

## A New *Omineus* (Coleoptera, Mycteridae, Euryptinae) from Honshu, Japan

Daniel K. YOUNG<sup>1)</sup> and Masahiro SAITÔ<sup>2)</sup>

<sup>1)</sup>Department of Entomology, 445 Russell Laboratories, University of Wisconsin,  
Madison, Wisconsin 53706–1598 US  
young@entomology.wisc.edu

<sup>2)</sup>4–3–23–115 Mikuni-higashi, Mikuni-chô, Sakai-shi, Fukui Pref., 913–0016 Japan  
heteromerasaito@fork.ocn.ne.jp

**Abstract** *Omineus toyoshimai* sp. nov. is described from Honshu, Japan. This new species is anatomically very similar to *Omineus humeralis* LEWIS, 1895, but differs from the latter primarily by the shape of the antennal club, elytral surface sculpturing, and larger, gibbose male sex patch on the second abdominal ventrite.

*Omineus* (Coleoptera, Mycteridae) was established by LEWIS (1895) for his *O. humeralis* from Nara Prefecture, Japan, on “Mount Omine”. Since then, three Southeast Asian species have been added to *Omineus*: *O. bicolor* (PIC, 1930) from Hoa Binh, Vietnam (as *Pseudothisias* PIC; POLLOCK, 2005), *O. caeruleus* (CHAMPION, 1916) from Perak, Malaysia (as *Phalysius* CHAMPION; POLLOCK, 2005), and *O. incanus* CHAMPION (1921) from Singapore. Recently we had an opportunity to examine *Omineus* specimens collected from Gifu Prefecture, Honshu, Japan. After our careful examination of those specimens, we concluded that they represent a species new to science.

The holotype designated in this study is deposited in the National Museum of Nature and Science, Tsukuba (NMNS). The paratopotype is deposited in the private collection of K. TOYOSHIMA (KTC).

Abbreviations used herein are as follows: L — body length (length from apical margin of clypeus to elytral apices); W — body width (across elytral humeri); FW — width across frons (distance between eyes); ED — eye diameter; PL — pronotal length; PW — maximum width of pronotum; HW — head width; EL — elytral length; EW — maximum width of elytra; MtiL — metathoracic tibial length; Mta1stL — length of 1st metathoracic tarsomere; AL — length of aedeagus; AW — width of aedeagus.

For the most part, anatomical terms are used as standard for describing the anatomy of Coleoptera. The term sex patch (sensu POLLOCK, 2010; POLLOCK & MAJKA, 2012) is used to describe the sexually dimorphic complex associated with the abdominal venter in most euryptine Mycteridae.

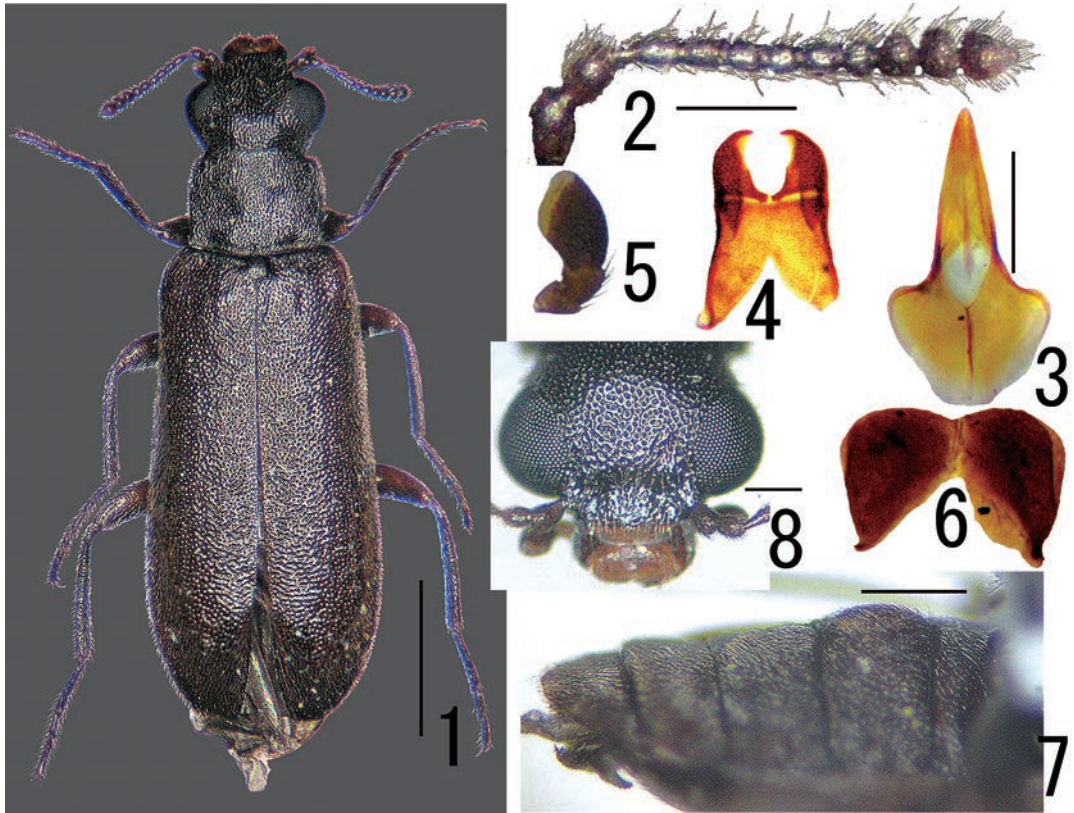
***Omineus toyoshimai*** YOUNG et M. SAITÔ, sp. nov.

[Japanese name: Momi-kataaka-jôkaimodoki]

(Figs. 1–8)

**Male.** Body elongate, L/W 2.93 (holotype, Fig. 1), parallel-sided, moderately convex dorsally, covered with short, fine, dense white pubescence. Color largely blackish brown; mouthparts yellowish brown; elytra each with an obscure reddish-brown humeral macula; dorsum nitid.

Head somewhat hexagonal in dorsal view, densely and coarsely punctate; vertex very weakly convex; frons (Fig. 8) flat, FW/ED 1.69 (holotype); clypeus flat, coarsely punctate, anterior margin

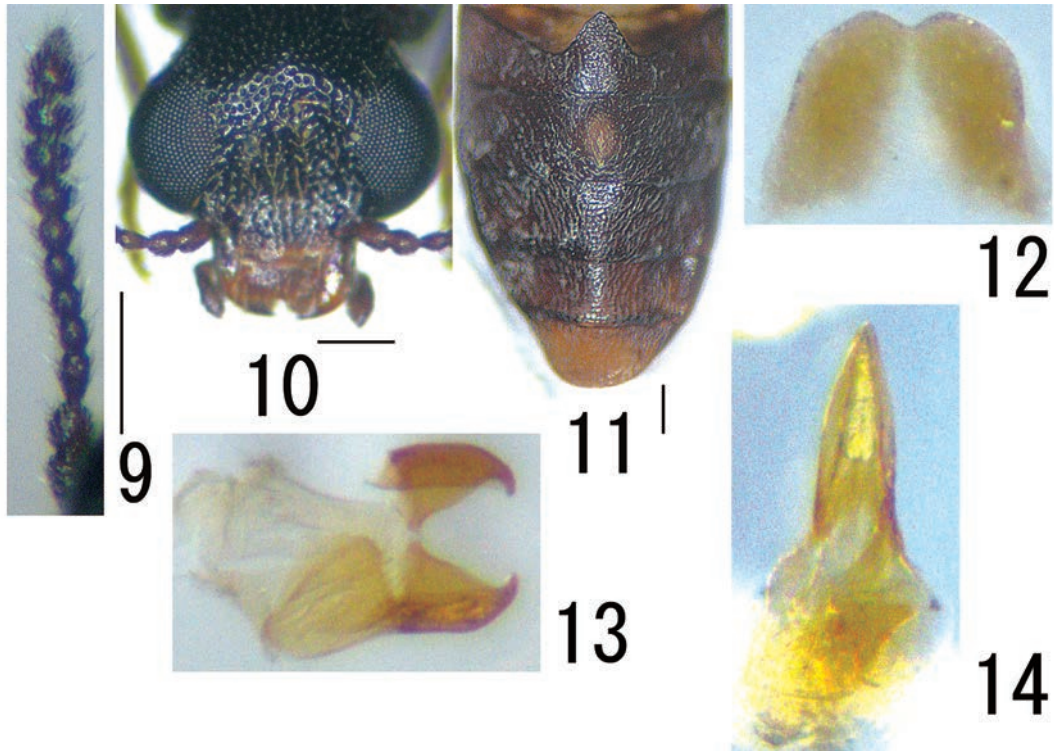


Figs. 1–8. *Omineus toyoshimai* sp. nov. — 1, Habitus, holotype, dorsal view; 2, antenna; 3, median lobe; 4, tegmen; 5, maxillary palpus; 6, pygidium; 7, abdomen, lateral view; 8, head, dorso-frontal view. Scales: 1.00 mm for 1; 0.40 mm for 7; 0.20 mm for 2–3 & 8.

straight, fronto-clypeal furrow indistinct, widely and shallowly depressed. Eyes finely faceted, strongly projecting. Terminal maxillary palpomere (Fig. 5) weakly securiform; outer lateral margin arcuate, longer than inner lateral margin; apical margin truncate, slightly longer than interior margin. Antennae (Fig. 2) short, extending beyond the anterior angles of pronotum; antennomeres I–II robust, III–VI filiform, VII submoniliform, VIII–X scaphiform, forming a weak club; terminal antennomere subquadrate with apex spindle-shaped. Relative lengths of each antennomere from base to apex (holotype): 1.22, 1.00, 1.00, 0.56, 0.56, 0.44, 0.44, 0.44, 0.56, 0.67, 1.00; ratio of width to the length of each antennomere from base to apex (holotype): 0.73, 0.89, 0.56, 0.80, 0.80, 1.00, 1.25, 1.50, 1.60, 1.50, 0.94.

Pronotum rectangular, PW/PL 1.29 (holotype), PW/HW 0.95 (holotype), PW/W 0.59 (holotype), weakly convex, widest at middle; lateral margins weakly sinuate; anterior margin very weakly sinuate; anterior angles obtuse; basal angles nearly 90°; basal margin weakly and widely sinuate; disc densely and coarsely punctate, with a pair of very shallow depressions at middle and with a pair of small and deep foveae which are connected by shallow groove along the basal margin. Scutellum longer than wide, weakly convex, feebly acuminate apically, shallowly and coarsely punctate.

Elytra elongate with lateral margins subparallel, EL/EW 2.18 (holotype), weakly convex, flat at central area along the suture; humeri and apices broadly rounded; disc densely, coarsely punctate with



Figs. 9–14. *Omineus humeralis* LEWIS from Honshu, Japan — 9, Antenna; 10, head, dorso-frontal view; 11, abdomen, ventral view; 12, pygidium; 13, tegmen; 14, median lobe. Scales: 0.20 mm.

some rugosities, the punctures larger than those of head and pronotum.

Ventral surface covered with short, fine, dense white pubescence, shallowly but densely, coarsely punctate. Abdominal ventrite II with sex patch prominent, brownish, setose, mesal gibbose (Fig. 7), with length much greater than half the mesal length of ventrite II. Pygidium (Fig. 6) broadly rectangular, apical margin weakly and widely emarginate mesally.

Legs slender and rather short.  $MtiL/EL$  0.27 (holotype) and  $MtiL/EW$  0.58 (holotype);  $MtaL/Mti1stL$  2.20 (holotype); relative lengths of each metathoracic tarsomere from base to apex (holotype): 1.00, 0.37, 0.13, 0.59.

Aedeagus: Median lobe (Fig. 3) stout, basolaterally produced, explanate, apically hastate; tegmen (Fig. 4) with basal piece relatively short, stout, deeply, acutely emarginate basally, sides very slightly tapering and sinuate distally; parameres approximate basally, becoming widely separated apically, each acuminate and strongly incurvate distally.

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

**Measurement** (in mm, ♂). L: 4.25 (holotype), 4.90 (paratopotype); W: 1.45 (holotype), 1.69 (paratopotype).

**Distribution.** Japan: Honshu (Gifu Prefecture).

**Type series.** Holotype (Figs. 1–8): ♂ (NMNS), Ishiki, Shirakawa-chô, Gifu Pref., 14.V.1997, T. TOYOSHIMA leg. Paratopotype: 1 ♂ (KTC), same data as the holotype.

**Notes.** Males of *Omineus toyoshimai* resemble *O. humeralis* LEWIS (specimens examined data: 1

♂, Mt. Amaishi, Sasayama-shi, Hyogo Pref., 17.V.1980, Y. HAYASHI leg., in the private collection of M. SAITÔ in general appearance, but are distinguished from the latter by the following characteristics: 1) frons (Fig. 8) narrower,  $1.70 \times ED$  ( $1.80 \times$  in *O. humeralis*: Fig. 10); 2) antennomeres III–VI filiform (Fig. 2) (moniliform in *O. humeralis*: Fig. 9); 3) antennal club more distinct, antennomeres VIII–X scaphiform (rectangular in *O. humeralis*); 4) interspaces of elytral punctures less distinct in *O. toyoshimai*, with definitive transverse rugosities (*O. humeralis* without conspicuous rugosities); 5) sex patch of ventrite II prominent, gibbose (Fig. 7), larger than that of *O. humeralis* (Fig. 11), its length much greater than half the mesal length of ventrite II (length of gibbosity in *O. humeralis* about half the mesal length of ventrite II); 6) pygidium (Fig. 6) broadly rectangular, apical margin weakly and widely emarginate mesally (trapezoidal with apical margin narrowly emarginate in *O. humeralis*: Fig. 12); 7) basal piece of tegmen (Fig. 4) slightly longer than that of *O. humeralis* (Fig. 13); and 8) distal hastate extension of penis (Fig. 3) with sides straighter (more arcuate in *O. humeralis*: Fig. 14).

Both of the type specimens emerged from dead branches of *Abies firma* SIEBOLD et ZUCC.

*Etymology.* The specific name is given in honor of Mr. K. TOYOSHIMA who offered the materials.

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We wish to heartily thank Mr. Kentaro TOYOSHIMA (Gifu Pref.) for enabling us to examine the specimens and perform necessary dissections. Our thanks also to Dr. Darren A. POLLOCK (Department of Biology, Eastern New Mexico University) for reviewing the manuscript of this paper.

### 要 約

Daniel K. YOUNG・斎藤昌弘：本州産カタアカジョウカイモドキ属 *Omineus* (鞘翅目ホソキカワムシ科) 1 新種の記載。——本州より採集されたカタアカジョウカイモドキ属の1種をモミカタアカジョウカイモドキ *Omineus toyoshimai* YOUNG et M. SAITÔ, sp. nov. と命名して記載した。本種は触角球桿の形状などで、カタアカジョウカイモドキ *O. humeralis* から識別できる。和名の“モミ”の由来は2頭の標本がモミから羽脱したことによる。

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