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# Two Panagaeine Carabid Beetles from the Ryukyu Islands, Southwest Japan (Carabidae)

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**Abstract** 1) *Peronomerus insularis* SCHÖNFELDT is transferred to the genus *Trichisia*, and is redescribed together with *Euschizomerus liebkei* JEDLIČKA which has hitherto been confused with the former. 2) A key to the genera of Japanese Panagaeini is given.

In 1890 SCHÖNFELDT described *Peronomerus insularis* based on the single female specimen from Amami-Ohshima Island, the Ryukyus, Japan. Since then, it has not been correctly recognized for a long time, because of its rareness and especially of the ignorance of its males. Besides, *P. insularis* was often confused with another panagaeine occurring more abundantly in the Ryukyus, that is, *Euschizomerus liebkei* JEDLIČKA.

Recently, I had an opportunity to examine a male specimen of *P. insularis* through the courtesy of Mr. Atsuo IZUMI who had obtained it on the above mentioned island. It agrees well with SCHÖNFELDT's description, though the 1st segment of its fore tarsi is not enlarged and lacking in the adhesive hairs ventrally, and the 4th segment is only emarginate at apex, not bilobed. According to CHAUDOIR's system (1878), *P. insularis* must be placed in the genus *Trichisia* hitherto unrecorded from our faunal region. In this paper, I am going to redescribe and illustrate the two genera and species, and to give a key to the eight genera of Japanese Panagaeini. Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for not only giving me advice but also loaning literature and critically reading the typescript of this paper, and to Dr. Yoshihiko KUROSAWA of the same museum for affording facilities to examine the specimens under his care. Thanks are also due to Messrs. Atsuo IZUMI, Seiji MORITA and Minoru TAO for their kindness in offering valuable material and help.

The abbreviations used herein are as follows: WH – greatest width of head including eyes; WP – greatest width of pronotum; LP – length of pronotum, measured along the mid-line; WE – greatest width of elytra; LE – length of elytra.

## *Trichisia insularis* (SCHÖNFELDT), comb. nov.

"Okinawa-kebuka-gomimushi"

*Peronomerus insularis* SCHÖNFELDT, 1890, Ent. Nachr., **16**: 168–169. (Oshima, Liu-Kiu Inseln). —— CSIKI, 1929, Coleopt. Cat., pars 104: 364. —— JEDLIČKA, 1965, Annot. zool. bot., (12): 10, 11.

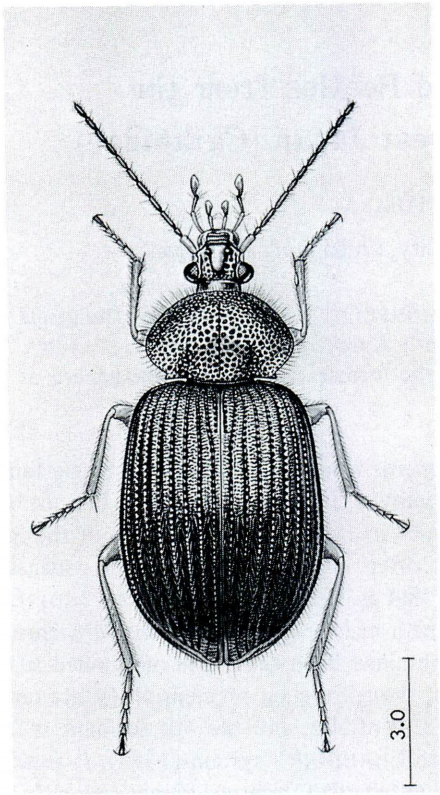


Fig. 1. *Trichisia insularis* (SCHÖNFELDT), from Amami-Ohshima Is.

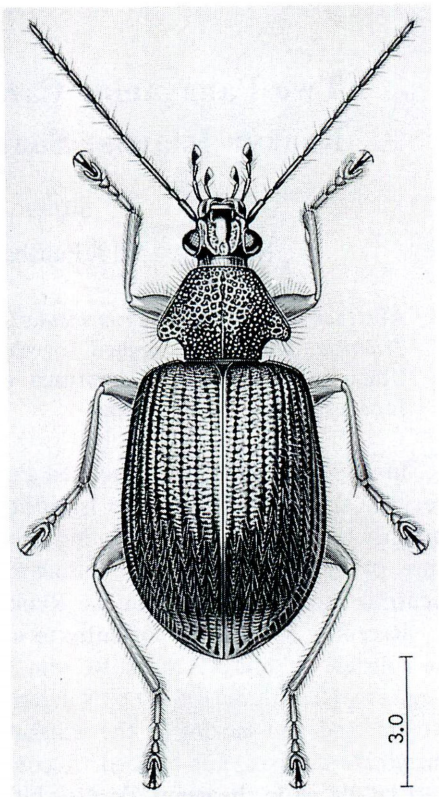


Fig. 2. *Euschizomerus liebkei* JEDLIČKA, from Ishigaki Is.

*Description.* Length 8.1–10.0 mm. Width 4.2–4.9 mm. Stouter in general appearance than any of the Japanese species of *Peronomerus*. Wholly pubescent. Black, tinged with dark metallic blue, head shiny; scape, basal segments of palpi and legs reddish brown, rest of antennae and palpi, labrum and mandibles dark reddish brown or blackish.

Head small, subquadrate, almost flat, irregularly with large punctures, except on neck, clypeus and frons, the last one of which forms ob-triangle and is somewhat convex; microsculpture absent, small punctures sparsely visible; labrum emarginate at apex; eyes well prominent, hemispherical; antennae slender, extending beyond shoulder; scape 2.5 times as long as wide, 1.6 times as long as segment 2, segment 3 almost twice as long as segment 2, 1.4 times as long as segment 4; apical segment of palpi widely and triangularly dilated.

Pronotum transverse, moderately convex, widest at basal two-fifths, twice as wide as head, 1.6 times as wide as long (in 1♂, 4♀♀, WP/WH 1.94–2.13, mean 2.06; WP/LP 1.54–1.67, mean 1.60); surface densely and irregularly pitted, microsculpture absent; median sulcus shallow, ambiguous in pits; apical margin almost straight; apical angles obtuse, rounded; basal margin straight at the median part, obliquely sinuate at lateral parts; basal angles rectangular, denticulately protrudent, though rounded at the tips; lateral margins

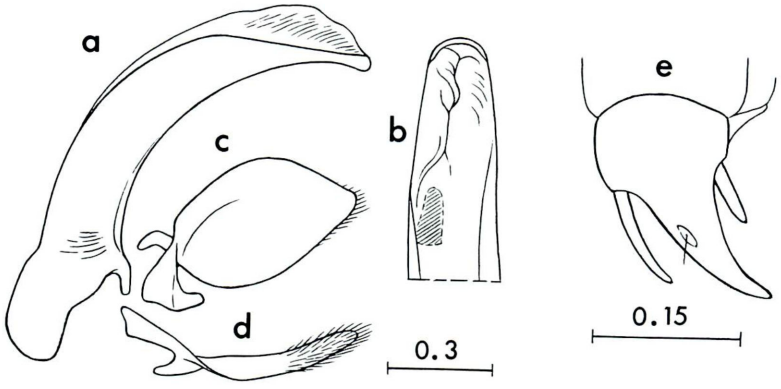


Fig. 3. Genitalia of *Trichisia insularis* (SCHÖNFELDT).
a, Left lateral view of aedeagus; b, apical half of aedeagus in dorsal view; c, left side of left paramere; d, right side of right paramere; e, left stylus of female.

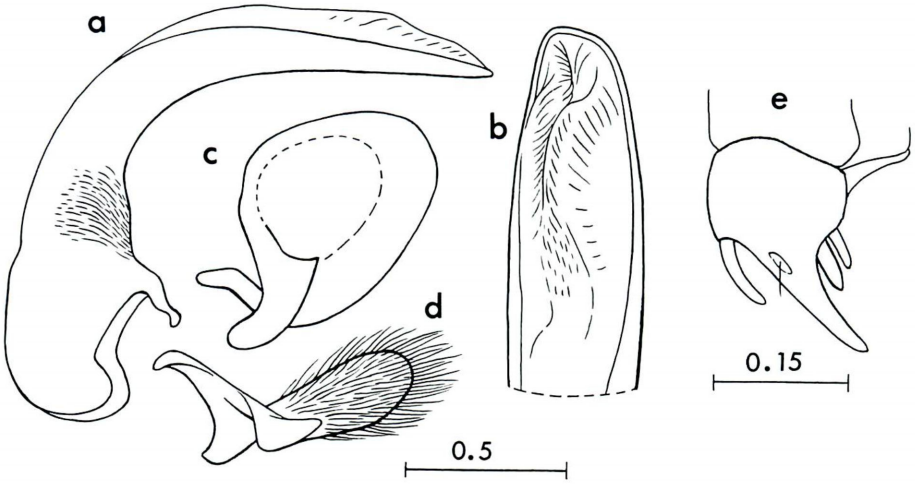


Fig. 4. Genitalia of *Euschizomerus liebkei* JEDLIČKA.
a – e, Same as in Fig. 3.

narrowly bordered from apical angles to behind the widest part, evenly and roundly convergent anteriad, well arcuate at the widest part, thence fully convergent posteriad; basal foveae rather deep, sublinear, depressed at the external parts.

Elytra ovate, convex, widest at the middle, 1.4 times as wide as pronotum, as long as wide in the same proportion (in 1♂, 4♀♀, WE/WP 1.35–1.40, mean 1.38; LE/WE 1.37–1.40, mean 1.38); apical sinuation shallow; striae deep, distinctly punctate; intervals

well convex, with dense punctures which are mostly connected with one another and form transverse wrinkles. Wings full.

Tarsal segment 4 moderately emarginate at apex, though not bilobed; fore tarsal segment 1 similar in both the sexes, not enlarged, without adhesive hairs beneath even in male; hind tarsi 1.33 times as long as the width of head.

Ventral surface rather densely punctate, sternites with small scratch-like punctures at the median area.

Aedeagus evenly and gently arcuate, widely rounded at apex in dorsal view, somewhat tumid ventrally, apical lobe extremely short; left paramere wide, ovate, narrowed towards apex though narrowly rounded at the tip, sparsely pubescent at the apical margin; right paramere slender, rather densely pubescent at apical third on the right side. Styluses of female genitalia wide at basal third, with the foramen at apical third; inner spine long, outer one short.

*Distribution.* Japan – Ryukyus. Formosa – Botel-Tobago Is.

*Notes.* The present species resembles *T. cyanea* SCHAUM, 1853 from China, Hongkong and India in the color and size, but may be distinguished from the latter by having wider pronotum which is twice as wide as long. Also resembles *T. violacea* JEDLIČKA, 1935 from the Philippines in the form of pronotum, but may be separated from it by having the basal three segments of antennae reddish brown.

Specimens examined. 1♂, 30-VI-1980, Nishinakama, Amami-Ohshima Is., Kagoshima Pref., A. IZUMI leg.; 1♀, IV-1973, Amami-Ohshima Is., Kagoshima Pref., M. ITO leg., (through M. TAO); 1♀, 14-VI-1979, Mt. Yonaha, Okinawa Is., Okinawa Pref., T. HORIGUCHI leg., (through M. TAO); 1♀, 1-VI-1962, Hentona, Okinawa Is., Okinawa Pref., S. UÉNO leg., (NSMT); 1♀, date not known, Botel-Tobago Is., Formosa, (KANO collection, NSMT).

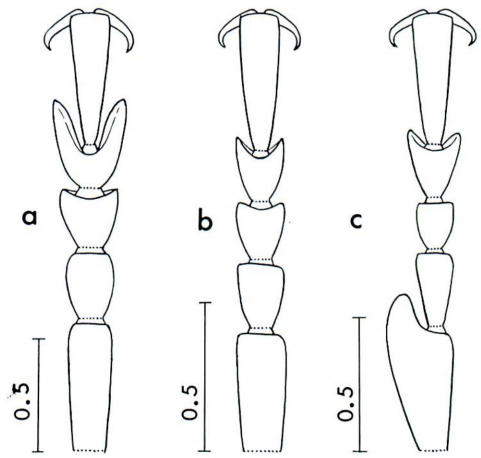


Fig. 5. Male right fore tarsi (setae and pubescence omitted).
a, *Euschizomerus liebkei* JEDLIČKA; b, *Trichisia insularis* (SCHÖNFELDT); c. *Peronomerus auripilis* BATES.

## *Euschizomerus liebkei* JEDLIČKA

"Sedaka-kebuka-gomimushi"

*Euschizomerus Liebkei* JEDLIČKA, 1932, Acta Soc. ent. Čech., **29**: 43, fig. (Umg. Schanghai). ——— *Euschizomerus liebkei*: JEDLIČKA, 1965, Annot. zool. bot., (12): 9, fig. 7. ——— KASAHARA, 1981, Kita-Kyushu no Konchu, **28**: 60, 65 – 66, 68. ——— *Peronomerus insularis*: HABU, 1975, Trans. Shikoku ent. Soc., **12**: 77*. ——— HABU, 1975, Ent. Rev. Japan, **28**: 71*. ——— KASAHARA, 1980, Kita-Kyushu no Konchu, **26**: 194.

*Description.* Length 9.8–10.6 mm. Width 4.6–5.0 mm. Shiny black with a tinge of metallic blue which is faint on the dorsal surface, more apparent on the venter; wholly covered with yellowish pubescence. Labrum, mandibles, palpi and antennae reddish black. Legs reddish brown, tarsal segment 4 somewhat darker, claw segment blackish.

Head subquadrate, rather flat; frontal furrows incurved, approaching to each other a little before the post-eye level, irregularly with large punctures; clypeus and frons glabrous, somewhat convex; labrum emarginate at apex; eyes prominent, hemispherical; neck constriction linear on the dorsal side; antennae long and slender, nearly reaching basal third of elytra; scape 3 times as long as wide, 1.5 times as long as segment 2, segment 3 the longest, 2.4 times as long as segment 2, 1.6 times as long as segment 4; apical segment of palpi widely and triangularly dilated.

Pronotum peculiar in shape, somewhat sagittate, widest at basal third, less than 1.75 times as wide as head, 1.5 times as wide as long (WP/WH in 11♂♂, 1.68–1.80, mean 1.70; 11♀♀, 1.67–1.80, mean 1.73: WP/LP in 11♂♂, 1.46–1.55, mean 1.50; 11♀♀, 1.45–1.61, mean 1.53); apex truncate; apical angles obtuse, rounded; base almost straight; basal angles nearly rectangular; lateral margins strongly and almost straightly convergent from the widest part to apical angles; lateral parts protrudent postero-laterally, slightly reflexed dorsally, thence abruptly contracted to basal angles, forming a deep emargination on each side; surface densely pitted, pits irregular in size and form, inter-spaces among them convex, microsculpture absent; median sulcus and basal foveae rather deep, though somewhat ambiguous in pits.

Elytra ovate, well convex, widest at the middle, 1.6 times as wide as pronotum, 1.4 times as long as wide (WE/WP in 11♂♂, 1.49–1.59, mean 1.54; 11♀♀, 1.53–1.64, mean 1.58; LE/WE in 11♂♂, 1.40–1.47, mean 1.45; 11♀♀, 1.39–1.44, mean 1.42); apical sinuation faint; striae deep, with large punctures; intervals rather flat in basal half of 1st–

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* I have examined the specimens used by HABU in preparing his papers and now preserved in the Laboratory of Insect Identification and Taxonomy, National Institute of Agricultural Sciences, through the courtesy of Mr. Narao FUKUHARA, to whom I wish to express my heartfelt thanks.

3rd, densely and irregularly punctuate, the punctures mostly connected with one another and forming transverse wrinkles; microsculptures partially and faintly visible. Wings full.

Tarsal segment 4 deeply emarginate at apex, conspicuously bilobed; fore tarsal segments not enlarged in male, without adhesive hairs ventrally; tarsal segments 1–4 thickly with long hairs beneath in both the sexes.

Ventral surface densely pitted except for median areas of sternites which are densely covered with small scratch-like punctures.

Aedeagus curved in 90 degrees at about middle, thence almost straight to apex in lateral view; basal part stout, with dense transverse wrinkles at the ventral side; apical half rather flat, apex subtruncate in dorsal view, apical lobe extremely short; left paramere wide, ovate; right paramere club-shaped in apical half, densely pubescent, the pubescence being relatively long. Styluses of female genitalia wide at basal half, narrow and spinous at apical half, with the foramen at about middle; inner spine long and curved, outer ones shorter than the inner and different in thickness, the apical one being stouter than the proximal.

*Distribution.* Japan – Ryukyus. Formosa. China.

*Notes.* This species resembles *E. rufipes* HELLER, 1921 from the Philippines, but may be distinguishable from the latter by having longer pronotum which is only a little wider than long.

Specimens examined (all the following examples were obtained by myself). 4♀♀, 24-IV-1980, Takeda, Ishigaki Is., Okinawa Pref.; 1♂, 2♀♀, 26-IV-1980, Uebaru, Ishigaki Is., Okinawa Pref.; 2♂♂, 2♀♀, 7-VI-1976, Sonai, Iriomote Is., Okinawa Pref.; 8♂♂, 2♀♀, 9-VI-1976, Oh-hara, Iriomote Is., Okinawa Pref.; 1♀, 2-VI-1976, Sonai, Yonaguni Is., Okinawa Pref.

## Key to the Genera of Japanese Panagaeini**

1 ( 6 ) At least fore tarsal segment 1 widely enlarged and provided beneath with adhesive hairs in male.
2 ( 3 ) Only 1 fore tarsal segment enlarged in male (fig. 5, c); elytra immaculate . . . . . ***Peronomerus***
3 ( 2 ) Fore tarsal segments 1 and 2 enlarged in male; elytra maculate.
4 ( 5 ) Head peculiarly prolonged . . . . . ***Tinoderus***
5 ( 4 ) Head normal. . . . . ***Panagaeus***
6 ( 1 ) Fore tarsal segments hardly or not enlarged in male, adhesive hairs either present or absent.
7 ( 8 ) Fore tarsal segments 1–4 very slightly or hardly enlarged in male, adhesive hairs present; elytra maculate. . . . . ***Microcosmodes***
8 ( 7 ) Fore tarsal segments not enlarged at all in male, adhesive hairs absent.

** Also refer to HABU, 1978, Ent. Rev. Japan, **32**: 75, figs. 21–26.

9 (12) Tarsal segment 4 moderately emarginate at apex, not bilobed (fig. 5, b).
10(11) Elytra maculate. . . . . *Craspedophorus*
11(10) Elytra immaculate. . . . . ***Trichisia***
12( 9 ) Tarsal segment 4 deeply emaginate and bilobed.
13(14) Tarsal segment 4 shallowly bilobed; elytra maculate. . . . . ***Dischissus***
14(13) Tarsal segment 4 deeply bilobed (fig. 5, a); elytra immaculate. . . . . ***Euschizomerus***


## 摘　　要

1）これまで，*Peronomerus*属として扱われてきたオキナワケブカゴミムシ*insularis* SCHÖNFELDを，雄の前跗節の形態的特徴に基づいて*Trichisia*属に移し，本種と混同されていたセダカケブカゴミムシ(新称) *Euschizomerus liebekei* JEDLIČKA とともに再記載した．

2）日本産ケブカゴミムシ族Panagaeiniの属の検索表をつくった．


## Literature Cited


CHAUDOIR, M. DE, 1878. Essai monographique sur les Panagaeides. *Ann. Soc. ent. Belg.*, **31**: 83–186.

CSIKI, E., 1929. Carabidae: Harpalinae 3. In JUNK & SCHENKLING, *Coleopterorum Catalogues,* pars 104 (pp. 347–527). W. Junk, *Berlin.*

HABU, A., 1975a. Carabidae taken from the Ryukyus, mainly by Mr. HASEGAWA during February and March in 1973 (Coleoptera, Carabidae). *Trans. Shikoku ent. Soc.*, **12**: 63–81.

———— 1975b. Carabid beetles Mr. A. SUGIMOTO taken in Ishigaki Is., Ryukyus, by a black-light trap (Coleoptera, Carabidae). *Ent. Rev. Japan,* **28**: 69–84, pls. 7–9.

———— 1978. Some rare species of ground-beetles found by Mr. S. KASAHARA in the Ryukyus (Coleoptera, Carabidae). *Ibid.*, **32**: 61–80.

JEDLIČKA, A., 1932 Neue Carabiden aus Süd-China, 3 Teil. *Acta Soc. ent. Čech.*, **29**: 38–48, fig.

———— 1965. Monographie des Tribus Panagaeini aus Ostasien (Coleoptera, Carabidae). *Annot. zool. bot.*, (12): 1–15.

KASAHARA, S., 1980. Ground-beetles collected in the Yaeyama Islands, Ryukyus. *Kita-Kyushu no Konchu,* **26**: 89–95, pls. 11–12 (in Japanese).

———— 1981. Ground-beetles collected in the Yaeyama Islands, Ryukyus 2. *Ibid.*, **28**: 59–68, pls. 7–8 (in Japanese).

SCHONFELDT, H. V., 1890. Ein Beitrag zur Coleopterenfauna der Liu-Kiu-Inseln. *Ent. Nachr.*, **16**: 168–175.

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# On a Stag-beetles of the Genus *Neolucanus* THOMSON from the Ryûkyûs. (Coleoptera, Lucanidae)

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The Oriental genus *Neolucanus* THOMSON is mainly distributed in Indo-China and Southern China. In Japan, two species of this genus, have been known from the Ryûkyû Islands: *N. saundersi protogenetivus* Y. KUROSAWA known from the Amami group, *N. saundersi insulicola* Y. KUROSAWA and *N. insularis* MIWA known from the Yaéyama group, but unknown from Okinawa Is.

These species are rare in any habitats, and singular life style for Japanese Stag-beetles. Adults of any species appeared in the autumn and the winter. Consequently, up to the present, have been collected few specimens.

Recently, however, I had a chance to examine many specimens of this genus collected in Okinawa Is.. In the present paper, the results of taxonomic examination on the species of Amami-Oshima Is. and Okinawa Is. are presented.

## *Neolucanus protogenetivus* Y. KUROSAWA, stat. nov.

*Neolucanus saundersi protogenetivus* Y. KUROSAWA, 1976, Bull Natn. Sci. Mus., Ser. A (Zool.), 2(3): 190.

*N. saundersi protogenetivus* Y. KUROSAWA, 1976, described from Amami-Oshima Is., is not subspecies of *N. saundersi* PARRY, 1864, described from North India, but an endemic species of the Ryûkyû Islands (Amami and Okinawa group). The points distinguishing this species, *N. protogenetivus*, from *saundersi* PARRY, and other allied species in the Continent and Formosa, are as follows: in male, (1) Almost black, sometimes blackish brown, not distinctly shining, all over of the upper surface feebly punctured. (2) Body rather depressed, head and pronotum slightly but more short and broad. (3) Mandibles, in large specimens, slender, but not longer than head breadth, slightly curved as sigmmoid in lateral aspect, curved into the inside at apical third; one erect dentation produced on near of the tip, with four or five small teeth on the tip part of inner side, posterior two or three teeth fused and rather flat developed. In medium and small specimens, short and robust, broaden at base; the teeth extend to the base, irregularly serrate at the inner edge. (4) Oculo-frontal ridge, triangular, widest in anterior margin, and it is sinuated, lateral margin narrower behind.

Length: 40–51mm (without mandibles), 48–66mm (with mandibles); width 19.5–24.5mm.

In female, similar to other allied species, but oculofrontal ridge oblicue in front,

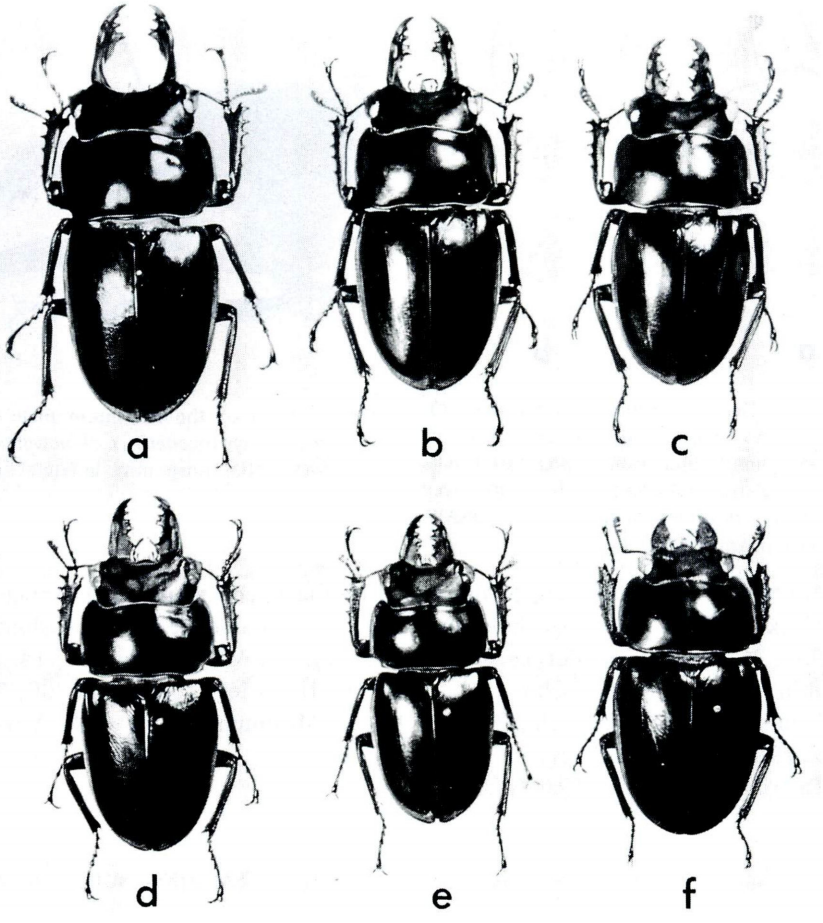


Fig. 1. Variation of *Neolucanus protogenetivus okinawanus* SAKAINO, subsp. nov. a–e, Male; f. female. e, Holotype; f, allotype.

lateral margin parallel truncatus.

Length: 42–55mm (with mandibles); width: 19–23mm.

## *Neolucanus protogenetivus protogenetivus* Y. KUROSAWA

(Fig. 2. b, 4. b)

Very dark blackish brown, not entirely black. Mandibles, short and robust, inner small teeth irregularly fused and rather flat developed, a very small erect dentation produced on near of the tip. Oculo-frontal ridge, triangular, widest in anterior margin, and it is sinuated, lateral margin narrower behind.

Length: male 41–43mm (without mandibles), 48.5–52mm (with mandibles); female 47–48mm (with mandibles). Width: male 20–21mm; female 22–22.6mm.

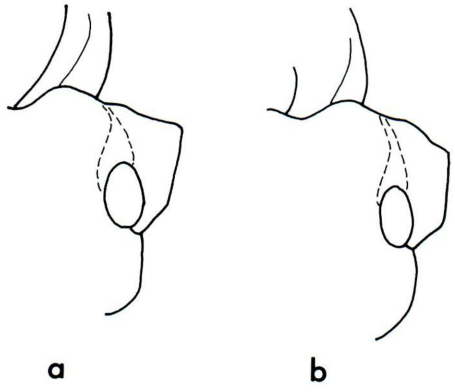


Fig. 2. Head of *Neolucanus protogenetivus* subspp, male, in dorsal view. a, *N. protogenetivus okinawanus* SAKAINO, subsp. nov., from Okinawa Is.. b, *N. protogenetivus protogenetivus* Y. KUROSAWA, from Amami-Oshima Is..

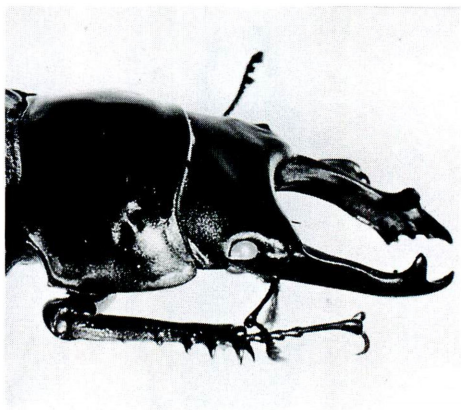

Fig. 3. Head of the maximum male of *Neolucanus protogenetivus okinawanus* SAKAINO, subsp. nov., in lateral view.

*Specimens examined*: 1♂, Nishikata-son (Setouchi-chô at present), Amami-Oshima Is., 25. ix. 1937, Y. Maki leg. (holotype); 2♀♀, Mt. Yuwan-dake, Amami-Oshima Is., 29. ix 1937, Y. Maki leg. (allotype and a paratype); 1♂, Mt. Yuwan-dake, 14. x. 1974, M. Ôishi leg.; 1♂, Setouchi-chô, 12. x. 1976, K. Unno leg. 1♂, Funcha, 30, ix. 1982, T. Mizunuma leg. 1♀, Onkachi, 30. ix. 1982, T. Mizunuma leg.; 1♀, Mt. Yuwan-dake, 29. ix. 1982, T. Mizunuma leg.

Distribution; Ryûkyû Islands (Amami group).

## *Neolucanus protogenetivus okinawanus* SAKAINO, subsp. nov.

(Fig. 1. a–f, 2. a, 3. a, 4. a)

Differing from the nominate subspecies from the Amami-Oshima Is. in the following points: the oculo-frontal ridge more strongly produced lateroanteriorly with the posterior angle produced; body entirely black, not reddish; punctures rather distinct, less shining and rather mat.

Length: male 40–51mm (without mandibles), 48–66mm (with mandibles); female 42–55mm (with mandibles). Width: male 19.5–24.5mm, female 19–23mm.

*Type series*: Holotype; 1♂, Mt. Yonaha-dake, Okinawa Is. 1. xi. 1979, S. Okajima leg.; Allotype; 1♀, same date as the holotype. Paratypes; 1♂, Oku-river, 18. xi. 1977, I. Hiura leg.; 3♂♂, Oku-river, 14. xi. 1978, H. Sakaino leg.; 2♂♂, Mt. Yonaha-dake, 13. xi. 1978, H. Sakaino leg.; 5♂♂, Mt. Yonaha-dake, 29. x. 1979, S. Okajima leg.; 3♂♂, Mt. Yonaha-dake, 29. x. 1979, T. Matsumoto leg.; 1♂, Gaji-rindô, 29. x. 1979, T. Yanaga leg.; 1♂, Benoki-river, 29. x. 1979, T. Yanaga leg.; 10♂♂, Mt. Yonaha-dake, 20. x. 1982, T. Mizunuma leg.; 1♀, Yona-river, 7. x. 1971, Y. Uémura leg.; 2♀♀, Mt. Yonaha-dake, 29. x. 1979, S. Okajima leg.; 1♀, Mt. Yonaha-dake, 29. x. 1979, T. Matsumoto leg.; 5♀♀, Mt.

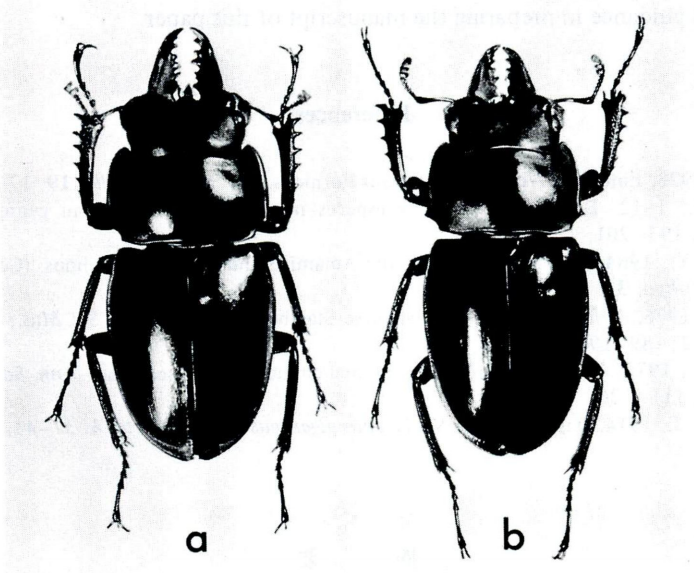


Fig. 4. *Neolucanus protogenetivus* subspp., minimum male, dorsal view. a, *N. protogenetivus okinawanus* SAKAINO, subsp. nov., from Okinawa Is.. b, *N. protogenetivus protogenetivus* Y. KUROSAWA, from Amami-Oshima Is..

Yonaha-dake, 20. x. 1982, T. Mizunuma leg.; 1♂ 1♀, Yona, 13. x. 1983, H. Fujita leg.; 5♂♂ 3♀♀, Ié-rindô, 15. x. 1983, H. Fujita leg.

The holotype and allotype are preserved in the National Science Museum (Nat. Hist.), Tokyo. The paratypes are in the author's and other collector's collections.

Distribution; Ryûkyû Islands (Okinawa Is.)

*Notes*; As a result of above, *Neolucanus protogenetivus* Y. KUROSAWA known from the Amami group (including Tokunoshima Is.) and Okinawa Is. For the present, however, in the Amami group, it have not been collected large specimens of equaled Okinawa Is.. Because, it is impossible that make a comparative study of the both large specimens, but the specific characters common to the both small specimens also, and author considered both of them to be similar species.

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## References

DUDICH, E., 1923. Eine neue *Neolucanus*-Art aus Formosa. *Ent. Blätter, Berlin,* **19**: 17–18.

HOUBERT, C., 1912. Description de deux especes nouvelles appartenant au genre *Neolucanus*. *Insecta,* **2**: 193–201.

KUROSAWA, Y., 1964. The Stag-beetles of the Amami Islands of the Loo-choos. (Col. Lucanidae) *Kontyû, Tokyo,* **32**: 443–447.

———— 1976. Additional Notes on Japanese Stag-beetles. *Bull. Natn. Sci. Mus., Ser. A. (Zool)* **2**: 189–195.

LACROIX, J.P., 1972. *Neolucanus* nouveaux ou peu connus. (Col. Lucanidae) *Ann. Soc. ent. France* (N. S.), 8: 111–126.

POUILLAUDE, I., 1914. Description de *Neolucanus giganteus* n. sp. *Insecta,* **4**: 37–41.

## 摘　　要

従来，沖縄本島からは*Neolucanus*属の分布は知られていなかったが，今回，新たに同島より発見された種は，本属のどの既知種とも容易に区別できる．一方，奄美大島より知られていたアマミマルバネクワガタは，*N. saundersi* PARRYタテヅノヤルバネクワガタの亜種*protogenetivus* Y. KUROSAWAとして扱われていたが，沖縄本島の種と *protogenetivus* は同種であることが認められた．従って，*protogenetivus*を独立種とし，さらに沖縄本島のものをその亜種*okinawanus* SAKAINO, subsp. nov. として記載した．なお，今のところ奄美大島の標本が少なく，沖縄本島産に匹敵する大型個体が得られていないのが残念であるが，小型個体においても同種と認め得る特徴を十分に備えているので，上記の扱いとした．

和名は，奄美大島のものではすでに使われているのでそれを存続させ，沖縄本島亜種をオキナワマルバネクワガタとしたい．

ELYTRA, 12(1): 13—20. September 25, 1984

# Two New Longicorn Beetles from Kyushu Studies on Cerambycidae (Coleoptera) of Japan (2)

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**Abstract** In the present paper, two new species, *Glaphyla morii* and *Eumecocera minamii* are described. The former is collected from dead tree, *Fagara ailanthoides* ENGLER, Rutaceae and on flowers of *Castanopsis cuspidata* var. *Sieboldii* NAKAI, Fagaceae in Tanegashima. I. of Kagoshima Pref. This new species is similar and related to *G. cobaltina* (HAYASHI) from Amami-Ôshima I. of Kagoshima Pref. The latter is collected on leaves of living tree, *Ulmus Davidiana* var. *japonica* NAKAI, Ulmaceae in Mt. Kurodake, Mts. Kujû of Ôita Pref. This new species is similar and related to *E. trivittata* (BREUNING) from Honshu, Shikoku, Kyushu.

## Subfamily Cerambycinae

### Tribe Molorchini

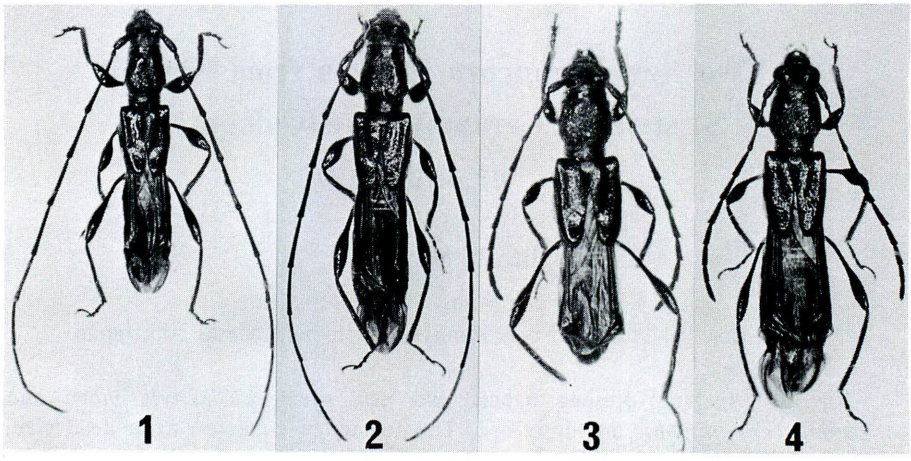
### *Glaphyla morii* sp. nov.

(Japanese name: Tsuya-ruri-higenaga-kobane-kamikiri)

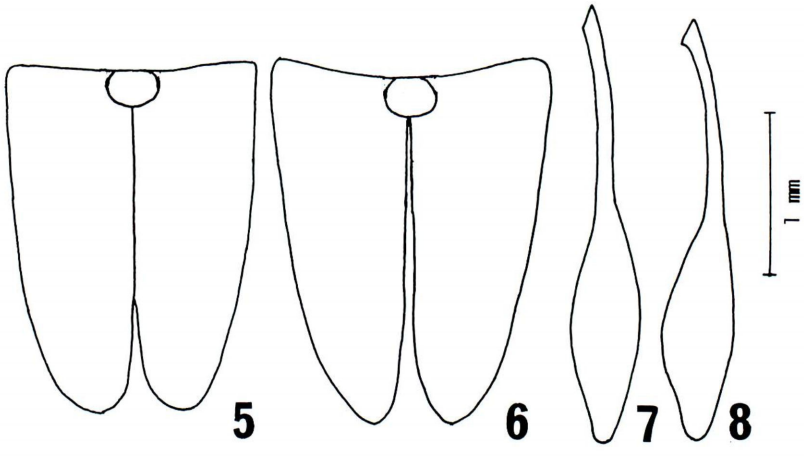
Male. Body stout. Body shining light cobalt blue; antennal segments 3—11 blackish brown; maxillary and labial palpi light reddish brown.

Head as wide as pronotum, coarsely punctured, with a deep median longitudinal furrow prolonged through vertex to occiput; front clypeus and labrum with denser suberect light brown hairs; genae with denser erect long whitish yellow hairs; frons with sparse prostrate short whitish yellow hairs. Antennae shorter, relative length to body about 1.4, relative length of each segment 5.9 : 1.2 : 6.2 : 8.9 : 10.9 : 11.2 : 11.7 : 10.9 : 11.2 : 10.7 : 11.2; segments 1—3 with sparse suberect longer white hairs; segments 4—5 with sparse erect very short white hairs; segments 4—11 with dense blackish brown pubescence.

Pronotum narrower than elytra, longer than broad, relative length to width 1.33, broadest basal 3/8, narrowed gradually to apex and strongly to before base, with sparse erect or suberect long whitish yellow hairs; sides roundly swollen; disc coarsely reticulate-punctate, except for the apical and basal long transverse plicate portions and three discal shining weakly reticulate-punctate areas (large two on sides and small one at basal 1/3 of middle).




Figs. 1–4. *Glaphyla* spp. 1, 3: *G. cobaltina*; 2, 4: *G. morii* sp. nov.; 1, 2: Males; 3, 4:



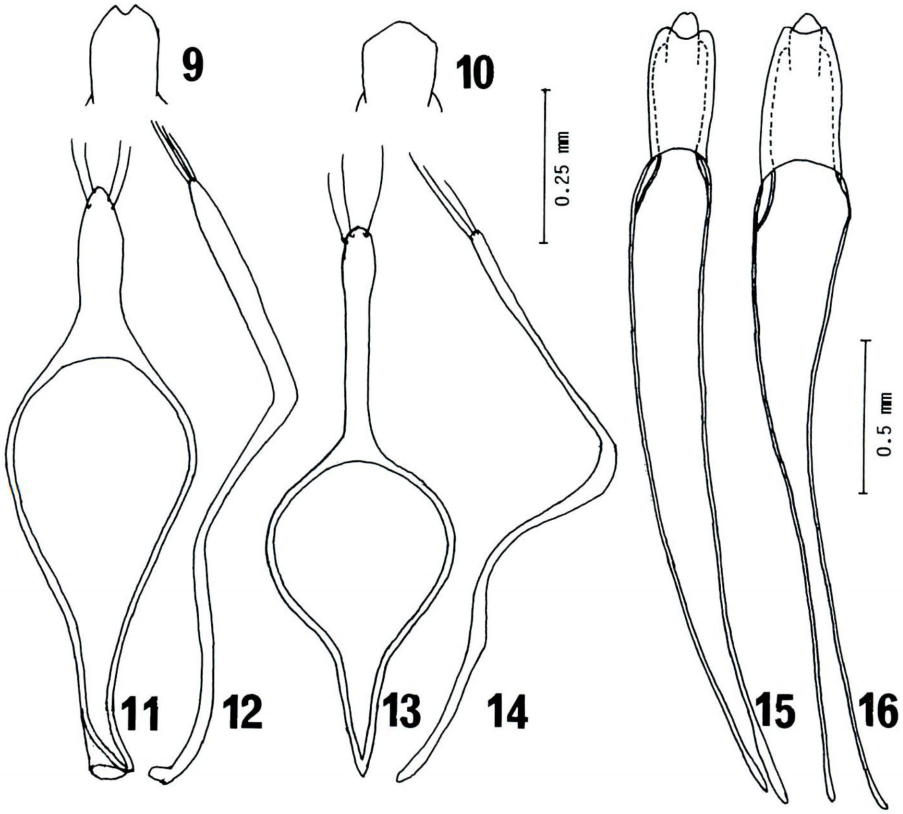

Figs. 5–8. Elytra and hind femora of *Glaphyla* spp., males. 5, 7: *G. cobaltina*; 6, 8: *G. morii* sp. nov.; 5, 6: Elytra; 7, 8: Hind femora.

Scutellum large, transverse ovate, with dense prostrate long light brown hairs; disc coarsely punctured.

Elytra stout, as long as pronotum, strongly narrowed posteriorly, relative length to width 1.28, with sparse suberect short whitish yellow hairs; disc somewhat weakly and sparsely punctured.

Legs long, with sparse suberect long whitish yellow hairs; femora clavate; fore femora shining and impunctured; middle femora weakly punctured; hind femora punctured; tibiae and tarsi strongly punctured.

Ventral side with sparse oblique long whitish yellow hairs; prosternum strongly punctured, except for apical transverse plicate portion and discal shining weakly punctate areas; mesepisternum finely and densely punctured; mesosternum strongly punctured;




Figs. 9–16. Male genitalia of *Glaphyla* spp. 9, 11, 12, 15: *G. cobaltina*; 10, 13, 14, 16: *G. morii* sp. nov.; 9, 10: Apical part of pennis; 11, 13: Tegmen, ventral view; 12, 14: Tegmen, lateral view; 15, 16: Penis, ventral view.

metasternum shallowly and coarsely punctured; abdominal sternites shallowly punctured, denser toward apical segments; 3–6 abdominal sternites with dense prostrate golden yellow pubescence.

Penis slender, with long curved median struts; apical part weakly projected. Tegmen strongly curved in lateral view; lateral lobes monolobed, slender and long; ringed part circular.

Length: 6.5–10.0 mm.

Female. Antennae short, relative length to body about 0.65; relative length of each segment 10.3 : 2.1 : 9.8 : 10.8 : 12.4 : 11.3 : 10.8 : 8.8 : 8.2 : 6.7 : 8.8.

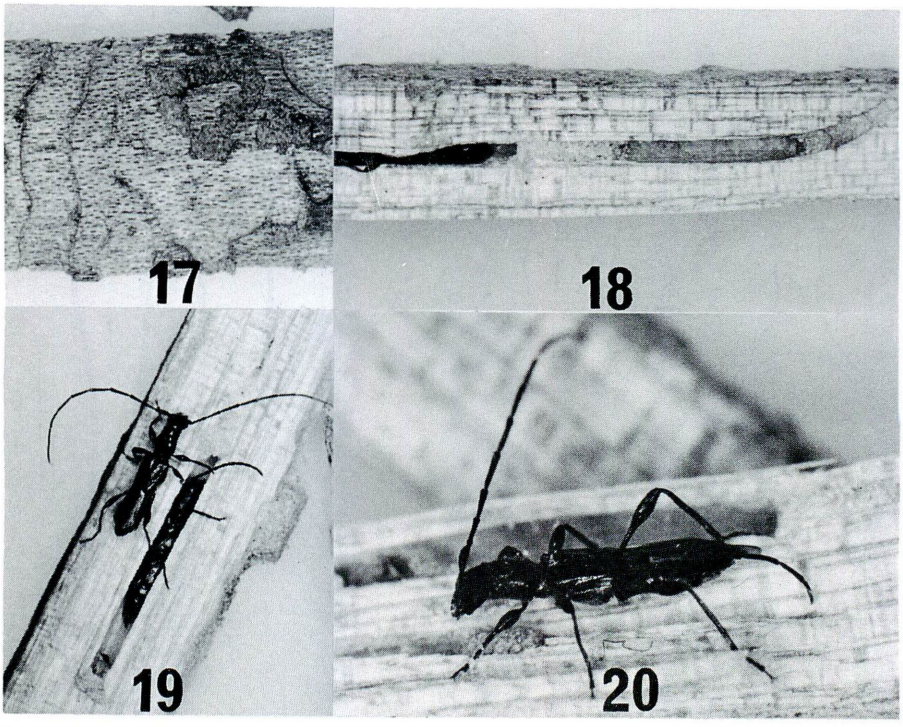
Pronotum a little narrower than elytra; a little longer than broad, relative length to bredth to bredth 1.18; disc strongly reticulate-punctate, except for apical sparsely punctate portion and basal short transverse plicate one.

Elytra longer than pronotum.

Length: 7.0–8.5 mm.

Distribution: Tanegashima I. of Kagoshima Pref.

Type material: Hototype, ♂ (Type No. 2448, Kyushu Univ.), Nishino-omote City,




Figs. 17–20. *Glaphyla morii* sp. nov. 17: Under bark of *Fagara ailanthoides* ENGLER, fed on by the larvae; 18: Entrans hole; 19, 20: Escaping adult, males.

Tanegashima I. of Kagoshima Pref., ii. 1984, collected by splitting dead tree, *Fagara ailanthoides* ENGLER, Rutaceae, K. MORI leg. Paratypes, 1♂, same locality as holotype, 10. iv. 1983, collected on flowers of *Castanopsis cuspidata* var. *Sieboldii* NAKAI, Fagaceae, K. OGATA leg.; 43♂, 45♀, same data as holotype.

Type depository: The holotype is preserved in the collection of the Entomological Laboratory, Faculty of Agriculture, Kyushu University.

Remarks: This new species is similar and related to *G. cobaltina* (HAYASHI) from Amami-Ôshima I. of Kagoshima Pref., but differs from it following characters.

*G. cobaltina* (Figs. 1, 3): Body dully shining cobalt blue; head corsely punctured, except for discal shining impunctured area on vertex, with a shallow median longitudinal furrow through vertex to occiput; antennae long, relative length to body about 1.6 (in male) or 0.75 (in female); pronotum with three discal shining areas; apical and basal portions of pronotum with short transverse plicae; elytra gradually narrowed posteriorly (Fig. 5); elytral disc with many very minute punctures, except for large punctures; hind femora with somewhat developed clavate (Fig. 7); apical part of penis depressed (Fig. 9); tegmen weakly curved in lateral view (Fig. 12); ringed part of tegmen oval (Fig. 11).

*G. morii* sp. nov. (Figs. 2, 4): Body shining light cobalt blue; head coarsely punctured, with a deep median longitudinal furrow prolonged through vertex to occiput; antennae short, relative length to body about 1.4 (in male) or 0.65 (in female); pronotum

with three discal shining weakly reticulate-punctate areas; apical and basal portions of pronotum with long transvers plicae; elytra strongly narrowed posteriorly (Fig. 6); elytral disc without minute punctures, except for large punctures; hind femora developed clavate (Fig. 8); apical part of penis weakly projected (Fig. 10); tegmen strongly curved in lateral view (Fig. 14); ringed part of tegmen circular (Fig. 13).

This new species lays eggs on crevice of bark of dead tree, *Fagara ailanthoides* ENGLER. The young larvae hatch from the eggs in about ten days after the eggs are deposited. The eggs are flat, about 1 mm long. The larvae feed on under bark (Fig. 17) and make entrans holes (Fig. 18), depth 3–5 mm and length 30–50 mm.

## Subfamily Lamiinae

### Tribe SAPERDINI

### *Eumecocera minamii* sp. nov.

(Japanese name: Jûmonji-nise-ringo-kamikiri)

Body black; elytra dark blackish brown; claws brown.

Head broader than pronotum, finely punctured, with sparse suberect short brown hairs and dense prostrate orange pubescence, except for discal shining black area on frons (in female); clypeus and genae with sparse erect long yellow hairs. Antennae slender, relative length to body 1.21 (in male) or 1.08 (in female), relative length of each segment 11.0 : 1.6 : 15.7 : 11.4 : 10.6 : 9.4 : 9.0 : 8.6 : 8.2 : 7.1 : 7.5 (in male) or 11.3 : 1.2 : 15.7 : 11.8 : 10.6 : 9.8 : 9.0 : 8.2 : 7.8 : 7.1 : 7.5 (in female); segment 1 with sparse oblique long brown hairs and denser prostrate short whitish yellow or orange hairs; segments 2–3 with sparse oblique long whitish yellow hairs on under sides and dense prostrate white pubescence; segments 4–10 with a few suberect long brown hairs on apices; segments 4–11 with a few erect short white hairs and dense prostrate blackish brown pubescence.

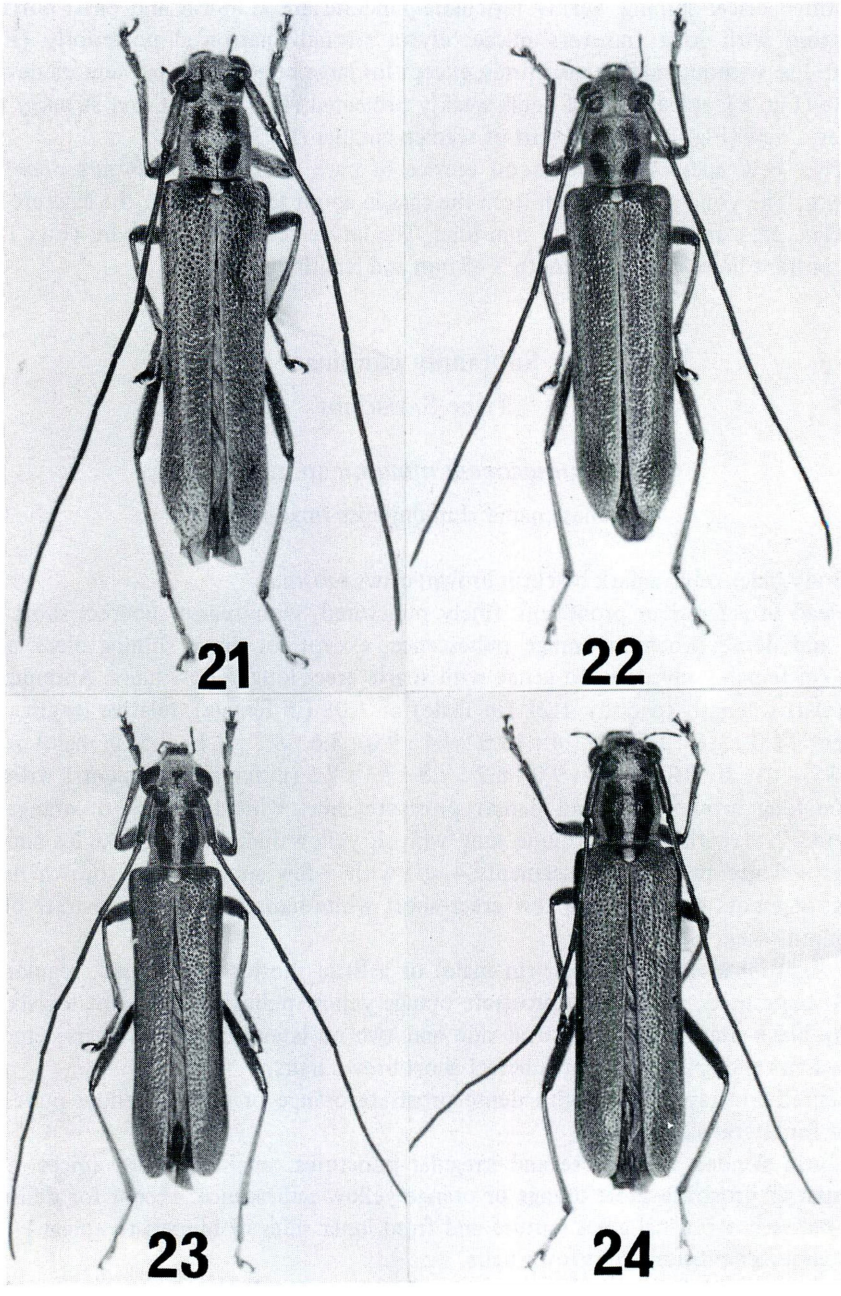
Pronotum as long as broad (in male) or a little shorter than broad, regularly and deeply punctured, with dense prostrate orange yellow pubescence, except for six discal shining black areas (four on dorsal side and two on lateral ones) and sparse erect long yellow hairs and sparse erect or suberect short brown hairs.

Scutellum trapeziform, with dense prostrate orange or orange yellow pubescence, except for lateral sides.

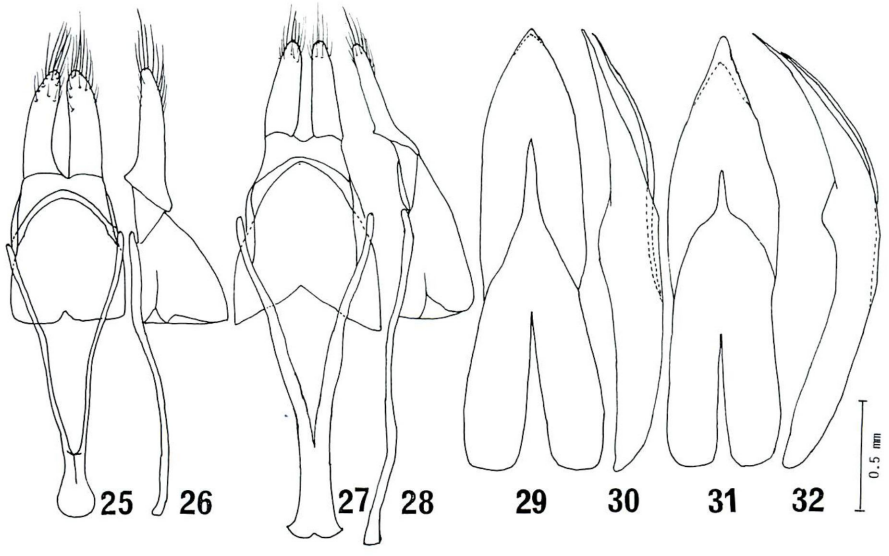
Elytra slender, with close and irregular punctures, smaller toward apices, covered with sparser prostrate short orange or orange yellow pubescence, except for dense same color pubescent vertical areas (suture and from inner sides of humeri to apical 1/5), and sparse suberect shorter light brown hairs.

Legs long; femora with dense oblique short orange yellow hairs and sparse suberect long yellow hairs; tibiae with dense oblique long yellow hairs, denser toward apices, and sparse suberect long yellow hairs; tarsi with sparse oblique longer bristles on dorsal sides.

Ventral side with minute punctures and covered with sparse erect short yellow hairs; pro- and mesosternum and lateral sides of metasternum and abdominal sternites with




Figs. 21—24. *Eumecocera* spp. 21, 22: *E. minamii* sp. nov.; 23, 24: *E. trivittata*; 21, 23: Males; 22, 24: Females.




Figs. 25–32. Male genitalia of *Eumecocera* spp. 25, 26, 29, 30: *E. minamii* sp. nov.; 27, 28, 31, 32: *E. trivittata*; 25, 27: Tegmen, ventral view; 26, 27: Tegmen, lateral view; 29, 31: Penis, ventral view; 30, 32: Penis, lateral view.

dense orange or orange yellow pubescence; metasternum and abdominal sternites, except for lateral sides with sparser orange yellow pubescence.

Penis wide and so curved in lateral view; apical part weakly projected. Tegmen somewhat slender and not so curved in lateral view; space between base of each lobe narrow; basal-piece narrow and raised; ringed part slender.

Length: 9.5–12.0 mm (male), 10.0–11.5 mm (female).

Distribution: Kyushu.

Type material: Holotype, ♂ (Type No. 2449, Kyushu Univ.), Mt. Kurodake, Mts. Kujû, Ôita Pref., 15. v. 1983, collected on leaves of living tree, *Ulmus Davidiana* var. *japonica* NAKAI, Ulmaceae, K. TSUDA leg. Paratypes, 1♂, 1♀, same locality and collector as holotype, 23. v. 1982; 1♀, same locality as above, 30. v. 1982, Y. MINAMI & K. TSUDA leg.; 1♂, same locality and collector as holotype, 5. vi. 1982; 1♀, same locality and collector as above, 13. vi. 1982; 5♂, 2♀, same locality and collector as above, 15. v. 1983; 7♂, 3♀, same locality as above, 15. v. 1983, Y. MINAMI leg.

Remarks: This new species is similar and related to *E. trivittata* (BREUNING) from Honshu, Shikoku, Kyushu, but differs from it following characters.

*Eumecocera trivittata* (Figs. 23, 24): Frons with discal shining small (in male) or large (in female) black area; pronotum with sparse erect longer brown hairs; pronotum with four discal shining black areas (two on dorsal side and two on lateral ones); elytra with discal shining black vertical areas on lateral sides, from humeri to apical 1/4 and with uniform pubescence; penis curved in lateral view (Fig. 32); apical part of penis strongly projected (Fig. 31). Tegmen curved in lateral view (Fig. 28); space between base of each lobe wide (Fig. 27); basal-piece wide and flat (Figs. 27, 28); ringed part of

tegmen stout and wide (Fig. 27).

*E. minamii* sp. nov. (Figs. 21, 22): Frons with (in female) or without (in male) discal shining small area; pronotum with sparce erect shorter yellow hairs; pronotum with six discal shining black areas (four on dorsal side and two on lateral ones); elytra without discal shining black areas; penis not so curved in lateral view (Fig. 30); apical part of penis weakly projected (Fig. 29); tegmen not so curved in lateral view (Fig. 26); space between base of each lobe narrow (Fig. 25); basal-piece narrow and raised (Figs. 25, 26); ringed part slender (Fig. 25).

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## References

HAYASHI, M. 1963. The Cerambycidae of Ryukyu Islands. 2. *Ent. Rev. Japan,* 15(2): 50–55.

———— 1984. Ceramycidae. *The Coleoptera of Japan in Color* **4**: 1–146, pls. 1–28, Hoikusha, Osaka. (in Japanese)

## 摘　　要

今回の報告ではツヤルリヒゲナガコバネカミキリ*Glaphyla morii*とジュウモンジニセリンゴカミキリ*Eumecocera minamii*の2種を記載した．前者は鹿児島県の種子島のカラスザンショウの枯木とスダジイの花上より採集されたもので，奄美大島から記録されているルリヒゲナガコバネカミキリ*G. cobaltina* (HAYASHI)に近縁な種である．後者は大分県の九重山，黒岳付近のハルニレの葉上より採集されたもので，セミスジニセリンゴカミキリに非常に類似している種である．

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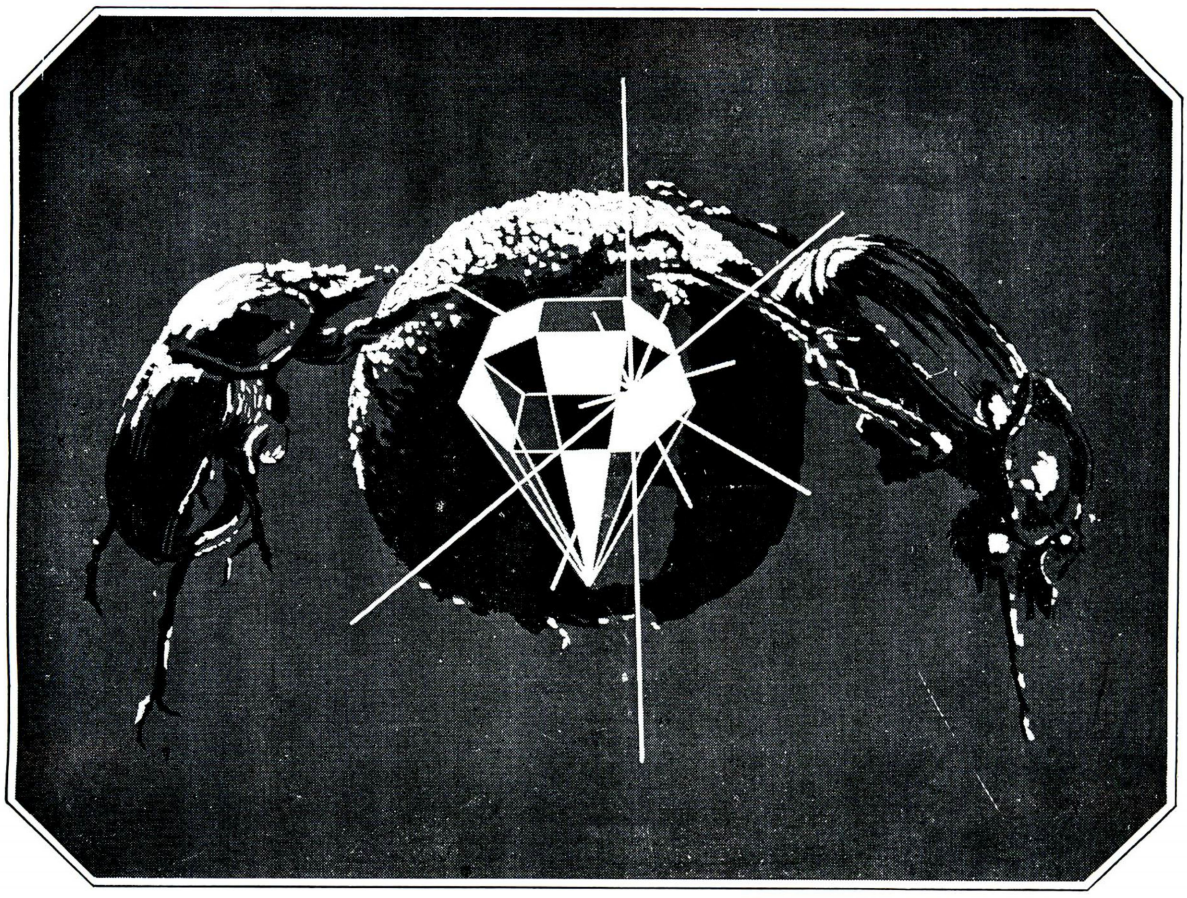

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