

***Camioleum choi*, a new species in the omaliine tribe Anthophagini (Coleoptera: Staphylinidae) from Korea**

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Abstract

Camioleum choi Shin & Ahn, new species (type locality: Mt. Odaesan, Korea) is described, and habitus photo and line illustrations of diagnostic features are provided for its recognition. The differences between *C. loripes* Lewis and *C. choi* are discussed.

Key words: Coleoptera, Staphylinidae, Omaliinae, *Camioleum*, new species, Korea

Introduction

In 2001, S.-J. Park collected two unusual male staphylinids with entire elytra covering up the tip of abdomen from the deciduous forests in high mountain area in Korea. He showed these specimens to C. Shin who worked on taxonomy of Korean Omaliinae for master's degree in 2002–2003. After clearing and dissecting specimens for detailed study on microscope slides, we discovered that these specimens had an unusual aedeagus which made them a new species of *Camioleum* Lewis, 1893. Later, we found two additional female specimens collected in the same locality as the males.

The genus *Camioleum* was first described by Lewis (1893) based on *C. loripes* Lewis, 1893 from Japan. However, the systematic position of the genus had been questioned until Hammond (1971) placed it in the subfamily Omaliinae based on the presence of a pair of ocelli on the vertex and the median basal projection of the abdominal sternite VIII. Later, Smetana (1985) discussed its phylogenetic relationship within Omaliinae, and presented the sexual characters and the characters on the abdomen VIII. An additional new species, *C. yasutoshii* Watanabe, 1991 was described from Taiwan, but subsequently synonymized with *Deinopteroloma chiangi* Smetana, 1990 by Smetana (2001). Smetana (2001)

mentioned that *Camioleum* can be distinguished from *Deinopteronoloma* Jansson, 1947 by the separate first gonocoxites, well-developed and setose second gonocoxites (Fig. 5, Smetana 1985, Fig. 6), and complex aedeagus (Figs. 6–7, Smetana 1985, Fig. 7).

In this paper we describe a new species of unusual omaliine from Korea, and present its habitus photo and line drawings of diagnostic features. The holotype and paratypes are deposited in the Chungnam National University Insect Collection, Daejeon, Korea (CNUIC).

***Camioleum choi* Shin & Ahn, new species**

(Figs. 1–7)

Type series

Holotype, male, labeled as follows: KOREA: Gangwon Prov., Pyeongchang-gun, Jinbu-myeon, Mt. Odaesan, Sangwonsa, 4 2001, SJ Park, sifting; Holotype, *Camioleum choi* Shin and Ahn, Desig. K.-J. Ahn, 2006. Paratype, 1 male, same data as holotype; 1 female, same data as holotype except for 30 IV–4 VI 2001, KJ Ahn, SJ Park, MS Kim, MJ Jeon, FIT; 1 female, same data as holotype except for 8–25 V 2004, SJ Park, DH Lee, JS Park, FIT.

Description

Body length 3.5–3.7 mm (from clypeus to apex of elytra). Body broad, convex. Body glossy, brown, antennomeres 6–11 dark brown, abdomen black. Head more or less pentagonal, about 1.6 times wider than long, depressed above, with scattered distinct punctures. Compound eyes prominent, about 2.3 times longer than tempora, distinct orbital ridge present behind each eye, postocular region arcuate, a pair of distinct ocelli present, distance between them about 2.0 times wider than distance between outside of ocellus and inner margin of eye. Antennae long and filiform, reaching to basal fourth of elytra, incrassate distally, all antennomeres longer than wide, antennomeres 1–5 polished and 6–11 opaque. Antennomere 1 robust, about 2.0 times longer than wide; 2: length to width ratio 2.0, shorter and narrower than 1; 3: slender, slightly dilated apically, 2.5 times longer than wide, longer and narrower than 2; 4–7: more or less same in length and shape as each other, 8–10: slightly decreasing in length, increasing in width. Maxillary palpomere 4 longest and more or less pointed apically. Pronotum surface uneven, convex medially, but depressed along median line and with V-shaped depression from lateral margin to posterior margin; more or less deplanate laterally; widest near middle, posterior and anterior margin more or less same in length, anterior margin broadly emarginated, posterior margin almost straight, each lateral margin round and crenulate, anterior and posterior angles round; single fovea present in middle of each deplanate lateral area, punctures much larger than those on head. Elytra long, covering entire abdomen, oval and convex, lateral margin in anterior margin very slightly crenulate, narrowly deplanate along

lateral margin, punctation striate. Legs long and slender.

Male. Protibia with a number of short peg setae incurved at apical third, mesotibia with a number of minute spines and short peg setae in apical two thirds on ventral region. Aedeagus as in Figs. 6–7. Median lobe long and divided into three lobes, middle lobe constricted in apical third and more or less pointed, each lateral lobe curved to opposite side. Parameres slender and long, a little longer than median lobe.

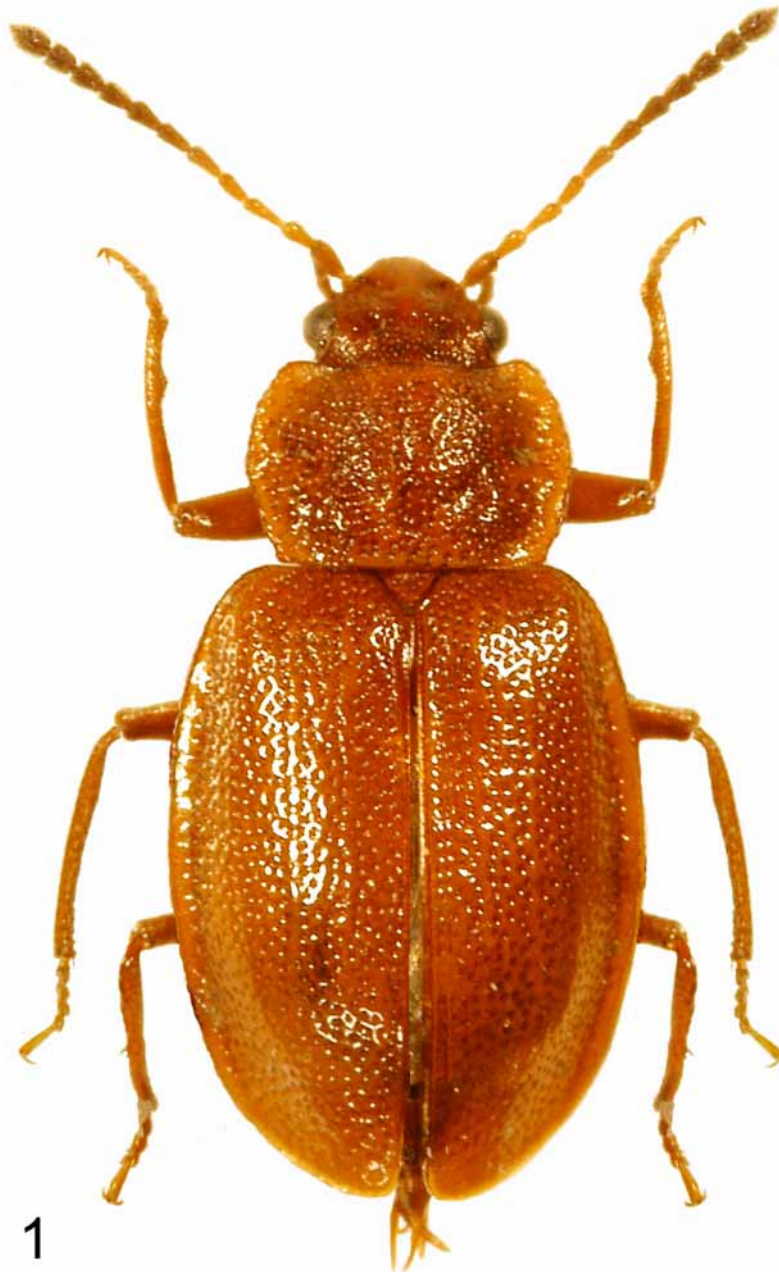
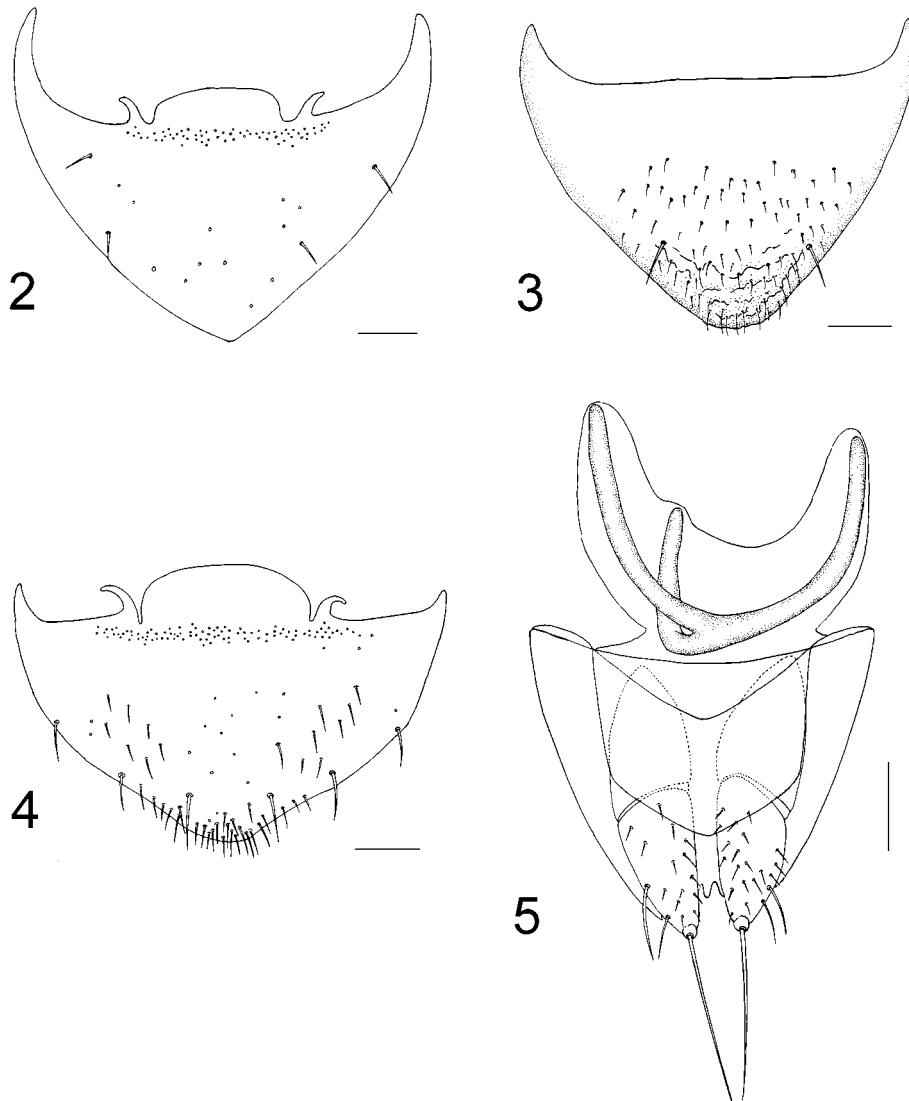


FIGURE 1. *Camioleum choi*, new species, male. Body length 3.7 mm.

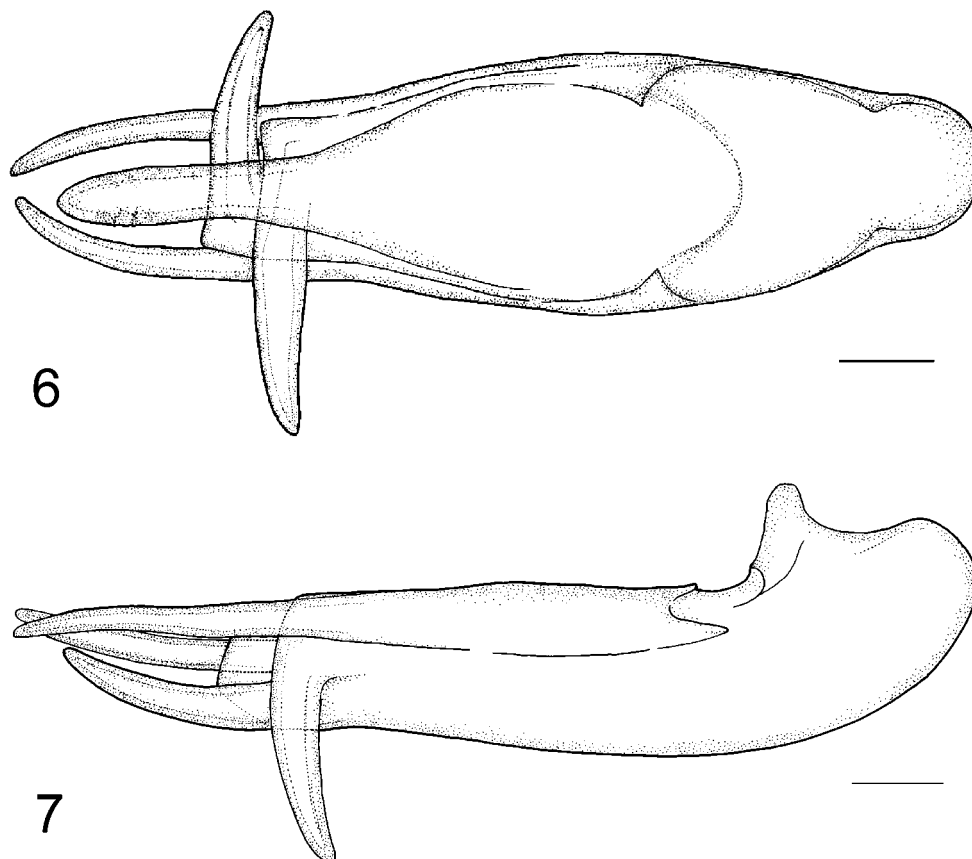


FIGURES 2–5. *Camioleum choi*, new species. 2, male sternite VIII, ventral aspect; 3, female tergite VIII, dorsal aspect; 4, female sternite VIII, ventral aspect; 5, female genital segment, ventral aspect. Scale bar 0.1 mm.

Female. Protibia straight, without modified peg setae; mesotibia lack modified peg setae. Tergite VIII with prolonged apex (Fig. 3). Sternite VIII with numerous setae (Fig. 4). Genital segment with an internal sclerite (Fig. 5).

Distribution

Korea.



FIGURES 6–7. *Camioleum choi*, new species. 6, aedeagus, ventral aspect; 7, aedeagus, lateral aspect. Scale bar 0.1 mm.

Etymology

The new species is named in honor of Dr. Y. B. Cho, a Korean Staphylinidae specialist.

Remarks

The new species is similar to *C. loripes*, but, in addition to some differences in the structure of the aedeagus, can be distinguished by the following characters: the tip of maxillary palpomere 4 of *C. loripes* is broadly rounded (Watanabe 1990, Fig. 100), while that of *C. choi* is more or less pointed; pronotum of *C. loripes* is more strongly narrowed posteriorly than anteriorly (Watanabe 1990, Fig. 98), in contrast to more or less the same length of anterior and posterior margin in *C. choi* (Fig. 1); *C. loripes* has arcuate and rectangular posterior angles of pronotum (Watanabe 1990, Fig. 98), but in *C. choi* the angles are rounded (Fig. 1); the apical margin of male sternite VIII of *C. loripes* is more or less straight (Smetana 1985, Fig. 1), but that of *C. choi* is prolonged (Fig. 2); the apical margins of female tergite VIII (Smetana 1985, Fig. 5) and sternite VIII (Smetana 1985,

Fig. 4) of *C. loripes* are emarginated, in contrast, in *C. choi* they are prolonged (Figs. 3–4); the median lobe of *C. loripes* is entire (Watanabe 1990, Fig. 106), while it is divided into three lobes (Fig. 6) in *C. choi*; the parameres of *C. loripes* are shorter than the median lobe (Watanabe 1990, Fig. 106), in contrast, in *C. choi* the parameres are longer than the median lobe (Fig. 6).

Acknowledgements

We are grateful to Dr. M. K. Thayer (Field Museum of Natural History, Chicago) and anonymous reviewer for critical review of the paper and Dr. Y. Watanabe (Tokyo University of Agriculture, Japan) for kindly providing valuable references. We also thank Ms. Kun-Hee Lee (Chungnam National University, Daejeon) for her efforts to find old literature references. S.-I. Lee, M.-J. Jeon and S.-J. Park (Chungnam National University, Daejeon) prepared habitus photo, line drawings and manuscript suitable to the journal. This work was supported by Chungnam National University Research Grant (2005).

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