

Notes on the Species of Staphylinidae (Coleoptera) from Japan

XXV. The Descriptions of Two New Species of the *Lobrathium* from Honshu and Shikoku

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Abstract Two new species of the genus *Lobrathium* are described from Japan: *L. nikkoense* T. ITO, sp. nov. (Honshu) and *L. takumii* T. ITO, sp. nov. (Shikoku).

Introduction

More than thirty species of the genus *Lobrathium* are known from Japan (SCHÜLKE & SMETANA, 2015; ITO, 2019) up to present. During my study on the Japanese *Lobrathium* species, presence of numerous undescribed species has been revealed. Recently I had an opportunity of examining two undescribed species of the genus from Japan. In present paper I am going to describe these species from Honshu and Shikoku, respectively.

Material and Methods

External morphology and aedeagus were examined using a Nikon SMZ 1000 stereoscopic microscope. Pictures were taken using a Nikon OS-Fi1 digital camera. The aedeagus was mounted in Euparal (Chroma-Gesellschaft) on a slide glass card pinned under the insect body from which the part was removed.

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

Taxonomy

Lobrathium nikkoense sp. nov.

(Figs. 1–4)

Body subcylindrical, weakly shiny, black; elytra each with a small subcircular yellow spot about in apical forth, the apical spot not extending to suture and to 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 except for elytral spots yellowish, and yellowish brown to dark brown on appendices. Length: 5.8–6.5 mm.

Male. Head subquadrate, almost as long as wide, coarsely, closely and deeply punctate except that frons is apparently sparsely so and clypeus is impunctate; punctures umbilicate, apparently coarser and sparser on vertex than on postgenae and basal third area, which are seemingly reticulately punctate; eyes rather large, the longitudinal diameter longer than half length of postgena; postgenae

subparallel-sided, more or less narrowed basally and widely rounded at posterior angles; ventral surface with coarse and rather sparse punctures which become sparser laterad. Antennae moniliform, robust, slightly incrassate distad, and passing over middle of pronotum, all segments longer than wide; 1st segment largest, very robust and more than 1.5 times as long as 2nd which is a little shorter than 3rd; 4th to 6th each gradually shortened distad; 7th to 10th subequal in length; 11th conical and distinctly longer than 10th.

Pronotum suboblong (length/width = 1.27), longer (pronotum length/head length = 1.18) and narrower (pronotum width/head width = 0.94) than head, subparallel-sided; lateral margins invisible in dorsal view; both apical and basal margins thick; disc coarsely, closely and somewhat irregularly punctate; punctures evidently coarser and a little sparser than on head, with a vestigial median line short, placed only near base, slightly depressed on each side of it. Scutellum distinctly and rather finely punctate.

Elytra longitudinally oblong (length/width = 1.23), subparallel-sided, widest near middle, wider (elytra width/pronotum width = 1.33) and longer (elytra length/pronotum length = 1.32) than pronotum; punctures much coarser than on pronotum, arranged in somewhat irregular rows, especially rugosely so near suture, becoming a little finer laterad; pleural keels absent at base. Hind wings developed.

Abdomen (Figs. 1 & 2) gently dilated toward 7th segment, then rather steeply convergent apicad; all segments scarcely microsculptured; tergites basally with punctures coarse, obsolete and becoming finer and sparser posteriad; 7th tergite provided with a white thin seam along apical margin; punctures on each sternite coarser than on the opposite tergite; 4th to 5th sternites very weakly or scarcely depressed medially; 6th sternite moderately depressed medially; 7th sternite deeply, widely depressed in somewhat circle-shape, faintly emarginate in middle of apical margin, the depression with finer and sparser punctures in the bottom than on outsides; 8th sternite widely and oblongly excised on apical margin, and rather widely and deeply depressed medially, the depression narrow and almost impunctate in basal part, and somewhat wide and long oval in apical part, with fine black granules except a narrow apico-marginal smooth area. Profemora very robust and protarsi usually dilated.

Aedeagus (Figs. 3 & 4) moderately sclerotized except dorsal side, with a ventral projection heavily sclerotized, lanceolate in shape, widest in front of middle, thence rather rapidly narrowed to subparallel-sided area and then gradually narrowed to apex, while complicatedly bent dorsally in lateral view; apical part well thickened, shoe-like and strongly projecting backward (Fig. 3). Internal sac with slightly sclerotized structure.

F e m a l e. Similar in facies to male, but differing from it by all abdominal sternites without any median depressions, 7th sternite simple in middle of apical margin, and 8th sternite gradually narrowed towards slightly rounded apex and with no specialized modification.

Type series. Holotype: ♂, Oku-nikkô, Yumoto, Tochigi Pref., 13.IX.2008, K. MASUMOTO leg. Paratypes: 2 ♂♂ (slightly teneral), 3 ♀♀, same data as the holotype.

Distribution. Japan (Honshu: Tochigi Pref.).

Notes. The present new species belongs to the *L. cribricelle* species-group which is diagnosed by a combination of the following characteristics: body subcylindrical; 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 eleven species: 1) *Lobrathium cribricelle* SHARP, 1889, 2) *L. ishizuchiense* T. ITO, 1996, 3) *L. sasajii* T. ITO, 2007, 4) *L. isamutanakai* T. ITO, 2009, 5) *L. kjuense* T. ITO, 2013, 6) *L. daisenense* T. ITO, 2014, 7) *L. ontakense* T. ITO, 2014, 8) *L. hosokawai* T. ITO, 2015, 9) *L. hosakai* T. ITO, 2018, 10) *L. imasakai* T. ITO, 2018, and 11) *L. nikkoense* T. ITO, sp. nov.



Figs. 1–8. Habitus and male genitalia of *Lobrathium* spp. — 1–4, *L. nikkoense* sp. nov.; 5–8, *L. takumii* sp. nov.
 — 1 & 5, Dorsal habitus; 2 & 6, 7th and 8th sternites in male; 3 & 7, aedeagus in lateral view; 4 & 8, ditto in ventral view.

Although this new species is most closely allied to *Lobrathium hosokawai* T. ITO (ITO, 2015), it is distinguishable from the latter by the aedeagus in different shape, with a ventral projection more strongly bent dorsad especially in apical part which is more thickened, shoe-like, and more strongly projecting backward in lateral view.

In this paper I would like to delete the distributional record of *L. cribricolle* from Marunuma-Kôgen, Gumma Pref. (ITO, 1996 a), because the record was based only on a single female specimen but the discovery of *L. nikkoense* from its adjacent locality arose a question on the species

identification. The taxonomic identity of the Marunuma-Kôgen population should be determined in the future by examination of a male specimen.

Etymology. The specific epithet of this new species was given after the type locality (Oku-nikkô).

***Lobrathium takumii* sp. nov.**

(Figs. 5–8)

Body slender, moderately sized, 6.5 mm in length, subcylindrical, black, and moderately shiny; mouth parts, apical third of elytra, 10th abdominal segment and legs reddish brown; mandibles and antennae a little darkened; pubescence on body dark brownish black to black except for elytral marks yellowish, ill-defined, not circular in shape, each touching elytral apices; appendices yellowish brown to dark brown.

M a l e. Head subquadrate, nearly as long as wide, coarsely, closely and deeply punctate; punctures sparse on frons, absent on clypeus, apparently coarser and sparser on vertex than on postgenae and basal third which are reticulately punctate; eyes more or less large, the longitudinal diameter longer than half length of postgena in dorsal view; postgenae scarcely expanded laterally and roundedly narrowed toward neck; ventral surface coarsely, rather sparsely and uniformly punctate, with perceptible microsculpture. Antennae slender, long and passing over middle of pronotum; each segment distinctly longer than wide; 1st segment less than twice as long as 2nd which is clearly shorter than 3rd; 4th to 10th subequal in length; 11th conical and distinctly longer than 10th.

Pronotum oblong (length/width = 1.30), longer (pronotum length/head length = 1.20) and narrower (pronotum width/head width = 0.90) than head, feebly narrowed behind; lateral margins invisible in dorsal view; both apical and basal margins thick; disc coarsely, closely and somewhat irregularly punctate; punctures evidently coarser and sparser than on head, with a clear median smooth line throughout. Scutellum distinctly and rather finely punctate.

Elytra longitudinally oblong (length/width = 1.16), widest near middle, wider (elytra width/pronotum width = 1.17) and longer (elytra length/pronotum length = 1.08) than pronotum; surface with punctures much coarser than on pronotum, arranged in somewhat irregular rows, especially rugosely so near suture, becoming a little smaller laterad; pleural margin fairly thick, and pleural keels absent at base. Hind wings developed.

Abdomen (Figs. 5 & 6) slightly expanded laterad, gently dilated toward 7th segment, then rather steeply convergent apicad; tergites scarcely microsculptured and with extremely fine and obsolete punctures; 7th tergite provided with a white thin seam along apical margin; punctures on each sternite coarser than those on the opposite tergite; 6th sternite hardly or not perceptibly depressed medially; 7th feebly emarginate in middle, slightly depressed medially in U-shape, the depression with a narrow impunctate median space before apical margin; 8th sternite deeply and more or less elliptically excised on apical margin, and deeply, triangularly depressed medially from base to apex, with fine black granules except for both median narrow space and apico-marginal rather wide impunctate space; apical angles of apical excision of 8th sternite slightly produced. Profemora very robust and protarsi usually dilated.

Aedeagus (Figs. 7 & 8) elongate, symmetrical and bi-emarginate on sides in ventral view, rather strongly sclerotized except dorsal side, simply bent dorsally in lateral view, with a ventral projection widest behind middle, thence slightly constricted apically; apical part forming a rather short-lanceolate shape, round at tip. Internal sac scarcely with sclerotized structure.

F e m a l e. Unknown.

Type series. Holotype: ♂, Tsuno-chô, Takaoka-gun, Kôchi Pref., 22.VII.2001, T. SAITO leg.

Distribution. Japan (Shikoku: Kôchi Pref.).

Notes. Although the present species is seemingly allied to *Lobrathium ishidae* T. ITO, 1996 (ITO, 1996 b) in having the similar shape of aedeagus, it is easily differentiated from the latter by the apparently deeper excision and depression of male 8th sternite and the lanceolate aedeagal projection that is more simply curved dorsally. The examined specimen was captured together with a trechine beetles living in a mountain range.

Etymology. The specific name was dedicated to Mr. Takumi SAITO who is the collector of the holotype.

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要 約

伊藤建夫：日本産ハネカクシ科甲虫の覚え書き，25. ツツナガハネカクシ属の2新種の記載。——
日本産ツツナガハネカクシ属 *Lobrathium* に2新種を認め，それぞれ *L. nikkoense* sp. nov. (本州)と *L. takumii* sp. nov. (四国)として命名記載した。各新種の和名にはニッコウツツナガハネカクシとトサツツナガハネカクシを提唱した。

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