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A New Species of the Genus *Trichotichnus* (Coleoptera, Carabidae) from Central Honshu, Japan

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Abstract A new harpaline carabid beetle, *Trichotichnus daibosatsunis* sp. nov., is described from central Honshu, Japan. It resembles *T. leptopus* (BATES), occurring sympatrically with the latter. They are, however, clearly distinguished from each other by difference of their pronota and aedeagi.

The Japanese species of the harpaline carabid genus *Trichotichnus* (s. str.) was classified by HABU (1973) into four species-groups. One of them, the *leptopus* group, is characterized by having cordate pronotum and reduced wings, and comprises nine montane species hitherto described. There are, however, still many unsolved problems in this group, since its members vary from locality to locality and are often difficult to determine ranges of respective taxa. In this paper, I am going to describe a new species of this group under the name of *Trichotichnus daibosatsunis* sp. nov., which occurs on the Kwantô Mountain Range of central Honshu, Japan. It resembles *T. leptopus* (BATES) in general appearance and sympatrically occurs with the latter, but is clearly discriminated from it by different configuration of pronotum and aedeagus. The abbreviations used herein are the same as those explained in other papers of mine.

I wish to express my 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. Atsuo IZUMI and Minoru TAO for their kind offer of the materials.

Trichotichnus* (*Trichotichnus*) *daibosatsunis sp. nov.

[Japanese name: Daibosatsu-tsuya-gomokumushi]
(Figs. 1–2, 4)

Description. Length 9.6–11.0 mm. Width 3.9–4.4 mm. Black, shiny and iridescent; labrum and mandibles reddish brown, apices of the latter blackish; clypeus and outer sides of frontal furrows generally reddish brown; antennae, palpi and legs yellowish brown.

Head gently convex, somewhat narrower than that of *T. leptopus*; labrum weakly emarginate at apex, instead of being distinctly emarginate. Pronotum gently convex, clearly narrower than that of *T. leptopus*, widest at apical third, ca. 1.4 times as wide as head (PW/HW 1.36–1.43, mean 1.40), ca. 1.35 times as wide as long (PW/PL 1.30–

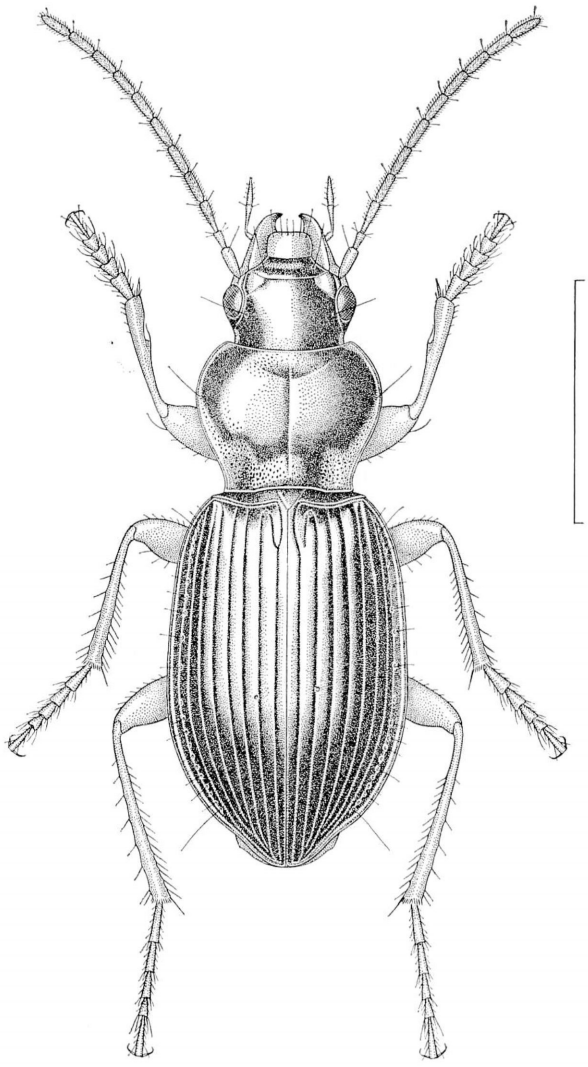
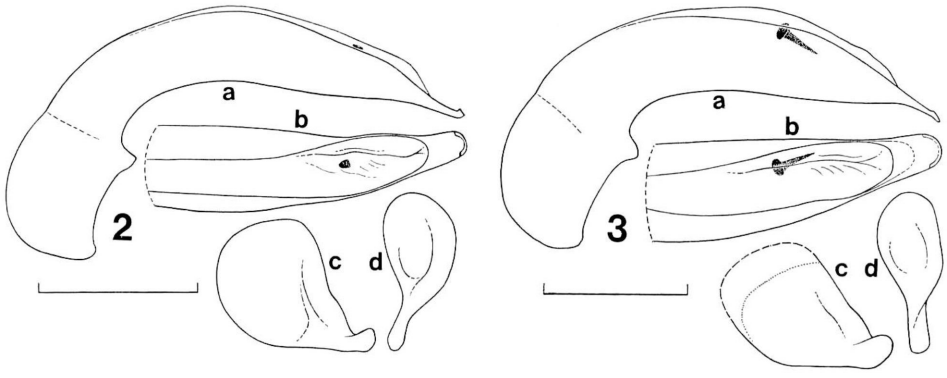


Fig. 1. *Trichotichnus* (*Trichotichnus*) *daibosatsunis* sp. nov., ♂, from the Nikkawa-dani, Yamanashi Pref. Scale: 4 mm.

1.38, mean 1.35), ca. 1.43 times as wide as base (PW/PBW 1.38–1.48, mean 1.43); lateral margins well arcuate, and strongly convergent posteriad, then sinuate before sharp basal angles, which are somewhat produced laterally; apical margin finely bordered; basal margin finely but distinctly bordered; basal foveae relatively deep, strongly and densely punctate; outer sides of basal foveae depressed and punctate as in *T. leptopus*; apical arcuate depression distinct, strongly punctate; median line distinct; surface irregularly punctate except on disc.



Figs. 2–3. Male genitalia of *Trichotichnus* (*Trichotichnus*) spp. —— 2, *T.* (*T.*) *daibosatsunis* sp. nov. from the Nikkawa-dani, Yamanashi Pref.; 3, *T.* (*T.*) *leptopus* (BATES), from Mt. Mitake-san, Tokyo; a, aedeagus in left lateral view; b, same in dorsal view, with omitted basal part; c, left paramere; d, right paramere. Scale: 1 mm.

Elytra ovate, gently convex, widest at about middle, ca. 1.3 times as wide as pronotum (EW/PW 1.24–1.33, mean 1.30), ca. 2.7 times as long as pronotum (EL/PL 2.51–2.79, mean 2.70), ca. 1.54 times as long as wide (EL/EW 1.48–1.59, mean 1.54); humeral part less conspicuous than in *T. leptopus*, with humeral angles more obtuse than in the latter; basal borders gently curved, very minutely dentate at shoulders; lateral margins gently and rather straightly divergent posteriad from behind shoulders, gently arcuate at the widest part, then roundly convergent to preapical emarginations, which are shallow, though relatively distinct, apices rounded; scutellar striole rather long as in *T. leptopus*; striae distinctly impressed throughout, almost smooth; intervals gently convex, though almost flat on disc; interval 3 with a dorsal pore, adjoining stria 2 at about middle; marginal series of pores 24–29 in number. Wings reduced.

Venter shiny; prosternum and apical part of metasternum, and pro-, meso- and metepisterna punctate; lateral sides of sternites 3–4 punctate; median parts of sternites 4–5 sparsely and minutely pubescent.

Aedeagus moderately bent at basal third, then almost straightly extending to apex, though weakly curved downwards at the apical part; apical third somewhat curved to the right in dorsal view; apical lobe as long as or a little longer than wide, distinctly bordered at the apex, which is distinctly reflexed; inner sac with a minute chitinized piece near apical orifice; left paramere wide; right one relatively wide, rounded at apex.

Type series. Holotype: ♂, Nikkawa-dani, Enzan-shi, Yamanashi Pref., 24–IX–1981, S. KASAHARA leg.; allotype: ♀, same locality as for the holotype, 28–VI–1981, A. IZUMI leg.; paratypes: 2 ♂♂, Mt. Daibosatsu, Enzan-shi, Yamanashi Pref., 10–VI–1979, M. TAO leg.; 1 ♂, same locality, 12–VIII–1978, M. TAO leg.; 1 ♂, Nikkawa-dani, Enzan-shi, Yamanashi Pref., 10–IX–1982, S. KASAHARA leg.; 1 ♀, same

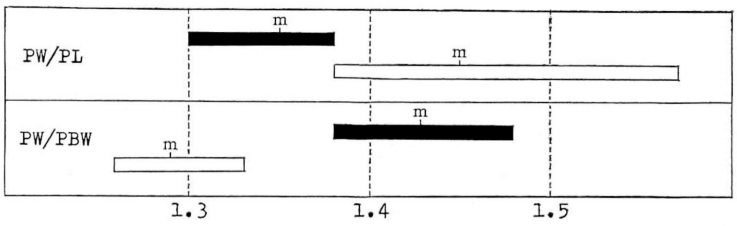


Fig. 4. Diagram showing proportions of pronota in *Trichotichnus* (*Trichotichnus*) spp.; black bar, *T.* (*T.*) *daibosatsunis* sp. nov.; white bar, *T.* (*T.*) *leptopus* (BATES); m, mean.

locality, 22–VI–1985, S. KASAHARA leg.; 1 ♂, Tabayama-mura, Yamanashi Pref., 4–VII–1980, S. KASAHARA leg.; 1 ♂, Unazawa, Mt. Ohtake-san, Okutama-machi, Tokyo, 29–VI–1982, S. KASAHARA leg.; 1 ♂, Mt. Mitake-san, Ohme-shi, Tokyo, 30–V–1981, S. KASAHARA 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 my collection.

Notes. Though the present new species is similar to *T. leptopus*, it is easily discriminated from the latter by the following points: General appearance slenderer; pronotum clearly narrower, with lateral margins more strongly convergent posteriad; pronotal base almost as wide as apex, while the base is always wider than apex in *T. leptopus*; aedeagus slenderer; apical lobe more strongly bordered at the apex, which is clearly reflexed, while it is slightly curved ventrad in *T. leptopus*; chitinized piece of inner sac very small and flat, not peg-like.

要　約

笠原須磨生：本州中部産ツヤゴモクムシ属の1新種.——本州中央部の関東山地から，ツヤゴモクムシ属のツヤゴモクムシ種群に属する1新種，ダイボサツツヤゴモクムシ *Trichotichnus* (*Trichotichnus*) *daibosatsunis* を記載した．本種はツヤゴモクムシ *T.* (*T.*) *leptopus* (BATES) にやや似ていて，これと同所的にみられるので混同されやすいが，前胸背板と陰茎の形態が明らかに異なるので識別はむずかしくない．

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