Elytra, Tokyo, **20** (2): 155–159, Nov. 15, 1992

Occurrence of a New *Badister* (Coleoptera, Carabidae) in Tokyo, Japan

Seiji MORITA

Motoazabu 1–3–28–405, Minato-ku, Tokyo, 106 Japan

Abstract A new licinine carabid beetle, *Badister* (*Baudia*) *nakayamai* sp. nov., is described from Tokyo, Central Japan. It is a very small species, and is closely allied to *B.* (*B*) *nigriceps* MORAWITZ.

In Japan, our knowledge concerning small licinine beetles belonging to the subgenus *Baudia* is still insufficient as compared with any other carabid groups. These beetles are usually rare and only a few examples have hitherto been known from single populations. To make the matter worse, diagnostic characters adopted for identifying European species do not serve by themselves for classifying Japanese species of licinine carabids. The only exception is *Badister vittatus* BATES from Hokkaido and Honshu, a remarkable species redescribed by KASAHARA and MORI (1990, p. 1) on the basis of newly obtained materials.

Recently, unexpected discovery of a new species belonging to the subgenus *Baudia* was made by Mr. F. NAKAYAMA at the heart of Tokyo Metropolis. Additional materials were obtained from the same collecting site and were recorded under the name of "*Badister marginellus*" (IZUMI, 1990, p. 6). At my request, both the collectors submitted for my study a short series of their specimens. Besides, I was given an opportunity to examine the holotype of *B. marginellus* BATES through the courtesy of Dr. STORK. After a comparative study, it became evident that IZUMI's record was based on his misidentification and that the species in question must belong to a new one. I am, therefore, going to give a full description of the species in the present paper. The abbreviations used herein are the same as those explained in my previous paper (cf. 1992, p. 15).

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for critical reading of the original manuscript of this paper. My thanks are also due to Dr. N. E. STORK and Dr. Stuart J. HINE of the Natural History Museum, London, for loan of type material under their care, to Dr. G. Sh. LAFER of the Institute of Biology and Pedology, Vladivostok, for his kind offer of Siberian specimens of *Badister*, and to Messrs. Fuki NAKAYAMA and Atsuo IZUMI for their kind help.

Badister* (*Baudia*) *nakayamai MORITA, sp. nov.

[Japanese name: Chibi-katakiba-gomimushi]

(Figs. 1–5)

Badister marginellus: IZUMI, 1990, Coleopt. News, Tokyo, (90), p. 6.

Length: 3.54–4.04 mm (from apical margin of clypeus to apices of elytra); very small species.

Head black; pronotum reddish brown, though the apical and basal margins are darker than the disc; elytra black with iridescent lustre; basal part, interval 1 and sides brown; clypeus, labrum, mandibles, palpi, segments 1 and 7–11 of antennae, and legs reddish brown; remaining segments of antennae dark brown; ventral side of pronotum and epipleura reddish brown; rest of ventral side black.

Head large and convex, without puncture; PW/HW 1.39–1.48 (M 1.44) in 3 ♂♂, 1.34–1.43 (M 1.40) in 4 ♀♀; frontal furrows entirely obliterated; eyes moderately convex; two pair of supraorbital setae lying on lines divergent posteriad; neck wide and long; apices of mandibles rather obtuse (not truncate); microsculpture sharply impressed, composed of polygonal meshes, its meshes being larger in ♂ than in ♀;

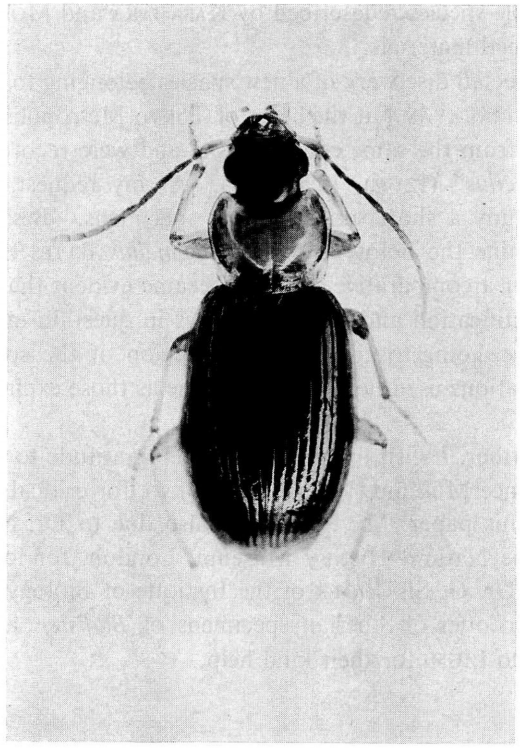
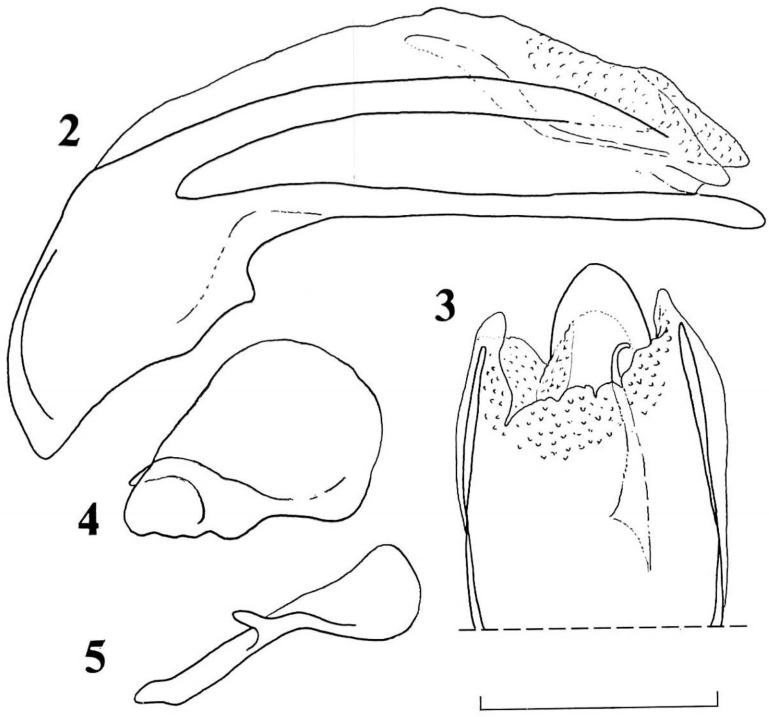


Fig. 1. *Badister* (*Baudia*) *nakayamai* MORITA, sp. nov., ♂, from Ikegami in Tokyo.



Figs. 2–5. Male genital organ of *Badister* (*Baudia*) *nakayamai* MORITA, sp. nov.; 2, aedeagus, left lateral view; 3, apical part of aedeagus, dorso-apical view; 4, left paramere, left lateral view; 5, right paramere, left lateral view. (Scale: 0.3 mm.)

antennae rather short, reaching basal 3/11 of elytra; relative lengths of antennal segments as follows: I: II: III: IV: V: VI: XI=1: 0.38: 0.73: 0.89: 0.90: 0.83: 0.91.

Pronotum transverse, PW/PL 1.30–1.39 (M 1.34) in 3 ♂♂, 1.42–1.50 in 4 ♀♀, PW/PA 1.44–1.47 (M 1.45) in 3 ♂♂, 1.39–1.45 (M 1.42) in 4 ♀♀, PW/PB 1.18–1.24 (M 1.23) in 3 ♂♂, 1.19–1.28 (M 1.23) in 4 ♀♀; surface convex though depressed on the basal part; apical margin widely emarginate, much narrower than base, PA/PB 0.82–0.86 (M 0.85) in 3 ♂♂, 0.84–0.89 (M 0.87) in 4 ♀♀; sides moderately arcuate and convergent posteriad, very slightly sinuate just before hind angles; each marginal gutter very close to side margin inside apical angle, but becoming widely distant posteriad and continuing into basal fovea; apical angles strongly advanced and rounded at the tips; hind ones obtuse; base arcuately oblique inside each hind angle, and almost straight at middle; median line clearly impressed, somewhat widening basally; basal fovea large but shallow; microsculpture composed of irregularly transverse lines.

Elytra oblong, moderately convex; EL/PW 1.43–1.48 (M 1.46) in 3 ♂♂, 1.44–1.48 (M 1.45) in 4 ♀♀, EL/EW 1.43–1.47 (M 1.45) in 3 ♂♂, 1.44–1.48 (M 1.47) in 4 ♀♀; basal border weakly curved; sides evenly arcuate, but subtruncated at apices; scutellar striole long, joining stria 1; striae impunctate, not reaching base; intervals flat, im-

punctate; interval 3 with 2 pores, both adjoining stria 2; microsculpture composed of fine transverse lines, though more or less irregular and partially obliterated. Wings full.

In ♀, anal sternite with two pair of setae which lie almost on a straight transverse line. Legs slender; TL/HW 1.11–1.26 (M 1.18) in 2 ♂♂ and 3 ♀♀; in ♂, protarsal segments 1–3 dilated, and with median sulcus on dorsal side; meso- and metatarsi each with median sulcus on dorsal side, which is sometimes rudimentary or disappears.

Male genital organ lightly sclerotized and small; aedeagus with two lateral sclerotized stripes; apex of aedeagus simply rounded without apical spine (cf. BALL, 1959, p. 221)*; ventral surface of aedeagus longitudinally concave; copulatory piece elongate with the apical part prolonged and curved; left paramere wide, right one rather elongate.

Type series. Holotype: ♂, 19–XII–1989, allotype: ♀, 20–XII–1989, A. IZUMI leg. Paratypes: 1 ♂, 3 ♀♀, 12–XII–1989, F. NAKAYAMA leg.; 3 ♂♂, 2 ♀♀, 14–XII–1989, F. NAKAYAMA leg.; 1 ♂, 20–XII–1989, A. IZUMI leg.; 1 ♀, 4–I–1990, A. IZUMI leg.; 1 ♂, 28–I–1990, A. IZUMI leg.

The holo- and allotypes are preserved in the National Science Museum (Nat. Hist.), Tokyo. The paratypes are distributed to the private collections of the author and both the collectors.

Locality. Ikegami, Ohta-ku, Tokyo, Central Japan.

Notes. The present new species can be easily distinguished from *B. marginellus* BATES (1873, p. 258) by smaller body and darker coloration. Of the four species belonging to the subgenus *Baudia*, this new species is most closely allied to *B.* (*Baudia*) *nigriceps* MORAWITZ (1863, p. 36). It is, however, distinguished from it mainly by the following points: 1) smaller body; 2) different coloration; 3) more covex dorsum; and 4) shorter antennae.

要　約

森田誠司：東京で発見されたカタキバゴミムシの1新種. —— 東京都大田区で採集された，カタキバゴミムシ属の *Baudia* 亜属に属する1新種，チビカタキバゴミムシ *Badister* (*Baudia*) *nakayamai* を記載した．本種は，はじめキベリカタキバゴミムシとして記録されたが，正基準標本と比較した結果，新種と認められた．むしろ，クロズカタキバゴミムシ *B.* (*Baudia*) *nigriceps* MORAWITZ に近縁なものであろうと思われる．

References

BALL, G. E., 1959. A taxonomic study of the North American Licinini with notes on the Old World species of the genus *Diploceila* BRULLÉ (Coleoptera). *Mem. Am. ent. Soc.*, (16): i+1–258, pls.

* My treatment with a few drops of lactic acid has revealed that the drawing of aedeagal apical part (cf. fig. 3) is somewhat expansive.

1–15, i–iv.

BATES, H. W., 1873. On the geodephagous Coleoptera of Japan. *Trans. ent. Soc. London*, **1873**: 219–322.

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

IZUMI, A., 1990. Records of three carabids from Tokyo. *Coleopt. News, Tokyo*, (90): 6. (In Japanese.)

KASAHARA, S., & M. MORI, 1986. Notes on Japanese ground beetles, II. *Badister vittatus* BATES rediscovered in Hokkaido, North Japan. *Coleopt. News, Tokyo*, (73): 1–2. (In Japanese.)

LAFER, G. Sh., 1989. Podotriad Adephaga. *In* LERA, P. A. (ed.), *Opredelitel' Nasekomykh Dal'nego Vostoka SSSR v Shesti Tomakh*, **3**(1): 67–257. (In Russian.)

MORAWITZ, A., 1863. Beitrag zur Käferfauna der Insel Jesso. Erste Lieferung. Cicindelidae et Carabici. *Mém. Ac. imp. Sci. St.-Pétersb.*, (VII), **6**(3): i–iii+1–84.

NAKANE, T., 1985. The beetles of Japan (new series). 70. *Nat. & Ins., Tokyo*, **20**(11): 22–26. (In Japanese.)

Elytra, Tokyo, **20** (2): 159–160, Nov. 15, 1992

A Record of *Synuchus nivalis uenoi* LINDROTH (Coleoptera, Carabidae) from North Japan

Seiji MORITA

Motoazabu 1-3-28-405, Minato-ku, Tokyo, 106 Japan

In his revision of the genus *Synuchus*, LINDROTH (1956) described a small platynine carabid from Central Japan under the name of *Synuchus uenoi*. This species seems very rare in Japan, since only a few records have been given by HABU (1978) and MATSUMOTO (1981) since then. According to LAFER (1976, p. 30), it was regarded as a subspecies of the European species, *S. nivalis* (ILLIGER). Studying my collection of platynine carabids, I found a specimen of this beetle collected by myself in Wakkanai-shi, North Japan. In this short report, I am going to record it.

Synuchus (*Synuchus*) *nivalis uenoi* LINDROTH

Synuchus uenoi LINDROTH, 1956, Trans. r. ent. Soc. London, **108**: 495, 508, figs. 10 c, 13 c; type locality: Utsukushigahara, Nagano Pref., Japan. —— HABU, 1972, Mushi, Fukuoka, **46**: 33. —— TANAKA, 1985, Coleopt. Japan Col., Osaka, **2**: 133.

Synuchus (*Synuchus*) *uenoi*: HABU, 1978, Fauna Japonica, Tokyo, p. 335, figs. 677, 679, 682, 685, 687, 690, pl. 28, fig. 4.