

New Report of the Subfamily Micropeplinae Leach (Coleoptera, Staphylinidae) in Korea

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한국산 도랑넓적반날개아과(딱정벌레목, 반날개과)의 첫 보고

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ABSTRACT: The subfamily Micropeplinae Leach belonging to the family Staphylinidae is reported for the first time in Korea with *Micropeplus fulvus japonicus* Sharp. The photographs of adult and aedeagus are provided.

Key words: Coleoptera, Staphylinidae, Micropeplinae, *Micropeplus*, Korea

초 록: 반날개과(Staphylinidae)의 도랑넓적반날개아과(Micropeplinae Leach)를 국내에 처음으로 소개하고, 이 아과의 도랑넓적반날개(*Micropeplus fulvus japonicus* Sharp)를 보고한다. 성충과 수컷의 생식기에 대한 사진을 제공한다.

검색어: 딱정벌레목, 반날개과, 도랑넓적반날개아과, 도랑넓적반날개속, 한국

The Micropeplinae Leach is a small subfamily of the family Staphylinidae including more than 82 species worldwide (Herman, 2001). This subfamily is characterized by antennae with nine antennomeres, the ninth enlarged into an oval club; pronotum strongly transverse, explanate at sides; elytra truncated with longitudinal ridges (Campbell, 1968; Newton et al., 2001). The members occur in forest leaf litter, near swamps and bogs, in mammal nests, grass clumps of marshes, on stumps and wood chips of recently cut spruce and fir, and on bare areas of mudflats (Campbell, 1968; Lawrence and Newton, 1995).

In East Asia, the subfamily has been recorded eight species in Japan and 13 species in China (Li and Zhao, 2001; Zhao and Zhou, 2004; Shibata, 2013). In this study, the species, *Micropeplus*

fulvus japonicus Sharp, is reported firstly from Korea with the redescription, photographs of adult habitus and aedeagus. Specimens examined were deposited in the Natural History Museum, Hannam University, Daejeon, Korea (HUNHM).

Materials and Methods

Last three abdominal segments of specimen were dissected from the body after softening in hot water. Aedeagus was mounted in Euparal on slide following the method described by Hanley and Ashe (2003). Photographs of aedeagus were taken with Ricoh GX100 camera attached to Nikon YS100 microscope and habitus one was taken using a Canon EOS 500D camera with a Canon macro photo lens MP-E 65 mm.

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Results and Discussion

Taxonomic accounts

Subfamily Micropeplinae Leach, 1815 도랑넓적반날개아과 (신칭)

Micropeplinae Leach, 1815: 90.

Genus *Micropeplus* Latreille, 1809 도랑넓적반날개속 (신칭)

Micropeplus Latreille, 1809: 377 (Type species: *Staphylinus porcatus* Paykull, 1789).

Micropeplus fulvus japonicus Sharp 도랑넓적반날개 (신칭) (Figs. 1-2)

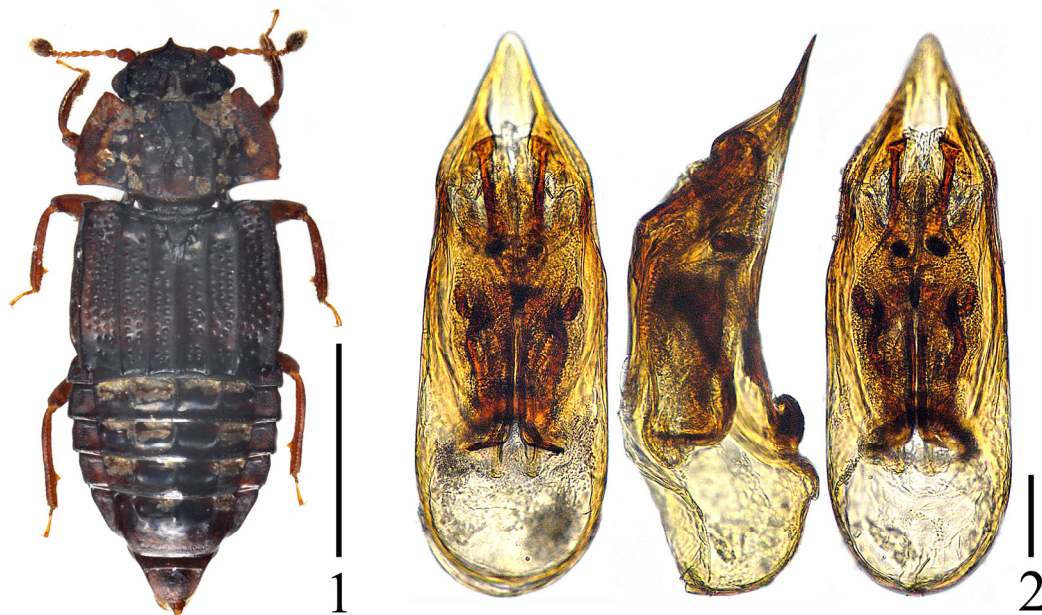
Micropeplus fulvus Erichson var. *japonicus* Sharp, 1874: 101 (TL: Japan).

Micropeplus fulvus japonicus: Watanabe and Shibata, 1964: 67; Watanabe, 1975: 316; Watanabe and Luo, 1991: 93; Herman, 2001: 192; Smetana, 2004: 271.

Redescription. Body length 2.7-2.9 mm. Body (Fig. 1) blackish brown, antennae and legs reddish brown, surface granulate. Head clearly narrower than pronotum (0.60:1), subtriangular,

broadly and shallowly depressed on frons, deeply impressed at each side of base, with longitudinal furrows on basal half along median portion, with two carinae at each side of the median furrow; eye slightly prominent. Pronotum wider than long (1.87-1.94:1), slightly narrower than elytra (0.95:1), convex at median portion, gradually narrowing toward anterior margin; anterior margin almost straight at median portion, posterior margin broadly rounded at median portion; lateral sides unsmoothly rounded; median portion with ten cells enclosed by costae, three on apical area, two on both sides at middle area and five on basal area. Elytra wider than long (1.20-1.25:1), each elytron with four longitudinal carinae of one sutural, two median and one humeral; interspace of carinae with irregular and longitudinal rows of punctures. Abdomen relatively short, gradually narrowing toward posterior margin; paratergites apparently raised; each of tergites IV-VII with one median and two lateral longitudinal carinae. Aedeagus (Fig. 2) with elongated median lobe, gradually narrowing toward apical portion but apical area abruptly narrowed, the tip slightly blunt; parameres slender and fused with median lobe, slightly shorter than median lobe.

Specimens examined. 2♂♂, Naribunji, Na-ri, Buk-myeon, Ulleung-gun, Gyeongbuk province, N37° 30' 16.6'', E 130° 51' 36.8'', 12-13. x. 2015, Pitfall trap, Y. B. Cho; 1♂, Guam-ri,



Figs. 1-2. *Micropeplus fulvus japonicus*. 1. habitus (2.8 mm), 2. aedeagus (dorsal, lateral and ventral view). Scale bar = 1 mm (1), Scale bar = 0.1 mm (2).

Sacheon-eup, Sacheon-si, Gyeongnam province, 25. v. 2015, G. S. Lee.

Distribution. Korea (new record), Japan, China (Zhejiang) and India (Kashmir, Uttaranchal, Uttar Pradesh).

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