# A New Species of the Genus *Miridiba* (Scarabaeidae, Melolonthinae, Melolonthini) from the Yaeyama Islands, Southwest Japan

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**Abstract** A new rhizotrogine species, *Miridiba hirsuta* is described from both Ishigakijima and Iriomotejima Islands of the Ryukyus, Southwest Japan.

In 1988, I recorded *Miridiba trichophora* (FAIRMAIRE, 1891) from Iriomotejima Island and described its specific characters in Japanese. Later, I had an opportunity to examine three specimens of this species from Fokien [=Fujian] in China, compared the specimens from the Ryukyus with those from China, and commented that the individuals from the Ryukyus belong to *Miridiba trichophora* (FAIRMAIRE, 1891) though a few slight differences were recognized between the specimens from the two areas (ITOH, 1990). At present, I have obtained further individuals not only from Iriomotejima but also from Ishigakijima Island through the courtesy of Mr. Ryuji FUKAISHI. As the result of my additional scrutiny, I have reached the conclusion that the Ryukyuan individuals may be recognized as a new species though the differences are rather slight between them and the individuals of *Miridiba trichophora* from China. Thus, I am going to describe herein the new species from the Ryukyus under the name of *Miridiba hirsuta* T. ITOH, sp. nov.

Before going further, I would like to express my cordial thanks to Mr. R. Fukaishi for his kind offer of materials employed in this study.

# Miridiba hirsuta T. ITOH, sp. nov.

[Japanese name: Yaeyama-kuriiro-kogane] (Figs. 1–9)

Miridiba trichophora: Ітон, 1988, Lamellicornia, Tokyo, (4): 21–22; 1990, ibid., (6): 5–6.

Description. Length: 16.3–20.5 mm.

Male. Head, mouth parts, pronotum, scutellum, pro- to metasterna, metacoxae, tibiae and tarsi reddish brown to dark brown, antennae, maxillary palpi, elytra, abdomen and femora paler, light brown to chestnut brown though the abdomen and femora are sometimes dark blackish brown. Whole body bluntly shining and densely covered with short or long, semirecumbent yellowish hairs.

Head wide; clypeus densely and coarsely punctate, very weakly emarginate at the

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middle of anterior margin or almost straight at anterior margin, rounded at each anterolateral corner and distinctly reflexed along anterior margin, with fronto-clypeal suture fine and arcuate anteriorly; canthus narrow with some long thick hairs; frons flattened, reticulately punctate with short erect yellowish hairs; vertex with carina gently curved posteriad; occiput coarsely and irregularly punctate to the level of posterior margin of eye, with the punctures bearing short, procumbent hairs; antennae 9-segmented with 3-segmented club, which is longer than the antennal shaft, 5th segment triangular, 6th very slightly lamellate; labrum deeply excavated on ventral side as a pair of tusks; mentum transverse and quadrate, widely concave in central area, emarginate at the middle of anterior margin, gently produced along lateral margins, with a pair of longitudinal rows of short, thick, bent and recumbent hairs, which are directed toward the median line.

Pronotum transverse and convex, ratio of length to width 0.65–0.68 (mean 0.67, n=3); disc densely haired and densely punctate with small, inconspicuous impression in each latero-median portion; punctures dense except in central area, composed of two different sized ones; anterior margin gently emarginate, thickly rimmed; lateral margin gently curved behind the middle in lateral view, straight and not serrate in anterior half, straight and finely serrate in posterior half; posterior margin gently produced posteriad, slightly rimmed only near posterior angle; anterior angle subrectangular, posterior one blunt and rounded. Scutellum widely triangular, about twice as wide as long, and punctate in various way: 1) hardly punctate; 2) forming a pair of patches of

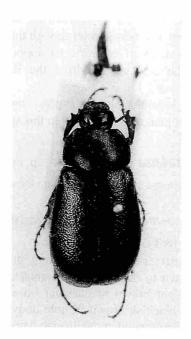


Fig. 1. Miridiba hirsuta sp. nov.; habitus, ♂.

punctures; 3) forming V-shaped patch of punctures.

Elytra smooth, densely and feebly rugosely punctate, more or less with short semirecumbent hairs, not costate except for obscurely raised sutural costa; rim recognizable to the level of 5th abdominal sternite in dorsal view; marginal membrane recognizable to sutural angle. Pygidium triangular, gently convex, densely haired, coarsely and densely punctate.

Prosternum with a bluntly triangular post-coxal process. Metasternum densely covered with long yellowish hairs, raised and distinctly carinate medially behind meso-coxae, thence finely furrowed to posterior end of metasternite. Abdomen sparsely haired in central area, densely haired in almost all parts of 2nd sternite, lateral areas of 3rd to 4th and whole areas of 5th and 6th.

Legs robust; metacoxa quadrate, rimmed, densely with long recumbent hairs and rectangular at postero-lateral corners; femur stout, coarsely punctate, mesofemur almost straight along upper margin, metafemur swollen, ratio of length to width 0.39–0.40 (mean 0.39, n=3); protibia stout, sharply tridentate, with 3rd (=basal) denticle distinct and at basal 0.48–0.54 (mean 0.51, n=3); apical spur of protibia slender and sharp, occurring from socket against position of emargination between 2nd and 3rd denticles, not reaching half the 1st tarsal segment; mesotibia with at least two remarkable spines on dorsal surface, also with distinct oblique ridge past the middle; metatibia rather strongly widened apicad, with the same ridge as that on mesofemur and at least three spines on dorsal surface, and with apical two spurs of different length, the longer one of which is longer than 1st metatarsal segment; tarsi slender, with each of 1st to 4th segments of pro- and mesotarsi bearing a tuft of short yellowish hairs apico-ventrally, 1st metatarsal segment distinctly shorter than the 2nd; claws each gently bent apicad, with vertical denticle medially.

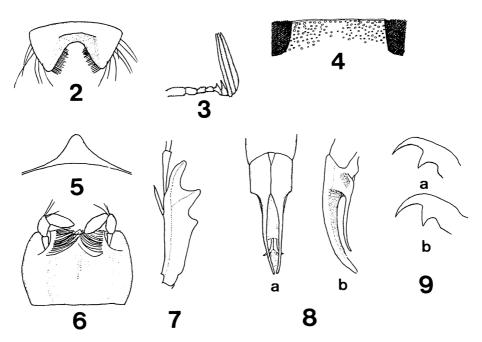
Male genitalia with parameres branched, lower branches thin, shorter than upper ones, bent outwards apicad in dorsal view, upper branches gradually bent toward apex and bluntly pointed apicad in lateral view.

Female. Antennal club shorter than antennal shaft; protibia stout, metafemur distinctly stout, longer one of metatibial spurs stout and widest at apical 1/3, claw of protarsus feebly strongly bent. Arithmetic data as follows: ratio of pronotal length to width 0.63-0.64 (mean 0.63, n=3); ratio of metafemoral width to length 0.43-0.46 (mean 0.45, n=3); 3rd protibial denticle at basal 0.44-0.49 (mean 0.46, n=3).

Specimens examined. Holotype: 1 &, Omoto-rindô, Is. Ishigakijima, Okinawa Pref., 22–II–2001, R. Fukaishi leg. (OMNH TI 142). Paratypes: 1 &, same data as for holotype; 1 &, same locality, 10–III–2001, R. Fukaishi leg.; 1 &, same locality, 20~27–III–2000, R. Fukaishi leg.; 1 &, Sonai, Iriomotejima Is., Okinawa Pref., 26–III–1982, M. Sawai leg.; 1 &, same locality, 11–III–1976, H. Arimoto leg. The holotype is deposited in the Osaka Museum of Natural History, Osaka City.

Distribution. Ishigakijima Is., Iriomotejima Is. (the Ryukyus, Southwest Japan). Remarks. The present new species is closely allied to M. trichophora (FAIR-MAIRE) from China, but is distinguishable from the latter by the following points: 1)

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Figs. 2–7. *Miridiba hirsuta* sp. nov., δ. —— 2, Labrum; 3, antenna; 4, occiput; 5, prosternal post-coxal process; 6, mentum; 7, protibia; 8, male genitalia (a: dorsal view; b: lateral view); 9, claw of protarsus (a: δ; b: \$\partial 2\$).

body generally larger; 2) male genitalia with upper branches of parameres slightly sharper apicad in lateral view; 3) antennal club feebly more elongate in male.

As to the ecological note, the adult pair of male and female individuals are found copulating on the ventral surface of leaves of *Fraxinus griffithii* in Ishigakijima Island. Adult chafers emerge in February to April.

### 要 約

伊藤 武:琉球列島のクリイロコガネの1新種. — 琉球列島のクリイロコガネの1新種 Miridiba hirsuta T. ITOH(ヤエヤマクリイロコガネ)を,石垣島と西表島より記載した. 筆者は,1988年と1990年に,本種を中国に産する,Miridiba trichophora (FAIRMAIRE, 1891) に相当するものと報告したが,その後,数多くの標本を検することができ,再検討した結果,中国のものとは軽微な差異によって新種として取り扱えると判断し,記載した。本種は,石垣島ではシマトネリコ Fraxinus griffithii C. B. CLARKE, 1882の葉裏にて交尾するものが観察されており,成虫は2月から4月にかけて発生活動する。

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# A Food Habit of *Onthophagus (Pseudonthophagus) penicillatus* HAROLD (Coleoptera, Scarabaeidae)

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Onthophagus (Pseudonthophagus) penicillatus HAROLD, 1879, originally described from Burma, is widely distributed in Southeast Asia, that is, northern India, Laos, southern Vietnam, southern China, Borneo and Sumatra. The author collected this species from a large-sized dead millipede in Northeast Thailand. The millipede is very common in the forest of this area, so that the insect might depend on this as one of its foods.

Collecting data. 1 ex., Wang Nam Kieo, Nakhon Ratchasima, NE. Thailand, 29~30–VIII–2000, K. MASUMOTO leg.; 3 exs., same data and locality, Y. UTSUNOMIYA leg.

This is the first record of *Onthophagus (Pseudonthophagus) penicillatus* HAROLD, 1879, from Thailand.

#### Reference

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