

A Species of Euplectitae (Coleoptera: Staphylinidae: Pselaphinae) New to Korea

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한국산 미기록 곤봉개미사돈 *Philoscotus rostralis* [딱정벌레목: 반날개과: 개미사돈아과]에 대한 보고

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ABSTRACT: A species of pselaphine beetles, *Philoscotus rostralis* Nomura, is reported in Korea for the first time. Illustrations of a habitus, diagnostic characters and distribution map are provided.

Key words: New record, Coleoptera, Pselaphinae, *Philoscotus*, Korea

초록: 개미사돈아과의 미기록종인 *Philoscotus rostralis* Nomura를 한국에 처음으로 보고한다. 정확한 동정을 위해 외형과 진단형질의 사진과 분포 지도를 함께 제공한다.

검색어: 미기록종, 딱정벌레목, 개미사돈아과, 옆배개미사돈속, 한국

The supertribe Euplectitae includes 8 tribes and 385 genera in the world (Bouchard et al., 2011), but only single genus and species, *Philoscotus coreanus* Nomura and Lee, 1993, is recorded in Korea. The genus *Philoscotus* Sawada may be separated from other Euplectitae genera by narrowed head and prothorax, well-developed paratergites, and extremely reduced or absent female eyes and hind wings. This genus is similar externally with the genus *Acetalius*, but it can be easily distinguished by having paratergites. In this paper, *Philoscotus rostralis* Nomura is recorded in Korea for the first time. Illustrations of a habitus, diagnostic characters and distribution map are provided.

Materials and Methods

Thirty specimens were examined from the Chungbuk National University Insect Collection (CBNUIC), Cheongju-si, Chungbuk-do, South Korea, and the Chungnam National University Insect Collection (CNUIC), Daejeon, South Korea (indicated parenthetically). The picture of habitus and diagnostic characters were observed by LEICA M80 microscope and DM1000 LED optical microscope, respectively. Images were taken using Las V4.12 and Zerene Stacker software to take multi-focus images. The map is created from SimpleMapp and was subsequently modified to mark localities.

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Systematic accounts

Genus *Philoscotus* K. Sawada, 1957 옆배개미사돈속

Type species *Philoscotus longulus* K. Sawada, 1957

Typhlacetalius Jeannel, 1959: 17. Type species *Typhlacetalius coiffaiti* Jeannel, 1959 (= *Philoscotus brevis* K. Sawada, 1957)

Philoscotus rostralis Nomura, 1988 긴턱옆배개미사돈(신칭) (Figs. 1, 2)

Philoscotus rostralis Nomura, 1988: 746; Nomura and Lee, 1993: 3; Kurbatov, 2007: 294.

Diagnosis. Body reddish brown to yellowish brown (Fig. 1A and B). Head and pronotum strongly narrowed than abdomen (Fig. 1A and B). Male with large convex eye (Fig. 1H), female absent (Fig. 1I). Antennomeres 1-2 rectangular, and 11 extremely enlarged with many setae (Fig. 1A and B). Pronotum longer than wide (Fig. 1A and B). Elytra many setae and three

foveae on each elytron. Male hind wing well-developed, female extremely reduced. Male abdominal sternite IX with a pair of lobes (Fig. 1D, red arrows), X triangular (Fig. 1E). Male genitalia bulb-shaped (Fig. 1F).

Materials examined. Korea: Jeonnam Prov.: 2♂, Gurim-ri, Samsan-myeon, Haenam-gun, 19.V.2019. 34°29'42.7"N 126°37'38.8"E, 147 m. leaf litter & Deadwood debris, Ji-Won Kang (CBNUIC); Chungnam Prov.: 4♂, Geumsan-Gun, 21V-10VI 2006, FIT (CNUIC); 20♂, Gongju-City, Mt. Gyeryonsan, Donghaksa, N 36°21'17.4" E 127°14'55.7", 1.VI.-18.VI.2004, SM Choi, JS Park. ex FIT (CNUIC); 2♀, Oncheon-ri, Banpo-myeon, Gongju-si, 3.V.2019, 36°22'15.1"N 127°15'57.8"E 120 m, Leaf litter, JW Kang, YJ Choi, JS Park, Deadwood debris sifting near stream (CBNUIC); Gangwon Prov.: 2♂, Jeongseon-gun, Jeongseon-eup, Mt. Gariwangsan recreation forest, N37°24'54" E128°32'10.1", 26.V.-12.VI.2009, TK Kim, YH Kim, JH Song, SG Lee, ex FIT (CNUIC).

Distribution. Korea (Fig. 2), Japan.

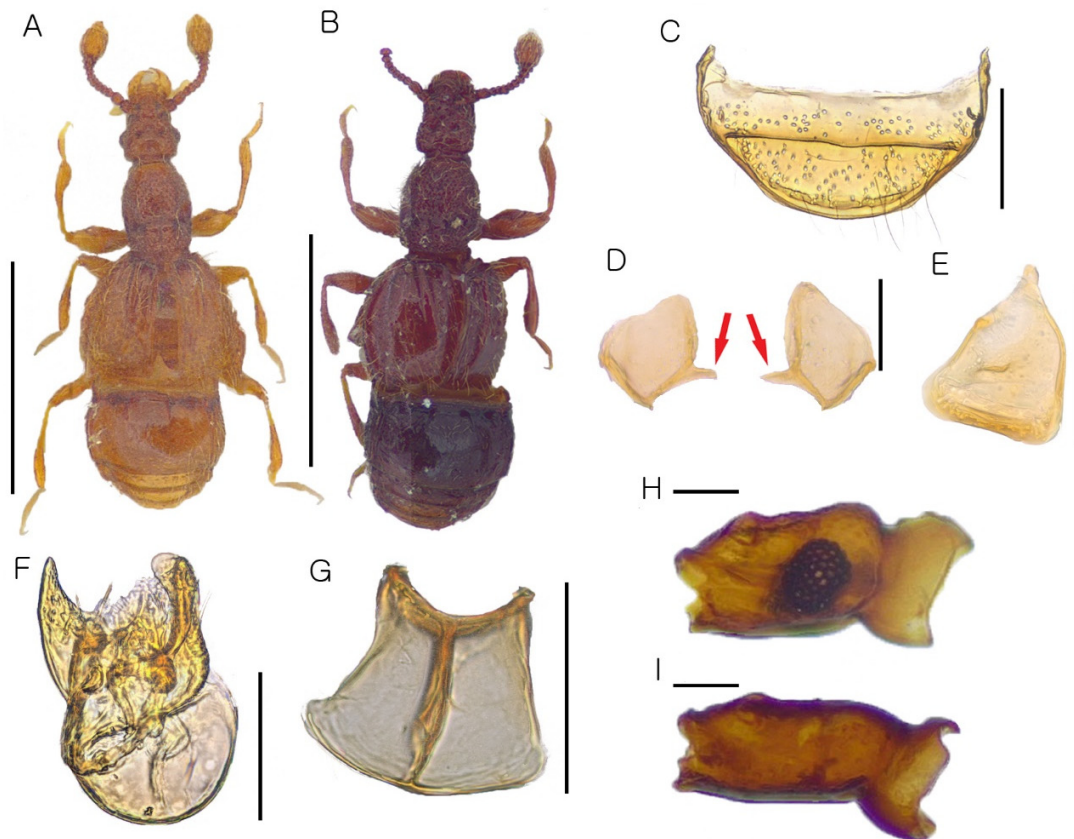


Fig. 1. *Philoscotus rostralis*. A: male habitus, dorsal view; B: female habitus, dorsal view; C: male abdominal tergite VII, ventral view; D: male abdominal sternite IX (red arrows: lobes of male abdominal sternite IX); E: male abdominal sternite X; F: male genitalia in ventral view; G: female genital plate; H: male head, lateral view; I: female head, lateral view. Scale bars: A-B = 1 mm, C-I = 0.1 mm.

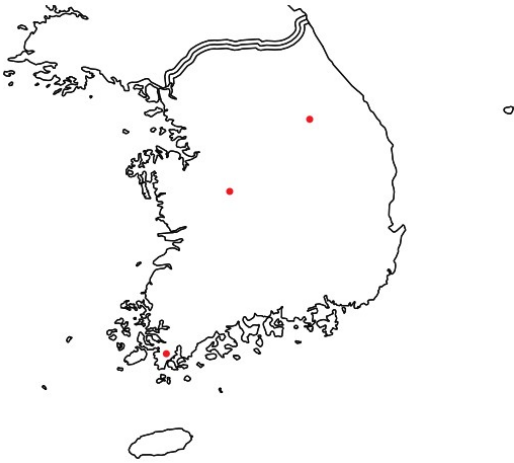


Fig. 2. Distributions of *Philoscotus rostralis* in the Korea (dots).

Remarks. *Philoscotus rostralis* is known as a predator of small creatures in soil habitats, but specific biology is unknown. This species can be separated from the other Korean *Philoscotus* species, *P. coreanus* Nomura and Lee, by longer head length and a pair of lobes of male abdominal sternite IX. Specimens of this species were collected using flight intercept traps (FIT), or by sifting leaf, wood debris near stream. Female specimens were not collected by FIT because of lacking the ability to fly by extremely reduced hind wing.

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