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A new species of the genus *Dinoderus* Stephens from Taiwan (Coleoptera: Bostrichidae, Dinoderinae)

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Abstract. The paper contains the description of a new species of the family Bostrichidae, *Dinoderus koi* n. sp., from Taiwan. Although belonging to *Dinoderus* s. str., it shows some characteristic features of the subgenus *Dinoderastes* Lesne, therefore we provide a modified key to the identification of subgenera of *Dinoderus*.

Key words: entomology, taxonomy, new species, *Dinoderus*, Coleoptera, Bostrichidae, Taiwan.

INTRODUCTION

The genus *Dinoderus* Stephens, 1830 contains 26 species grouped into two subgenera: *Dinoderus* s. str. with 22 and *Dinoderastes* with 4 species. The majority of taxa have been described from the Oriental Region, with only few from Palaearctic, Ethiopian, Australian and Neotropical Regions (Borowski, Węgrzynowicz 2007). The fauna of Taiwan includes so far 6 species representing both subgenera (Liu & al. 2006; Borowski, Węgrzynowicz 2011). Below we provide the description of *Dinoderus koi* n. sp., discovered among the materials of the Department of Entomology, National Taiwan University (NTU), Taipei.

TAXONOMY

Dinoderus (*Dinoderus*) *koi* n. sp.

Type material

Holotype, "Taiwan, Nantou County, Neimaopu Tract, NTU Experimental Forest, 15-I-2005, No. 4, 1 specimen, leg. Ching-Shan Lin" (deposited in the Department of Entomology, NTU, Taipei).

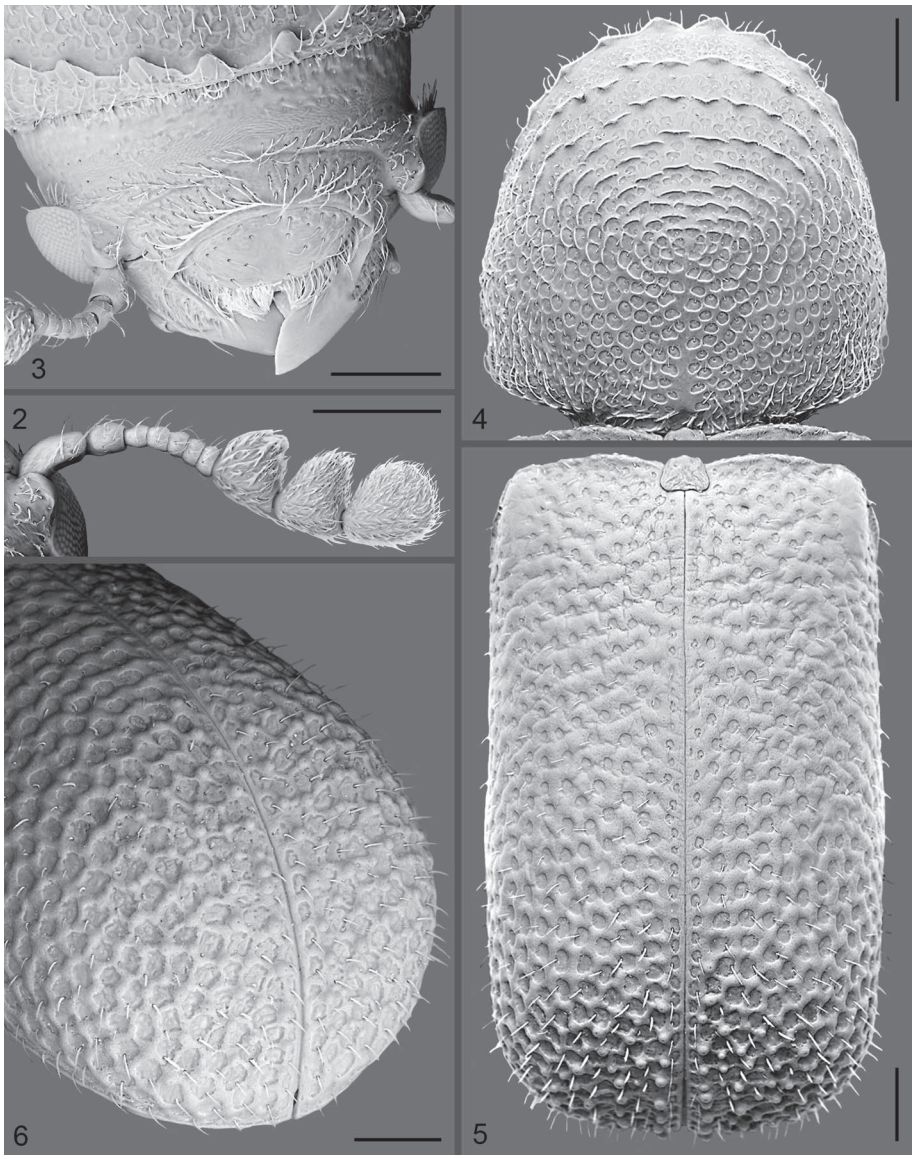
Diagnosis

Numerous erect papillae on elytral truncation make *Dinoderus koi* n. sp. easily distinguishable from all the remaining, devoid of such ornamentation, representatives of the genus *Dinoderus*. Moreover, distinctive is also the structure of tarsi in the new species: brushes of long setae on three proximal joints is characteristic of *Dinoderastes* (Fig. 9) and hitherto have not been found in representatives of the nominotypical subgenus.

1. *Dinoderus koi* n. sp., holotype

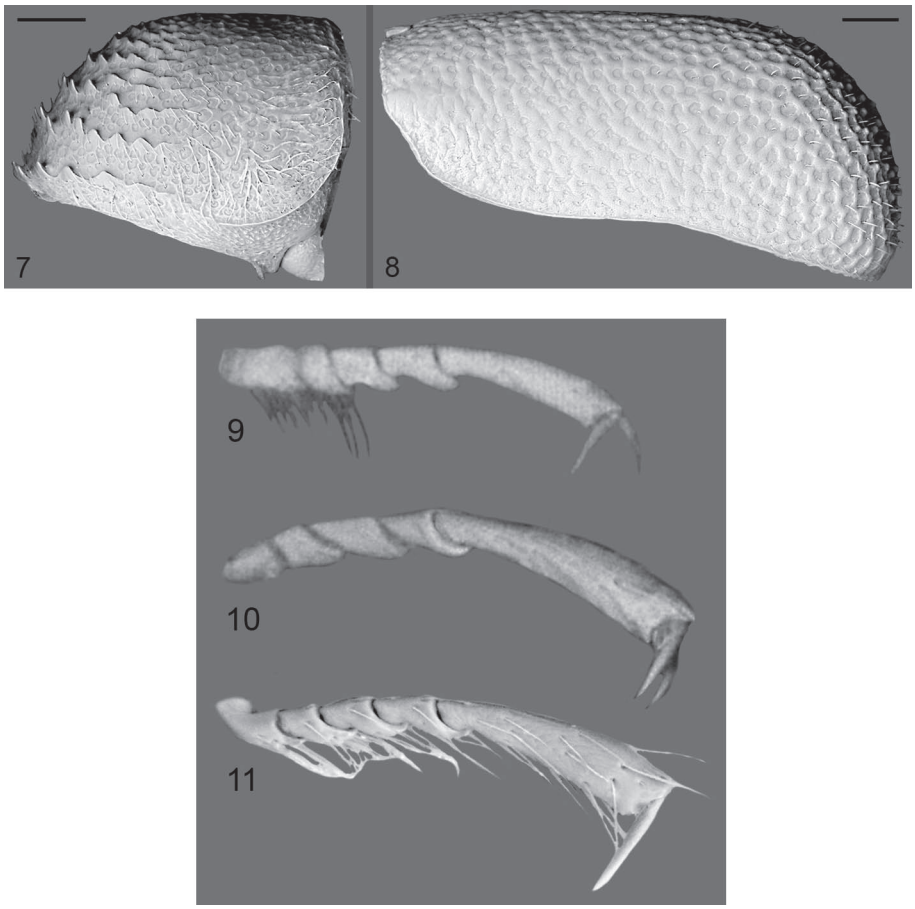
Description

Length 2.9 mm. Body cylindrical, elongated, dorsal side bicolorous: pronotum black, elytra brownish-red (Fig. 1). Antennae 10-jointed, ending with 3-jointed club; 2 joint of club transverse, third of width and length subequal, broadly rounded at apex (Fig. 2). Eyes distinctly flattened (Fig. 3). Radially spread setae behind ocular margins yello-



2-6. *Dinoderus koi* n. sp.: 2 – antenna; 3 – head, dorsal view; 4 – pronotum; 5 – elytra, dorsal view; 6 – elytral declivity, semilateral view

wish-white. Labrum finely punctured at sides, smooth at middle. Epistome narrow, its apical margin arcuately emarginated, erect setulae directed forwards. Front very narrow, with finely but distinctly microsculptured surface, setulae (seen only near to epistome) directed towards middle of front. Vertex inconspicuously wrinkled. Pronotum widest behind midlength (Fig. 4). Lateral carina distinct, reaching beyond pronotal midlength, there vanishing and not joining row of denticles on anterior margin (Fig. 7). Denticles at anterior margin (5 on each side) evenly spaced, sharply triangular; those in remaining rows finer, semicircularly distributed. Basal part of pronotum covered with wide, shallow punctures. Prescutellar depression very shallow and inconspicuous. Pronotal setulation yellowish-white, recumbent, only on sides and near basal angles denser. Scutellum trapezoidal, black. Elytra faintly shining, parallelsided (Fig. 5), anterior margin sharp and distinct throughout. Elytral punctures wide, shallow, irregularly distributed;



7-8. *Dinoderus koi* n. sp., lateral view: 7 – pronotum; 8 – elytra; 9-11. Tarsi of *Dinoderus*, lateral view: 9 – *D*. (*Dinoderastes*) *speculifer* Lesne; 10 - *D*. (*Dinoderus*) *nitidus* Lesne; 11 - *D*. (*Dinoderus*) *koi* n. sp.

surface between them weakly (anteriorly) to distinctly (in apical part) convex; truncation covered with prominent, highly elevated, round-topped, lustrous black papillae (Fig. 6). Apices of elytra invisible from above, apical margin finely crenulated. Setae very fine, hardly discernible in almost glabrous-looking basal and middle parts of elytra (Fig. 8), distinct, erect, yellowish-white, short, sharply pointed on truncation. Ventral parts black, femora and tibiae blackish-brown, tarsi reddish-brown. First tarsomere short, hardly appreciable; claw-joint somewhat longer than the remaining ones together. Three proximal tarsomeres with dense brush of long setae (Fig. 11).

Name derivation

The name of the new species is given in honour of the Taiwanese entomologist, friend of one (JB) of the authors, Prof. Chiun-Chen Ko, head of the Departament of Entomology, National Taiwan University, Taipei.

Discussion

Dinoderus koi n. sp. was caught in Lindgren multiple funnel trap, in a Chinese-fir (*Cunninghamia lanceolata*) stand. Rarity of occurrence suggests that it does not develop in bamboos but rather in other – possibly endemic to Taiwan – trees or bushes. The species must be treated as endemic at least until its host-plant is discovered or the beetle is recorded from other areas of Asia. Tarsal structure of the new species is peculiar: short first three joints and long –longer than the remaining together– last one characterize the specialized species classified in the subgenus *Dinoderus* s. str. (Fig. 10), but dense brushes of setae on underside of basal three joints is, in turn, typical for *Dinoderastes*, whose claw joints are definitely shorter than rather long proximal three (Fig. 9). On these tarsal characters all previous keys to the identification of species of the genus *Dinoderus* (Lesne 1914, Fisher 1950, Vrydagh 1955, Borowski, Węgrzynowicz 2012) have been based, so the revised key to subgenera is provided below:

Genus *Dinoderus* Stephens

1. Basal joints of tarsi short, distinctly shorter than second and third combined. Apical tarsomere longer than remaining ones combined (Figs 10-11) ……..... .....*Dinoderus* s. str.
-. Basal tarsomeres long, at least as long as second and third combined. Apical tarsomere somewhat shorter than the remaining ones combined (Fig. 9) ..…… ……..……*Dinoderastes* Lesne

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