A New Species of the Genus *Antibothrus* (Coleoptera, Bothrideridae) from Japan, with Notes on the Japanese Bothriderinae

Sasaji Hiroyuki

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A New Species of the Genus *Antibothrus* (Coleoptera, Bothrideridae) from Japan, with Notes on the Japanese Bothriderinae

Hiroyuki SASAJI

Biological Laboratory, Fukui University, Fukui 910, Japan

Abstract. A new bothriderid, *Antibothrus morimotoi* (Coleoptera, Cucujoidea) is described from Japan. A key to the Japanese genera of Bothriderinae is provided, with a brief description of *Leptoglyphus vittatus* Sharp.

Key words: Taxonomy, Coleoptera, Bothrideridae, Japan, new species.

Up to the present, 6 species of the subfamily Bothriderinae (Coleoptera: Bothrideridae) have been recognized from Japan. Recently an unknown bothriderine species was collected in Fukui Prefecture, Central Japan by Mr. Inoue, a forest entomologist. After careful examination, I concluded that it was new to science and describe it as a new species as below. In this occasion the further known species of the subfamily Bothriderinae of Japan are listed with some taxonomic notes.

Before going further, I wish to express my cordial thanks to Mr. Shigenori Inoue, the Green Center of Fukui Prefecture, Mr. Nobuyuki Narukawa, Tsu, and Mr. Teruhisa Ueno, Kyushu University, for their kind offers of the valuable materials.

***Antibothrus morimotoi* sp. nov.**

[Japanese name: Inoue-Hosokata]

(Figs. 1-3)

Body somewhat flat cylindrical, about 3.3 as long as wide, nearly parallel-sided. Uniformly reddish brown without any blackish or paler marking. Surface almost glabrous.

Head relatively large and much wider than long in dorsal aspect. eye strongly prominent laterally and glabrous. Frons relatively finely and sparsely punctate.

Antenna clearly 11-segmented (Fig. 2). Basal segment stout, glabrous with a sharp spine at basal side; 2nd segment much smaller than basal and strongly widened; 3rd subcylindrical, slightly longer than wide; each of 4th to 9th segments wider than long. Tenth segment strongly widening apically, about twice as wide as long; terminal (11th) segment transverse oval, much wider than long with a narrow stem. Detail structure of each segment are as figured.

Pronotum nearly as long as wide and hexagonal with weakly angulated sides; surface of pronotal disc roughly sculptured by large, irregular and longitudinal depressions. Pronotal base with a pair of weak and very short elevations and depressions.

Elytra almost parallel-sided with a short rounded apex. Three distinct longitudinal carinae present, which are almost reaching to elytral apex. Suture also carinate. Each of three intervals with a weak longitudinally carinate elevation at anterior half or anterior two-third. Surface of interstices between carinae very weakly, sparsely and roughly punctate.

Prosternal process (Fig. 3) very narrow, and weakly widening posteriorly with a subtruncate apex, and nearly as long as basisternal length. Postcoxal process of prothoracic hypomeron very thin.

Protibia with a sharp terminal spine and several small but distinct denticles, with a long slender and a short spurs. Meso- and metatibia with sharp terminal spine at apex and each with two spurs.

Fig. 1. *Antibothrus morimotoi* sp. nov. dorsal habitus.

Figs. 2-3. *Antibothrus morimotoi* sp. nov. — 2, antenna: 3, prosternum.

Body length: 2.25-2.50 (2.50) mm; width: 0.73-0.75 (0.75) mm, those of the holotype are in parentheses.

Distribution. Japan (Honshu).

Holotype: 1 ex., Kami-makidani, 400m alt., Imajô-chô, Fukui Pref., Japan, 20. vii. 1995, S. Inoue leg., preserved in the Collection of the Entomological Laboratory, Kyushu University, Fukuoka (Type No. 3056, Kyushu Univ.).

Paratypes: 2 exs., Hirakura, Mie Pref., Japan. 12-13. v. 1956, H. Ichihashi leg., preserved in the author's collections.

Remarks. The present new species is very similar to *Antibothrus fatalis* Nikitsky, 1985 from Primorye, Far East Russia, but this is distinguishable from it in the following features: preapical segment of antenna much wider; basal and second antennal segments very characteristic; eye strongly prominent laterally; longitudinal furrow at pronotal median line scarcely recognized; sub-interval carinae of elytra much shorter than in *A. fatalis*; and prosternal process longer.

Key to the Japanese genera of the subfamily Bothriderinae

1. Dorsal surface set with scales. Anterior and middle coxae very widely separated.
 Dastarcus
2. Dorsal surface glabrous or finely setose. Anterior and middle coxae moderately
 or narrowly separated by prosternal process.3
2. Pronotum with 3 pairs of distinct longitudinal carinae which are interrupted by
 deep transverse fovea at near base.*Machlotes*
3. Pronotum without distinct longitudinal carinae.3
3. Pronotum with a deep fovea on centre of disc, and elongate cordiform with a
 weakly arcuate sides. Antenna 11-segmented.**Aeschyntelus*
4. Pronotum with weak depressions on base of disc, and usually hexagonal in
 outline. 4

4. Antenna 9-segmented with a large oval terminal segment which is indistinctly divided into two segments. *Leptoglyphus*
 Antenna 1 1-segmented with distinctly separated into two segments. *Antibothrus*

A synonymic list of the Bothriderinae of Japan

- Dastarcus helophoroides* (Fairmaire, 188 1)
 = *Pathodermus helophoroides* Fairmaire, 188 1
 = *Dastarcus longurus* Sharp, 1885
 China, Japan.
Dastarcus kurosawai Sasaji, 1986
 Japan (Ryukyus).
Machlotes costatus (Sharp, 1885)
 = *Erotylathris costatus* Sharp, 1885
 Japan (Hokkaido, Honshu, Tsushima), Formosa.
Aeschyntelus takeii (Nakane, 1968)
 = *Bothriderus takeii* Nakane, 1968
 = *Ascetoderus takeii* Nakane, 1978
 Japan (Honshu).
Aeschyntelus popei (Nakane, 1978)
 = *Ascetoderes popei* Nakane, 1978
 Japan (Ogasawara Is.), China.
Leptoglyphus vittatus Sharp, 1885
 Japan (Kyushu), Formosa.
Antibothrus morimotoi sp. nov.
 Japan (Honshu).

On *Leptoglyphus vittatus* Sharp, 1885

The genus *Leptoglyphus* is a *Bothriderus*-like colydiid and is very close to the genus *Arztibothrus*. According to Ślipiński *et al.* (1989), **6** species are known from Japan and southeastern Asia. In this occasion, I want to illustrate and briefly describe the Japanese (and Formosan) specimens of *Leptoglyphus vittatus* which is the type-species of the genus.

Leptoglyphus vittatus Sharp

(Fig. 4)

Elongate, subcylindrical fusiform. About 3 times as long as wide. Head distinctly longer than wide. Antenna 9-segmented with a single segmented large club; the club indistinctly divided into 2 segments. Pronotum hexagonal, nearly as long as wide; both frons and dorsum of pronotum very coarsely punctate. Elytra much wider than pronotum. sides weakly arcuate. Each elytron with 3 extremely strong longitudinal ridges throughout and a sutural groove. Each intervals almost flat and provided with 2

rows of elongate punctures as a rule. Legs as illustrated, tibial apex sharply pointed and each 2 distinct spurs provided. Prosternal process narrow and weakly widening apically.

Body length: 2.2-3.5 mm; width: 0.6-1.2 mm.

Distribution. Japan (Kyushu), Formosa.

Specimens examined. 1 ex., Teuchi, Is. Shimokoshiki, Kagoshima Pref., Japan. 17. v. 1994, T. Ueno leg. (Ueno coll.); 1 ex., Liyuchih, Haulien Hsien, Formosa, 14 viii. 1966, H. Kamiya (H. Sasaji) leg.; 1 ex., Penpuchi, Formosa, 26. v. 1965, T. Shirôzu leg.; 1 ex., Penpuchi, Formosa, 4. vi. 1965, T. Shirôzu leg.; 2 exs., Liukuei, Formosa. 25. vii. 1970, T. Kobayashi leg., (Shibata Coll.).

Fig. 4. *Leptoglyphus vittatus* Sharp, dorsal habitus.

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