

A New Species of the Genus *Onthophagus* (Coleoptera: Scarabaeidae) from Taiwan

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Abstract A new *Onthophagus* belonging to the subgenus *Onthophagus*, *O. (O.) campestris* sp. nov., is described from Taiwan.

Onthophagus is a large dung beetle genus containing more than 300 species from the Palaearctic Region. From Taiwan, 49 species are recorded (Löbl & Löbl, 2016), however the record includes some doubtful species and some undescribed species are remained (Masumoto *et al.*, 2014; Masumoto *et al.*, 2017).

Recently, one of the authors (BHH) collected unknown *Onthophagus* from Linkou, New Taipei City, and another author (MK) had also collected this species and left it unidentified nearly 40 years. On this occasion, we examined this species in details and came to the conclusion that it is new to science. In this paper, we are going to describe it as new species.

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The holotype of the new species will be deposited in the National Museum of Natural Science, Taichung, Taiwan, and a paratype will be deposited in the National Museum of Nature and Science, Tsukuba, Japan.

Onthophagus (Onthophagus) campestris sp. nov. (Figs. 1–5)

Body oval, rather strongly convex; major portions black, apical margin of head and legs brownish black, antennae and mouth parts yellowish brown, humeral portion of elytron with vague reddish patch in female; dorsal surface rather strongly shining with faint cupreous luster, ventral surface weakly shining; dorsal surface glabrous, ventral surface mostly with setaceous hairs.

M a l e: Clypeus ruguloso-punctate, apical margin widely rounded and weakly reflexed, incised at the middle; fronto-clypeal border rather strongly ridged and arcuate anteriorly; genae weakly depressed, finely punctate, with exterior margin smoothly continued with clypeal margin in anterior half, nearly straightly narrowed in posterior half; frons somewhat transversely concave, scattered with punctures, which are a little larger and sparser than those on genae; posterior margin of frons with transverse ridge, which is very slightly bent at the middle and higher than the ridge on fronto-clypeal border, posterior portion of the ridge steeply inclined and almost impunctate.

Pronotum strongly convex dorsad, with steep declivity

near apex, the upper margin of the declivity very slightly bisinuous; disc rather evenly scattered with small punctures; front angles subrectangular with corners directed anteriorly, hind angles obliquely truncate; apex widely emarginate and slightly bisinuous, finely rimmed; base widely rounded, finely rimmed; lateral margins gently, obliquely produced, wholly rimmed, the rim visible from above.

Elytra punctate-striate, the striae finely margined, the punctures small and round at each bottom, noticeably notching intervals at each top; intervals gently convex, scattered with small punctures, and often transversely rugulose.

Pygidium weakly convex, microsculptured, closely, shallowly punctate. Protibiae rather noticeably four-dentate on exterior margin. Terminal spur of metatibia almost of the same length of the first segment of metatarsus.

Male genitalia rather bold, about 1.5 mm in length, 0.7 mm in width, strongly bent at the border of phallobase and parameres; phallobase gently curved in lateral view; parameres nearly triangular, apices with small sharp hooks.

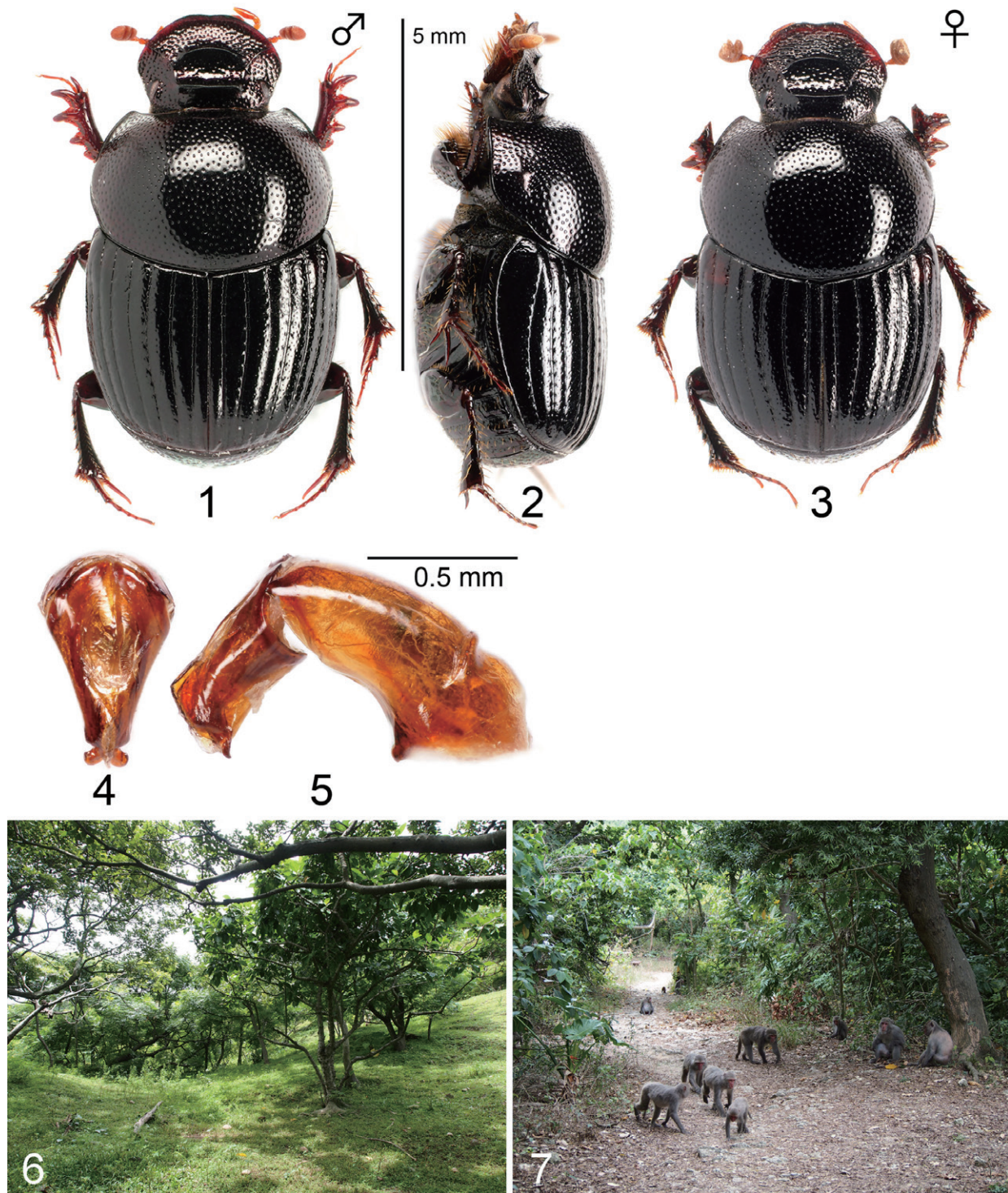
F e m a l e: Similar to male, but head more noticeably rugulose-punctate, pronotum less strongly convex, without distinct declivity near apex, legs bolder, and abdomen differently shaped.

Body length: 5.7–6.0 mm.

Type series. Holotype: ♂, Linkou, New Taipei City, 25. X. 2017, M. Kiuchi leg. Paratypes: 1♂, Chiangchun Shan, Miaoli County, Taiwan, 26. X. 1976, M. Kiuchi leg.; 1♀, Shuiniukang, Linkou, New Taipei City, Taiwan, 8–10. VII. 2017, B.-H. Ho leg.; 1♀, Shoushan, 240 m alt., Kaohsiung County, Taiwan, 21. V. 2017, S.-R. Liao leg.; 1♂, 1♀, Shoushan, Kaohsiung County, Taiwan, 20. I. 2018, B.-H. Ho & Y. Szeto leg.

Diagnostic notes. This new species is peculiar in showing little sexual dimorphism. The only other species having this characteristic and similar to this species seems to be *Onthophagus (O.) boucomontianus* Balthasar, 1935, distributed in S. China (Yunnan, Fujian, Sichuan). The former can be distinguished from the latter by the body smaller (9–11 mm in length in *O. (O.) boucomontianus*), the clypeus ruguloso-punctate, with the apical margin incised at the middle, the anterior ridge on the head shorter, almost of the same width of the posterior ridge, the posterior ridge without small projection at each side.

Biological notes. The holotype was collected in the open area of a stock farm at Linkou. One female was collected by the pitfall trap baited with human dung from Linkou (Fig. 6). The other female was collected from monkey dung in



Figs. 1–7. *Onthophagus (Onthophagus) campestris* sp. nov. (1–5) and environments of collecting places (6–7) — 1–2, Holotype, male, 1, dorsal view, 2, lateral view; 3, paratype, female, dorsal view; 4–5, male genitalia, 4, frontal view; 5, lateral view; 6, Linkou, New Taipei City; 7, Shoushan, Kaohsiung County.

Shoushan (Fig. 7).

Etymology. The specific name is given after *campester* (Latin), the plain area, where the type series were collected.

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