

A New Species of the Genus *Leptoglyphus* (Coleoptera, Bothrideridae) from Tsushima Island, Kyushu, West Japan

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Abstract A new bothriderid beetle, *Leptoglyphus carbonaceus*, is described from Tsushima Island, Kyushu, West Japan. The new species is distinguishable from the known species of the genus by mostly black body, pronotum distinctly wider than long and very slender male genitalia.

Eight certain species are known in the genus *Leptoglyphus* SHARP, 1885 from Asian region: *L. vittatus* SHARP, 1885, *L. cristatus* SHARP, 1885, *L. feae* GROUVELLE, 1896, *L. orientalis* GROUVELLE, 1906, *L. foveifrons* GROUVELLE, 1908, *L. pubescens* (DAJOZ, 1979), *L. tanakai* AOKI, 2011 and *L. kubotai* AOKI, 2011. Four species among them (*vittatus*, *orientalis*, *tanakai* and *kubotai*) are known from Japan. We found an unknown *Leptoglyphus* species from a dead tree (Fig. 3) on Tsushima Island, which is described below as a new species, representing fifth species of the genus from Japan.

Leptoglyphus carbonaceus sp. nov.

(Figs. 1, 2, 4–10)

Body length. 2.85–3.60 mm (av. 3.23 mm).

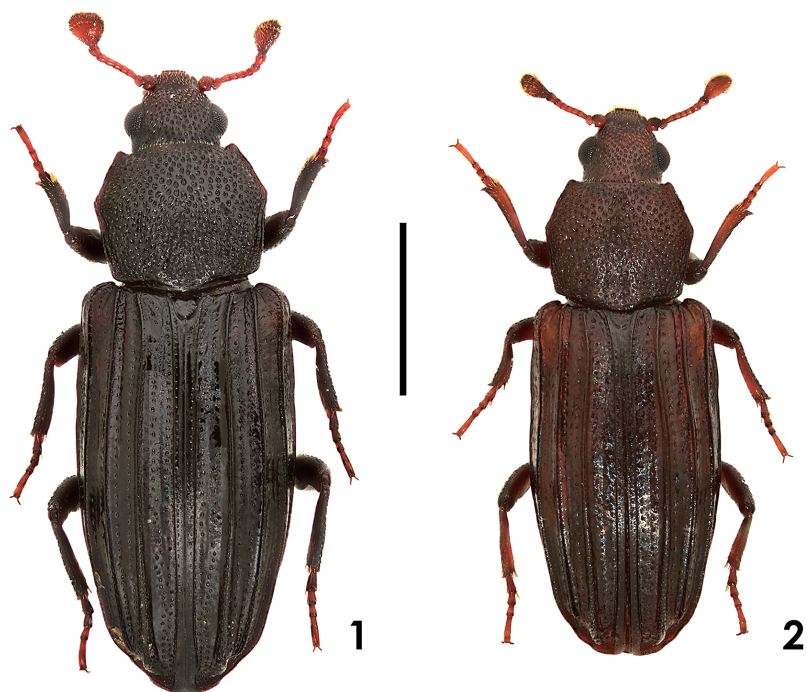
Color. Head, thorax, elytra, venter and legs (trochanters and femora) black, tibiae brown, antennae and tarsi yellowish brown (Fig. 1). Some individuals with elytra not completely black, but red-brown in parts between elytral carinae II and III (Fig. 2).

Head. Eyes comparatively large, separated from each other by 1.8 times diameter of single eye. Antenna (Fig. 6) 9-segmented; relative width of antennomeres: IX > I > VIII > II = VII > VI > V > III > IV; relative length of antennomeres: IX > I > III = VIII > II > VII > VI > IV > V; terminal antennomere IX forming distinct club divided by transverse line into two parts without constriction.

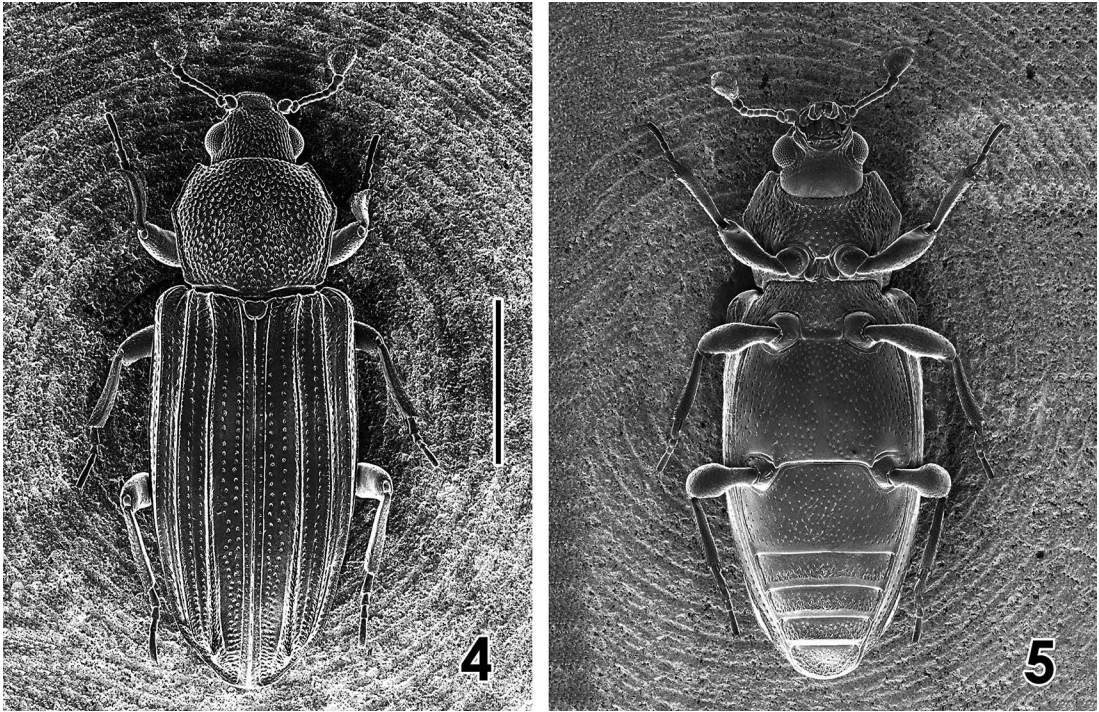
Prothorax. Pronotum wider than long (W/L = 1.12–1.19), hexagonal, with small but sharp anterolateral angles and lateral angularity a little in front of middle (Fig. 7), lateral margin anterior and posterior to angularity nearly straight. A pair of short longitudinal ridges absent in posteromedian part of disc. Surface densely covered with oval foveolae becoming smaller in marginal parts.

Elytra nearly twice as long as wide (L/W = 1.95), 2.6 times as long as pronotum, 1.29 times as wide as pronotum and lateral margin of elytra gently swollen. Elytral carinae II and III ending shortly before reaching apical border of elytron; apical part of carina II distinctly but not so prominently raised and thickened, bearing minute setae sparsely (Fig. 8).

Ventral side. Prosternal process broad, with dilated apex, posterior margin almost straight. Surface of mesosternum and metasternum covered with oval foveolae, large and dense on the former, small and sparse on the latter. Intercostal process of ventrite broad and trapezoid, nearly as broad as ventrite 3. Male genitalia lanceolate, very slender, only slightly swollen in middle portions, with two



Figs. 1–3. *Leptoglyphus carbonaceus* sp. nov. and its habitat. — 1, Holotype with wholly black body; 2, paratype with black body partly red-brown; 3, a dead tree inhabited by *Leptoglyphus carbonaceus* sp. nov. Scale: 1.00 mm.



Figs. 4–5. *Leptoglyphus carbonaceus* sp. nov., SEM image. — 4, Holotype, dorsal view; 5, ditto, ventral view. Scale: 1.00 mm.

pairs of curved setae near tip (Fig. 10).

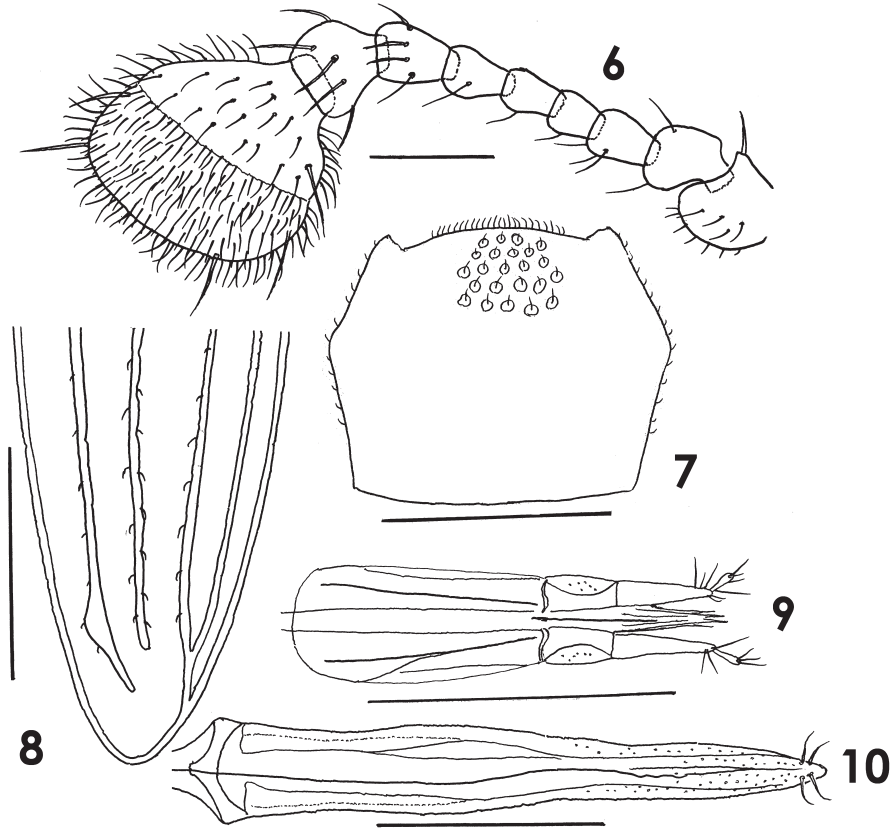
Legs. Relative lengths of legs: hind leg > middle leg > fore leg. Tarsal segments 1, 2 and 3 nearly same in length on fore leg, while segment 1 distinctly longer than 2 and 3 on middle and hind legs.

Type series. Holotype: ♂, Shishimi-rindô, Tsushima Island, West Japan, 5.VI.2016, T. ITO leg. Paratypes: 3 exs., same data as the holotype; 13 exs., ditto, 2.VI.2016, T. ITO leg.; 1 ex., ditto, 2.VI.2016, M. SAITO leg.; 1 ex., ditto, 3.IX.2016, J. AOKI leg.; 2 exs., Shushi-rindô, Tsushima Island, 17.VII.2016, G. FUKAGAWA leg. Holotype (NSMT-I-C 200168) and five paratypes (NSMT-I-C 200169–200173) are deposited in the collection of National Museum of Nature and Science, Tsukuba; two paratypes in the collection of Osaka Museum of Natural History, Osaka; two paratypes in the collection of Kyushu University Museum, Fukuoka and the remaining paratypes in the collections of the authors.

Distribution. Japan (Kyushu: Tsushima Island).

Etymology. The specific name is derived from carbonaceous body color of the new species.

Remarks. The new species is recognized at first sight by the blackish body color, because all the other species of *Leptoglyphus* show reddish brown or chestnut brown body color. Morphologically, the new species is distinguishable from the other congeners by (1) the large body size, distinctly larger than the other species except for *L. vittatus*, (2) the pronotum distinctly wider than long, (3) the second elytral ridge with terminal elevation bearing only minute setae, and (4) very slender male genitalia.



Figs. 6–10. *Leptoglyphus carbonaceus* sp. nov., paratype. — 6, Antenna (right side); 7, pronotum; 8, apical half of elytron; 9, female ovipositor; 10, male genitalia. Scales: 0.05 mm for 6; 0.50 mm for 7–9; 0.20 mm for 10.

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要 約

青木淳一・伊藤建夫：対馬から発見されたミスジホソカタムシ属(ムキヒゲホソカタムシ科)の1新種。——ミスジホソカタムシ属にはアジアから8種が知られており、そのうち4種は日本に分布している。今回、長崎県対馬から未知種が採集され、クロミスジホソカタムシ *Leptoglyphus carbonaceus* sp. nov. として命名記載した。本種は大きな体、ほとんど真っ黒な体色、横長な前胸背板、きわめて細長い雄交尾器などによって同属他種から区別される。

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