

## Notes on the Species of Staphylinidae (Coleoptera) from Japan

### XXIII. The Descriptions of Two New Species of *Lobrathium* MULSANT et REY

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**Abstract** Two new species of the *cribricolle* species group of the genus *Lobrathium*, are described from Japan: *L. hosakai* T. ITO, sp. nov. and *L. imasakai* T. ITO, sp. nov.

Twenty-eight species and one subspecies of the genus *Lobrathium* have been known from Japan (LÖBL & LÖBL, 2015; ITO, 2018) up to present. Recently I had a chance to examine two unknown species belonging to the *cribricolle* species-group (ITO, 2015) through the courtesy of several colleagues. In this paper I describe two new species.

All the holotype designated in the present paper are deposited in the collection of the Osaka Museum of Natural History, Osaka.

Before going further I would like to express my cordial thanks to Messrs. Ken-ichi HOSAKA (Yamaguchi City), Shoichi IMASAKA (Kurume City) for their kindly offering me all of the valuable materials used in the present study, and also to Mr. Yasuhiko HAYASHI (Kawanishi City) for his kindly reading the description in the draft and preparing the plates used in this paper.

#### Supplementary Description of the *cribricolle*-Group

Body subcylindrical in structure; pronotum without distinct smooth line along median line; elytra apico-laterally with clearly-outlined yellow spots; aedeagus symmetrical, bearing a ventral lancet-shaped projection which is heavily sclerotized.

This species-group includes the following ten species: *Lobrathium cribricolle*, *L. ishizuchiense*, *L. sasajii*, *L. isamutanakai*, *L. kujunense*, *L. daisenense*, *L. ontakense*, *L. hosokawai*, *L. hosakai* sp. nov. and *L. imasakai* sp. nov.

#### *Lobrathium hosakai* T. ITO, sp. nov.

(Figs. 1a–d)

Body subcylindrical, a little shiny, black; elytra each with a relatively small subelliptical yellow spot in apical fourth, the apical spot not touching to suture, lateral and apical margins; mandibles, basal segments of antennae and femora reddish brown; labrum darkened, maxillary and labial palpi, apical segments of antennae, tibiae and tarsi reddish yellow to brown; pubescence on body dark brownish black to black, and yellowish brown to dark brown on appendices. Length: 6.0–6.5 mm.

Head subquadrate, hardly longer than wide, coarsely, closely and deeply punctate except frons which is apparently sparsely so, and clypeus is impunctate; the punctures umbilicate, considerably coarser, sparser on vertex than on postgenae and basal third area where those are seemingly reticulated in arrangement; eyes rather large, the longitudinal diameter longer than a half length of postgena; postgenae subparallel-sided, slightly narrowed basally and widely rounded at posterior angles. Anten-

nae moniliform, robust, slightly incrassate distad, rather long and passing over the middle of pronotum, and all segments distinctly longer than wide; 1st segment largest, very robust and more than 1.5 times as long as 2nd which is subequal to 3rd in length; 4th to 6th segments each gradually shortened distad; 7th to 10th subequal in length to each other; 11th conical and distinctly longer than 10th.

Pronotum oblong (length/width = 1.26), longer (1.20 : 1.00) and a little narrower than head, subparallel-sided, feebly narrowed behind, coarsely, closely and somewhat irregularly punctate in arrangement; the punctures evidently coarser and sparser than on head; disc with vestigial median short line placed only near base, slightly depressed on each side of it; lateral margins invisible when viewed from above, but thick throughout as well as both apical and basal margins. Scutellum distinctly and rather finely punctate.

Elytra longitudinally oblong, subparallel at sides, wider (1.28 : 1.00) and distinctly longer than pronotum, ratio of length at shoulders to width at the widest point near middle about 1.23; surface with punctures much coarser than on pronotum, arranged in somewhat irregular rows, especially disarranged by rugosities near suture and becoming a little finer in size laterad. Wings well developed.

Abdomen (Fig. 1a–b) gently dilated toward 7th segment, then rather steeply convergent apicad; apical segment scarcely microsculptured; punctures on tergites coarse, obsolete and becoming finer and sparser apicad; 7th tergite with a white thin seam at apical margin; punctures on sternites somewhat coarser than on each opposite tergite. In male, 4th to 8th sternites depressed along the middle respectively as follows: 4th sternal depression faint, 5th one weak, 6th one moderate; 7th one deep, wide, U-shaped, rather closely punctate in the bottom than on its circumference but narrowly impunctate along the middle, and faintly emarginate in middle of apical margin; 8th one partitioned into two parts by the constriction, the basal part of them wide and almost impunctate, and the apical one relatively narrow, with fine black granules, narrowly smooth medially, and apical margin of 8th sternite widely emarginated in oblong and clearly furnished with a small process at the middle of emargination. Profemora very robust and protarsi usually dilated.

Aedeagus (Figs. 1c–d) moderately sclerotized except dorsal side; ventral projection heavily sclerotized, in ventral view, lancet-shaped, widest in middle, thence gradually but not evenly narrowly apically, pointed at the tip, and in lateral view, it complicatedly bent before the widest point and strongly curved dorsally in apical third, which is rather thin and sharpened apicad.

**F e m a l e.** Unknown.

*Type series.* Holotype: ♂, Mt. Naganoyama, Yamaguchi Pref., 26.V to 3.VI.2018, K. HOSAKA leg. Paratypes: 2 ♂♂, 8 to 14.IV.2018 and 12 to 21.V.2018, same locality and collector as the holotype.

*Distribution.* Japan (Honshu: Yamaguchi Pref.).

*Notes.* Although this new species is closely allied to *Lobrathium daisenense* in having similar appearance (ITO, 2014), it is distinguishable from the latter species by the elytral yellow spots being apparently smaller, the male 8th-sternal emargination being with a distinct process on bottom and the apical tip of aedeagus being sharpened.

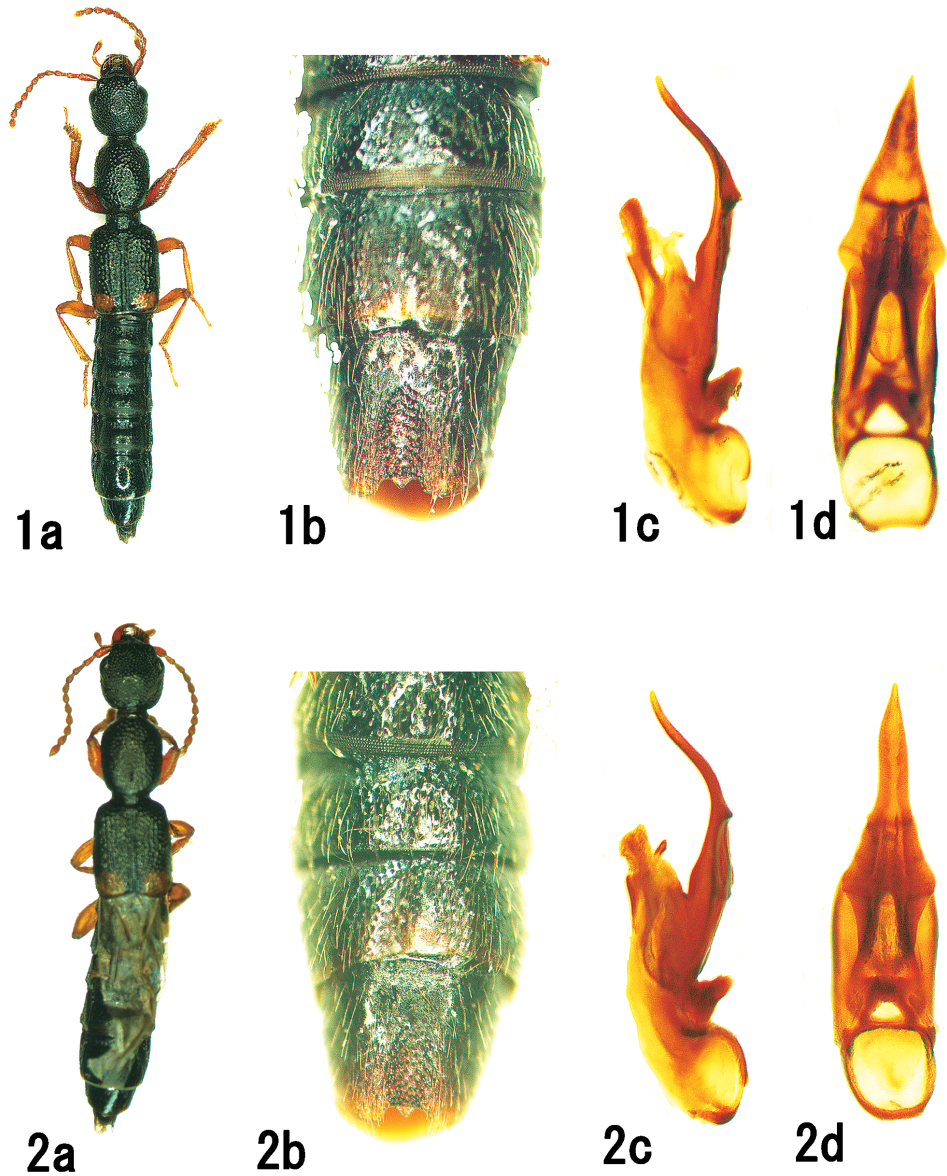
All the specimens of type series were captured by FIT (Flight Interception Trap).

*Etymology.* The specific name of the new species is dedicated to Mr. Ken-ichi HOSAKA who is the collector of the type series.

***Lobrathium imasakai*** T. ITO, sp. nov.

(Figs. 2a–d)

Body moderately sized, subcylindrical, a little shiny, black; elytra each with a small suboval yellow spot in apical fourth, which is not touching to suture, lateral and apical margins; mandibles, basal segments of antennae and femora reddish brown; labrum darkened, maxillary and labial palpi, apical



Figs. 1–2. Habitus and male genitalia of *Lobrathium* spp. — 1, *L. hosakai*, T. Iro, sp. nov.; 2, *L. imasakai* T. Iro, sp. nov. — a, Habitus; b, 7th and 8th sternites in male; c, aedeagus in lateral view; d, ditto in ventral view.

segments of antennae, tibiae and tarsi reddish yellow to brown; pubescence on body dark brownish black to black, and yellowish brown to dark brown on appendices. Length: 6.2–6.5 mm.

Head subquadrate, almost as long as wide, coarsely, closely and deeply punctate, apparently sparsely on frons and impunctate on clypeus; the punctures umbilicate, considerably coarser, sparser on vertex than on postgenae and basal third area where those are seemingly reticulated in arrangement; eyes rather large, the longitudinal diameter longer than a half length of postgena; postgenae

subparallel-sided, more or less narrowed basally and widely rounded at hind angles. Antennae moniliform, robust, slightly incrassate distad, rather long and passing over the middle of pronotum, all segments distinctly longer than wide; 1st segment largest, very robust and more than 1.5 times as long as 2nd and 3rd respectively; each segment of 4th to 6th gradually shortened distad; 7th to 10th subequal in length to each other; 11th conical and distinctly longer than 10th.

Pronotum suboblong (length/width = 1.24), longer (1.23 : 1.00) and slightly narrower (0.97 : 1.00) than head, subparallel-sided, slightly narrowed behind, coarsely, closely and somewhat irregularly punctate in arrangement; the punctures evidently coarser and a little sparser than on head; disc with median line vestigially short, placed only near base, and slightly depressed on each side of it; lateral margins invisible when viewed from above, but thick throughout as well as both apical and basal margins. Scutellum distinctly and rather finely punctate.

Elytra oblong, longer than wide (length/width = 1.28), parallel-sided, wider (1.24 : 1.00) and longer (1.28 : 1.00) than pronotum; surface more coarsely punctate than on pronotum, the punctures arranged in somewhat irregular rows, especially disarranged by rugosities near suture and becoming a little finer laterally; pleural margins fairly thick. Wings well developed.

Abdomen slightly expanded laterad, gently dilated toward 7th segment, then rather rapidly tapering toward the apicalmost segment; 7th tergite provided with a white thin seam at apical margin; apical two or three segments scarcely microsculptured; each of tergites coarsely and obsoletely punctate; the punctures becoming finer and sparser posteriad, those on each sternite coarser than on the opposite tergite. In male, 4th to 8th sternites depressed along the middle respectively as follows: 4th sternal depression faint, 5th one weak, 6th one moderate, 7th one deep, wide, U-shaped, more closely punctate than on the circumference, narrowly impunctate medially with the apical margin faintly bisinuate in middle; 8th one partitioned into two parts by a constriction at the middle, widely and subquadrately excised at apex, the basal part of the depression wide and almost impunctate, the apical one somewhat narrow and deep, with fine black granules except for irregularly smooth median space, and the excision widely oblong in outline and clearly with a small process at middle (Fig. 2b). Profemora very robust and protarsi usually dilated in both sexes.

Aedeagus (Figs. 2c–d) moderately sclerotized except dorsal side with a ventral projection heavily sclerotized, lancet-shaped, widest in middle, thence rather irregularly narrowed apically with four phases, viz., the first phase of basal third of aedeagus, deeply emarginated at side, the second one a little steeply narrowed apicad, the third subparallel-sided, and the fourth linearly tapered toward subacute apex; in lateral view the projection largely curved dorsally in general, and feebly sinuate in apical half.

*Type series.* Holotype: ♂, Mt. Shaka-dake, Fukuoka Pref., 18.V.2017, S. IMASAKA leg. Paratypes: 7 ♂♂, 5 ♀♀, same data as the holotype; 1 ♂, 1 ♀, Mt. Shaka-dake, Fukuoka Pref., 30.V.2017, S. IMASAKA leg.; 1 ♀, ditto, 23.VI.2017, S. IMASAKA leg.

*Other specimen examined excluding type series.* 1 ♂, same data as the holotype.

*Distribution.* Japan (Kyushu: Fukuoka Pref.).

*Notes.* Although the present species has closer relationship with the preceding species than *Lo-brathium kujuense* T. ITO, 2013 in having the similar appearance, the shape of aedeagus and the secondary sexual features, it is distinguishable from *L. hosakai* T. ITO, sp. nov. by the ventral projection of aedeagus being quite different in shape (e. g., the ventral plate much complicatedly narrowed to apex from the widest point and apparently narrower throughout in ventral view), the male 8th sternal apical depression being slightly wider and the elytral yellow spots being a little more transverse in shape etc.

On this paper I would like to delete the distributional record of *L. kujuese* from Mt. Hikosan, Fukuoka Pref. (ITO, 2013).

*Etymology.* The specific name of the new species is dedicated to Mr. Shoichi IMASAKA who is the collector of the type series.

## 要 約

伊藤建夫：日本産ハネカクシ科甲虫（鞘翅目）の覚え書き，23. ツツナガハネカクシ属 (*Lobrathium*) の2新種の記載。———キモンツツナガハネカクシ種群の2新種，*Lobrathium hosakai* T. ITO, sp. nov. と *L. imasakai* T. ITO, sp. nov. を本州と九州から記載命名した。和名にはそれぞれスオウキモンツツナガハネカクシとシャカキモンツツナガハネカクシを提唱する。

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