Small Coprophagous Scarabaeids (Coleoptera, Scarabaeidae) from Yunnan, Southern China¹⁾

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Abstract Three scarabaeid beetles of small size are recorded from Yunnan, Southern China. Two of them, a *Haroldius* and a *Panelus*, seem new to science. Both were found from soil samples taken in a tropical rain forest of Xishuangbanna. The other species, originally described from northern Vietnam, seems rather widespread in Southeast Asia.

In the autumn of 1992, a Sino-Japanese joint party of entomologists made an investigation of soil animals in Yunnan, southern China. Participating in this project, Dr. S.-I. Uéno, and Dr. Y. Watanabe collected a short series of specimens of small scarabaeid beetles at Kunming and Xishuangbanna. They were found in soil samples taken in a tropical rain forest at Menglun and a temperate mixed forest in the suburbs of Kunming.

After a close examination, it has become apparent that the collection contains three species of two different genera. One species each of these genera, from Xishuangbanna, seem new to science and are described in this paper. The remaining one, a *Panelus*, is referable to a species originally described from northern Vietnam, and is newly recorded from China.

The holotypes of the species to be described are deposited in the collection of the Shanghai Institute of Entomology, Academia Sinica.

Before going further, the authors wish to express their heartfelt thanks to Dr. Shun-Ichi Uéno, Dr. Yasuaki Watanabe and all the other participants of the joint expedition for their kind help extended to the authors in the course of the present study. Appreciations are due to Dr. Yasuhiko Hayashi of Kawanishi City for taking photographs inserted in this paper, and also to Mr. Teruo Ochi of Osaka Prefecture for invaluable comment.

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Tribe Alloscelini

Haroldius (s. str.) uenoi sp. nov.

(Fig. 1)

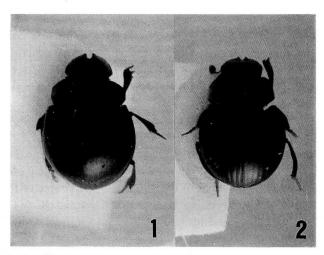
Dark reddish brown, with antennae yellowish brown; dorsal surface except for outer margins of clypeus piceous, feebly micro-shagreened and shining; ventral surface rather alutaceous and gently shining. Body hemispherical.

Head semicircular, gently raised in posterior portion, sparsely and microscopically punctate; front margin of clypeus gently produced into two lobes, deeply emarginate in the middle; fronto-clypeal border impressed on each side; genae rather abruptly narrowed before eyes with clypeo-genal border impressed in inner portion; eye small and obliquely subelliptic, with inner margin ridged.

Pronotum short and convex, finely punctate and micro-shagreened, each puncture with a fine bent hair, transversely elliptically depressed near base; apex widely emarginate though gently arcuate forwards in middle, finely rimmed on each side; base widely rounded though feebly angulate in the middle, gently truncate and finely rimmed in lateral portions; sides steeply declined to lateral margins which are obliquely, slightly arcuate and finely rimmed; front and hind angles rectangular, the former with rounded and the latter with angulate corners.

Elytra microscopically, shallowly punctato-striate, the punctures closely set one another; intervals wide and flat, sparsely, microscopically punctate and feebly microshagreened.

Pygidium gently convex, sparsely and microscopically punctate, each margin finely rimmed. Fore tibia tridentate, the apical tooth extremely small and the middle very large; middle and hind tibiae distinctly dilated towards each apex, with acute



Figs. 1–2. —— 1. *Haroldius* (s. str.) *uenoi* sp. nov., ♀, holotype. —— 2. *Panelus* (s. str.) *watanabei* sp. nov., ♂, holotype.

outer corner.

Body length: 2.7 mm.

Holotype: ♀, Menglun, 600 m alt., Xishuangbanna, Yunnan, S China, 30–X–1992, S.-I. Uéno & Y. Watanabe leg.

Notes. This new species resembles *Haroldius perroti* PAULIAN, 1939, originally described from Tonkin, but can be distinguished from the latter by the larger body, the clypeus more rounded though more strongly produced into two lobes in the middle, the pronotum distinctly truncate near the hind angles, and the apices of middle and hind tibiae with acuter outer corners.

Tribe Canthonini

Panelus (s. str.) tonkinensis PAULIAN, 1939

Panelus tonkinensis PAULIAN, 1939, Bull. Soc. ent. Fr., 44: 70. Tonkin.

Specimens examined. 3 exs., Menglun, 570 m alt., Xishuanbanna, Yunnan, S China, 28–X–1992, S.-I. Uéno & Y. Watanabe leg.; 1 ex., Menglun, 600 m alt., Xishuangbanna, 30–X–1992, S.-I. Uéno & Y. Watanabe leg.; 1 ex., Menglun, 570 m alt., Xishuangbanna, 9–IV–1992, Zhao, L. leg.; 1 ex., Menglun, 570 m alt., Xishuangbanna, 18–IV–1992, Zhao, L. leg.; 2 exs., Qiongzhu-si, 2,100–2,150 m alt., Yu'an-shan Hill, Kunming, Yunnan, S China, 5–XI–1992, S.-I. Uéno & Y. Watanabe leg.; 4 exs., Xi-shan, 2,120 m alt., Kunming, 7–XI–1992, S.-I. Uéno & Y. Watanabe leg.

Notes. The Yunnanese specimens recorded above are slightly different from Vietnamese specimens in certain characters. This species is, however, rather variable in the shape and coloration of the body even in the Vietnamese population. The present authors prefer to regard the Yunnanese specimens as a geographical variant of *P. tonkinensis*.

Panelus (s. str.) watanabei sp. nov.

(Fig. 2)

Dark reddish brown, with mouth parts, antennae and tarsi yellowish brown; dorsal surface piceous and vitreously shining; ventral surface coriaceous and feebly shining. Body ovate, very convex, with elytra distinctly rounded.

Head gently convex in posterior portion, rather closely and finely punctate, each puncture with a microscopic bent hair; clypeus produced into two sharp teeth, which are feebly reflexed and rather close together; gena gently arcuate laterad with the junction of clypeus minutely toothed.

Pronotum subtrapezoidal and rather closely punctate, the punctures slightly larger than those on head, each with a microscopic bent hair; apex widely emarginate though gently arcuate forwards in middle; base widely rounded, slightly punctato-marginate in lateral portions; sides rather steeply inclined, with lateral margins gently narrowed forwards in basal 2/3, abruptly so in apical 1/3; front angles rather acute and hind

angles obtuse; disc broadly convex, with a sharply defined and transversely elliptical depression free from punctures in the middle of basal portion.

Elytra shallowly punctato-striate; intervals wide and very slightly convex, rather sparsely punctate, the punctures smaller than those on head and pronotum, each with a bent hair which is longer than pronotal ones.

Pygidium strongly convex and coriaceous. Fore tibia armed with 3 outer teeth, distinctly emarginate at apex, weakly chipped in apical portion of outer margin; hind tibia armed with a tooth at apex of inner margin in male; middle and hind tarsi rather short and distinctly flattened.

Body length: 2.6 mm.

Holotype: \circlearrowleft , Menglun, 600 m alt., Xishuangbanna, Yunnan, S China, S.-I. Uéno & Y. Watanabe leg. Paratypes: 1 ex., same data as for the holotype; 1 ex., Menglun, 570 m alt., Xishuangbanna, 28–X–1992, same collectors as for the holotype.

Notes. This new species resembles *Panelus tonkinensis* PAULIAN, 1939, but is distinguishable from the latter by the larger body, larger eyes, the elytra more distinctly rounded, and the fore tibia weakly chipped in apical portion of the outer margin.

要 約

益本仁雄・尹 文英:中国云南省産の小型食糞コガネに関する知見. — 1992 年秋に、中国云南省において、日中両国の昆虫学者による土壌性動物の調査が実施された。その際に得られた小型食糞コガネのうち、2 種は西双版納の熱帯雨林の土壌から採集され、検討の結果、新種と認められたので、それぞれ Haroldius uenoi sp. nov. および Panelus watanabei sp. nov. と命名した。さらに、他の1種は、特徴に多少の差異はあるが、北ベトナムから記載された Panelus tonkinensis Paulian、1939とした。本種は、原記載の地域だけでなく、タイ北部などまでかなり広く分布する種だと考えられる。

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