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

XXIV. The Descriptions of Two New Species of the Lobrathium yoshidai Species-Group

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**Abstract** Two new species of the *Lobrathium yoshidai* species-group are described from Japan: *L. hagai* T. Ito, sp. nov. and *L. kaiense* T. Ito, sp. nov.

#### Introduction

More than thirty species of the genus *Lobrathium* have been known from Japan (SCHÜLKE & SMETANA, 2015; ITO, 2015, 2017, 2018 a, b) up to present, of which six species belongs to the *Lobrathium yoshidai* species-group (ITO, 2017, 2018 a). As a result of careful examination of many *Lobrathium* specimens from Japan in my cabinet, I have found two additional unknown species of the *L. yoshidai* species-group. In this paper I am going to describe these two new species. All the holotype designated in the present paper are deposited in the collection of the Osaka Museum of Natural History, Osaka.

#### The Lobrathium yoshidai Species-Group

This species-group is supplementally diagnosed by a combination of the following characteristics: body depressed above; pronotum with an impunctate smooth median line; each elytron with a reddish, large brown macula in apical portion; male 8th sternite widely emarginate on apical margin, with a lump of several tubercles just in the middle of the margin; aedeagus symmetrical, bearing an elongate, lanceolate projection on ventral surface. So far *Lobrathium yoshidai*, *L. niisatoi*, *L. shikokense*, *L. tateyamense*, *L. hiroshimense*, *L. yasuii* and the two new species described in the present paper are included in this species-group.

# Lobrathium hagai sp. nov.

(Fig. 1 a-d)

Body slender, relatively large and robust among Japanese species, 7.5–8.0 mm in length, slightly flattened above, dark brown and moderately shiny; mouth parts, apical three-sevenths of elytra, anal end and legs reddish brown, mandibles and antennae a little darkened; pubescence on body dark brownish black to black except for elytral band reddish, and yellowish brown to dark brown on appendices.

M a l e. Head subquadrate, slightly longer than wide (length : width = 1.07 : 1.00), coarsely, closely and deeply punctate except that from is apparently sparsely so and clypeus is impunctate, with discernible microsculpture on the basal area; the punctures umbilicate, apparently coarser and sparser on vertex than on postgenae and basal third area, which are seemingly reticulately punctate; eyes moderately sized, the longitudinal diameter considerably shorter than half length of postgena; postge-

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nae subparallel-sided, slightly narrowed basally and widely rounded at posterior angles. Antennae somewhat slender, rather long and passing over the base of pronotum, and each segment longer than wide; 1st segment less than twice as long as 2nd, which is clearly shorter than 3rd; 4th to 6th subequal in length to each other; 7th to 10th each hardly shortened distally; 11th conical and distinctly longer than 10th. Ventral surface of head coarsely, rather sparsely and uniformly punctate, wholly with similar microsculpture to that on basal area of dorsal surface.

Pronotum suboblong (length/width = 1.27), longer (pronotum length : head length = 1.18 : 1.00) and narrower (pronotum width : head width = 0.94 : 1.00) 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 = 1.21), subparallel-sided, widest near middle, wider (elytra width : pronotum width =1.28 : 1.00) and longer (elytra length : pronotum length = 1.23 : 1.00) than pronotum; punctures much coarser than on pronotum, arranged in somewhat irregular rows, especially rugosely near suture, becoming a little finer laterad and pleural keels absent at the base. Wings developed.

Abdomen (Fig. 1 a & b) gently dilated toward 7th segment, then rather steeply convergent apicad; each tergite scarcely microsculptured, with extremely fine and obsolete punctures; 7th tergite provided with a white thin seam along apical margin; punctures on each sternite coarser than on the opposite tergite; 5th to 6th sternites each very weakly depressed medially; 7th weakly and widely depressed in U-shape, faintly emarginate in middle of apical margin, and the depression with finer and sparser punctures in the bottom than on outsides; 8th sternite widely and roundly excised on apical margin and widely depressed medially, the depression suboval and almost impunctate in basal part, and somewhat deeply and widely triangular in apical part, with fine black granules except a narrow apico-marginal smooth area.

Profemora very robust and protarsi usually dilated.

Aedeagus (Fig. 1 c & d) elongate, symmetrical and bi-emarginate on sides in ventral view, rather strongly sclerotized except dorsal side, considerably sinuate in lateral view, with a rather elongate lanceolate projection on ventral side, the projection sinuate in lateral view, widest at basal third, thence gradually narrowed apicad in emarginate line on sides and rather sharpened at the tip which is not pointed in ventral view. Internal sac with distinctly sclerotized structure.

F e m a l e. Unknown.

*Type series*. Holotype: ♂, Kami-shihoro, Katô-gun, Hokkaido, 28.VII.2009, K. HAGA leg. Para-types: 2 ♂♂, same data as the holotype.

Distribution. Japan (Hokkaido).

*Notes.* Although this new species is closely allied to *Lobrathium yoshidai* (ADACHI, 1955) in having similar appearance of the aedeagus (Y. WATANABE & K. BABA, 1973), it is distinguishable from the latter by the robuster body, the elytral red band being considerably larger, and the robuster aedeagus, with a projection more strongly sinuate and more sharpened at the tip.

*Etymology.* The specific name of the new species is dedicated to Mr. Kaoru HAGA who is the collector of the holotype.

### Lobrathium kaiense sp. nov.

(Fig. 2 a-d)

Body slender, moderately sized, 7.2–7.8 mm in length, subflattened above, dark brown and mod-



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

erately shiny; mouth parts, apical two-fifths of elytra, anal end and legs reddish brown, mandibles and antennae a little darkened; pubescence on body dark brownish black to black except for elytral band yellowish, and yellowish brown to dark brown on appendices.

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M a l e. Head subquadrate, nearly as long as wide, coarsely, closely and deeply punctate; the punctures sparse on frons, absent on clypeus, apparently coarser and sparser on vertex than on postgenae and basal third area, which are reticulately punctate; eyes more or less large, the longitudinal diameter scarcely shorter than half length of postgena in dorsal view; postgenae scarsely expanded laterally and roundedly narrowed toward neck. Antennae very slender, clearly long and passing over the base 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 sub-equal in length to each other; 11th conical and distinctly longer than 10th. Ventral surface of head coarsely, rather sparsely and uniformly punctate, with perceptible microsculpture.

Pronotum oblong (length/width = 1.30), longer (pronotum length : head length = 1.16 : 1.00) and narrower (pronotum width : head width = 0.89 : 1.00) 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 = 1.20), widest near middle, wider (elytra width : pronotum width = 1.18 : 1.00) and longer (elytra length : pronotum length = 1.08 : 1.00) 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, pleural keels absent at base. Wings developed.

Abdomen (Fig. 2 a & b) slightly expanded laterad, gently dilated toward 7th segment, then rather steeply convergent apicad; each tergite 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; 5th to 6th sternites very weakly depressed medially; 7th feebly emarginate in middle, widely depressed in U-shape and the depression with finer and sparser punctures in the bottom than on outsides; 8th sternite widely and trapezoidally excised on apical margin, widely depressed before the excision, the depression triangular, almost impunctate in basal portion, somewhat deeper, with fine black granules on the apical marginal area.

Profemora very robust and protarsi usually dilated.

Aedeagus (Fig. 2 c & d) elongate, almost symmetrical, moderately sclerotized except dorsal side, rather simply bent ventrally behind the widest point, then rather strongly curved dorsally, with a ventral projection widest behind the middle, thence slightly constricted apically, apical part behind the constriction forming a rather short-lanceolate lobe, with rounded tip; projection/median lobe = 1.31. Internal sac without sclerotized structure.

Female. Unknown.

*Type series*. Holotype: 3, Maruno-cho, Yamanashi Pref., 19.VI.1992, K. HOSODA leg. Paratype: 13, 20.VI.1996, same locality and collector as the holotype.

Distribution. Japan (Yamanashi Pref.).

*Notes.* Although the present species is seemingly allied to *Lobrathium yasuii* T. ITO, 2018 in having the similar shape of aedeagus, it is easily differentiated from the latter mainly by the following different points of aedeagus: the lanceolate projection is more simply bent ventrally and relatively shorter (projection/median lobe = 1.31 in *L. kaiense* while 1.42 in *L. yasuii*).

*Etymology.* The specific name of the new species is derived from Kai which is the classical name of the type locality, Yamanashi Prefecture.

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## 要 約

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