

First Record of *Lebioderus* (Coleoptera, Carabidae, Paussinae) from the Indochinese Peninsula, with Description of a New Species

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Abstract. *Lebioderus thaianus* n. sp. is described from Khao Yai National Park, East Thailand. It is the first record of *Lebioderus* from the Indochinese Peninsula. The new species is similar to *L. candezei* Dohrn, *L. percheroni* Westwood, and *L. ritsemae* Gestro, but is easily distinguished from them by its smaller body and other characteristics.

Key words: new species, Platyrhopalina, *Lebioderus thaianus* sp. nov., myrmecophily, Thailand, Khao Yai National Park, flight interception trap.

Introduction

The genus *Lebioderus* Westwood, 1938, belongs to the subtribe Platyrhopalina Jeannel, 1946, of the tribe Paussini Latreille, 1807, and is represented by seven species from Southeast Asia, including Indonesia [Java (Java), Sumatera (Sumatra), and Kalimantan], Malaysia (Peninsular Malaysia), and the Philippines (Luzon) (Luna de Carvalho, 1987). No *Lebioderus* species has been recorded from the Indochinese Peninsula; the type locality for one species, however, is unknown (Luna de Carvalho, 1973). Recently, we collected an unknown species of *Lebioderus* in Khao Yai National Park, East Thailand, and describe it as a new species in this paper.

Although all of the members of *Lebioderus* are thought to be myrmecophilous like other Paussini species (Luna de Carvalho, 1987), no information exists on their ant associations, including those of the new species described here.

The following abbreviations are used: KUM (Kyushu University Museum, Fukuoka), NSMT (National Museum

of Nature and Science, Tokyo), and NPBK (National Parks, Bangkok). The technical procedures used here are generally as in Maruyama (2006). Measurements are all in millimeters.

Lebioderus Westwood

Lebioderus Westwood, 1838: 93 [original description; type species: *Ledioderus goryi* Westwood, 1838, by monotypy]; Luna de Calvalho, 1987: 403 [redescription, key to species].

Lebioderus thaianus Maruyama, n. sp.

Etymology. Named after Thailand.

Type series. Holotype: male (KUM), [Thailand]: Pha Kluai Mai (800 m alt.), Khao Yai National Park, Nakhon Ratchasima, 27 IX-4 X 2007, M. Maruyama & Y. Katayama. Paratypes: 1 male and 1 female (KUM), same data as holotype; 1 male (NPBK) and 1 female (KUM), same data, but Kong Kaew (700 m alt, near Visitor

Centre), 21 IX-4 X 2007; 1 male (NSMT), same data, but Kong Kaew (750 m alt, near Visitor Centre), 26 X-30 X 2006, S. Nomura.

Distribution. East Thailand (Khao Yai National Park).

Diagnosis. This species is very similar to *L. candezei* Dohrn, 1888, from Kalimantan (Borneo), *L. percheroni* Westwood, 1874, from Peninsular Malaysia, and *L. ritsemae* Gestro, 1901, from Sumatera in the shapes of antennae, pronotum, and legs, but it is easily distinguished from them by its smaller body, non-protruding temples, and evidently shorter 2nd dorsal denticle of the 2nd antennal segment (Fig. 1, arrow).

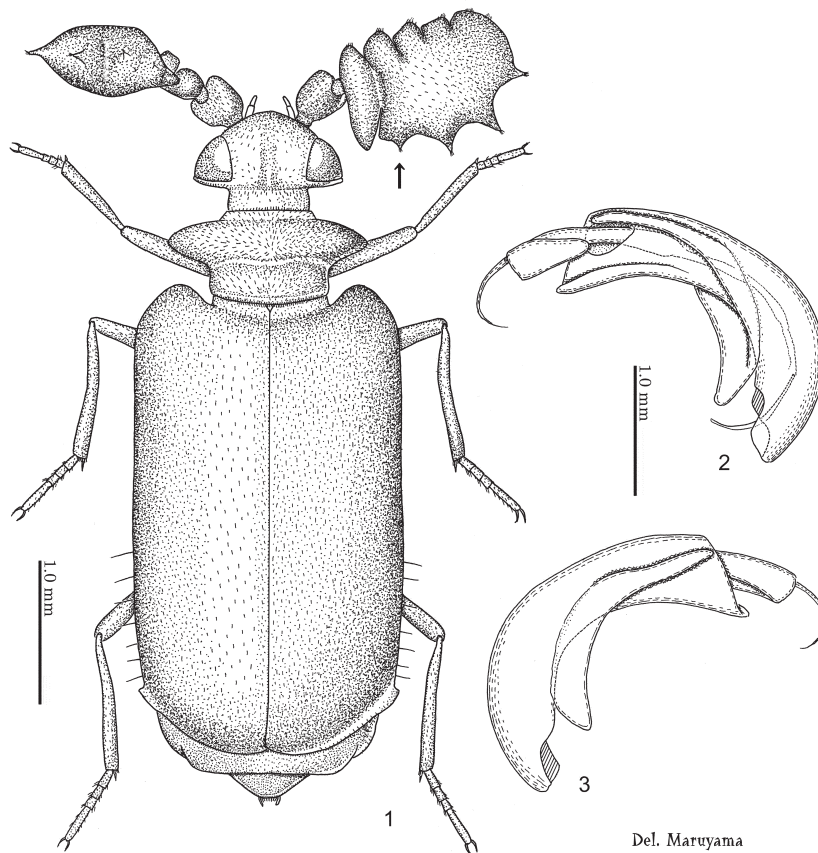
Description.

Body (Fig. 1) small, shining, dark brown, but mouthparts and legs slightly paler. Head with a shallow longitudinal groove medially; frons gently rounded; temples weakly protruded laterad; surface smooth, sparsely covered with minute setae. Second segment of antennae (fused 2nd to 11th segments) not well articulated except for 1st article; 2nd dorsal denticle (Fig. 1: arrow) short;

3rd dorsal denticle shorter than 4th, almost as long as 5th; 1st ventral projection rounded at apex; 2nd to 4th ventral projections shallowly emarginate; 5th ventral projection small, rounded; 6th ventral projection minutely convex with a few small setae at apex. Pronotum broad ($W/L=2.05-2.15$); lateral projection well convex above, rounded at apex; surface smooth, moderately with short setae. Elytra with 8-10 pairs of long setae on lateral margins of apical half; surface smooth, moderately with short setae. Legs thin; tibiae slightly dilated apicad, curved outwards. Aedeagus (Figs. 2, 3): apical inner part of median lobe margined; internal sac with a subtriangular sclerite; apices of parameres reach apical margin of median lobe.

Measurements. Body length: ca. 6.2-7.0; head width: 1.43-1.55; 2nd segment of antenna: 1.55-1.68; pronotal length: 0.91-0.99; pronotal width: 1.87-2.13; elytral length (from apex of shoulder): ca. 4.4-5.0.

Bionomics. Six specimens of this species were collected in flight interception traps at two sites in Khao Yai National Park during the rainy season. At the



Figs. 1-3. *Lebioderus thaianus* sp. nov. 1, facies, female (paratype); 2, aedeagus (holotype), ventral view; 3, ditto, dorsal view.

collecting sites, ants of the genera *Dorylus*, *Leptogenys*, *Odontomachus*, *Pheidole*, and *Pseudolasius* were particularly abundant. We excavated numerous ant nests searching for this paussine beetle, but none were found.

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