

Taxonomical Treatment of the *Cylindromicrus*-species (Coleoptera, Bothrideridae)

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Abstract The genus *Cylindromicrus* SHARP, 1885 is synonymized with the genus *Sosylus* ERICHSON, 1845, and *Cylindromicrus gracilis* SHARP, 1885 is shown here as *Sosylus gracilis* (SHARP, 1885), comb. nov. The other Japanese species, *C. hiranoi*, can not be included in *Sosylus*, and a new genus *Carbothrus* is elected for the species, which is shown here as *Carbothrus hiranoi* (AOKI, 2008), comb. nov.

The genus *Cylindromicrus* was established by SHARP (1885) on the basis of the type species *C. gracilis* collected in Kumamoto, South Japan. A detailed observation of *C. gracilis* revealed, however, that it is very similar to the members of the genus *Sosylus* ERICHSON, 1845, and there is no distinct differences between *Cylindromicrus* and *Sosylus*. When he established *Cylindromicrus* in 1885, SHARP did not refer to *Sosylus* which has shape very similar to *Cylindromicrus*. Though both the genera are treated as valid in the Catalogue of Palaearctic Coleoptera by LÖBL and SMETANA (2007), I dare to treat the genus *Cylindromicrus* as a junior synonym of *Sosylus*.

The second Japanese species, *C. hiranoi* AOKI, 2008 has peculiar features and can not be included in *Sosylus* and a new genus *Carbothrus* is established for the species.

Genus *Sosylus* ERICHSON, 1845

[Japanese name: Higo-hosokatamushi-zoku]

Sosylus ERICHSON, 1845, 287.

Pleuridium LECONTE, 1861, 91.

Metopiestes PASCOE, 1863, 38.

Pycnocephalus KRAATZ, 1895, 160.

Cylindromicrus SHARP, 1885, 73, syn. nov.

Diagnosis. Prothorax cylindrical, swollen anteriorly; elytra parallel-sided and longitudinally carinate; antennae eleven-segmented with two-segmented club; anterior coxal cavities closed posteriorly; first tarsal segment of all legs longer than second segment. Widely distributed from Africa, Asia, Americas to the islands of the South Pacific and Australia.

Type species. *Colydium rufipes* FABRICIUS, 1801.

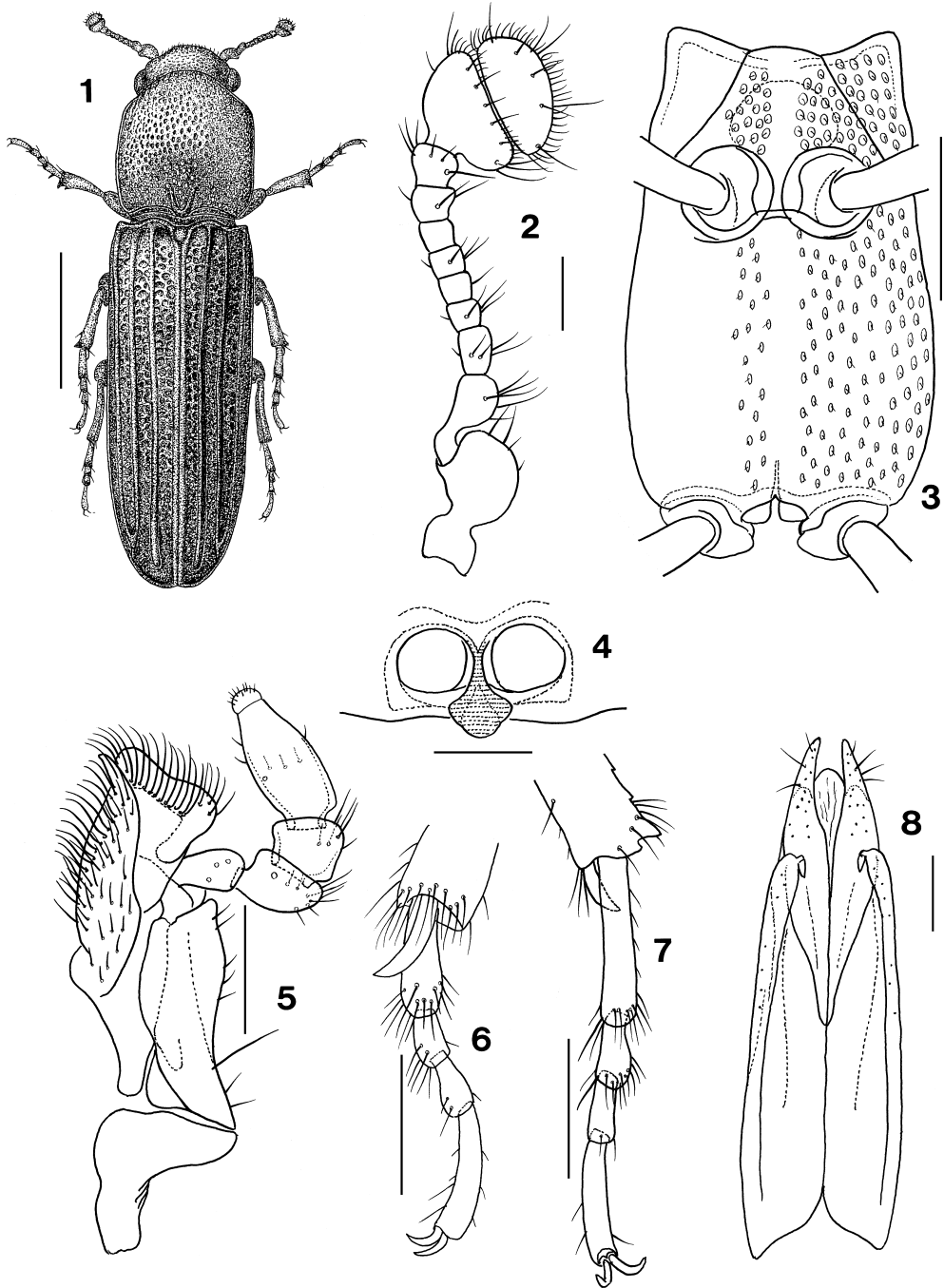
Sosylus gracilis (SHARP, 1885), comb. nov.

[Japanese name: Higo-hosokatamushi]

Cylindromicrus gracilis SHARP, 1885, 73, pl. 19, fig. 6; AOKI, 2008, 1, figs. 1, 2 & 5; 2009 b, 98, fig. (p. 99.); 2012, 20, fig. 8.

Body length: 3.5–4.8 mm.

Remarks. Having 1) antennae with eleven segments including distinctly swollen 2-segmented club, 2) golden brush-like setae on vertex of males, 3) elongated prothorax usually swollen in anterior



Figs. 1–8. *Carbothrus hiranoi* (AOKI). — 1, Habitus; 2, antenna; 3, meso- and metasterna; 4, prosternal process; 5, maxilla; 6, tarsus of foreleg; 7, tarsus of mid leg; 8, male genitalia. Scale bars: 0.1 mm for 2, 4, 5 and 8; 0.2 mm for 6 and 7; 0.5 mm for 3; 1 mm for 1. (Fig. 1 from AOKI, 2008; the other figures are original.)

part, 4) elongate, parallel-sided elytra, *Cylindromicrus gracilis* SHARP should be no doubt a member of the genus *Sosylus*.

Type locality. Mt. Oyayama, Kumamoto Prefecture, South Japan.

Distribution. Honshu (Mie Prefecture), Kyushu (Kumamoto Prefecture), Tsushima Island, Yaku Island, Amami-Ôshima Island and Iriomote Island.

Genus *Carbothrus* gen. nov.

[Japanese name: Sesuji-tsutsu-hosokatamushi-zoku]

Diagnosis. 1) antennae 11-segmented, with distinct club consisting of two clearly separated segments (Fig. 2), 2) vertex of head nearly flat, not distinctly concave, with dense golden setae in male, 3) thorax large, well swollen dorsally, not elongate, only slightly longer than wide, 4) elytra twice as long as broad, gradually narrowing apically, 5) exposed portion of 1st segments of foretarsi nearly equal (not shorter) in length to 2nd and 3rd segments combined (Fig. 6), 6) prosternal process with narrow stem and widely expanded tip (Fig. 4), 7) coxal cavities of mid-legs separated with narrow interspace (Fig. 3), 8) aedeagus of male genitalia with a pair of short and thick hooks ventrally (Fig. 8), 9) body color charcoal black.

Type species. *Cylindromicrus hiranoi* AOKI, 2008.

Etymology. The name of the new genus is derived from *carbo*-(charcoal)+*bothrus*, meaning a member of the family Bothrideridae with charcoal black body color.

Carbothrus hiranoi (AOKI, 2008), comb. nov.

[Japanese name: Sesuji-tsutsu-hosokatamushi]

(Figs. 1–8)

Cylindromicrus gracilis: SASAJI, 1985, 294, pl. 48, fig. 2; NARUKAWA & TANAKA, 2004, 20, photo.

Cylindromicrus hiranoi AOKI, 2008, 3, figs. 3, 4, 6–8; 2009 a, 3, fig. 4; 2009 b, 96, fig. (p. 97.); 2012, 19, fig. 7.

Body length: 3.7–4.4 mm.

Detailed features were mentioned in the original description of the species by AOKI (2008). Additional morphological characters were shown here as a result of dissection (Figs. 2–8). Coxal cavities of mid legs are separated by a narrow interspace and not tightly stuck together as in *Sosylus gracilis*. First segments of tarsi are nearly equal to (not shorter than) 2nd and 3rd segments combined (Fig. 6), but it is shorter in *S. gracilis*; it is distinctly longer on tarsi of mid legs (Fig. 7) and hind legs in both species. A pair of hook-like appendages on aedeagus of male genitalia (Fig. 8) must be a peculiar feature of *Carbothrus hiranoi*.

Type locality. Ohtomi, Iriomote Island, South Japan.

Distribution. Kyushu, Yaku Island, Tanegashima Island, Amami-Ôshima Island, Okinawa Island, Ishigaki Island and Iriomote Island.

要 約

青木淳一：セスジツツホソカタムシ属 *Cylindromicrus* の種の分類学的検討（コウチュウ目ムキヒゲホソカタムシ科）。——セスジツツホソカタムシ属 *Cylindromicrus* は SHARP (1885) によって熊本県大矢山で採集された *C. gracilis* SHARP を模式種として設立されたものである。しかし、AOKI (2008) にも述べられているように、その後複雑な経緯をたどった。保育社の図鑑 (294 頁, 第 48 図版, 第 21 図) にこの模式種として掲載された写真は原記載の種とは全く違うもので、2008 年に新種 *C. hiranoi* AOKI として記載された。一方、本物

の *C. gracilis* と認められる種が熊本県で採集され、それはヒゴホソカタムシという和名とともに報告された。ところが、今回さらに複雑なことが起こり、SHARP が設立した *Cylindromicrus* をここでは *Sosylus* 属のシノニムとみなし、ヒゴホソカタムシの学名を *Sosylus gracilis* (SHARP, 1885), comb. nov. とした。ところが、もう一方の種セスジツツホソカタムシ *Cylindromicrus hiranoi* は明らかな形態的な違いから、どうみてもヒゴホソカタムシと同属とは考えられず、ここに新属 *Carbothrus* を設立してその中に入れ、学名は *Carbothrus hiranoi* (AOKI, 2008), comb. nov. となった。ここには新属を記載するとともに、従来 *Cylindromicrus* 属に入れられていた日本産の2種をそれぞれ別属に移し、新しい組み合わせの学名を提唱した。

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