

***Ptochus bambusae* sp. nov., a New Apterous Cyphicerine Weevil Associated with Bamboos from North Vietnam**

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Abstract A new species of the apterous weevil genus *Ptochus* is described from North Vietnam under the name of *P. bambusae* sp. nov. as the first representative of the genus from the country. A large number of adults were observed infesting leaves of a bamboo grass and a small bamboo (Poaceae, Bambusoideae).

Among weevils, associations with bamboos are commonly known in the family Dryophthoridae as bamboo weevils or bamboo shoot weevils (KALSHOVEN, 1961). Besides the Dryophthoridae, weevil-bamboo associations occur in the family Anthribidae (SINGH & BHANDARI, 2011) and the subfamilies Baridinae and Cossoninae of the family Curculionidae (YOSHIHARA & MORIMOTO, 1994; ZIMMERMAN, 1957). In the subfamily Entiminae of the Curculionidae, only a few associations with bamboos are known in the tribe Cyphicerini, though it may be more likely to happen within the tribe (CHAO & CHEN, 1980; KOJIMA, unpubl.).

A large number of apterous cyphicerine weevils were found on and infesting leaves of a certain species of bamboo grass and small bamboo (Poaceae), respectively, in North Vietnam. They were identified as the same species belonging to the genus *Ptochus* SCHOENHERR, 1823. The genus contains about 80 species from the Palearctic, Ethiopian, and Oriental Regions. However, only two Burmese species have been known from the Indochinese Region to date (MARSHALL, 1916; LONA, 1937).

In this paper, we will describe a new *Ptochus* species as the first representative of the genus from Vietnam.

The type series is preserved in the Laboratory of Entomology, Tokyo University of Agriculture, Atsugi.

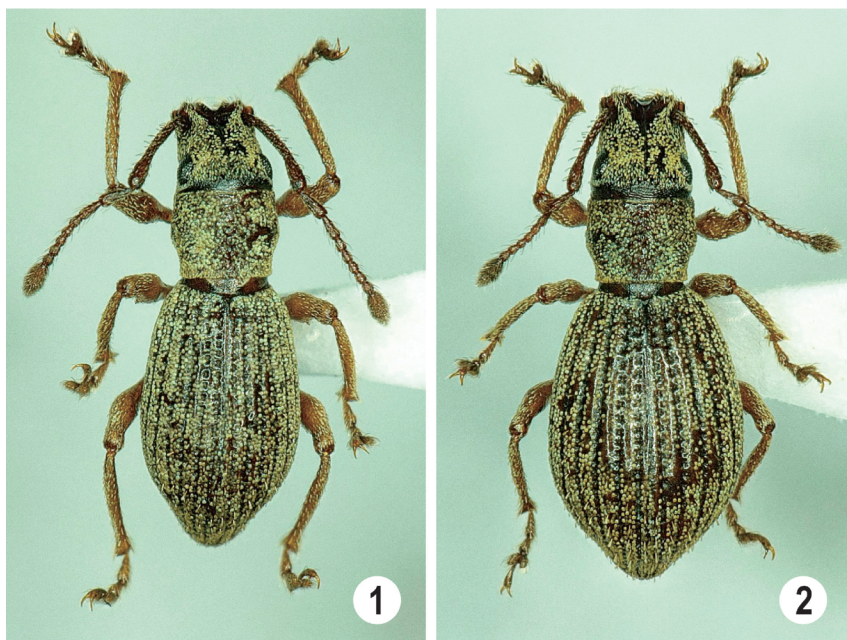
***Ptochus bambusae* KOJIMA, sp. nov.**

(Figs. 1–10)

Male. Length: 2.5–3.4 mm; width: 0.9–1.2 mm.

Piceous, antennae dark reddish brown, legs slightly paler; scaling dense excepting median part of pronotum longitudinally and often median part of elytra, predominantly greyish, often with faint greenish shimmer.

Head with frons broad, twice as wide as length of eye, which is ovate and weakly convex. Rostrum slightly wider than long, slightly convergent to base of pterygia, then weakly dilated; dorsolateral carinae indefinite; epistome reaching level between caudal margins of swinging fossae, narrower than right angle behind, parepistome bare, postepistomal area with indefinite transverse ridge, median carina obscure behind epistome, but continued to form fine carina up to fovea of frons; prementum with four setae. Antennae normal, scape weakly clavate at apex, scape to club with proportion in



Figs. 1 & 2. Habitus photographs of *Ptochus bambusae* KOJIMA, sp. nov. — 1, Male; 2, female.

length as 45 : 13 : 10 : 6 : 5 : 4 : 4 : 4 : 20, club with 1st segment about 1.5 times as long as 2nd.

Prothorax 1.2–1.3 times as wide as long, sides parallel on apical fourth, then expanded laterally in curve, widest at middle, and convergent to faint constriction at quarter from base, anterior and posterior margins truncate, wider at apex than base; disk with impressions shallowly before and more evidently behind middle, coarsely punctate. Scutellum minute and bare. Elytra elliptical, 1.6 times as long as wide, widest slightly behind middle; striae moderately deep and punctate; intervals broad, even, each with three to four rows of round scales and row of suberect scales, which are longer on declivity than those of basal half.

Legs with femora each armed with small sharp tooth; tibiae very weakly curved inwards on apical half, faintly bisinuate internally, corbels of hind pair open.

Venter with basal two ventrites flattened.

Terminalia as illustrated (Figs. 3–5); spiculum gastrale of sternite 9 abruptly curved at apex; aedeagus subtruncate at apex, apodeme longer than body, internal sac Z-folded, asperate on distal half.

F e m a l e. Length: 3.4–3.9 mm; width: 1.4–1.6 mm.

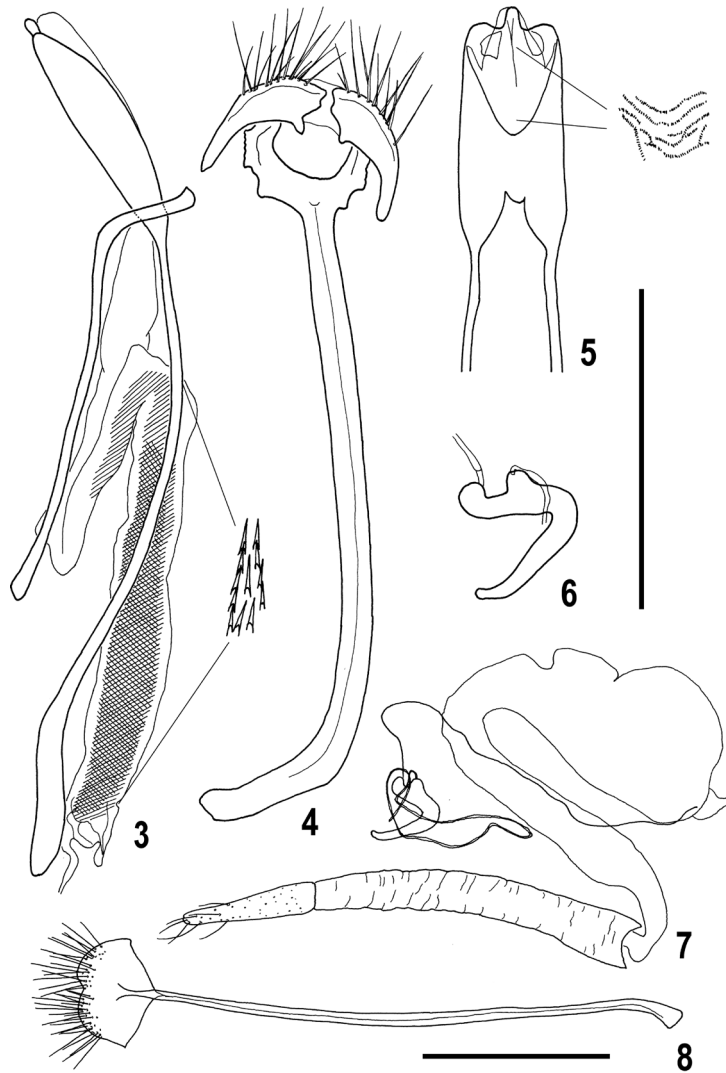
Resembles male except antennal proportion from scape to club in length as 45 : 12 : 10 : 5 : 4 : 4 : 4 : 4 : 18; elytra ovate, 1.5 times as wide as long and venter with basal two ventrites inflated.

Terminalia as illustrated (Figs. 7, 8); spermatheca with ramus differentiated and collum much longer than wide.

Etymology. The name is derived from the associated plant.

Type series. Holotype: male. Fansipan (alt. 2,200–2,400 m), Lao Cai Prov., 1–VII–2012, H. KOJIMA. Paratypes: 150 exs., same data as the holotype; 98 exs., same locality as the holotype, 30–VI–2012, H. KOJIMA; 35 exs., Nr. Tram Ton Pass (alt. 1,950 m), Lao Cai Prov., 29–VI–2012, H. KOJIMA.

Distribution. North Vietnam (Lao Cai Prov.).

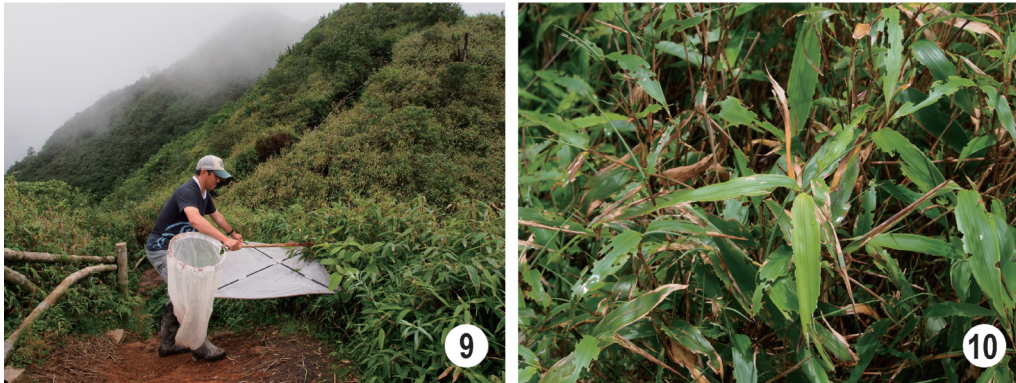


Figs. 3–8. Male and female terminalia of *Ptochus bambusae* КОЖИМА, sp. nov. — 3, Aedeagus and tegmen, lateral; 4, sternite 8 and spiculum gastrale, ventral; 5, aedeagal body and base of apodeme, dorsal; 6, spermatheca; 7, ovipositor; 8, sternite 8, ventral. Scale=0.5 mm.

Biological note. The adults were captured on a bamboo grass and a small bamboo, respectively at the two places.

Remarks. The genus *Ptochus* comprising ca. 80 species from the Old World is possibly an assemblage of heterogeneous apterous species of the Myllocerina and is apparently in need of revision based on the character assessment (MORIMOTO *et al.*, 2006).

Ptochus bambusae is very similar in appearance to *P. limbatus* MARSHALL, 1916 from Ceylon (Sri Lanka) in having the following features: antennae with 2nd funicular segment shorter than 1st, prothorax narrower at base than at apex, and elytra elliptical in male. In *P. bambusae*, however, the head is not striolate (striolate in *P. limbatus*), the dorsal carinae of the rostrum are indistinct (distinct



Figs. 9 & 10. Photographs of a habitat and adult food plant of *Ptochus bambusae* KOJIMA, sp. nov. — 9, Fansipan (alt. 2,200–2,400 m), Lao Cai Prov., N. Vietnam; 10, bamboo grass with feeding traces by adults on leaf margins.

in *P. limbatus*) and the scutellum is bare (scaled in *P. limbatus*).

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References

- CHAO, Y., & Y. CHEN, 1980. Economic Insect Fauna of China, 20. Coleoptera, Curculionidae (1). xi+184 pp., 14 pls. Science Press, Beijing. (In Chinese.)
- KALSHOVEN, L. G. E., 1961. Habits and host-associations of Indomalayan Rhynchophorinae (Coleoptera, Curculionidae). *Beaufortia, Amsterdam*, 9(96): 49–73.
- LONA, C., 1937. Curculionidae: Otiorrhynchinae II. In SCHENKLING, S. (ed.), *Coleopterorum Catalogus auspiciis et auxilio W. Junk*, 160: 227–412. 's-Gravenhage.
- MARSHALL, G. A. K., 1916. Coleoptera. Rhynchophora: Curculionidae. In SHIPLEY, A. E. (ed.), *The Fauna of British India, including Ceylon and Burma*. xv+367 pp. Taylor & Francis, London.
- MORIMOTO, K., H. KOJIMA & S. MIYAKAWA, 2006. Curculionoidea: General introduction and Curculionidae: Entiminae (Part 1). Phyllobini, Polydrusini and Cyphicerini (Coleoptera). *The Insects of Japan*, 3. iv+406 pp. Touka Shobo, Fukuoka. (In English and Japanese.)
- SINGH, K. P., & R. S. BHANDARI, 2011. *Phloeobius crassicolis* JORDAN (Coleoptera: Anthribidae): a new pest of green standing bamboo. *Ann. Forestry, Dehra Dun*, 19: 315–317.
- YOSHIHARA, K., & K. MORIMOTO, 1994. A new genus of the subfamily Baridinae (Coleoptera, Curculionidae) from East Asia. *Jpn. J. Ent.*, 62: 723–729.
- ZIMMERMAN, E. C., 1957. Formosan cossonine weevils of bamboo (Coleoptera: Curculionidae: Cossoninae). *Proc. U.S. nat. Mus., Washington*, 107: 13–23.

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