

Notes on the Species of Staphylinidae from Japan

XVII. Description of Two Additional Species of *Lobrathium*

MULSANT et REY (Coleoptera) from Honshu

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Abstract Two additional species belonging to the *Lobrathium cribricolle* group are described under the names of *L. daisenense* sp. nov. and *L. ontakense* sp. nov. from Honshu. A distributional map of the seven related species is illustrated.

Right after I described the fifth species allied to *Lobrathium cribricolle* from Kyushu (ITO, 2013), I had a chance to examine two additional species from Honshu through the courtesy of several colleagues. In this paper I add these two species which are more closely allied to *L. cribricolle* (SHARP) described from Japan and give a distribution map of seven species (Fig. 5): *L. cribricolle* (SHARP), *L. ontakense* sp. nov., *L. isamutanakai* T. ITO, *L. sasajii* T. ITO, *L. daisenense* sp. nov., *L. ishizuchiense* T. ITO and *L. kujuese* T. ITO which belong to the species group of *L. cribricolle*. Besides, I provide with a key to the species group.

Before going further, I would like to express my cordial thanks to all the colleagues whose names are printed in the sections of type series, especially Messres. Osamu YAMAJI (Okayama City) and Kentaro TOYOSHIMA (Gifu City) for their kindly offering me the valuable materials used in the present study.

Lobrathium daisenense T. ITO, sp. nov.

(Figs. 1, 2, 5)

Body moderated sized, subcylindrical, a little shiny, black; elytra each with a relatively large yellow spot in subapical areas; 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, yellowish brown to dark brown in appendices.

Length: 5.5–6.0 mm.

Head subquadrate, almost as long as wide, coarsely, closely and deeply punctate except that frons is apparently sparsely so and clypeus is impunctate, the punctures umbilicate, considerably coarser and scarcely sparser on vertex than on postgenae and basal third area where those are seemingly reticulated in arrangement; eyes moderate-sized, the longitudinal diameter shorter than a half length of postgena; postgenae subparallel-sided, more or less narrowed basally and widely angulate toward neck; antennae moniliform, robust, slightly incrassate distad, rather long and passing over the middle of pronotum, all segments distinctly longer than wide, 1st segment the largest, very robust but less than twice as long as 2nd which is a little shorter than 3rd, each segment of 4th to 6th gradually shortened distad, 7th to 10th subequal in length to each other, 11th conical and distinctly longer than



Fig. 1. *Lobrathium daisenense* sp. nov., habitus.

10th. Ventral surface of head coarsely and rather sparsely punctate, the punctures also umbilicate and becoming sparser laterad; mentum clearly depressed on both sides, submentum coarsened, gular plate smooth, gular sutures fairly separated and subparallel to each other.

Pronotum ovate (length/width = 1.23), longer (1.22 : 1) 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 line short, 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.

Elytra longitudinally oblong, subparallel at sides, wider (1.26 : 1) and distinctly longer than pronotum, ratio of length at shoulders to width at the widest point near middle about 1.20; 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; pleural margins fairly thick, pleural keels moderately observable except both extremities; each elytral spot large, clearly transversely oval in shape, located at apico-lateral area of elytron, not touching at both apical and lateral margins, the shorter diameter of spot longer than one-third of sutural length. Wings well developed and functional. Scutellum distinctly and rather finely punctate. Prosternum wholly coarsened, mesosternum also uneven and metasternum finely and sparsely punctate.

Abdomen slightly expanded laterad, increasing in width gently toward 7th segment, then decreasing in width rather rapidly toward the apicalmost segment; apical segments scarcely microsculp-

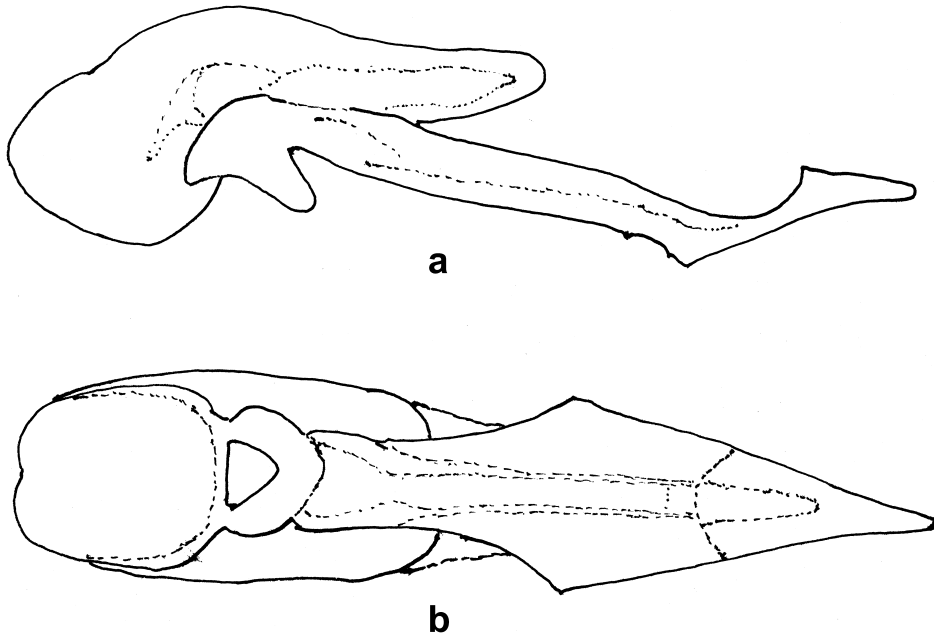


Fig. 2. *Lobrathium daisenense* sp. nov. — a, Aedeagus in lateral view; b, ditto in ventral view.

tured; each base of tergites with punctures coarse, obsolete and 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 scarcely or not observable, 5th-sternal depression weak, 6th-sternal depression moderate, 7th-sternal depression deep, wide, U-shaped and with closer punctures than on outsides except a narrow impunctate space along the middle, apical margin of 7th sternite faintly emarginate in middle, 8th-sternal depression distinctly deep, U-shaped, with fine black granules except a rather wide impunctate space along the middle and reaching apical marginal excision, the excision widely oblong in outline and without any epimeral processes on its bottom.

Legs with profemora very robust and protarsi usually dilated in both sexes.

Aedeagus moderately sclerotized except dorsal side, with a ventral projection heavily sclerotized, lanceolate in shape, widest in middle, thence sub-straightly and gradually narrowed apically and rapidly so basally, and then subparallel-sided, not pointed at tip, complicatedly bent before the widest point, and strongly, dorsally curved at apical third, and thickened at apex; apical part shaped like as a shoes, its heel clearly angled (Fig. 2).

Type series. Holotype ♂, Mt. Daisen, Daisen-chô, Tottori Pref., 4-VI-1989, A. WATANABE leg. (coll. to be eventually deposited in the Osaka Natural History Museum). Paratypes: 1 ♂, same locality and datum as holotype; 1 ♀, Slope of Mt. Daisen, Maniwa City, Okayama Pref., 15-V-2011, O. YAMAJI leg.

Distribution. Japan (Honshu: Chugoku District).

Etymology. The specific name of the new species is given after Mt. Daisen which is the type locality of the present species.

Notes. Although this new species is closely allied to *L. cribricolle* SHARP in having the sub-cylindrical body, the pronotum being without a distinct smooth line along the middle, and the elytra being with yellow spots apico-lateral. It is distinguishable from the others of the *L. cribricolle*-species

group by the elytral spots being distinctly larger in size, the ventral projection of aedeagus being quite different in shape, such as the apical part well thickened and the heel of shoe-like swelling clearly angled in lateral view, the curve towards dorsal side wholly different in manner.

Lobrathium ontakense T. ITO, sp. nov.

(Figs. 3–5)

Body subcylindrical, a little shiny, black; elytra each with a small yellow spot in apico-lateral area; 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, yellowish brown to dark brown in appendices.

Length: 5.5–6.0 mm.

Head subquadrate, almost as long as wide, coarsely, closely and deeply punctate except that frons is apparently sparsely so and clypeus is impunctate; the punctures umbilicate, considerably coarser and sparser on vertex than on postgenae; eyes moderately sized, the longitudinal diameter a little shorter than a half length of postgena; postgenae subparallel-sided and widely angulate toward neck; antennae moniliform, robust, slightly incrassate distad, rather long and passing over the middle of pronotum, all segments distinctly longer than wide, 1st segment the largest, very robust but less than twice as long as 2nd which is a little shorter than 3rd, each segment of 4th to 6th shorter than the following one, 7th to 10th subequal in length to each other, 11th conical and distinctly longer than 10th.

Pronotum rather longitudinally ovate, clearly longer and scarcely narrower (0.98 : 1) than head, subparallel-sided, coarsely, closely and somewhat irregularly punctate in arrangement; the punctures apparently coarser and a little sparser than on head; vestigial median line short, placed only near base, scarcely depressed on each side; lateral margins invisible when viewed from above, but thick throughout as well as both apical and basal margins.

Elytra longitudinally oblong, subparallel at sides, widest at apical third, wider (1.27 : 1) and longer (1.28 : 1) than pronotum, ratio of length at shoulders to width at the widest point about 1.20; 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; pleural margins fairly thick, pleural keels clearly observable except both extremities; each elytral spot rather small, a little transversely oval in shape, located at apico-lateral area of elytron, evidently not touching at both apical and lateral margins, the shorter diameter of spot about one-sixth as long as humeral length. Wings well developed and functional. Scutellum distinctly and rather finely punctate. Prosternum wholly coarsened, mesosternum also uneven and metasternum finely and sparsely punctate.

Abdomen slightly expanded laterad, increasing in width gently toward 7th segment, then decreasing in width rather rapidly toward the apicalmost segment; all segments scarcely microsculptured; each base of tergites with punctures coarse, obsolete and 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 very feeble, 5th-sternal depression weak, 6th-sternal depression moderate, 7th-sternal depression deep, wide, U-shaped and with closer punctures than on outsides except a narrow, triangular and impunctate space along the middle, 8th-sternal depression wide and parallel at sides, divided on the base and a part apical, in which the basal part is wide and almost impunctate, the apical one bears fine black peg-like spines except for median space very narrow and smooth, the excision widely oblong in outline and with a very small epimeral process discernible in middle (Fig. 3).



Fig. 3. Seventh and 8th sternites of *Lobrathium ontakense* sp. nov. in male.

Legs with profemora very robust and protarsi usually dilated in both sexes.

Aedeagus moderately sclerotized except dorsal side, with a ventral projection heavily sclerotized, lanceolate in shape, constricted at basal fourth, widest at apical three-sevenths, dorsally bent at the widest point, from which somewhat curvilinearly narrowed apically in width and linearly, extremely so near apex, not pointed at the tip, when viewed from lateral sides slender and scarcely thickened at apex (Fig. 4).

Type series. Holotype ♂, Mt. Ontake, Okuhida, Gifu Pref., 11–VII–2009, K. TOYOSHIMA leg. (coll. to be eventually deposited in the Osaka Natural History Museum). Paratypes: 1 ♀, Mt. Ontake, Takane, Hiwada, Gifu Pref., 18–VII–2010; 1 ♀, Mt. Ontake, Hiwada-kogen, Gifu Pref., 11 to 12–VII–2009, T. ITO leg.; 1 ♀, Mt. Ontake, Hakkaizan, Ohtaki vill., Nagano Pref., 22–VII–2006, K. HOSOKAWA leg.

Distribution. Japan (Honshu: Tokai District).

Etymology. The specific name of the new species is given after Mt. Ontake which is the type locality of the present species.

Notes. This species has closer relationship with *Lobrathium isamutanakai* T. ITO than to *L. cribricolle* (SHARP). It is distinguishable from *L. isamutanakai* by the elytral spot being larger in size, the male 8th excision being with a discernible epimeron, the ventral projection of aedeagus being quite different in shape, such as the lateral sides extremely narrowed at apical part, the apex being less thickened on tip in lateral view.

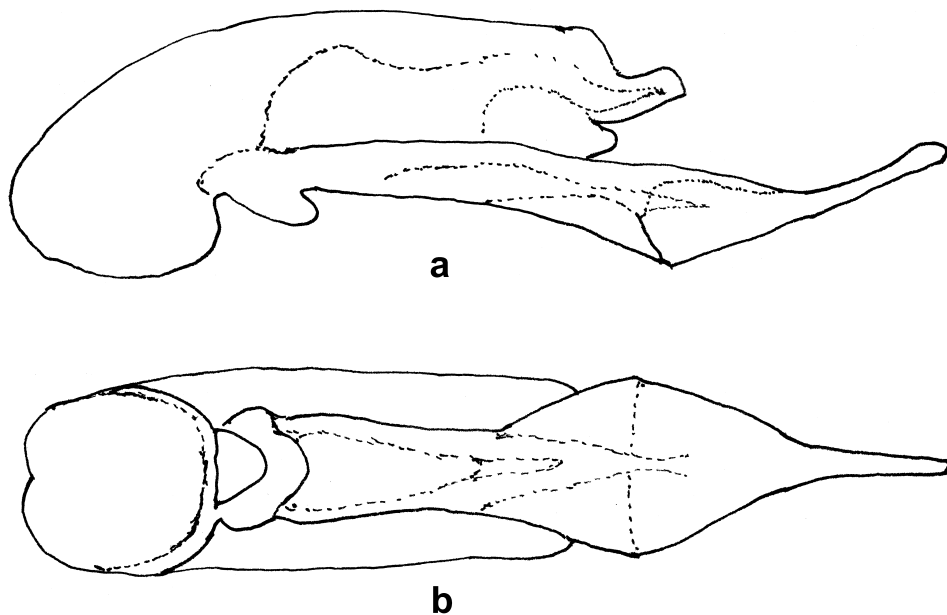


Fig. 4. *Lobrathium ontakense* sp. nov. — a, Aedeagus in lateral view; b, ditto in ventral view.



Fig. 5. Map showing the distribution of the species group of *Lobrathium cribricolle* (SHARP, 1889). — ○, *L. cribricolle*; □, *L. isamutanakai*; ▽, *L. sasajii*; △, *L. ishizuchiense*; ▲, *L. kijuense*; ●, *L. daisenense*; ■, *L. ontakense*.

Key to Species of the Species Group of *Lobrathium cribricolle* (SHARP)

1. Elytral yellow spot large, longitudinal diameter longer than one-third of sutural length *L. daisenense* sp. nov.
- Elytral yellow spot small, longitudinal diameter shorter than one-fourth of sutural length 2
2. Male 8th sternite oblongly excised 3
- Male 8th sternite triangularly excised *L. sasajii* T. ITO
3. Excision of male 8th sternite with a distinct epimeron 4
- Excision of male 8th sternite without any distinct epimeron 5
4. Aedeagus with ventral plate uniformly narrowed apically *L. ishizuchiense* T. ITO
- Aedeagus with ventral plate narrowed apically step by step *L. kujunense* T. ITO
5. Aedeagus with ventral plate distinctly thickened at apex when viewed laterally *L. cribricolle* SHARP
- Aedeagus with ventral plate slightly or scarcely thickened at apex when viewed laterally 6
6. Aedeagus with ventral plate rather uniformly narrowed apically *L. isamutanakai* T. ITO
- Aedeagus with ventral plate extremely narrowed at apical part *L. ontakense* sp. nov.

要 約

伊藤建夫：日本産ハネカクシ科甲虫の覚え書き，17. ツツナガハネカクシ属 (*Lobrathium*) のキモンツツナガハネカクシ近似の2新種。—— *Lobrathium daisenense* sp. nov. と *L. ontakense* sp. nov. を記載命名した。和名にはそれぞれ、ダイセンツツナガハネカクシおよびオンタケツツナガハネカクシを提唱する。

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