

Occurrence of *Morionidius* (Coleoptera, Carabidae)
in Japan

Sumao KASAHARA

Nishifuna 4–9–13, Funabashi City, Chiba, 273 Japan

and

Norio OHTANI

Miirihigashi 2–74–5, Asakita-ku, Hiroshima City, 731–02 Japan

Abstract The morionine carabid genus *Morionidius* CHAUDOIR is recorded for the first time from Japan, and its new species, *M. insularis* sp. nov., is described from Is. Yaku-shima, off southern Kyushu.

The morionine carabid genus *Morionidius* was established by CHAUDOIR (1880, pp. 380–383) for the Bornean species, named *doriae* at the same time. After that, ANDREWES (1921, pp. 203–205) redescribed the genus, and introduced in the same article the second species, *charon*, from Tonkin and Laos. This small but peculiar genus is mainly characterized by well convex body with securiform labial palpi, and the terminal abdominal sternite bearing a series of setiferous pores along the apical margin in the female. It has not been known in our fauna up to the present.

However, an unnamed species doubtless belonging to the same genus occurs on Is. Yaku-shima, off southern Kyushu, Southwest Japan. It is distinct from the other species by larger body with longer parallel-sided elytra, and seems to be new to science. In this paper, we are going to describe it under the name of *Morionidius insularis* sp. nov. The abbreviations used herein were already explained in previous papers of the senior author.

Before going further, we wish to express our deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his advice and for reading the manuscript of this paper. Thanks are also due to Messrs. Atsushi KATÔ, Tokuzô OHMOTO and Ken ODANAKA for their kindness in supplying with the materials. We are grateful to Mr. Yasutoshi SHIBATA for taking a photograph of the type specimen of *M. charon* ANDREWES preserved in the collection of the British Museum (Nat. Hist.).

Morionidius insularis sp. nov.

[Japanese name: Yakushima-ô-kuchiki-gomimushi]

(Figs. 1-5)

Description. Length (measured from apex of labrum to apices of elytra) 14.3–21.3 mm. Width 4.9–7.0 mm. General appearance cylindrical, very shiny, black. Head quadrate, convex; eyes well convex, hemispherically prominent together with temporae, which are shorter than eyes, and weakly tumid; mandibles stout, strongly arcuate, abruptly narrowed in apical halves, and acutely pointed at apices; labrum gently emarginate, and rounded on each side at the apex; clypeus gently emarginate at apex; supra-antennal portions rectangularly angulate, and slightly produced laterad on each side; clypeal suture distinctly impressed between frontal furrows, though becoming finer outside of furrows, and with rather distinct convexities; frontal furrows

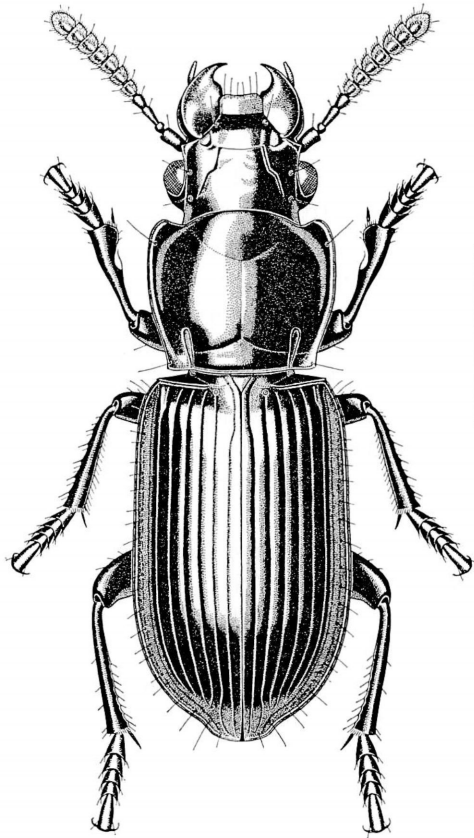
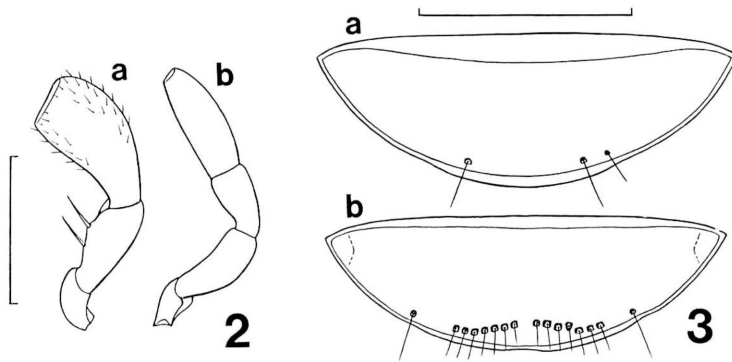


Fig. 1. *Morionidius insularis* sp. nov., ♂, from Is. Yaku-shima, Kagoshima Pref. Scale 4 mm (a small individual).

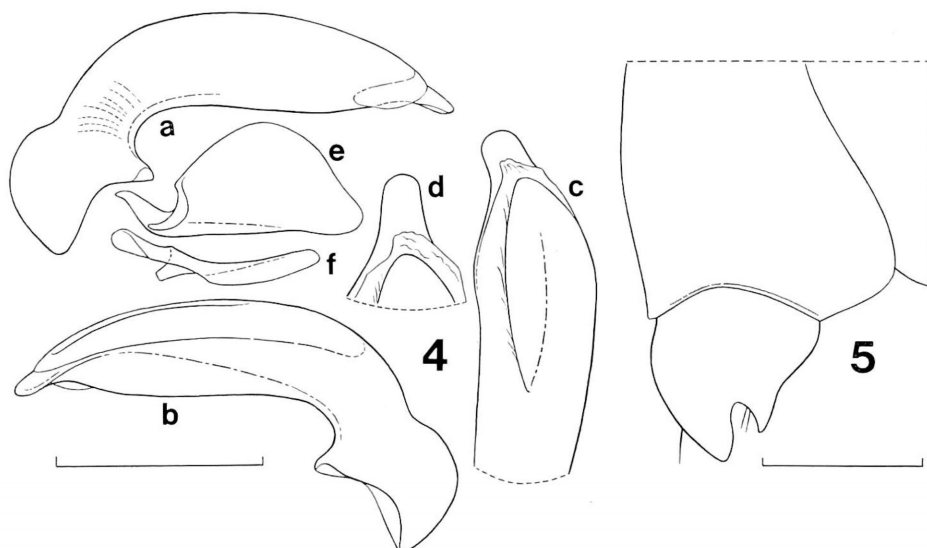


Figs. 2-3. Left palpi and terminal abdominal sternite of *Morionidius insularis* sp. nov., from Is. Yaku-shima, Kagoshima Pref. — 2. Left palpi in the male, ventral view; a, labial palpus; b, maxillary palpus. — 3. Terminal abdominal sternite; a, in the male; b, in the female.

deeply and linearly impressed, divergent posteriad, extending to a little behind the post-eye level, and lightly sinuate at middle; lateral grooves becoming deeper and wider at the sides of eyes; mentum tooth simple, though finely rugose on the surface; terminal segment of maxillary palpus cylindrical, truncate at the apex; terminal segment of labial palpus apically dilated to the middle, securiform, and sparsely pubescent; configuration of palpi identical in both sexes; antennae short and thick, moniliform, pubescent from the apical part of segment 4, though the median part of each segment is more or less glabrous, segments 5-10 each wider than long.

Pronotum trapezoidal, well convex, widest at about apical third, about a fifth as wide as head (PW/HW 1.18-1.23, mean 1.21), as wide as long in a similar proportion (PW/PL 1.20-1.23, mean 1.22), ca. 1.3 times as wide as base (PW/PBW 1.26-1.30, mean 1.27); lateral margins almost parallel to each other in apical halves, then gently convergent posteriad, and slightly sinuate before basal angles, which are rectangular; lateral side rather widely and evenly depressed along margins; apical margin arcuate, its median part produced farther than apical angles, though the latter are also more or less produced and rounded at the tips; basal margin almost straight, bordered throughout; median line fine and shallow, often interrupted by notches; apical and basal transverse impressions obsolete, but the latter is sometimes distinct; basal foveae relatively deep, each with a clearly engraved distinct furrow at the bottom; surface smooth, though transverse wrinkles and microsculpture are partially and slightly visible.

Wings full. Elytra oblong, parallel-sided, well convex, a little wider than pronotum (EW/PW 1.14-1.16, mean 1.15), ca. 2.37 times as long as pronotum (EL/PL 2.29-2.43, mean 2.37), ca. 1.7 times as long as wide (EL/EW 1.67-1.71, mean 1.70); basal border incomplete, reaching the base of stria 3, almost straight, though slightly



Figs. 4-5. Genitalia of *Morionidius insularis* sp. nov., from Is. Yaku-shima, Kagoshima Pref.
 — 4. Male genitalia; a-d, aedeagus; a, left lateral view; b, right lateral view; c, apical half in dorsal view; d, apical lobe in dorsal view in a longer case; e, left paramere; f, right paramere. Scale 1 mm. — 5. Left stylus with a part of hemisternite. Scale 0.15 mm.

waved at the base of stria 5, and dentate at shoulder; shoulders obtusely angulate; lateral margins parallel to each other from behind shoulders to apical third, then roundly convergent to apices, preapical emarginations short and shallow, sutural angles defined; scutellar striole absent; striae clearly impressed throughout, though irregularly and minutely notched at the bottoms; stria 2 arising from basal pore; intervals nearly flat; interval 3 without dorsal pore; marginal series of pores 25-26 in number, widely spaced at middle; apical and preapical pores lying on stria 7; surface very smooth; microsculpture visible, formed by very fine transverse meshes.

Venter wholly smooth; prosternal process shallowly depressed at middle, bordered at the apex; metepisterna long, ca. 2.7 times as long as wide; terminal sternite with a pair of setiferous pores along the apical margin in the male, sometimes with an extra pore at the outer side of the ordinary one; 12-14 setiferous pores arranged in a transverse row between the primary pores in the female. Legs stout; tarsi broad and flat, dorsally glabrous, claw segment glabrous on the ventral surface, basal three segments of protarsus each with a pair of adhesive hairs on the ventral side in the male.

Aedeagus small though stout, obtusely bent at basal third, and with a dorsal ligula inclined to the left, extending almost to the base of apical lobe; apical part gently curved rightwards in dorsal view, apical lobe flat, as long as wide or sometimes longer than wide, and rounded at the apex; left paramere large and wide, triangular, rounded at

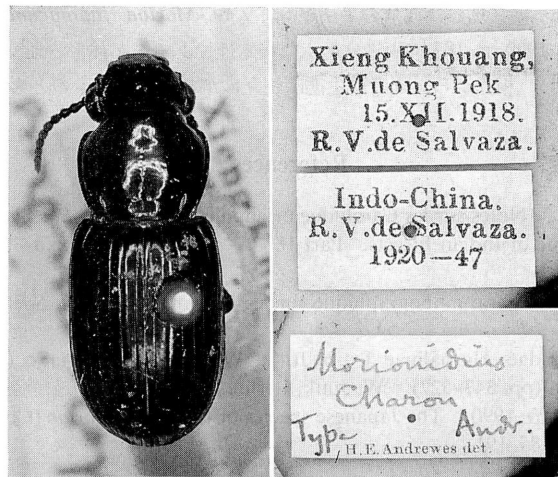


Fig. 6. Type specimen of *Morionidius charon* ANDREWES, from Xieng Khouang, Laos, and its labels preserved in the collection of the British Museum (Nat. Hist.). Photo by Y. SHIBATA.

the apex; right paramere slender, weakly curved at middle, and rounded at the apex. Styli in the female very small and short, almost as long as wide, marginal spines absent, each outer margin with a deep cleft near the apex.

Type series. Holotype: ♂, Ohkawa-rindô, Is. Yaku-shima, Kagoshima Pref., 27-VII-1990, N. OHTANI leg.; allotype: ♀, same locality as for the holotype, 18-VII-1989, T. OHMOTO leg. Paratypes: 1 ♂, same data as for the holotype; 1 ♀, Shiratani-rindô, Is. Yaku-shima, Kagoshima Pref., 17-VII-1983, A. KATÔ leg.

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

Notes. The present new species somewhat resembles *M. charon* ANDREWES in general appearance, but is easily discriminated from the latter by larger body with longer parallel-sided elytra. Judging from the cylindrical body with peculiarly small styli in the female, members of *Morionidius* seem to have a different mode of life from those of *Morion*, though both the genera are saproxylophilous.

要 約

笠原須磨生・大谷規夫：日本新記録のオオクチキゴミムシ属とその1新種。——クチキゴミムシ族 *Morionini* のオオクチキゴミムシ属 *Morionidius* は、いちじるしく中高の体に斧形の下唇肢をもち、雌の腹板末端節は後縁に多数の有毛孔点が並ぶ特徴的なグループである。これまでに、ボルネオ、ラオス、トンキン（現在の北ヴェトナム）から2種が知られるのみで、日本からは未記録であった。九州南端の屋久島に本属の種が生息することは、かなり以前から知られていたが、既知のどの種とも明らかに区別できる新種であることが判明したので、これをヤクシマオオクチキゴミムシ *M. insularis*

と命名記載した。なお、屋久島には同族のクチキゴミムシ *Morion japonicum* BATES も分布する (KASAHARA & SATÔ, 1990, p. 187)。両者はともに朽木性であるが、体形や雌交尾器の先端節にみられる形態上のいちじるしい相違から、両者の生態は相互にかなり異なるものと考えられる。

References

- ANDREWES, H. E., 1951. Notes sur les Carabique orientaux. III. *Annl. Soc. ent. Belg.*, **61**: 202–210.
 ——— 1930. Catalogue of Indian Insects. Part 18 — Carabidae. i+xxii+389 pp. Government of India, Calcutta.
- CHAUDOIR, M. DE, 1880. Essai monographique sur les Morionides. *Bull. Soc. imp. Natur. Moscou*, **55** (2): 317–384.
- CSIKI, E., 1929. Carabidae: Harpalinae 3. In JUNK, W., & S. SCHENKLING (eds.), *Coleopterorum Catalogus*, pars 104 (pp. 347–527). W. Junk, Berlin.
- KASAHARA, S., & M. SATÔ, 1990. The Japanese species of the genus *Morion* (Coleoptera, Carabidae). *Elytra, Tokyo*, **18**: 185–191.

Elytra, Tokyo, **20** (2): 166, Nov. 15, 1992

A Record of *Lebia viridis* (Coleoptera, Carabidae) from Northern Kwantô, Japan

Sumao KASAHARA

Nishifuna 4-9-13, Funabashi City, Chiba, 273 Japan

In recent years, an imported North American lebiine carabid beetle, *Lebia viridis* SAY, has been recorded from various places in the Kwantô District of central Honshu, Japan. Here I will report it from the foot of the Nasu Mountains in Tochigi Prefecture. So far as I am aware, this is the northernmost known locality of the species in Japan.

Specimen examined. 1 ex., Senbonmatsu, Nishinasuno-chô, Tochigi Pref., 12-V-1992, S. OHMOMO leg. Collected by sweeping lawn.

I thank Dr. Sadahiro OHMOMO for his kindness in supplying with the material.