

Notes on Elaterid Beetles (Coleoptera, Elateridae) from East Asia (III)
A New Species of the Genus *Melanotus* from the Ryukyu
Islands, Southwest Japan

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Abstract A new elaterid species of the genus *Melanotus* ESCHSCHOLTZ, 1829 is described from Amami-Ôshima Is. and Tokuno-shima Is. of the Ryukyu Islands, Southwest Japan, with illustration of the taxonomic characters.

During the course of my study on the elaterid beetles from East Asia, I had an opportunity to examine a number of specimens of elaterid beetles from the Ryukyu Islands. After a careful examination, I found a new species belonging to the genus *Malanotus*, subgenus *Melanotus* ESCHSCHOLTZ, 1829 in the material.

In Amami-Ôshima and Tokuno-shima Islands, four species of the genus *Melanotus*, subgenus *Melanotus* are known up to the present: *M. (M.) loochooensis loochooensis* MIWA, 1929, *M. (M.) okinawensis* ÔHIRA, 1982, *M. (M.) oshimanus* ÔHIRA, 1967 and *M. (M.) takahashii* KISHII, 1974.

In this paper, I am going to describe this new species, *Melanotus (M.) nodai* sp. nov., with illustrations of the taxonomic characters. Most of the individuals of the new species were collected in simple light traps (Figs. 6–7).

Before going further, I wish express my sincere gratitude to Dr. Hitoo ÔHIRA in Okazaki for his constant guidance. I am also indebted to Messrs. Kôichi ARIMOTO in Fukuoka, Ryou NODA in Kurume and Yuji TSUTSUMIUCHI in Usuki for their kindly offering the specimens used in this study.

The holotype of the new taxon described in this paper is preserved in the Osaka Museum of Natural History.

***Melanotus (Melanotus) nodai* sp. nov.**

(Figs. 1–5)

Male. Length 16.0–20.0 mm, width 4.5–5.6 mm. Body robust and subfusiform, gently convex above and moderately shining except for head and pronotum more or less opaque. Color castaneous, head and pronotum blackish brown, antennae and legs dark brown.

Dorsal surface clothed with yellowish, rather long and recumbent setae; ventral surfaces with short and recumbent setae.

Head almost flattened between eyes; surface coarsely, deeply and very densely punctate, each puncture forming like semi-umbilicus; clypeal margin well ridged and rounded at the middle. Antennae rather long and extending beyond posterior angles of pronotum at least by apical segment; the second segment small, subglobular and almost as long as wide; the third obconical and about 1.8 times as long as the second; the fourth triangular and about 1.8 times as long as the third; from fourth to tenth clearly serrate.



Figs. 1–2. Habitus of *Melanotus nodai* sp. nov. — 1, Holotype, ♂; 2, paratype, ♀.

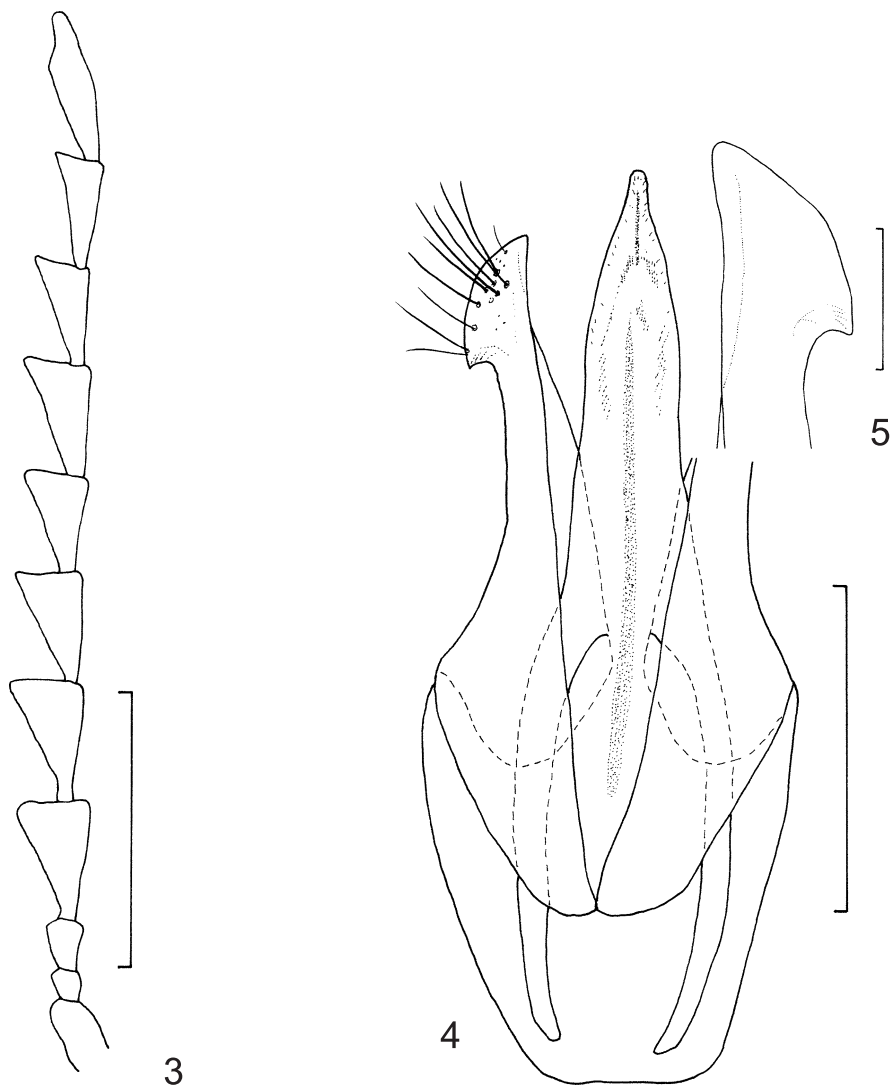
Pronotum subtrapezoidal, about 0.8 times as long as the basal width, with sides almost straight and slightly convergent from base to apical third, then rounded and convergent toward anterior angles; disc moderately convex, median longitudinal smooth line obscurely seen in basal half; surface scabrous, deeply and very densely punctate; posterior angles extending posteriad, each with a distinct carina above, which extends anteriorly along lateral margin to basal two-fifths.

Scutellum subvertical, lingulate, somewhat depressed at the middle and punctulate.

Elytra about 2.4 times as long as its basal width, with sides almost parallel in basal halves, then rounded and gradually convergent towards apices; striae well defined, deeply and regularly punctulate; intervals flattened, smooth and sparsely punctate, but sometimes irregularly and shallowly rugose.

Prosternal process weakly bent inward just behind procoxal cavities in lateral aspect, then extending straight toward obtusely pointed apex.

Male genitalia as illustrated; median lobe broadened and a little longer than lateral lobes, subparallel-sided in basal two-thirds, then rounded and gradually convergent toward obtusely



Figs. 3-5. *Melanotus nodai* sp. nov., holotype. — 3, Right antenna; 4, 5, male genitalia, dorsal view.
Scales: 1 mm for 3, 4; 0.5 mm for 5.

pointed apex; each apical portion of lateral lobes cuneiform, roundly expanded laterally and furnished with some long hairs.

F e m a l e. Length 17.5–20.0 mm, width 4.8–5.8 mm. Very similar to male in general structures, but the body is more robust; antennae shorter, with tips not attaining to posterior angles of pronotum.

Type series. Holotype: ♂, Naze-chinase [名瀬知名瀬], Amami City, Amami-Ōshima Is., Kagoshima Pref., Ryukyu Islands, Southwest Japan, 11~12-VII-2009, R. NODA leg. Paratypes: 1 ♂, San [山], Tokunoshima-chō, Ōshima-gun, Tokuno-shima Is., Kagoshima Pref., 27-VI-2008, H. OOTSUBO leg.; 2 ♀♀, same locality as the holotype, 2~3-VII-2009, R. NODA leg.; 5 ♂♂, 2 ♀♀, same locality and date as the holotype; 10 ♂♂, 3 ♀♀, same locality as the holotype, 10~



Figs. 6-7. Type locality and habitat of *Melanotus nodai*, Naze-chinase, Amami City, Amami-Ōshima Is., Kagoshima Pref., Japan. — 6, A trap setting on the ground; 7, a trap hanging down from a branch (photo by R. NODA).

13-VII-2010, R. NODA leg.; 7 ♂♂, 1 ♀, same locality as the holotype, 10~13-VII-2010, K. ARIMOTO leg.

Etymology. Dedicated to Mr. Ryou NODA, collector of the holotype.

Notes. This new species is similar to *Melanotus (Melanotus) lewisi lewisi* SCHENKLING, 1927 described from Japan, but can be distinguished from the latter by the following points: 1) the punctures on the head and the disc of pronotum are deeper and denser; 2) the male genital apparatus clearly different in the structures.

要 約

有本久之: 琉球諸島産クシコメツキ属(コウチュウ目コメツキムシ科)の1新種。—— 琉球諸島の奄美大島および徳之島から採集されたクシコメツキ属の1新種を *Melanotus (Melanotus) nodai* アマミクリイロクシコメツキと命名して記載した。この種は日本に広く分布する *M. (M.) lewisi lewisi* SCHENKLING, 1927 ルイスクシコメツキに似ているが、前胸背板の点刻は深くより密に印する、雄の触角はより長い、雄生殖器官の形状は明らかに異なるなどの違いにより容易に区別できる。また、本種はほとんどの個体が図示(Figs. 6-7)したような簡易のライトトラップで捕獲された。

References

- KISHII, T., 1974. Elaterid-beetles from Ryūkyū Archipelago, collected by Messrs. I. MATOBA, O. TAMURA and T. TAKAHASHI in the spring of 1973, with some new forms and notes. The snappers of Island (VII). *Bull. Heian High School, Kyoto*, (18): 1-19.
- ŌHIRA, H., 2001. Notes on the morphological structure of the female internal reproductive organs of the *Melanotus* species in Japan (Coleoptera: Elateridae). *Misc. Rept. Hiwa Mus. nat. Hist.*, (40): 17-27, 8 pls.
- SUZUKI, W., 1999. Catalogue of the family Elateridae (Coleoptera) of Taiwan. *Misc. Rept. Hiwa Mus. nat. Hist.*, (38): 1-348.

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