yellowish brown pubescent ground, intermixed with minute black patches ....*formosana japonica* HAYASHI
6. Elytron strongly crested basally and tricostate medioposteriorly, subcoarsely punctured on disc, decorated with a short oblique white pubescent band between first and second costae behind middle .....*formosana formosana* BATES*
— Elytron more strongly crested basally and similarly tricostate medioposteriorly than/as *formosana formosana*, coarsely punctured on disc, decorated with a transverse white pubescent band extending from near suture outward to second costa ..... *formosana nobuoi* BREUNING et OHBAYASHI
7. Body short and minute, prothorax coarsely closely punctured, elytron fairly costate, the interspaces of which coarsely closely punctured .....*mizoguchii* HAYASHI
— Elytron lacking such strongly raised costae 8
8. Elytra rounded at apex; inferior eye lobes as long as genae below them, elytra decorated with a pair of angulately curved greyish pubescent markings between middle and apex .....*loochooana* (MATSUSHITA)
— Elytra truncate at apex 9
9. Inferior eye lobes shorter than genae below them, elytra decorated with an undulate transverse greyish pubescent band behind middle (f. typica), sometimes lacking such greyish band (f. *okinawana* BREUNING et OHBAYASHI) .... *coenosa* (MATSUSHITA)
— Inferior eye lobes as long as genae below them, elytra decorated with a pair of rather large triangular yellowish white discal markings behind middle (f. typica*), additionally with dark brown pubescent markings at sides of middle on disc (f. *rufescens* PIC*), or the yellowish white discal marking divided into two small ones (f. *langana* PIC*)..... *honesta* (PASCOE)*

Rhodopinini

23. *Anaespogonius piceonigris* sp. nov.

Body piceous black, shining, sparsely furnished with blackish brown setae and

brownish pubescence; tarsi brown.

Head broader than prothorax, vertical in front, frons broader than long, slightly swollen, having a semicircular impression at the inferior half, irregularly sparsely punctured; vertex dully concave, sparsely punctured with an ill-defined median longitudinal furrow which is prolonged to occiput; antennal insertions well developed and separated each other; eyes coarsely faceted, emarginate, inferior eye lobes fairly longer than broad, about three times as long as genae below them. Antennae about 1.2 times as long as body, tapering to apex, scape long and swollen, relative length of each joint is as follows:— 6.5 : 1 : 7.5 : 7.3 : 4 : 3.8 : 3.7 : 3.2 : 3 : 2.5 : 3.3. Prothorax broader than long, narrowly constricted just behind apex and before base, and additionally broadly constricted inward, dully but broadly swollen at sides of middle each with a dull small lateral tubercle; disc well shining, very sparsely punctured, with three shallow tubercles, a pair of which set before and another behind middle. Scutellum triangular. Elytra fairly broader than head, about 2.15 times as long as the basal width, parallel-sided for basal half and then gradually narrowed apically from middle to apices which are conjointly rounded; disc convex, rather closely coarsely punctured, partly rugose. Metathoracic sterna laterally punctured. Legs long, femora depressed laterally but broadened, tibiae long, the middle pair lacking preapical incisions, tarsi short, first hind tarsal joint as long as the following two joints united together, tarsal claws divaricate, simple, not appendiculate. Length, 9.5 mm. Width, 3.1 mm.

Holotype, ♀, Hatsuno, Setouchi-cho, Amami-Ohshima Is., N. Ryukyu, Japan, July 5, 1970, HEIKICHI IRIE leg. (HAYASHI's coll.).

This new species differs from the known two species of the genus by the following characteristics shown in the key. The genus *Anaespogonius* GRESSITT (1938) was established by two West Chinese species (though *A. omeimontis* seems to be somewhat strange from other two in the morphological features), and now the third species is duly reported here from Northern Ryukyu, Japan. This genus is in first glance allied to *Penthides* MATSUSHITA among the members of Rhodopinini (especially of Apodasyini in the former sense), but it fairly differs from the latter genus in having no appendiculate tarsal claws, no incised middle tibiae, etc. This genus would be judged as one of the elements of the distribution belt III of the present author.

Key to the known three species of *Anaespogonius* GRESSITT

1. Inferior eye lobes rounded, about as long as wide; third antennal joint shorter than fourth; metathorax impunctate; elytra irregularly punctured; body dark chestnut brown, antennae, bases of tibiae, and tarsal claws reddish brown; antennae 1.5 times as long as body. Length, 10.2 mm., width, 3.7 mm. Shinkaishi, Mt. Omei (4,500 ft in alt.), Szechuan, West China ·····*omeimontis* GRESSITT
— Inferior eye lobes longer than broad; third antennal joint slightly longer than fourth; metathorax punctured laterally; elytra irregularly but substriately punctured ····· 2
2. Prothorax transverse; body piceous black, antennae in female 1.2 times as long as body; metathorax finely sparsely punctured. Length, 9.5 mm., width, 3.1 mm. Amami-Ohshima Is., Northern Ryukyu, Japan·····*piceonigris* HAYASHI
— Prothorax nearly as long as broad; body reddish brown, lateral parts of metathorax, bases of antennae and legs dark brown; antennae in male 1.2 times as long as body. Length, 9.2–11 mm., width, 3.5–4 mm. Western Szechuan (former-

ly reported as Sikang), West China ..... *fulvus* GRESSITT

24. *Penthides rufoflavus* (HAYASHI), status nov.

Hirakura rufoflava HAYASHI, 1957, Ent. Rev. Japan, 8 (2): 48, fig. 3 (Misugi-mura, Ichishi-gun, Mie Pref., Honshu, Japan).

Penthides flavus: HAYASHI (nec MATSUSHITA), 1963, Ins. Matsum., 25 (2): 136.

Through the courtesy of Prof. S-C. CHANG, Taichung, Taiwan, an example of the true *Penthides flavus* MATSUSHITA from Taiwan was presented to the present author. After careful comparative examination of the type specimen of *Hirakura rufoflava* and the *Penthides flavus*, the result convinced the present author that *Hirakura rufoflava* should be separated from *Penthides flavus* specifically even though it should belong to the genus *Penthides* MATSUSHITA such as shown in the former synonymy of the both genera (1963) by the present author, according to the following synopsis:—

1. Head, prothorax, scutellum and elytra entirely pale reddish yellow, antennae dark brown, legs yellowish brown, infuscated at apices of tibiae and entire tarsi; body furnished generally with pale yellowish white pubescence and long suberect hairs and additionally with dark brown hairs on head and outer sides of antennae; meso- and metasterna brown, abdomen brownish black. Head broader than prothorax, prothorax in female fairly broader than long, shallowly constricted behind apex, apex broader than base, disc shallowly uneven, more closely punctured, scutellum somewhat tongue-shaped, elytra twice as long as the basal width. Taiwan ..... *flavus* MATSUSHITA

— Head and apical and prelateral portions of prothorax dark brownish black, the rest of prothorax, scutellum and elytra reddish brown-yellow, antennae and legs dark brownish black; body furnished with yellow pubescence and long suberect hairs generally and additionally with dark brown hairs on head, antennae and legs; body beneath dark brownish black. Head as broad as prothorax, prothorax in female broader than long, strongly constricted behind apex, apex as broad as base, disc strongly uneven, more sparsely punctured, scutellum triangular, elytra twice and a quarter as long as the basal width. Japan ..... *rufoflavus* HAYASHI

New Japanese names

Atimia okayamensis HAYASHI	Kebuka-marukubi-kamikiri
Atimia fujimurai HAYASHI	Hime-kebuka-marukubi-kamikiri
Nadezhdiella japonica HAYASHI	Nippon-munehida-yama-kamikiri
Pyrestes yayeyamensis HAYASHI	Matsuda-kusubeni-kamikiri
Bumetopia senkakuana HAYASHI	Senkaku-usuaya-kamikiri
Mycerinopsis (*Zotale*) *apomecynoides* HAYASHI	Irie-shirahoshi-sabi-kamikiri
Sybra (*Sybra*) *basialbofasciata* HAYASHI	Moriya-shiroobi-chibi-kamikiri
Anaespogonius piceonigris HAYASHI	Kurotsuya-arage-kamikiri

A New Species of *Ceresium* from Iriomote Island (Cerambycidae)

By Keiichi Kusama and Jiro Komiya

The authors are deeply indebted to Mr. K. Mizusawa and Mr. H. Maruoka for the use of valuable specimens and also due to Mr. K. Kimura for the preparation of accurate drawing accompanying the present paper.

Ceresium (*Ceresium*) *pseudounicolor* sp. nov.

Female—Form robust, integument dull reddish brown, paler on legs. Body clothed with pale-buff pubescence, more whitish under surface, denser on vertex, pronotum and scutellum, sparser on portion of between vertex and occiput, central portion of pronotum and abdomen, and still sparser hair arising from each puncture on elytra.

Head concave, narrowly grooved between antennal supports, and with shiny and subtuberculate portion between occiput and vertex. Antennae slightly shorter than body, scape barely shorter than third segment, fifth slightly longer than third, scape and third each much longer than fourth. Prothorax barely broader than length, subrounded at side, disc with smooth raised area on central portion, coarsely punctured. Elytra with a depressed area behind scutellum, large and dense punctures on base, finer and closer to apex, apices rounded.

Length: 16 mm. Breadth: 4.5 mm.

Holotype: ♀, Itokawa-rindo, Iriomote Is., Yayeyama Islands, Sept. 12, 1969, K. Mizusawa leg. (in Komiya's collection).

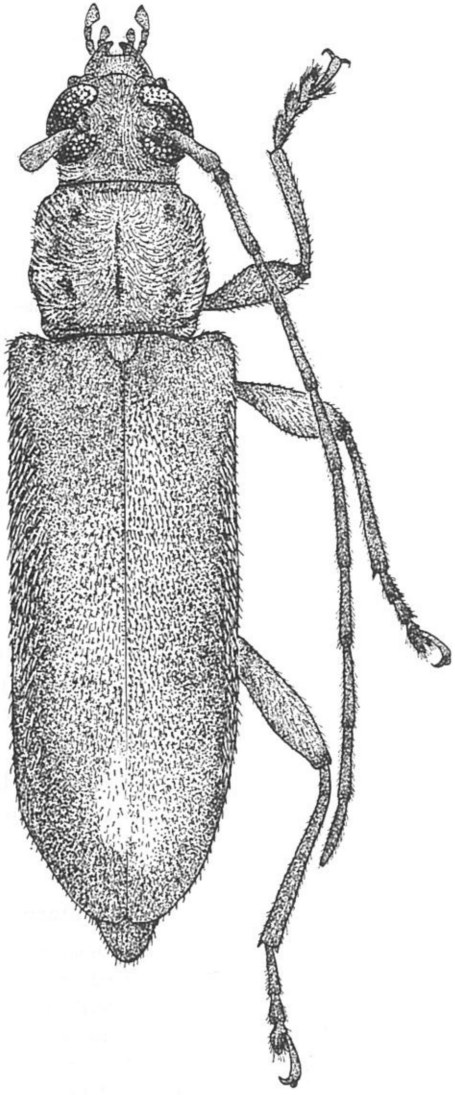
This new species is very closely allied to *C. unicolor* (Fabricius),[1] but differ from it by the following characters:— Occiput longer and with shiny and subtuberculate area, only one polish raising area on pronotum, and more puncture rolls on elytra, that is at the middle of elytron with about 24 rolls and 17 for this new species and *C. unicolor*, respectively.

Explanation of Plate 8.

Ceresium (*Ceresium*) *pseudounicolor* sp. nov., ♀

1) The specimens of ***C. unicolor*** used for the comparison were collected from Guam Is. in Micronesia (2 specimens), Chichi-jima in Bonin Islands (14 specimens), Iriomote Is. in South Ryukyu (1♂, July 27, 1962, leg. H. Maruoka) and Okinawa Is. in Central Ryukyu (1♂, June, 1966, leg. K. Mizusawa), the latter two of which are new records from Ryukyu Islands.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, p. 42, pl. 8, Sept., 1972]



(K. KIMURA del.)

A List of the Chrysomelid-beetles collected by Prof. K. YASUMATSU in India and Pakistan in 1963 (Col.: Chrysomelidae)

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This paper is a result of my study on the Chrysomelid beetles collected by Prof. K. YASUMATSU and his collaborators in India and Pakistan in 1963, during their study on the biological control of rice stem borers under a project of Japan-U.S. Cooperative Science Program. Otherwise stated, all the specimens here treated were collected by Prof. K. YASUMATSU and Dr. K. YANO. The specimen marked with an asterisk indicates that those specimens are collected by the sweeping of the paddy field.

Before going further I wish to acknowledge my hearty thanks to Prof. K. YASUMATSU, Kyushu University, for his kindness in giving me the opportunity to study the materials.

Subfamily **Criocerinae**

Lema coromandeliana (FABRICIUS, 1798)

India: Malakand-Saifu Sharif, Swat (1 ex., 25. X. 1963). Budanoor, near Mandya, Mysore (2 exs., 18. XI. 1963).*

Lema paradoxa JACOBY, 1904

India: Mandakalli, Mysore (1 ex., 19. XI. 1963).* Budanoor, near Mandya, Mysore (1 ex., 18. XI. 1963).

Lema constrictofasciata JACOBY, 1908

India: Nuapalli, Bhubaneswar, Orissa (1 ex., 12. XI. 1963).*

This specimen can not be separable from the type of the species, preserved in the British Museum (Nat. Hist.), London. This species resembles *L. trifasciata* JACOBY from Sylhet, India (type in British Museum, Nat. Hist.) and *L. externevittata* PIC from S. India (type in Mus. Nat. d'Hist. Nat., Paris), in having the similar coloration and markings of the dorsal surface, but differs in having the pronotum strongly and closely punctate on the median portion.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 43-48, Sept., 1972]

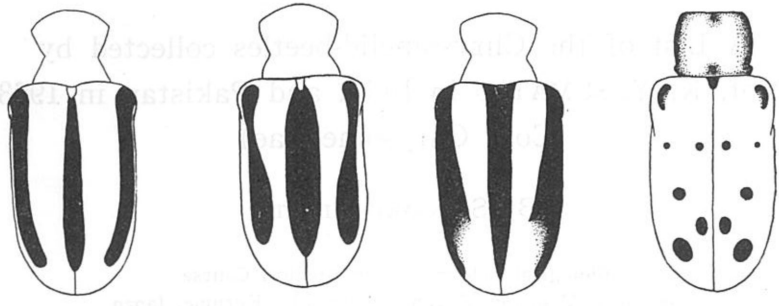


Fig. 1. a, *Lema constrictofasciata* JACOBY; b, *L. externevittata* PIC (after N. Thailand specimen); c, *L. trifasciata* JACOBY (after N. Thailand specimen); d, *Crioceris multimaculata* JACOBY (after type in Inst. roy. d'Sci. Nat., Bruxelles; Mandar (Beng.) P. Cardon).

Subfamily **Cryptocephalinae**

Cryptocephalus obliteratus SUFFRIAN, 1854

W. Pakistan: River Indus Bed (Muzaffargarh–D. G. Khan) (54 exs., 29. X. 1963).

Cryptocephalus vittipennis SUFFRIAN, 1854

W. Pakistan: Thatta, Hyderabad (3 exs., 22. X. 1963).* Rawalpindi–Pindi Bhattian, Lahore (2 exs., 27. X. 1963).*

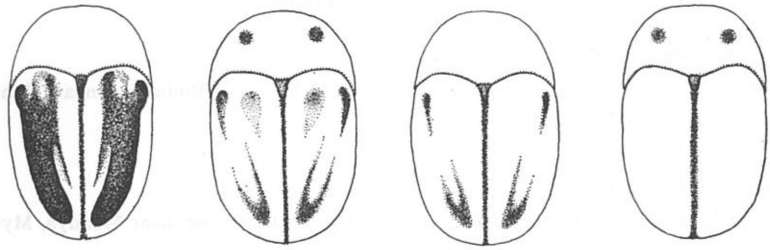


Fig. 2. *Cryptocephalus vittipennis* SUFFRIAN.

Cryptocephalus dichotomus SUFFRIAN, 1854

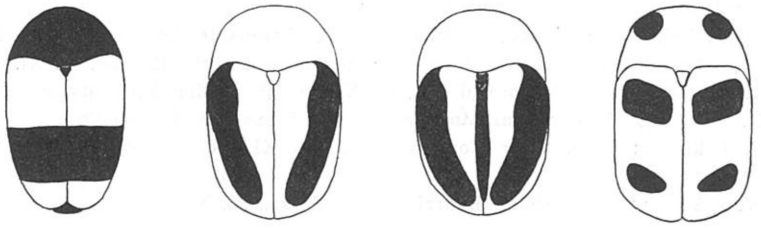
India: Maddur, near Mandya, Mysore (1 ex., 18. XI. 1963).*

Cryptocephalus ovulum SUFFRIAN, 1854

India: Budanoor, near Mandya, Mysore (1 ex., 18. XI. 1963).*

Cryptocephalus sehestedti FABRICIUS, 1798

India: Mandakalli, Mysore (4 exs., 19. XI. 1963).* Doddahasivinakere, near Mandya, Mysore (2 exs., 18. XI. 1963).* Gejjelgere, near Mandya, Mysore (1 ex., 18. XI. 1963).



a b c d

Fig. 3. a, *Cryptocephalus dichotomus* SUFFRIAN; b, *C. sehestedti* FABRICIUS; c, *C. ovulum* SUFFRIAN; d, *C. quadratus* SUFFRIAN (after specimen from Nangpore, S. India).

Pachybrachys sp. (nr. *scripticollis* FALDERMANN)

W. Pakistan: River Indus Bed (Muzaffargarh–D. G. Khan) (1 ex., 29. X. 1963).

Subfamily **Eumolpinae**

Pagria signata (MOTSCHULSKY, 1858)

India: Doddahasivinakere, near Mandia, Mysore (1 ex., 18. XI. 1963).* Budanoor, near Mandya, Mysore (1 ex., 18. XI. 1963).*

E. Pakistan: Shaibihal, Comilla (1 ex., 24. XI. 1963). Jagannatpur, Comilla (1 ex., 24. XI. 1963).*

Pachnephorus brettinghami BALY, 1878

W. Pakistan: Harrapa, Multan (6 exs., 30. X. 1963).*

Subfamily **Chrysomelinae**

Chrysolina coelestina (BALY, 1879)

W. Pakistan: Rawalpindi–Pindi Bhattian, Lahore (1 ex., 27. X. 1963).*

Entomoscelis adonidis (PALLAS, 1771)

W. Pakistan: Saidu Sharif–Bahrain, Swat (1 ex., 26. X. 1963).

Subfamily **Galerucinae**

Diorhabda perisica (FALDERMANN, 1873)

W. Pakistan: Lyallpur–Muzaffargarh, Multan (9 exs., 28. X. 1963).

Aulacophora indica (GMELIN, 1790)

W. Pakistan: Lyallpur–Muzaffargarh, Multan (1 ex., 28. X. 1963). Khanna, Rawalpindi (2 exs., 24. X. 1963).*

Aulacophora lewisii BALY, 1886

India: Mandakalli, Mysore (2 exs., 19. XI. 1963).*

Monolepta signata (OLIVIER, 1808)

India: Hehra Dun (2 exs., 14. VIII. 1964, T. NISHIDA leg.).* Kedargowri, Bhubaneswar, Orissa (1 ex., 12. XI. 1963).* Mandakalli, Mysore (12 exs., 19. XI. 1963).* Maddur, near Mandya, Mysore (6 exs., 18. XI. 1963.)* Kodanahalli, Mysore (12 exs., 17. XI. 1963).* Budanoor, near Mandya, Mysore (5 exs., 18. XI. 1963).*

E. Pakistan: Jagannatpur, Comilla (3 exs., 24. XI. 1963).* Dacca (1 ex., 25. XI. 1963).*

W. Pakistan: Saidu Sharif-Bahrain, Swat (8 exs., 26. X. 1963).

Monolepta sp. 1.

W. Pakistan: Rawalpindi-Pindi Bhattian, Lahore (2 exs., 27. X. 1963).*

India: Gauhati (1 ex., 30. VIII. 1964, T. NISHIDA leg.).*

Monolepta sp. 2.

W. Pakistan: Saidu Sharif-Bahrain, Swat (1 ex., 26. X. 1963).

Subfamily **Alticinae**

Psylliodes tenebrosus JACOBY, 1896

W. Pakistan: Khanna, Rawalpindi (2 exs., 24. X. 1963).

Chaetocnema (*Tlanoma*) *basalis* BALY, 1877

India: Baidyabati, Chanbannagar, near Calcutta (1 ex., 9. XI. 1963).*

E. Pakistan: Jagannatpur, Commila (1 ex., 24. XI. 1963).*

W. Pakistan: Khanna, Rawalpindi (22 exs., 24. X. 1963).* Harrapa, Multan (2 exs., 30. X. 1963).* Thal Desert (Lyallpur-Muzaffargarh), Multan (1 ex., 28. X. 1963).

Chaetocnema (*Tlanoma*) *indica* WEISE, 1916

India: Kodanahalli, Mysore (1 ex., 17. XI. 1963).*

Chaetocnema (*Tlanoma*) sp. (nr. *indica* WEISE)

W. Pakistan: Lyallpur-Muzaffargarh, Multan (1 ex., 28. X. 1963).

Chaetocnema (*Chaetocnema*) *psylliodes* PIC, 1909

W. Pakistan: Saidu Sharif-Bahrain, Swat (1 ex., 26. X. 1963).

Chaetocnema (*Chaetocnema*) *concinnipennis* BALY, 1877

India: Nuapalli, Bhubaneswar, Orissa (5 exs., 12. XI. 1963).*

Chaetocnema (*Chaetocnema*) *pusaensis* MAULIK, 1926

India: Maddur, near Mandya, Mysore (1 ex., 18. XI. 1963).*

Chaetocnema (*Chaetocnema*) *congnata* BALY, 1877

Iadia: Budanoor, near Mandya, Mysore (1 ex., 18. XI. 1963).

Chaetocnema (*Chaetocnema*) sp. (nr. *brettinghami* BALY)

W. Pakistan: River Indus Bed (Muzaffargarh-D. G. Khan) (1 ex., 29. X. 1963).

Luperomorpha nigripennis DUVIVIER, 1892

W. Pakistan: Saidu Sharif-Bahrain, Swat (1 ex., 26. X. 1963).

Longitarsus rangoonensis JACOBY, 1892

India: Kodanahalli, Mysore (1 ex., 17. XI. 1963).*

Longitarsus gola MAULIK, 1926

W. Pakistan: Saidu Sharif-Bahrain, Swat (1 ex., 26. X. 1963).

Longitarsus recticollis JACOBY, 1898

India: Kodanahalli, Mysore (1 ex., 17. XI. 1963.).*

Longitarsus belgaumensis JACOBY, 1896

India: Bhubaneswar, Orissa (1 ex., 12. XI. 1963). Budanoor, near Mandya, Mysore (6 exs., 18. XI. 1963). Kodanahalli, Mysore (1 ex., 17. XI. 1963).

Longitarsus sp. (nr. *sari* MAULIK).

W. Pakistan: Khanna, Rawalpindi (3 exs., 24. X. 1963).

Aphthona kanaraensis JACOBY, 1896

India: Budanoor, near Mandya, Mysore (1 ex., 18. XI. 1963).*

Orthocrepis ruficollis (LUCAS, 1849)

India: Gejjelgere, near Mandya, Mysore (1 ex., 18. XI. 1963).

Altica coelurea (OLIVIER, 1791)

=*Haltica brevicosta* WEISE, 1922, Tijdschr. Ent., 65: 110 (Luzon, Java, Canton, Darjeeling). **New Synonymy**

E. Pakistan: Dacca (1 ex., 25. XI. 1963). Kotbari, Comilla (5 exs., 24. XI. 1963).

GRESSITT & KIMOTO (1963, Pacific Ins. Mon., 1B: 888, 889) treated that *coelurea* OLIVIER and *brevicosta* WEISE are different species. CHEN (1934, Sinensia, 5: 393) suggested that these two species might be the same species. According to my further study on the type of *brevicosta* WEISE together with the specimens identified by some classical workers, it became to the conclusion that *Altica coelurea* OLIVIER and *Haltica brevicosta* WEISE might be the same species and the species previously identified by us as *Altica coelurea* was misidentification and should be identified as *Altica birmanica* (JACOBY), originally described from Burma. Though the name of the species was treated by MAULIK (1926, Fauna India, p. 422) as a synonymy of *cyanea* WEBER, *birmanica* is distinctly separable from *cyanea* WEBER, in having the elytron with a feebly impressed longitudinal sulcus situated at same level as humerus; elytral punctures more strongly impressed. The type of *brevicosta* WEISE is preserved in Naturhistoriska Riksmuseet, Stockholm, and of *birmanica* JACOBY is in British Museum (Nat. Hist.),

London.

Altica cyanea (WEBER, 1801)

E. Pakistan: Dacca (1 ex., 25. XI. 1963).* Abhori Ashram, Comilla (1 ex., 24. XI. 1963).

W. Pakistan: Khanna, Rawalpindi (1 ex., 24. X. 1963). Saidu Sharif-Bahrain, Swat (1 ex., 26. X. 1963). Malakand-Saidu Sharif, Swat (8 exs., 25. X. 1963).*

Altica foveicollis (JACOBY, 1889)

E. Pakistan: Kotbari, Comilla (1 ex., 24. XI. 1963). Dacca (3 exs., 25. XI. 1963).*

Subfamily **Hispinae**

Hispellinus moestus (BALY, 1888)

W. Pakistan: Thatta, Hyderabad (36 exs., 22. X. 1963).*

Dicladispa armigela (OLIVIER, 1808)

E. Pakistan: Jagannatpur, Comilla (3 exs., 24. XI. 1963).* Abhori Ashram, Comilla (5 exs., 24. XI. 1963).*

Platypria andrewsi WEISE, 1906

W. Pakistan: Thatta, Hyderabad (1 ex., 22. X. 1963).*

Oncocephala quadrilobata GUÉRIN-MÉNÉVILLE, 1844

W. Pakistan: Saidu Sharif-Bahrain, Swat (1 ex., 26. X. 1963).

Hispa andrewesi (WEISE, 1897)

India: Cuttack, Orissa (1 ex., 13. XI. 1963).

Dactylispa dilaticornis (DUVIVIER, 1891)

W. Pakistan: Lyallpur-Muzaffargarh, Multan (1 ex., 28. X. 1963).*

Dactylispa sp. (nr. *filiora* WEISE)

India: Kodanahalli, Mysore (1 ex., 17. XI. 1963).*

Records of Aquatic Coleoptera from Afghanistan, India, Laos, E. Pakistan and S. Vietnam

By Masataka Sato

Biological Laboratory, Nagoya Women's University

In the following paragraph, I make a collecting list of the aquatic Coleoptera from some parts of Asia. These specimens were captured by Mr. S. Inoué from S. Vietnam and Laos in 1958–1962, Prof. T. Ishihara from India and E. Pakistan in 1969, Mr. J. A. Lowe from India in 1969 (through Prof. T. Ishihara) and Mr. Y. Arita from Afghanistan and India in 1970.

I am very grateful to entomologists above-described who gave the privilege of studying specimens, and also due to Dr. A. Takahashi, Dr. R. Mouchamps and Dr. T. G. Vazirani for their kind assistance in many ways.

Afghanistan

Dytiscidae

1. *Agabus* (*Anagabus*) *vatelloides* Régimbart

Specimens examined: 9 exs., Parakh, Panjshir (alt. 2,700 m), July 6, 1970, Y. Arita leg.

Distribution: Afghanistan, India.

Note: Up to the present, this species was found at an elevation more than 3,000 m. Present record may be the lowest habitat of the species.

2. *Agabus* (*Dichonectes*) *biguttatus* (Olivier)

Spec. exam.: 1 ex., Band-i-Amir, July 29, 1970, Y. Arita leg.

Distr.: N. & NE. Africa, Egypt, Europe, Iran, Turkestan, Afghanistan, Pakistan, India.

3. *Agabus* (*Dichonectes*) *nitidus* (Fabricius)

Spec. exam.: 1 ex., Parakh, Panjshir (alt. 2,700 m), July 6, 1970, Y. Arita leg.

Distr.: N. & NE. Africa, Europe, Russia, Asia Minor, Iran, Turkestan, Afghanistan, India.

East Pakistan

Hydrophilidae

1. *Enochrus* (*Methydrus*) *escuriens* (Walker)

Spec. exam.: 1 ex., Dacca, Nov. 7, 1969, T. Ishihara leg.

Distr.: India, E. Pakistan, Ceylon, Vietnam, Sumatra, Java, Borneo, Philippines.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 49–53, Sept., 1972]

2. *Laccobius* (*Laccobius*) *rotundatus* RÉGIMBART
Spec. exam.: 1 ex., Dacca, Nov. 11, 1969, T. ISHIHARA leg.
Distr.: India, E. Pakistan, Burma.

3. *Hydrophilus rufocinctus* BEDEL
Spec. exam.: 1 ex., Mymensingh, Nov. 6, 1969, T. ISHIHARA leg.
Distr.: India, E. Pakistan.

4. *Berosus* (*Berosus*) *pulchellus* MACLEAY
Spec. exam.: 1 ex., Mymensingh, Nov. 6, 1969, T. ISHIHARA leg.
Distr.: India, Ceylon, E. Pakistan, Burma, Thailand, Cambodia, Vietnam, China, Sumatra, Java, Borneo, Philippines, Formosa, Ryukyus, Australia.

5. *Berosus* (*Enoplurus*) *fairmairei* (ZAITZEV)
Spec. exam.: 2 exs., Mymensingh, Nov. 6, 1969, T. ISHIHARA leg.
Distr.: E. Pakistan, Thailand, Cambodia, Vietnam, China, Sumatra, Philippines, Formosa, Ryukyus.

India

Noteridae

1. *Canthydrus luctuosus* (AUBE)
Spec. exam.: 2 exs., Hyderabad, Jan. 1, 1969, J. A. LOWE leg.
Distr.: Iran, India, Ceylon.

Dytiscidae

1. *Yola consanguineus* (RÉGIMBART)
Spec. exam.: 2 exs., Hyderabad, Jan. 1, 1969, J. A. LOWE leg.
Distr.: India.

2. *Hyphoporus bengalensis* SEVERIN
Spec. exam.: 1 ex., Amirtsar, Aug. 27, 1970, Y. ARITA leg.
Distr.: India.

3. *Cybister* (*Gschwendtnerhydrus*) *tripunctatus asiaticus* SHARP
Spec. exam.: 4 exs., Srinagar, Kashmir, Aug. 30, 1970, Y. ARITA leg.
Distr.: Oriental Region.

Hydrophilidae

1. *Sphaeridum scarabaeoides* (LINNÉ)
Spec. exam.: 6 exs., Aru-Lederwat (alt. 2,740-3,050 m), Sept. 2, 1970, Y. ARITA leg.; 8 exs., Lederwat-Kolhai (alt. 3,050-3,800 m), Sept. 3, 1970, Y. ARITA leg.
Distr.: Palaearctic Region, India, Japan, N. America.

2. *Sphaeridium seriatum* D'ORCHYMONT
Spec. exam.: 1 ex., Aru-Lederwat (alt. 2,740-3,050 m), Sept. 2, 1970, Y. ARITA leg.; 1 ex., Lederwat-Kolhai (alt. 3,050-3,800 m), Sept. 3, 1970, Y. ARITA leg.
Distr.: India, Vietnam, Sumatra, Java, Borneo, Philippines.

3. *Paracymus evanescens* (SHARP)
Spec. exam.: 1 ex., Hyderabad, Jan. 1, 1969, J. A. LOWE leg.
Distr.: India, SE. Asia, Java, Bali, Philippines, Ryukyus.

4. *Hydrophilus dauricus* MANNERHEIM (Fig. 1)

Spec. exam.: 10 exs., Srinagar, Kashmir, Aug. 30, 1970, Y. ARITA leg.

Distr.: India, China, E. Siberia.

Note: This species is the first record to Indian fauna as the southernmost distribution. The male genitalia of the Indian specimen is herein illustrated.

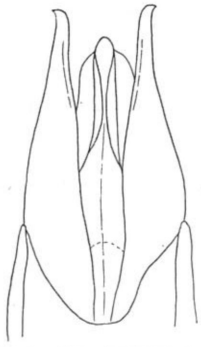


Fig. 1. Male genitalia of *Hydrophilus dauricus* MANNERHEIM.

5. *Hydrophilus olivaceus* FABRICIUS

Spec. exam.: 1 ex., Hyderabad, Sept. 20, 1969, T. ISHIHARA leg.

Distr.: India, Vietnam.

6. *Hydrobiomorpha spinicollis spicollis* ESCHSCHOLTZ

Spec. exam.: 1 ex., Hyderabad, Oct. 18, 1969, T. ISHIHARA leg.

Distr.: India, Ceylon.

7. *Regimbartia attenuata* (FABRICIUS)

Spec. exam.: 2 exs., Pahalgan, Kashmir (alt. 2,200 m), Sept. 1, 1970, Y. ARITA leg.

Distr.: Arabia, Afghanistan, W. Pakistan, India, Ceylon, Burma, Vietnam, Malaya, S. China, Sumatra, Philippines, Formosa, Ryukyus, Japan, N. Australia.

Laos

Hydrophilidae

1. *Sternolophus* (*Neosternolophus*) *brachyacanthus* RÉGIMBART

Spec. exam.: 1 ex., Vientiane (alt. 350 m), May 29, 1961, S. INOUÉ leg.

Distr.: India, Ceylon, Burma, Laos, Vietnam, Cambodia, Sumatra, Philippines.

South Vietnam[1)]

Hydrophilidae

1. *Coelostoma* (*Holocoelostoma*) *stultum* (WALKER)

Spec. exam.: 1 ex., Thu Duc, May 21, 1959, S. INOUÉ leg.

Distr.: India, Ceylon, Vietnam, China, Sumatra, Borneo, Formosa, Ryukyus, Japan.

2. *Enochrus* sp.

Spec. exam.: 1 ex., Saigon, May 17, 1960, S. INOUÉ leg.

Distr.: Vietnam.

3. *Helochares* (*Helochares*) *taprobanicus* SHARP (Fig. 3)

Spec. exam.: 1 ex., Saigon, June 8, 1960, S. INOUÉ leg.; 6 exs., Bobla, March 30, 31, 1962, S. INOUÉ leg.

Distr.: Ceylon, Vietnam.

Note: Although the species appears to be common, it little has been so far known about distribution. The species is briefly described as follows.

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1) The Dytiscid-beetles of Mr. S. INOUÉ's collection shall be reported in another paper (in press).

Body oval, moderately convex, blackish-brown with reddish-brown peripheries. Head closely and distinctly punctate; the punctures separated each other by a half to one times own diameter of them. Pronotal punctures a little finer than those of the head. Elytra broadest at apical third; the punctures finer and sparser than those of the pronotum and separated each other by two to three times own of the pronotum and separated each other by two to three times own diameter of them. Male genitalia moderately scrlotized; median lobe with two pairs hooks distinctly narrowed terminally, its apex somewhat sharp and bent ventrally; lateral lobe bifid, apex of inner one somewhat sharp, apex of outer one rounded and rather membraneous.

Length: 6.1–6.8 mm; breadth: 3.2–3.4 mm.

Fig. 2. Male genitalia of *Helochares* (*Helochares*) *taprobanicus* SHARP.

4. *Helochares* (*Hydrobaticus*) *anchoralis* SHARP

Spec. exam.: 1 ex., Thu Duc, May 21, 1959, S. INOUÉ leg.

Distr.: India, Ceylon, Vietnam, Sumatra, Ryukyus.

5. *Hydrophilus bilineatus cashimirensis* REDTENBACHER

Spec. exam.: 2 exs., Dalat (alt. 1,500 m), Prov. de Lang Bien, June 28, 1959, S. INOUÉ leg.; 2 exs., Cholon, May 24, 1962, June 20, 1962, S. INOUÉ leg.

Distr.: India, Ceylon, Vietnam, China, Sumatra, Java, Formosa, Ryukyus, Japan.

6. *Hydrophilus cavisternus* (BEDEL) (Fig. 2)

Spec. exam.: 2 exs., Cholon (Phu Lam), June 3, 1959, S. INOUÉ leg.; 8 exs., Cholon, June 3, 1959, Aug. 24, 1959, May 24, 1962, June 11, 1962, S. INOUÉ leg.; 2 exs., K 215, Saigon–Dalat, Bobla (alt. 1,000 m), May 4, 1962, S. INOUÉ leg.

Distr.: Vietnam.

Note: This paper includes the first illustration of male genitalia of the species.

Fig. 3. Male genitalia of *Hydrophilus cavisternus* (BEDEL).

7. *Hydrobiomorpha spinicollis oriensis* MOUCHAMPS

Spec. exam.: 3 exs., Dalat, Evergreen Farm (alt. 1,300 m), Prov. de Lang Bien, May 23, 1962, S. INOUÉ leg

Distr.: India, Laos, Vietnam.

8. *Hydrobiomorpha malaisica* MOUCHAMPS, stat. nov. (Fig. 4)

Spec. exam.: 1 ex., Dalat, Evergreen Farm (alt. 1,300 m), Prov. de Lang Bien, May 23, 1962, S. INOUÉ leg.

Distr.: Cambodia, Vietnam, Sumatra.

Note: This species was originally described from Sumatra and Cambodia in 1968 as a subspecies of *H. spinicollis* ESCHSCHOLTZ. The species easily differentiated from its nearest subspeies, *H. spinicollis oriensis* MOUCHAMPS and others by having the following characteristics: Body larger in size (19.5 mm); punctures on head finer than those of *oriensis* and nominate subspecies; punctures on pronotum and elytra sparser than those of *oriensis*; elytra provided with distinct punctures in addition to primary

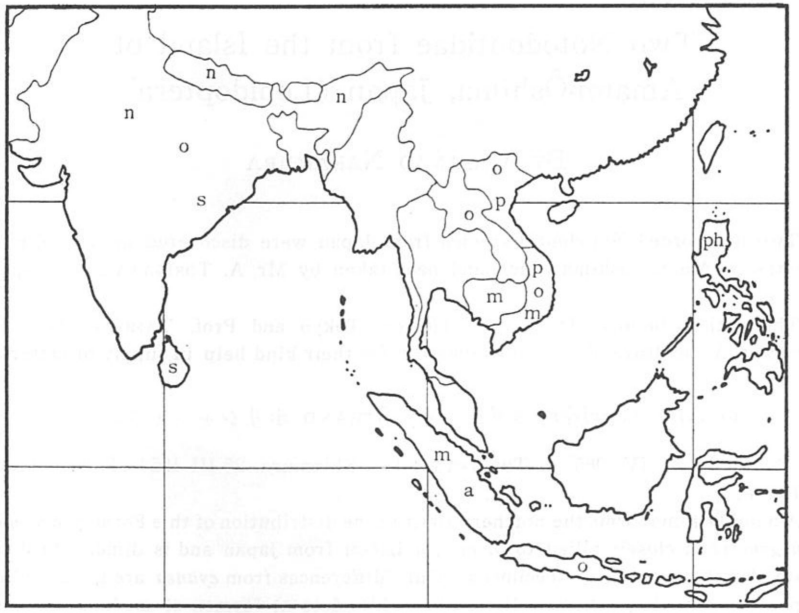

Fig. 4. Distribution of *Hydrobiomorpha spinicollis*-complex species.
s=*H. spinicollis spinicollis* Eschscholtz; n=*H. s. nordica* Mouchamps; o=*H. s. oriensis* Mouchamps; p=*H. s. pescheti* Mouchamps; a=*H. s. andromorpha* Mouchamps; ph=*H. s. philippinensis* Mouchamps; m=*H. malaisica* Mouchamps.

punctures, some of those arranged longitudinally along the suture; mentum somewhat sparsely punctate; claws more or less slender and evenly curved; hind spin of prosternal lamina short; mesosternal keel distinctly notched at the anterior portion; metasternal keel not carinate at the middle of posterior portion.

Moreover, the species and *H. spinicollis oriensis* were found at the same locality in Vietnam and the distribution pattern of these species are overlapped. Both the morphological differences and distribution pattern suggest that *malaisica* may be distinct species.

9. *Sternolophus* (*Sternolophus*) *rufipes* (Fabricius)

Spec. exam.: 1 ex., Dalat (alt. 1,500 m), Prov. de Lang Bien, Oct. 26, 1958, S. Inoué leg.; 1 ex., Saigon, June 6, 1962, S. Inoué leg.

Distr.: Tropical Asia, Ryukyus, Japan.

10. *Berosus* (*Enoplurus*) *fairmairei* (Zaitzev)

Spec. exam.: 1 ex., Saigon, June 8, 1960, S. Inoué leg.

Distr.: E. Pakistan, Thailand, Cambodia, Vietnam, China, Sumatra, Philippines, Formosa, Ryukyus.

Two Notodontidae from the Island of Amami-Ôshima, Japan (Lepidoptera)

By Masanao Nakamura

Two unrecorded Notodontid-species from Japan were discovered in the collection of moths of Amami-Ôshima which had been taken by Mr. A. Torigata in the spring of 1965.

The author thanks Mr. Akio Torigata, Tokyo and Prof. Tamotsu Ishihara, College of Agriculture of Ehime University, for their kind help in supply of materials.

Quadricalcarifera subgeneris Strand ホリシャシャチホコ

1♂, Koniya, 2 IV 1965 (A. Torigata); 1♂, Shinmura, 25 III 1954 (T. Edashige et T. Mohri).

Amami-Ôshima forms the northern limit in the distribution of this Formosan species. *Q. subgeneris* is closely allied to *Q. cyanea* Leech from Japan and is difficult to differentiate therefrom in worn specimens. Only differences from *cyanea* are in the following points: Forewing with two discernible white dots at termen of median- and antemedian lines on costal margin in numerous specimens; ante- and postmedian spotted dark lines with distinctly yellowish tint; no darkly shaded in costal area in outside of postmedian line.

The specimens of Amami-Ôshima are of less whitish hue than the Formosan representatives and closer to the ground colour of *cyanea* Leech. This species should seem to be the subspecies of *cyanea*.

Pseudofentonia (*Nipponotensha*) *amamiana* sp. nov.
アマミネグロシャチホコ（新称）

Pseudofentonia yakushimensis: Inoue (nec Nakamura), 1965, Kontyû, 33: 137.

♂: exp. 39–43 mm. Most closely related to *P. yakushimensis* Nakamura, but wings a little slender; forewing somewhat darker, particularly in median area, and coarsely shaded with dark-grey scales, not so ochraceously shaded as in *yakushimensis*, ante- and postmedian lines deeper, postmedian dentate line nearly parallel to outer margin, while somewhat oblique inwards to outer margin in *yakushimensis*, then the length between ante- and postmedian lines on costal margin longer than in *yakushimensis*; hindwing dark grey, not so brownish as in *yakushimensis*. ♂ genitalia: only a few points differ from *yakushimensis*. Uncus with narrow indention, apex rounded; socii not hooked at tip; valvae wider at cucullus, armed ampulla of costal string more intricately dentated at apex. Eighth sternite relatively wide, cepharad not so pro-

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Revisional Notes on Japanese Notodontidae, XX.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 54–56, pl. 9, Sept., 1972]

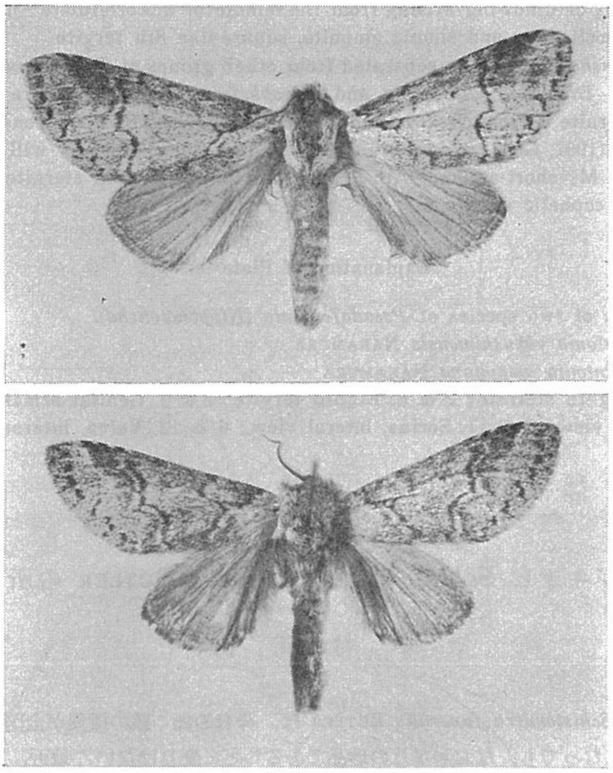


Fig. 1. Upper: *Pseudofentonia* (*Nipponotensha*) *yakushimensis* NAKAMURA
Under: *Pseudofentonia* (*Nipponotensha*) *amamiana* sp. nov.

jected, median piece broad, side pieces not dentated at apical edge. Eighth tergite not so protruded on caudal margin as in *yakushimensis*.

Holotype: ♂, Koniya, 2 IV 1965 (A. TORIGATA); paratype: ♂, data as holotype. All the types in coll. NAKAMURA.

Nipponotensha subg. nov.

Type: *Pseudofentonia amamiana* NAKAMURA

This species and *yakushimensis* NAKAMURA are closely related to *marginalis* MATSUMURA which belongs to the *Formotensha*-group of the *Pseudofentonia*, but are separable in the following points: Antennae serrated; forewing with veins Cu_1 and M_3 separated; hindwing with veins Cu_1 and M_3 from the same point, vein M_2 arising from one-third upper of discocellulars; male genitalia with slender socii, somewhat shorter and dentate edged ampulla, 8th tergite transverse. On *Formotensha*: Antennae pectinate but serrate in one-third of apex, veins Cu_1 and M_3 approximated in both

wings, vein M_2 of hindwing arising from the middle of discocellulars; male genitalia with dilated socii, long and simple ampulla, square-like 8th tergite.

Nipponotensha can also be separated from other groups of *Pseudofentonia* complex in Japan, viz. *Disparia*, *Eufentonia* and *Mesophalera* by the structure of antennae and of 8th sternite. From *Neodrymonia* in which *yakushimensis* was erroneously placed by KIRIAKOFF (1967, Genera Insectorum, 217 B: 139), this subgenus will be discriminated by vein M_1 short-stalked with R_5, R_2 connate and by 8th sternite of the male with straight cephalic margin.

Explanation of Plate 9.

Male genitalia of two species of *Pseudofentonia* (*Nipponotensha*).
1–6. *Pseudofentonia yakushimensis* NAKAMURA
7–12. *Pseudofentonia amamiana* NAKAMURA
1 & 7. Eighth sternite; 2 & 8. Eighth tergite; 3 & 9. Genital armature; 4 & 10. Uncus, dorsal view; 5 & 11. Socius, lateral view; 6 & 12. Valva, internal view.

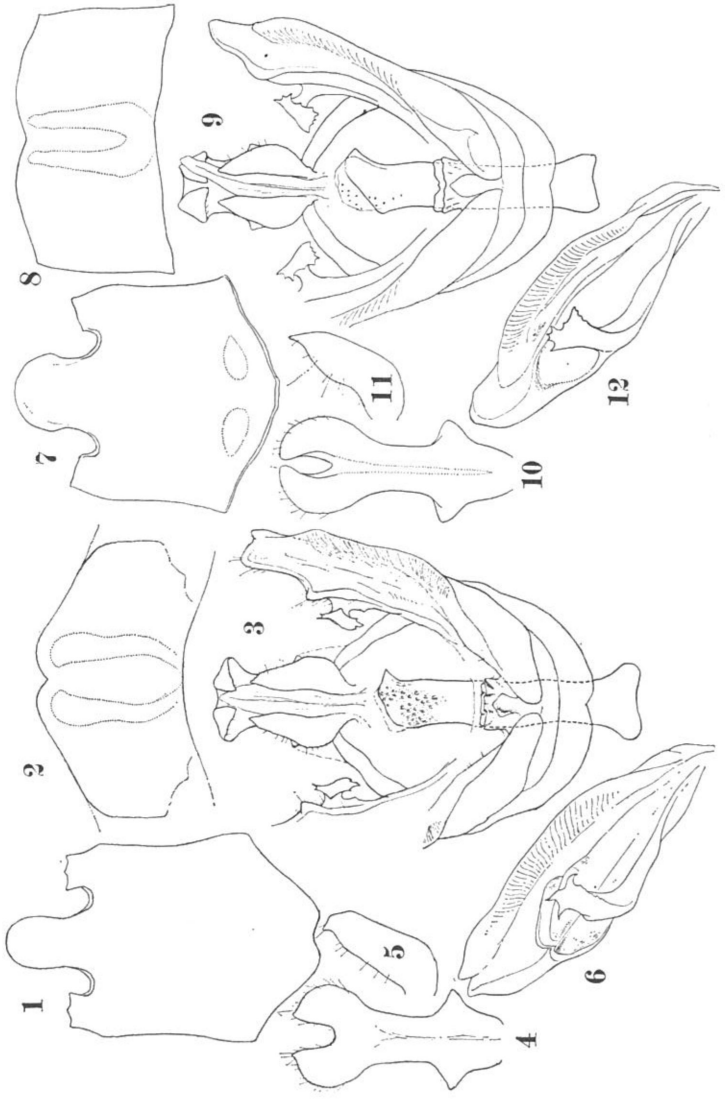
フジキオビ *Schistomitra funeralis* BUTLER の所属

中　村　正　直

フジキオビ *Schistomitra funeralis* BUTLER は，今日の如く蛾の採集が全国各地で盛んに行われるようになっても，なおかなりの珍品であることに変りはない．最近，杉繁郎氏によってその幼虫が採集され（蛾類通信，67：111，1971），私は氏が飼育して得られた同種の蛹の殻を氏の好意で検することができた．その結果，フジキオビの蛹はアゲハモドキ *Epicopeia hainesii* HOLLAND のそれと区別できないほど良く似ていることを知った．フジキオビは現在，ほとんどすべての研究者によりフタオガ科（Epiplemidae）に属せしめられているが，蛹の形態に関する限り本種はアゲハモドキ科（Epicopeidae）に隷属するものとして取扱う方が妥当であろうと思う．もっともフタオガ科，アゲハモドキ科はツバメガ科（Uraniidae）とともに互に極めて近縁の科で，僅かに翅刺の有無等により区別されるに過ぎず，研究者によっては，これらを合一してツバメガ科に包含させているほどであるから，上記の取扱いも特に異とするには当らないことかも知れない．

なお，フジキオビと同じくフタオガ科のなかで，特異な位置を占めるキンモンガ *Psychostrophia melanargia* BUTLER の蛹は，これらと形態的に少しく異っているので，果して本種もアゲハモドキ科に含ませるべきものかどうかいささか疑問もあるが，ともに幼虫が白蠟状物質を体上に盛り上げ，蛹が白粉で蔽われることから，同一グループのものと看做した方が無理がないように思う．

材料の恵与を受けた杉繁郎氏にお礼申しあげる．



(M. NAKAMURA del.)

A New Genus and a Key to Japanese Genera of the Subfamily Blennocampinae (Hym. Tenth.)[1)]

By Teiichi Okutani

(Entomological Laboratory, Faculty of Agriculture, Kobe University.)

Many years ago the late Professor Dr. T. Esaki of Kyushu University told me as to the leaf-rolling larva of a sawfly on Japanese cherry. Unfortunately I could not discover it for a long time, but recently I had been able to collect the larvae at many places in Hyogo Prefecture and succeeded in rearing them. After that Mr. Inomata did collect a lot of the sawfly at Takino in Hyogo Prefecture and put them under my study. At that time I could not recognize the genus of the sawfly definitely, as the habit of the larvae is very similar to *Blennocampa pusilla* (Klug) from Europe but the characters of it do not agree with the description of the genus as well as the larva described by Lorenz and Kraus (1957). When I have been in the British Museum in 1967, I confirmed the conclusion that the sawfly belongs to a new genus. In the course of study in Blennocampinae I have detected confusion in Takeuchi's key (1952) which must be revised as described below.

Before going further I wish to express my hearty thanks to the late Dr. T. Esaki for his suggestion about the sawfly, Mr. R. Inomata for the materials, and also the late Mr. R. B. Benson and Mr. J. Quinlan for their kind help to study in the British Museum.

Nipponocampa gen. nov.

This genus very closely allied to *Blennocampa* Hartig and *Claremontia* Rohwer, but easily separated by the venation of fore wing.

Costal vein dilated apically; stigma nearly semicircular; medius strongly bent posteriorly near the base; first cubital cell large, nearly as long as the second cubital cell, so that the first cubital cross-vein and the first recurrent vein nearly interstitial; basalis subparallel to the first recurrent vein; analis straight. Hind wing without middle cell; anal cell petiolate, petiole a little shorter than the length of the cell (fig. 1).

Head large, narrowed behind the eyes, a little narrower than the breadth of thorax, and without occipital carina; the inner margins of the eyes subparallel; labrum short, apically rounded, and sometimes hidden under the clypeus; clypeus truncate; malar space linear; antenna stout and shorter than head and thorax combined; both scape and pedicel about as long as apical width; the third antennal segment about twice as long as the fourth (fig. 2); frontal area surrounded by low but distinct ridges; postocellar area somewhat convex and broader than long. Prepectus wanting.

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1) Studies on Symphyta XXVIII.

[Ent. Rev. Japan, Vol. XXIV, Nos. 1/2, pp. 57-61, pl. 10, Sept., 1972]

Claws with a subapical tooth.

Type-species: *Nipponocampa esakii* sp. nov.

Nipponocampa esakii sp. nov.

Female: Length 4.3 mm; length of fore wing 4.4 mm; head width 1.4 mm.

Body including head black without paler marking, except the labrum brown; antenna black, but apical 2-4 segments somewhat paler; legs black, but all tibiae and tarsi yellowish brown with some parts of tarsal segments brown. Venation and stigma dark brown, but outer part of the stigma somewhat paler.

Head practically polished and shining, but temples very slightly rugose, about 13/32 as broad as long in dorsal aspect, and about 33/35 as broad as thorax. Clypeus gently convex, nearly trapezoidal in outline, and about 5/8 as long as the apical width. Supraclypeal foveae large and shallow; supraclypeal area nearly trapezoidal and gently convex. Antennal distance about 1.5 times as long as antenno-orbital distance. Median fovea distinct, punctiform, and surrounded by low but distinct ridges. Lateral foveae large, and somewhat elongate. OOL : OCL : POL=7 : 5.5 : 6. Interocellar furrow distinct but punctiform and attached to anterior ocellus. Postocellar area about 5/8 as wide as long; lateral furrows distinct anteriorly, like elongate large punctures. Antennal segments about 9 : 8 : 24 : 12 : 10 : 8 : 7 : 5 : 10 in relative length; scape about as long as its apical width; pedicel about 8/7 as long as its apical width; terminal segment about 5/3 as long as its basal width.

Thorax impunctate, shining and sparsely hairy; scutum faintly micro-sculptured; border between paraescutum and lateral lobes distinctly depressed; paraescutum with a longitudinal depression at dorsomesal line; scutellum nearly rhombic in outline, anterior margin distinctly depressed, distinctly separated by a furrow from scutellar-appendage, and a little wider than long (ca. 37 : 33); scutellar-appendage narrower than scutellum (ca. 12 : 16); cenchri large, broadest width about 12/9 as long as the distance of them; post-scutellum about twice as broad as long. Mesopleura faintly hairy but impunctate, and somewhat elevated below; mesoepimeron divided into an-epimeron and katepimeron by a crest; posterior edge of epimeron elevated. Hind tarsal segments about 24 : 12 : 8 : 5 : 12 in relative length; claws with a short subapical tooth near the middle.

Propodeum triangularly notched; all terga micro-sculptured, somewhat shagreened. Sawsheath rather long, about as long as hind basitarsus, and as in fig. 5; saw as in fig. 3.

Male: A little smaller than female; structure and coloration similar to female; hypopygidium punctured, and bluntly pointed apically; penis valve as in fig. 4.

Types: 3♀♀, 1♂, 10-iv-1959 (including holotype), 4♀♀, 4♂♂, 16-iv-1960, 10♀♀, 2♂♂, 28-iv-1960, Takino, R. INOMATA leg. (in Ent. Lab., Kobe University); 1♀, 3-iv-1959 emerged from the larvae collected on 17-vi-1958 at Hyonosen in Hyogo Pref. (in British Museum).

Larva (Penultimate instar): Rather small, about 11-12 mm long. Head dorsally brown, ventrally paler colored; body pale reddish but greenish in younger stage, often with a dark pattern on dorsum of caudal end.

Head granulato-reticulate, setigerous with minute setae. Antenna 5-segmented,

basal segment longest and the apical shortest (fig. 6). Frons semicircular in outline, with about 20 setae. Clypeus with 2 setae on each side. Labrum with 3 setae on each side (fig. 9), epipharynx with 6 rather spatulate setae on each side. Mandibles each with a seta, and sinistral with 4 distadentes and dextral with 3 (figs. 7, 8). Maxillary palpus 4-segmented, the basal and apical segments subequal in length and longest, 2nd segment with a seta and longer than the 3rd with 3 trichoid sensillae; palpifer with 3 setae; stipes with a seta on each lateral and proximal side; cardo without seta or sensilla; galea digit-like, and more or less curved proximad; lacinia with 5 spatulate setae along apical margin (fig. 12). Postmentum nearly as long as prementum, and with 2 trichoid sensillae on each side; palpiger with 3 setae; labial palpus 3-segmented, the apical segment longest, others subequal in length and all segments without seta.

Cuticle microscopically verrucose, without seta or hair, but with distinct cylindrical warts on certain annulets.

Prothorax with 3, mesothorax – 8th abdominal segments with 4, and 9th abdominal segment with 3 annulets; prothoracic 1st and 2nd annulets, meso- and metathoracic 2nd, 3rd and 4th, abdominal 2nd and 3rd annulets with 2 or 3 warts on each side (fig. 10). Dorsal part of 10th abdominal segments with 3 rather large warts on each side (fig. 11). Abdominal subspiracular and surpedal lobes each with one or sometimes 2 conical warts. Sternal side without seta.

Thoracic legs rather short, sparsely setigerous except tarsus; joints of legs apically shortened; femur distinctely dilated at apico-ventral part; claws short. Prolegs slender and wart-like, and wanting on 1st and 9th abdominal segments.

Leaf-roller of cherry trees. One generation a year.

Biological observation: These notes are mainly dependent upon the observation by Mr. R. INOMATA.

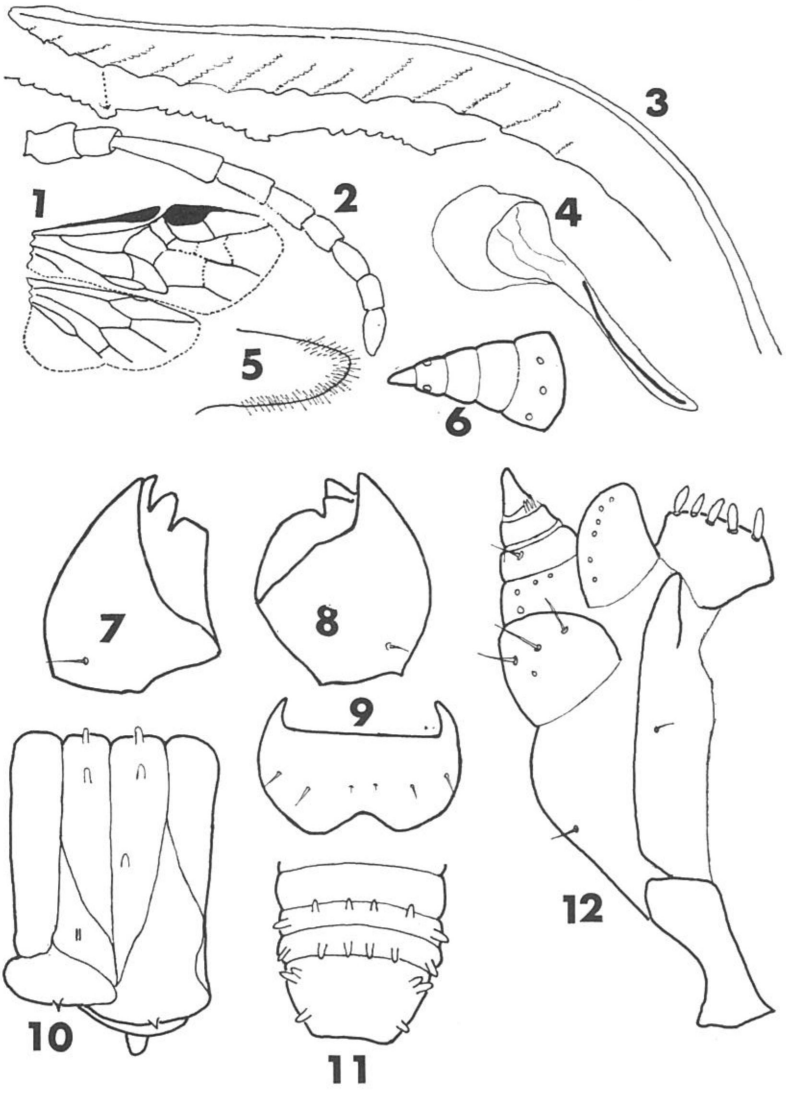
The adults appear in middle of April in Hyogo Prefecture. The female deposits her eggs one by one on the young twig of the cherry tree near the base of the leaf, and the oviposition time is about 4–7 minutes per egg. The incubation period is about 2 weeks. The hatching larva walks up on the petiole and wanders about on the upper side of the young leaf. As soon as the larva arrives at the base of the serration, it moves forwards skipping its head on the surface of the leaf. Skipping head seems to bite the surface because the traces can be recognized as a fluffy point. After the actions the larva begins to roll the leaf-edge with its abdomen. The larva, remaining the caudal part on the under side of the leaf-edge and the cephalic part on the upper surface, goes ahead stopping the move of the caudal part and after it puts forward a little it shakes the caudal part up and down. The first small roll is completed by these acts. The roll may be adhered by the nectary at the top of the serration. The growth of the roll may depend on the extention of the leaf, as the upper surface is bited here and there by the larva.

Host-plants: *Prunus* spp. (*P. yedoensis* MATS., *P. donarium* SIEB. var. *spontanea* MAKINO, and *P. Burgeriana* MIQ.)

Key to Japanese genera of the subfamily Blennocampinae.

1. Stub of analis in fore wing apically furcate; claws with subapical tooth or apically bifid and with or without basal lobe. ·····2

— Stub of analis simple, straight or upturned at apex; claws variable. 8
2(1) Claws bifid and with a distinct basal lobe; in ♂ hind wing with marginal vein; sawsheath in lateral view with the apex acute. ..... *Periclista* KONOW, 1886
— Claws without basal lobe; sawsheath not acute. 3
3(2) Outer orbit with a row of large punctures; sawsheath with a pair of protrusions at caudal end; claws with a distinct subapical tooth. ..... *Ardis* KONOW, 1886
— Outer orbit without large punctures; sawheath normal without protrusions; claws with a small tooth or bifid. 4
4(3) Claws bifid; mesopleura with a distinct prepectus; antennae long, slender and hairy; wings smoky. ..... *Phymatocera* DAHLBOM, 1835
— Claws with a small or minute tooth near the middle. 5
5(4) Propodeum with a distinct, broad and deep emargination; mesopleura with prepectus; claws with a small tooth near the middle. ... *Phymatoceropsis* ROHWER, 1916[1])
— Propodeum normal, only triangularly emarginate; mesopleura with or without prepectus; claws with a minute tooth near the middle. 6
6(5) Mesopleura without prepectus; antennae slender and long, longer than or subequal to head and thorax combined. ..... *Lagonis* ROSS, 1963
— Mesopleura with prepectus; antennae dick and shorter than head and thorax combined. 7
7(6) First recurrent vein and basalis in fore wing subparallel; 1st recurrent vein≒basalis≒2nd recurcent vein. ..... *Eutomostethus* ENSLIN, 1914
— First recurrent vein and basalis in fore wing divergent; 1st recurrent vein <basalis≒2nd recurrent vein; stub of analis biarcuate at apex. ..... *Tomostethus* KONOW, 1886
8(1) Malar space broad, distinctly longer than the diameter of an ocellus; labrum large and longer than it is broad; claws with a minute tooth at middle. ..... *Habachia* TAKEUCHI, 1952
— Malar space narrow, linear or shorter than a half-length of the diameter of an ocellus; claws variable. 9
9(8) Claws simple, with neither subapical tooth nor basal lobe. 10
— Claws with a basal lobe or with a subapical tooth or cleft at apex. 12
10(9) Hind wing with a middle cell; posterior orbit with a depression along eye. ..... *Monophadnus* HARTIG, 1837
— Hind wing without middle cell. 11
11(10) Stub of analis in fore wing distinctly upcurved at apex. ..... *Stetomostethus* BENSON, 1939
— Stub of analis in fore wing straight. ..... *Apareophora* SATO, 1928
12(9) Claws without subapical tooth, but with a distinct basal lobe. ..... *Pareophora* KONOW, 1886
— Claws with a subapical tooth or bifid at apex. 13
13(12) Claws with 2 subapical teeth and faintly indicated basal lobe. ..... *Nesotomostethus* ROHWER, 1910
— Claws with a single subapical tooth or cleft at apex. 14
14(13) Claws with a basal lobe. 15
— Claws without basal lobe. 16
15(14) Hind wing with a middle cell; wings smoky. ... *Megatomostethus* TAKEUCHI, 1933



(T. Okutani del.)

— Hind wing without middle cell; in ♂ hind wing with marginal vein; saw-sheath rather long. ……*Masaaki* TAKEUCHI, 1950

16(14) Claws with a small subapical tooth at middle; prepectus finely developed; hind wing with a middle cell. ……*Paracharactus* MACGILLIVARY, 1908[1)]

— Claws with a small tooth before the middle; prepectus well defined or wanting. ……17

17(16) Prepectus wanting; post-gena without depression; 1st cubital cross-vein and 1st recurrent vein much closer on cubitus. ……*Nipponocampa* gen. nov.

— Prepectus well defined; post-gena with a depression attached to eye; 1st recurrent vein joining the 2nd cubital cell near the middle. ……18

18(17) Depression of posterior orbit reached to dorsal part of eye; subapical tooth of claw minute; body mainly red. ……*Monophadnus* in part[2)]

— Depression of posterior orbit only on genal part; subapical tooth of claw small; body mainly black. ……*Claremontia* ROHWER, 1909

Explanation of Plate 10.

1-12. *Nipponocampa esakii* sp. nov.

1-5. Adult: 1. Fore and hind wings; 2. Antenna; 3. Saw; 4. Penis valve; 5. Saw-sheath.

6-12. Larva: 6. Antenna; 7. Sinistral mandible; 8, Dextral mandible; 9. Labrum; 10. Third abdominal segment; 11. Caudal parts of abdomen; 12. Sinistral maxilla.

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マルハバチ亜科の1新属と邦産属の検索

奥 谷 禎 一（神戸大学農学部）

サクラの葉を捲くハバチの幼虫について，故江崎教授からご指摘があったが，筆者はなかなか採集し得なかった．幸に猪股涼一氏により，多数の材料を提供されたので，種々研究した結果新属とすべきものであることが判明したので，*Nipponocampa* と命名し，本種 *N. esakii* OKUTANI サクラハマキハバチ（新称）をその模式種とした．その特徴は図示したように翅脈によく現われている．さらに，日本産のマルハバチ亜科の検索を，竹内（1952）の誤をただす意味で付記した．

1) These genera need for further study as they do not agree with their type-species in some points.

2) The genus *Monophadnus* in couplet 18 may be a subgenus *Doderia* proposed by MALAISE in 1935, and TAKEUCHI (1952) recognized as *Waldheimia*.

多摩段丘におけるオサムシ族の分布について

松　本　堅　一

On the Distribution of Carabina on Tama-terrace (Carabidae, Coleoptera)

By Ken-ichi Matsumoto

1. はじめに

多摩段丘とは，関東平野西南部に発達する１群の丘陵のことである．多摩川西岸に横たわるこの段丘中最大の多摩丘陵を中心に，その南に横浜南部丘陵，北には高尾北，加住，草花，狭山，加治の各丘陵が続き，典型的な波状丘陵をなしている．

この地域のオサムシ族の分布は，西川協一氏（1960）によって初めて系統的に論じられた．氏は関東地方周辺のオサムシの分布に関する論文の中で，多摩段丘を武蔵野台地および関東平野とそれぞれ命名された区域の中に含めて論じ，この地域にはアオオサムシ，クロナガオサムシ，マイマイカブリの３種が分布することを明らかにした．さらに熊谷幸明氏（1960）は，関東地方のクロナガオサムシ類の分布を論じ，この類に含まれる種が沖積層地に産することはほとんど稀であり，沖積層地以外の地域でも分布しない地域があることを明らかにした．

筆者は，1966年から1970年にわたり，多摩段丘のオサムシ族の分布を調査した結果，両氏の地域区分および分布論では不充分と思われる知見を得た．

第１図．多摩段丘概念図．
1. 多摩丘陵；2. 横浜南部丘陵；3. 高尾北丘陵；4. 加住丘陵；5. 草花丘陵；6. 狭山丘陵；7. 加治丘陵；8. 武蔵野台地；9. 相模野台地；10. 三浦半島；a. 東京湾；b. 相模湾；I. 多摩川；II. 境川；III. 鶴見川；IV. 帷子川；V. 浅川；VI. 秋川；VII. 入間川；VIII. 荒川．

〔昆虫学評論，第24巻，第1/2号，62-68頁，1972年，９月〕

本文をまとめるにあたり，多くのご教示を受けた大倉正文氏に感謝の意を表する．

2. 多摩丘陵におけるオサムシ族の分布

多摩丘陵は多摩川と境川の間に横たわる，多摩段丘中最大の丘陵である．この丘陵の西北部は無数の谷によってよく開析され，標高 200 m を越え，東京都町田市権現谷付近で高尾山を中心とする低山地域に接する．南東，南西部においては平坦な台地状地形をなし，神奈川県横浜市戸塚区品濃町付近で横浜南部丘陵に接する．

この丘陵には次の４種のオサムシ族が分布する．

1. アオオサムシ *Apotomopterus insulicola insulicola* CHAUDOIR
2. エサキオサムシ *Apotomopterus japonicus esakianus* NAKANE
3. クロナガオサムシ *Carabus procerulus procerulus* CHAUDOIR
4. ヒメマイマイカブリ *Damaster blaptoides oxuroides* SCHAUM

第２図はこれら４種の多摩丘陵における筆者の採集地をプロットしたものである．この図により次のことが明らかになる．

アオオサムシおよびヒメマイマイカブリは丘陵の全域にわたって分布する．クロナガオサムシは丘陵南西および南東部の台地状地域には分布しない．ただし南東部の沖積層上に島状に存在する夢見ケ崎と呼ばれる丘陵には分布する．エサキオサムシは丘陵北西部の低山地域に近いわずかな地域にのみ分布する．

以上の多摩丘陵におけるオサムシ族の各種の分布に基づき，筆者は種構成により３群のオサムシ族群を設定した．

第２図．多摩丘陵におけるオサムシの分布図．
●アオオサムシ；○エサキオサムシ；
×クロナガオサムシ；△ヒメマイマイカブリ．

第１表．多摩丘陵におけるオサムシ群

種＼群	アオオサムシ群	クロナガオサムシ群	エサキオサムシ群
D. b. oxuroides	○	○	○
A. i. insulicola	○	○	○
C. p. procerulus	*	○	○
A. j. esakianus	*	*	○

3. 他の多摩段丘におけるオサムシ族の分布

(1) 横浜南部丘陵

この丘陵は，多摩丘陵の南西に横たわり，三浦半島の丘陵地域に接している．北東部のいわゆる本牧台地を除いて多摩丘陵と同様に小河川による開析が進んでおり，標高は 100 m を越えない．全般に宅地化が急速に進み調査が困難なためデータが不充分であるが，アオオサムシ，クロナガオサムシ，ヒメマイマイカブリの３種の分布が確認でき，クロナガオサムシ群の分布が確認できる．

(2) 高尾北丘陵

この丘陵は多摩丘陵の北，南浅川と北浅川の間に発達する．標高 200 m を越え，地形的にも多摩丘陵の北西部とよく似ている．全域にわたってアオオサムシ，エサキオサムシ，クロナガオサムシ，ヒメマイマイカブリが分布し，エサキオサムシ群の分布のみが確認される．

(3) 加住丘陵

秋川に沿って細長く東西に拡がるこの丘陵は，川口川によって南北に２分される．河川による開析は西部においていちぢるしく，標高 260 m に達する．この丘陵からはアオオサムシ，エサキオサムシ，クロナガオサムシ，ヒメマイマイカブリの４種が採集される．アオオサムシ，クロナガオサムシ，ヒメマイマイカブリの３種は全域にわたって分布するが，エサキオサムシの分布は南の丘陵の全域および，北の丘陵の北西部に限られる．したがってこの丘陵にはクロナガオサムシ群およびエサキオサムシ群の分布が確認される．

(4) 草花丘陵

この丘陵からはアオオサムシ，クロナガオサムシ，ヒメマイマイカブリの３種が採集される．エサキオサムシは，丘陵西部につづく頂部の標高が 300 m を越え，地形的にみても奥多摩山地に属すると思われる地域に至って，はじめて採集することができる．したがってこの丘陵にはクロナガオサムシ群のみの分布が確認される．

(5) 狭山丘陵

この丘陵は武蔵野台地上に，他の丘陵と独立して存在し，標高は 200 m を越えない．この丘陵には全域にわたってアオオサムシ，クロナガオサムシ，ヒメマイマイカブリの３種が分布する．したがってクロナガオサムシ群のみの分布が確認される．

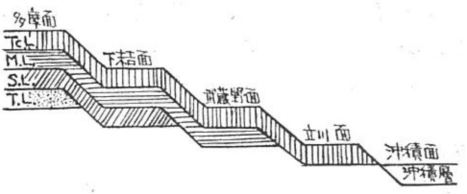
(6) 加治丘陵

草花丘陵の北に入間川に沿って細長く拡がり，全般的に台地状の地形をなす．標高は西部において 200 m を越える．この丘陵の全域にわたって分布するのは，アオオサムシ，クロナガオサムシ，ヒメマイマイカブリの３種である．エサキオサムシは丘陵西部につづく 300 m の標高を頂部にもつ，急峻な地形の地域に至って分布が確認される．したがってこの丘陵からもクロナガオサムシ群の分布のみが確認される．

4. 考察および結論

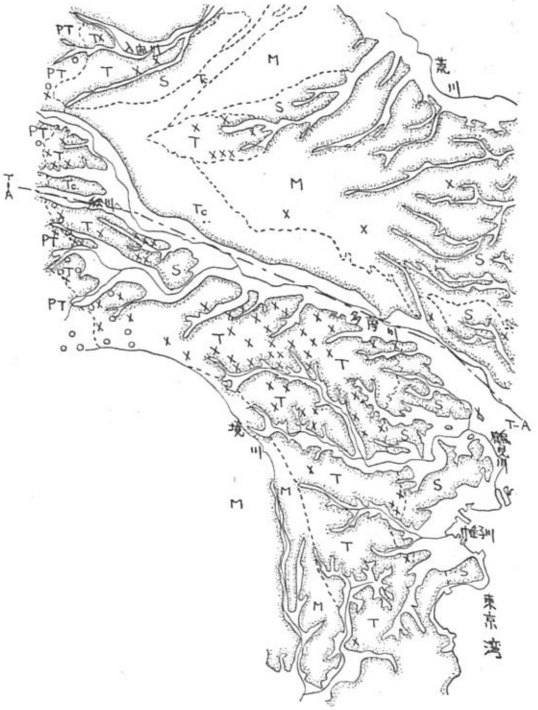
多摩段丘には，関東ローム層の堆積と密接な関係をもつ明瞭な４つの地形面の存在が知ら

れている．立川ローム以上の堆積する立川面(Tc 面)，武蔵野ローム以上の堆積する武蔵野面（M面），下末吉ローム以上の堆積する下末吉面（S面），多摩ローム以上の堆積する多摩面（T面）がこれにあたる．



第3図．多摩段丘における関東ローム層と地形面の関係．
Tc.L. 立川ローム；M.L. 武蔵野ローム；
S.L. 下末吉ローム；T.L. 多摩ローム．

第4図は多摩段丘とその周辺地域の各地形面の分布と各オサムシ群の分布の関係を示したものである．なお，この図においてはクロナガオサムシ群の標徴種となるクロナガオサムシ，およびエサキオサムシ群の標徴種となるエサキオサムシの採集地のみをプロットして各群の分布を示した．この図により次のことが明らかになる．



第4図．多摩段丘とその周辺地域のオサムシ群の分布と地形面．
○エサキオサムシ；×クロナガオサムシ．
Tc. 立川面；M. 武蔵野面；S. 下末吉面；
T. 多摩面；P.T. 前多摩山地．

1. アオオサムシ群の分布域は，多摩丘陵においては下末吉面（S面）および武蔵野面（M面）に一致し，武蔵野台地においては立川面（Tc 面）に一致する．

2. クロナガオサムシ群の分布域は，武蔵野台地では武蔵野面（M面）および下末吉面（S面）に一致し，狭山，草花，加治の各丘陵では下末吉面（S面）および多摩面（T面）に一致する．多摩，加住の両丘陵では北西部を除く多摩面（T面）に一致する．

3. エサキオサムシ群の分布域は，草花，加治両丘陵では丘陵西部につづく，中新統以前の古期岩類を基盤とする前多摩山地（PT）にしか存在しない．多摩，高尾北，加住の各丘陵においては，前多摩山地に存在するばかりか，多摩面（T面）地域にも存在する．

これらの事実は，多摩段丘およびその周辺地域のオサムシ族の分布が地形面と密接な関係をもっていることを示しているものと思われる．

以上の知見に基づいて，筆者は千葉県のオサムシの分布に関する秋山治郎氏および石川良輔氏の研究の関東ローム地質図による検討を試みた．

秋山氏は千葉県におけるオサムシの分布を調査し，この県内には，エゾカタビロオサムシ *Campalita chinense* KIRBY, セアカオサムシ *Hemicarabus tuberculosus* DEJEAN et BOISDUVAL, アオオサムシ *Apotomopterus insulicola insulicola* CHAUDOIR, ルイスオサムシ *Apotomopterus japonicus lewisianus* BREUNING, エサキオサムシ *Apotomopterus japonicus esakianus* NAKANE, アカガネオサムシ *Carabus granulatus telluris* LEWIS, クロナガオサムシ *Carabus procerulus procerulus* CHAUDOIR, トウホククロナガオサムシ *Carabus exilis parexilis* NAKANE, ヒメマイマイカブリ *Damaster blaptoides oxuroides* SCHAUM の9種が分布することを明らかにし，分布図を作製した．氏はこの中で，県内全域にわたって分布するのはアオオサムシ，ヒメマイマイカブリ，エゾカタビロオサムシの3種であり，他の6種はそれぞれ明瞭な分布域を持つことを示した．この分布図と関東ローム地質図を比較検討すると次のことがわかる．

1. ルイスオサムシの分布域は，海成中，下部洪積統を基盤とする丘陵地域と中新統およびそれ以前の古期岩類を基盤とする丘陵地域の分布と一致する．

2. エサキオサムシの分布域は，鹿野山山頂付近の武蔵野ローム堆積地域に一致する．

3. クロナガオサムシの分布域は海成中，下部洪積統を基盤とする丘陵地域と下総台地と呼ばれる下末吉面（S面）丘陵に一致する．

また，石川氏は，房総半島南端部に産する背面が全く赤銅色のアオオサムシを新亜種 *Apotomopterus insulicola nishikawai* ISHIKAWA と命名記載した．さらに氏はこの subsp. *nishikawai* と原種 subsp. *insulicola* の分布域の間には両者の中間型の産する地域が存在することを明らかにした．氏の示した subsp. *nishikawai* と中間型の分布域は，中新統およびそれ以前の古期岩類を基盤とする丘陵地域にほぼ一致する．

以上の考察により，オサムシ族の種および群の分布が地形面と密接な関係をもっているという事実は，間違いのないものと思われる．

5. オサムシ群と地形面の関係に基づく多摩段丘地域の区分

考察において明らかにされたオサムシ族の群の分布が，地形面に基礎づけられている事実に基づき，筆者は前記の西川協一氏および熊谷幸明氏の論文を参照して，第2表に示す多摩段丘および周辺地域の区分を試みた．

なお，これまでの多くの資料により，関東平野沖積部には，アオオサムシ，アカガネオサムシ，ヒメマイマイカブリ，セアカオサムシの4種の分布が明らかにされており，筆者はこの表においてこの種構成をアカガネオサムシ群として設定した．

次に第2表に示された区の分布に着目すると，多摩川―秋川を結ぶ線（第4図 T-A で示す）を境にして，差が生じていることが明らかになる．すなわち，武蔵野 I, 下末吉 I, 多摩 III はこの線の南にのみ分布し，武蔵野 II, 下末吉 II, 立川はこの線の北にのみ分布する．

この事実によれば，前述のクロナガオサムシ群の孤立して分布する多摩丘陵東端の夢見ケ

第2表．地形面とオサムシ群の関係に基づく分布区の試案

オサムシ群	オサムシ分布区（松本）			西川協一氏によるオサムシ分布区(1960)
	地形面	分布区	分布域	
アカガネオサムシ群	沖積面	関東沖積平野区	関東平野沖積部	関東平野
アオオサムシ群	立川面（Tc面）	立川区	武蔵野台地周辺の立川面全域	（関東平野 武蔵野台地）
	武蔵野面（M面）	武蔵野I区	多摩丘陵西部の武蔵野面	武蔵野台地
	下末吉面（S面）	下末吉I区	多摩丘陵東南部の下末吉面	関東平野
クロナガオサムシ群	武蔵野面（M面）	武蔵野II区	武蔵野台地周辺の武蔵野面	（関東平野 武蔵野台地）
	下末吉面（S面）	下末吉II区	武蔵野台地周辺の下末吉面	〃
	多摩面（T面）	多摩I区	加治，草花，狭山，横浜南部……多摩面全域 多摩，加住……西部を除く多摩面	〃
エサキオサムシ群	多摩面（T面）	多摩II区	多摩，加住両丘陵西部多摩面および高尾北丘陵全域	武蔵野台地
	前多摩山地（PT）	前多摩区	各多摩段丘につながる前多摩山地	奥多摩

崎と呼ばれる小丘は下末吉 II に区分され，多摩川一秋川線以北と相同の地域となる．

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Résumé

1. On Tama-terrace, four Carabidid-species are distributed; those are *Apotomopterus insulicola insulicola* CHAUDOIR, *Apotomopterus japonicus esakianus* NAKANE, *Carabus procerulus procerulus* CHAUDOIR and *Damaster blaptoides oxuroides* SCHAUM.
2. The distribution of those species on this region is founded on the topographic level.
3. In conformity with the reration between the topographic level and the composition of Carabidid-species, Tama-terrace is grouped two sections which are defined boundaries by Riv. Tamagawa-Riv. Akigawa line.

四国におけるオオトラカミキリの記録

長　尾　　悟

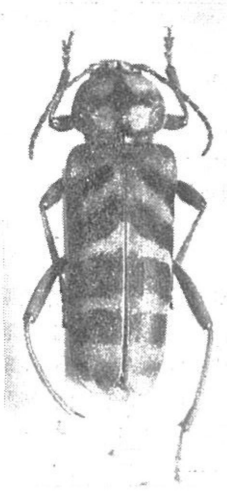
Xylotrechus villioni VILLARD オオトラカミキリは，本州京都付近から得られた個体により VILLARD（1882）が記載した大形のトラカミキリで，本州（近畿以北）・北海道から記録があり分布が確認されているが，四国からは分布の可能性は推測されていたにもかかわらず記録の報告がなく空白地帯となっていた．

筆者は，1971年８月に２度徳島県剣山に採集を試み，好運にも本種を得ることができた．本種が当山にて採集されているということを聞いていたので，帰京後剣山採集行でお世話になった露木繁雄氏他に標本を確認していただくと同時に各専門家に問い合わせをしておいた．

その結果，石鎚山近辺の記録があるらしいが詳細はわからないということと，京都の岡田節人氏により1969年に１個体得られていることが分かった．同氏のご承諾を得てここに２例四国におけるオオトラカミキリの記録を報告しておく．

1 ex., 徳島県剣山見の越神社，5-VIII-1969，岡田節人氏採集．

１♀，徳島県剣山夫婦池近辺，11-VIII-1971，長尾悟採集．



♀，徳島県剣山産

末筆ながら露木・岡田両氏および林匡夫博士・杉野広一氏に謝意を表する．

New Records of *Xylotrechus villioni* VILLARD from Shikoku.

1 ex., Minokoshi-jinja, Mt. Tsurugi, Tokushima Pref., S. OKADA leg.

1♀, Meotoike, Mt. Tsurugi, Tokushima Pref., S. NAGAO leg.

日本産コメツキムシ科の知見（XII）

大　平　仁　夫

Notes on Some Elaterid-beetles from Japan (XII) (Coleoptera)

By Hitoo Ôhira

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Agriotes leucophaeatus Candèze について

本種は，E. Candèze が G. Lewis の 1869～1871年の採集品に基づいて，1873年に日本から新種として記載した体長 5 mm 内外で体が黒色をした小形のコメツキムシであるが，1934年に三輪博士はそのモノグラフで産地を九州とした．原記載およびその後の Candèze (1880, 1891) の印刷物には，Japonia または Japon としているのみで，三輪博士はそのモノグラフによると標本には全く接していないので，どうして九州であることが判明したのか筆者にはよくわからないが，これは，当時の G. Lewis の標本の大部分が九州の長崎，鹿児島あたりのものであることから産地を推定されたものではないかと思われる．そして，本種の正体は，原記載から今日まで全く再検討されることなくおかれている．しかし，1955年に中根・岸井両氏は，その図説の説明文で初めて具体的に本種のことにふれ“*Megapenthes insignitus* Lewis なる学名が従来用いられてきたが，これは誤りである”とされ，従来の日本のヨツキボシコメツキに対して *Agriotes leucophaeatus* Candèze, 1873 の学名をあてはめた．その後のこの図説の改訂版では，この言葉は消えているが，学名は従来通り *A. leucophaeatus* になっている．そして，その後の大多数の発表者はこの説に従い，翅鞘に 4 個の黄斑のある種に対して上記の *A. leucophaeatus* という学名を使い，G. Lewis (1894) が記載した *Megapenthes insignitus* の存在は，前者のシノニムとして扱われ，今ではほとんど忘れられてしまっている．

Candèze (1873) の原記載には翅鞘の斑紋について，ラテン語では“plagis quatuor obscurius pubescentibus”となっており，フランス語の所では“sauf quatre taches peu apparentes sur les élytres”となっている．また，G. Lewis (1894) の *insignitus* の原記載では“the elytra, behind the humeral angle there is a longitudinal testaceous blotch, nearly the length of one third of the elytra, occupying part of interstices 3-8, behind the middle is an oblong spot a little smaller in size on interstices 3-7”と詳しく書いてい

〔昆虫学評論，第24巻，第1/2号，69-72頁，1972年，9月〕

る．両種とも翅鞘に4個の斑紋があることと，このような斑紋のある日本のコメツキムシでは，ヨツキボシコメツキを除いては一寸見当らないことなどから，これらを同一種と判断されたものと思われるが，よく原記載を検討すると，*leucophaeatus* の斑紋は体毛の色彩によるぼんやりとした斑紋であり，*insignitus* の方は翅鞘そのものにあるはっきりした斑紋であるなど，これら両種間にはかなり異った点があるように思われるのである．その他，CANDÈZE の原記載には "omnino testaceus" として体が褐色化したものがあることを示しているが，G. LEWIS の原記載ではこれとは逆に "There is a variety in which the maculations are very small" となっていて，むしろ黒化する傾向のあることが示されている．

筆者は，これらの点について長い間疑問を持ってきたが，Institut Royal des Sciences Naturelles de Belgique にある CANDÈZE の採集品の中には，本種のタイプ標本は保管されていないことがわかり，これ以上の追求の手掛りもないままに今日に至ったのであるが，はからずも，本種のタイプ標本が British Museum (Natural History) に保管されていることが判明した．そこにある *leucophaeatus* の標本は全部で4個体 (1 holotype と 3 syntypes) で，このうちの holotype と 2 syntypes を調べることができた．British Museum (Natural History) の HAYEK 氏によれば，holotype (写真右の個体) と同一の台紙にはりつけてある褐色化した 1 syntype (写真左の個体) は，CANDÈZE が新種の記載をしたのち G. LEWIS に直接返されたものであり，他の筆者が調べた 1 syntype には E. W. JANSON (1822-1891) の collection のラベルが付されていたが，CANDÈZE は，そのモノグラフを完成ののち，1869年に大量の彼のコメツキムシの採集品が，London の collector である上記の JANSON に売渡されたらしく，これを British Museum (Natural History) が買い取った，その中にあった標本だそうである．このことは，HORN & KAHLE (1935) の記事 "(Typen zur Monograhie u. Nachträgen dazu) 1869 via E. W. JANSON. Elaterid. via Godman u. Salvin 1892 an Brit. Mus. N. H. London" からも大体その通りであらうと推察される．

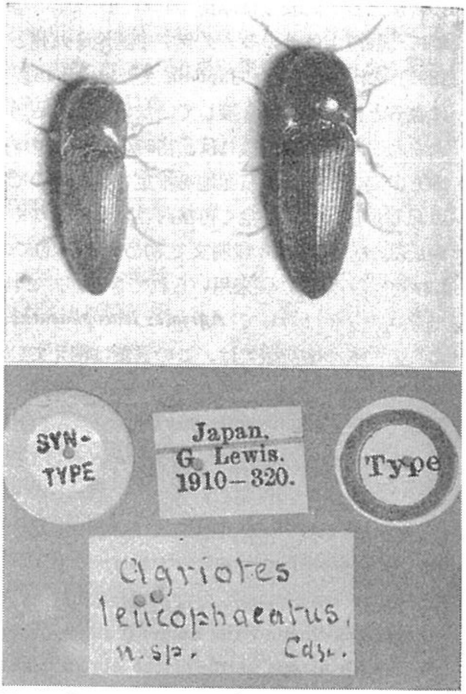

Fig. 1. Showing the holotype (right) and a part of syntypes (left) and labels of *Agriotes leucophaeatus* CANDÈZE, 1873, deposited in British Museum (Natural History).

筆者が調査することのできた holotype は，CANDÈZE の原記載にあるよう

に，高倍率の顕微鏡では倍率が高すぎてよくわからないが，低倍率のもので観察すると，翅鞘の毛は黄褐色であるが，前半部と後半部には褐色がかった毛が巾広く生えており，これが "plagis quatuor obscurius pubescentibus" の正体であることが判明した．Holotype と同一台紙にある他の 1 syntype（写真左）はやや小形で全体が褐色がかっており，これが CANDÈZE をして "omnino testaceus" と記載させたものと思われる．また，ここに図示しなかったが，JANSON の collection のラベルのついた他の 1 syntype は黒色で，holotype とよく一致する個体であった．そして，これは G. LEWIS (1894) が記載した *M. insignitus* とは全く異質な種であることが判明した．

では，この *leucophaeatus* なる種は一体日本産のものであろうか．筆者は現在まで，日本の各地の多数のコメツキムシ標本に接してきたが，このような形態を有する標本には全く接していない．しかし，東南アジアのこの属のもので，このような斑紋を有するものは，筆者が知る範囲では *Agriotes tonkinensis* (FLEUTIAUX, 1894) があり，筆者は Tonkin 産の種と詳しく比較したが，*leucophaeatus* の方が体はより平行状で，翅鞘の条線もより深く印し，間線部もより著しいシワ状をしていた．FLEUTIAUX (1939) によれば，*tonkinensis* は "Espèce extrêmement variable, abondante sur les fleurs au Tonkin. Aussi au Yunnan, en Chine orientale, au Japon, à Formose" としており，このJapon が一体どこから由来したのであるのか大変興味のある問題である．しかし，*tonkinensis* と日本の *leucophaeatus* が同種であるのか別種または別亜種であるのかは，今ここで断定することはできないが，上記の FLEUTIAUX の Japon は，この *leucophaeatus* を指していることにほぼ間違いないと思われる．台湾には *tonkinensis* は普通に産することになっているが，これは印度支那産の真の *tonkinensis* と全く同種であるかどうかは，まだ今後詳しく研究しなければならない．

また，岸井 (1966) は，この誤って同定された種を模式種に指定して *Ectinoides* 属を新設しているが，この属の命名法上の扱いなどについても，前記の台湾産の *tonkinensis* の問題も含めて，後日さらに詳しく検討して決めたいと思う．本稿では，G. LEWIS が記載した *M. insignitus* と CANDÈZE が記載した *A. leucophaeatus* とは別種であることを明らかにするにとどめたい．この種が日本に定着しているとすれば，やはり長崎か鹿児島あたりだろうか？日本のどこかで，この種が再発見されることを期待したい．

本文を終るにあたり，タイプ標本を貸与された British Museum (Natural History) の HAYEK 氏，種々ご指導頂いた東京農業大学の澤田玄正教授，本稿の掲載について配慮を頂いた大倉正文氏に心からお礼申しあげる．

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Summary

Megapenthes insignitus was originally described by G. Lewis in 1894 from Honshû (Miyanoshita and Yokohama), Japan, and this species is now deposited as an *Agriotes*-species. On the other hand, Nakane et Kishii (1955) treated that *M. insignitus* was to be synonymous with *Agriotes leucophaeatus* Candèze, 1873 from Japan (Kyushu?). As the result of the present examination of the holotype and two syntypes of *A. leucophaeatus* deposited in the British Museum (Natural History) through the courtesy of Miss C. M. F. Von Hayek, the author found that *A. leucophaeatus* is quite different from *A. insignitus* and closely allied to *A. tonkinensis* (Fleutiaux, 1894) from South China and Tonkin. However, the author have not been examined any credible specimen of *A. leucophaeatus* from Japan, so, the author can not locate certain type-locality of this *A. leucophaeatus* in this study.

カワラゴミムシ属 *Omophron* の性別について

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On the Gender of the Genus *Omophron* (Coleoptera, Carabidae)

By Akinobu Habu

Omophron 属は男性として使用されたり，中性とみなして使用されている．手もとの欧米の文献を調べてみたが，ほぼ五分五分で，男性として，すなわち *Omophron limbatus* と綴って使用している著者（年代順）は，Schaum, 1860 (Naturg. Ins. Deutschl., 1), Gemminger and Harold, 1868 (Cat. Col., 1), Bates, 1873 (Trans. Ent. Soc. Lond.), Ganglbauer, 1892 (Käf. Mitteleur., 1), Evert, 1898 (Schildvl. Ins. Nederl., 1), Reitter, 1908 (Faun. Germ., 1), Schaufuss, 1916 (Calwer's Käferb., 1), Csiki, 1927 (Col. Cat., pars 92), Mrozek-Dahl, 1928 (Tierw. Deutschl. 7, Col. 7, Carab.), Andrewes, 1929 (Faun. Brit. Ind., Col. Carab., 1), Jeannel, 1946 (Col. Carab. Reg. Malgache, 1), Benschoter and Cook, 1956 (Ann. Soc. Ent. Amer., 49) である．

一方中性として *Omophron limbatum* として使っている著者は，Dejean, 1826 (Spec. Gén. Col., 2), Lacordaire, 1854 (Hist. Nat. Ins. Gen. Col., 1), Jacquelin du Val and Migneau, 1855 (Gen. Col. Eur., Cicind., Carab.), Redtenbacher, 1872 (Faun. Austr., 1), Rousseau, 1908 (Gen. Ins., fasc. 83), Kuhnt, 1913 (Illustr. Best.-Tab. Käf. Deutschl.), Winkler, 1924 (Cat. Col. Reg. Pal.), Portevin, 1929 (Hist. Nat. Col. France, 1), Jeannel, 1941 (Faun. France, 39), Hatch, 1953 (Beetles Pacific Northwest, 1), Lindroth, 1963 (Opus. Ent. Suppl., 20) で，Jeannel のように両方使用している人もいる．

この属の語原については，Lindroth (1963) は語尾の *-phron* は *φρεν* で mind の意味があり，中性なので，この属は中性であると述べている．しかし私はこの説には賛成できない．末尾の *-phron* は *φρεν* ではなくて *φρήν* (mind, heart, will, midriff 等の意味がある）で，この語の性は女性である．*Omophron* の語原は Schenkling[1] によれば *ὠμόφρων* であって，この語は小さな辞書には出ていないが，A Greek-English Lexicon, New Edition, Oxford には "*ὠμό-φρων, ονος, ὁ, ἡ, (φρήν)* savage-minded ....." と記されていて，男性

1) Schenkling, 1922, Nomenclator Coleopterologicus : 82.

〔昆虫学評論，第24巻，第1/2号，73-74頁，1972年，9月〕

を示す ὁ と，女性を表わす ἡ の両方の記号が付されている．これによって *Omophron* が中性というのは誤りであることがわかるが，新たに男性か女性かということが問題になってくる．

オランダの Rijks 大学図書館のご好意で，*Omophron* の原記載 (LATREILLE, 1802, Histoire Naturelle, Générale et Particulière des Crustacés et des Insectes, 3, pp. 89–90) のコピーを見ることができたが，この属に含まれる種が p. 90 の 1 行目に "Exemple. *Scolytus limbatus.* Fab." と示されているだけで，性に関しては男性か女性かの手がかりはない．それで後年誤って中性とされたのであろう．

命名規約第30条 (a) (i) (2) によれば，両性の語原から属が作られた場合は，原著者が女性であることを示さなければ男性とみなすことになっているので，*Omophron* は男性として扱わなければならない．したがって，日本のカワラゴミムシの学名は，*Omophron limbatus aequalis* MORAWITZ と綴るべきである．

Summary

The genus *Omophron* is treated sometimes as masculine, sometimes as neuter. Concerning the gender, LINDROTH (1963) states that *-phron* being φρεν and neuter, the genus is neuter, but I am of the contrary opinion. The etymology of *Omophron* is ὠμόφρων and its gender is both masculine and feminine according to A Greek-English Lexicon, New Edition, Oxford. As LATREILLE does not point out the gender of his genus in the original description, *Omophron* has to be regarded as masculine under Article 30 (a) (i) (2) of the International Code of Zoological Nomenclature.

オオルリオサムシの腹部の構造について

西　尾　美　明

On the Structure of Abdomen of *Damaster gehini* FAIRMAIRE (Coleoptera, Carabidae)

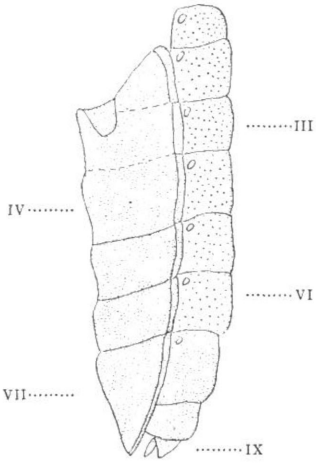
By YOSHIAKI NISHIO

JEANNEL et PAULIAN (1944) によれば甲虫類成虫の腹部は外観によって4型に分けられる．すなわち Hologastra, Haplogastra, Cryptogastra と Adephaga の4型である．この中，前3者は第2腹節腹板の後胸内への嵌入の度合によって系列的に分けられたものである．これらの群にあっては，第2・第3および第4腹節腹板はそれぞれ明瞭に独立し，僅少な例を除いては2腹板あるいは3腹板が融合して1板の大きな腹板を形成することはない．しかるに Adephaga にあっては第2・第3・第4腹節腹板は融合して1板の大きな腹板となり，各腹板の縫合線が明瞭に認められ，他の3型と構造を異にする．

さらに Adephaga にあっては単に腹節基部の構造が他群と異るばかりでなく，末端に嵌入している第8腹節，第9腹節の構造も他群の構造と著しく異る．筆者は *Damaster gehini* FAIRMAIRE オオルリオサムシの腹部を調査することができたのでこれを報告したい．

I. 腹部の外観

第1腹板は後胸内に入り消失している．第2腹板の大部分は後胸基節窩内に入っているが，側方が三角形状に露出している．第2・第3・第4腹板は融合し，1枚の大形の腹板になっているが，縫合線は点線状となり明瞭に認められる．第2・第3腹板の中央側方は強く凹陥し，後肢基節窩の一部をなしている．背面には8背板が認められ，第8節が尾端節になっているが，雌では時に第9背板の後方が露出していることがある（第1図）．腹面には6腹板が認められ，第7腹板が後方に伸長し第8背板下面を覆っている．第1～第6背板は薄いが，第7～第8背板は黒褐色のキチン



第1図．♀腹部の外観．
III, VI, IX…第3，6，9背板．
IV, VII…第4，7腹板．

〔昆虫学評論，第24巻，第1/2号，75-78，1972年，9月〕

質の固い板になっている．各腹板側方は上反して側板になっているが，側板は余り広くない（第1図）．

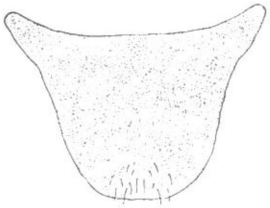
II. 第8腹節

雄．背板―丸味のある梯形状で，前縁が最も幅広く，側縁は後方に強く狭まり，後縁角付近および後縁は弓形を呈する．よく肥厚して固く，黒色を呈するが前縁中央に三角形の淡色な部分がある．裸形に近く，後縁中央付近に短毛が散在している（第2図）．

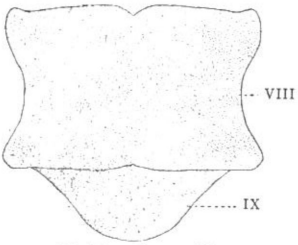
腹板―膜質化して消失している．

雌．背板―幅広い四辺形状を呈するが，側縁は強く彎入し弓状を呈し，前縁角および後縁角は突出する．前縁と後縁はほぼ平行であるが，両者ともに中央部が僅かに彎入する．雄第8背板と同様によく肥厚して固く，黒色を呈する（第3図）．

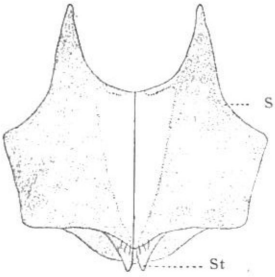
腹板―大形で背板と同じように固いキチン板になっている．梯形状を呈するが，前縁正中縁両側方は強く前方に突出し長形の刀刃状を呈する．側縁はやや後方に狭まり，後縁中央部は僅かに突出し，その両側方は弱い弓形を呈する．黒褐色を呈し，中央に長形の三角状の淡色な部分がある．正中線上は直線状に深く凹み，後縁中央に僅かな短毛がある．生殖器感覚突起および第9背板後縁付近が後方に見える（第4図）．



第2図．♂第8背板．



第3図．♀第8，9背板．

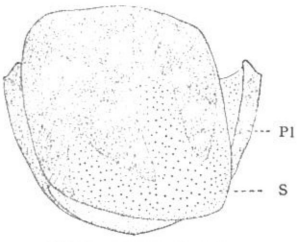


第4図．♀第8腹板．
S. 第8腹板；St. 生殖器感覚器．

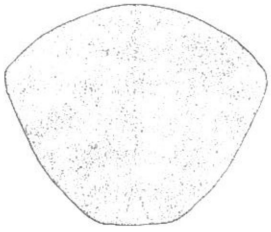
III. 第9腹節

雄．背板―膜質化して消失している．

腹板―円形のよく肥厚したキチン質の板になっている．黒色の波形の斑紋があり，平滑で毛その他を欠く．第8背板がその上方および側方を覆い，Median lobe がその中に包まれている（第5図）．



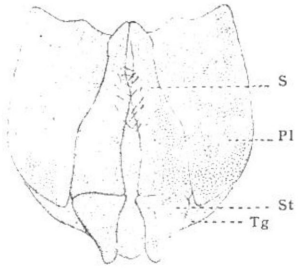
第5図．♂第9腹節下面．
Pl. 側板；S. 腹板．



第6図．♀第9腹節背板．

雌．背板―丸味のある梯

形状を呈する．前縁が最も幅広く，緩かな大きな弧状を呈して中央部が前方に突出する．側縁は強く後方に狭まり，前縁角，後縁角付近はともに丸味がある．よく肥厚して固く，黒色を呈するが，後縁中央に三角形状の淡色な部分がある（第6図）．第9腹節背板はその末端が，第8腹節背板の後方に露出していることがある（第1図）．



第7図．♀生殖器．
S. 腹板；Pl. 側板；Tg. 背板；St. 感覚突起．

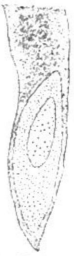
腹板一背板同様固いキチン板よりなり，数部に区分される．側板がよく発達し大形で，ほぼ長四辺形を呈するが，外方の後縁角付近は丸味がある．生殖器は太い筒状を呈するが，前方がいくらか細まる．感覚突起は太く，三角堆状で後端が突出する．毛は基幹部内縁沿いに若干見られる．黒褐色を呈するが，側板後方，生殖器外方等は淡色である（第7図）．

雌にあっては第9腹節が生殖器になっている．

IV. 雄生殖器

Median lobe一固く太い筒状で弓形を呈する．膜質部の前縁にあたる付近が最も太く，それより前方および後方に細まり，後端は細まる．黒褐色を呈するが，前端および後端は淡色である（第8図）．膜質部は長円形で大きい（第9図）．


第8図．Median lobe および Lateral lobe.


第9図．Median lobe 末端膜質部．

Tegmen一小形で，前端は Median lobe 前端に連続し，長形の皿状で，側縁は不規則な波状を呈する（第8図）．

V. 考　　察

オオルリオサムシの腹部の構造は，カミキリムシ科（西尾，1959[a,b,c]）やゾウムシ科（JEANNEL, 1949）と外形ばかりでなく，末端に嵌入している第8・第9腹節の構造も著しく異る．これは，オサムシ科はカミキリムシ科やゾウムシ科と系統関係が遠いことを示すとともに，産卵・交尾等の生態もまた異ることをも示すものであろう．

JEANNEL（前出）によれば，甲虫類の雌生殖器は第9腹節腹板が変形して生じたものである．このことはオオルリオサムシの生殖器の構造によっても知ることができる．即ち，オオルリオサムシの雌生殖器は背板を具備し，背板は腹板とともに固いキチン質で，全体が明かな節の形をしている．また腹面に明かに側板と考えられる大形なキチン板があることも注意されよう．この節の構造は甲虫類の雌生殖器の原形を示すものと見られる．

筆者（1960）は *Damaster blaptoides rugipennis* MOTSCHULSKY エゾマイマイカブリの雌の腹部の構造を報告した．この種の雌生殖器と，オオルリオサムシの雌生殖器はよく似ているということができる．しかし，エゾマイマイカブリの雌生殖器は背板および腹板ともに中央後方に深い横溝があり，末端近くと基幹部は明瞭に分けられるが，オオルリオサムシでは

分れていない．これは注目すべき差異と考えられる．またエゾマイマイカブリの雌生殖器が前後2部分に分けられるという事実は，甲虫類成虫の腹部第10節を考える上に重要な示唆を与えるものと思われる．

JEANNEL et PAULIAN (1949) によれば，甲虫類成虫雌の交尾器感覚器は，幼虫の腹部尾端節に見られる Style と同物である．しかるに *Silpha japonica* MOTSCHULSKY オオヒラタシデムシの雌生殖器（西尾，1960）を見ると，Style が左右両側方にあり，その中間にさらにもう1対の突出物がある．甲虫類雌の生殖器感覚器は幼虫の Style と同物ではなく，その中間に生じた1対の突出物の変化したものではないだろうか？これはさらに多くの甲虫類成虫雌の腹部を調査して確かめるべき問題であろう．

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