

***Orientoderus* a New Subgenus of *Prostephanus* LESNE, 1897, with
Description of a New Species from Thailand and Laos
(Coleoptera, Bostrichidae)**

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Abstract The paper contains descriptions of a new subgenus, *Orientoderus* subgen. nov., of the genus *Prostephanus* LESNE, 1897, and a new species, *P. (O.) orientalis* sp. nov. from Thailand and Laos. A key to the subgenera and a catalogue of species, belonging to the genus are provided.

Although already LESNE (1906, 1938) observed that the genus *Prostephanus* (five American species) and *Dinoderopsis* (three from Africa) were vicariants, and their representatives closely are resembled one another, nevertheless they have been continuously treated as separate genera (BOROWSKI, 2007, BOROWSKI & WĘGRZYNOWICZ, 2007). Studying the material of the Hungarian Natural History Museum (Budapest) we found a specimen from northeastern Thailand belonging to a new species and showing mixed characteristics between the subgenera. In 2010 LIU published a paper in which she reported an African species, *Dinoderopsis serriger*, from Laos; however, the examination of the respective specimen has revealed its taxonomic identity with the Thai new species. Detailed morphological analysis and geographical distribution prompted us to propose a new concept of the genus *Prostephanus*, including *Dinoderopsis* stat. nov., as well as *Orientoderus* subgen. nov. with the new Indochinese species. A key to the subgenera and a catalogue of all species belonging to this genus are provided at the end of the paper.

***Orientoderus* subgen nov.**

Gender: masculine.

Type species: *Prostephanus (Orientoderus) orientalis* sp. nov.

Diagnosis. *Orientoderus* subgen. nov. is easily distinguishable from the African *Dinoderopsis* by reduced number (10 instead of 11) of antennomeres. Moreover, antennal setae are very long and erect, what is otherwise typical characteristics of the subgenus *Prostephanus* s. str. — in *Dinoderopsis* the setae joints are uniformly, shortly pubescent. From the species of the American, nominotypical subgenus the new one differs in the armature of anterior margin of pronotum: at middle denticles in *Orientoderus* are widely separated and have no common base, while in *Prostephanus* s. str., the bases of two closely set curved dents are not separated and together make a conspicuously narrowed and produced lobe.

Description. Body cylindrical, elongate. Antennae 10-jointed, with distinct three-jointed club. Setation of antennomeres long, thin, erect. Labrum definitely wider than epistome, apical margin of the latter arcuately emarginate, at middle with pair of small denticles directed anterad. Anterior margin of front markedly convex, finely granulated on entire width; front otherwise punctured. Vertex smooth anteriorly, then covered with narrow longitudinal ridges. Fine, not

dense denticulation of lateral pronotal margin vanished in anterior half. Sides of pronotum rounded, convergent anterad. Rather coarse denticulation of anterior margin disrupted at middle, gap at least as wide as bases of two denticles. Anterior half of pronotal surface covered with sharp, backwards directed denticles. Median sulcus shallow and narrow, entire. Scutellum at the level of elytral surface. Elytra punctured, abruptly and sharply truncated. On and near declivity numerous papillae, on its sides sharply pointed tubercles. Suture smooth on upper ridge, papillose on sides. Elytral pubescence erect on apical declivity, recumbent otherwise. Apical margin crenulate. Tarsi distinctly 5-jointed, first and second joints subequal in length, fifth as long as basal four together. Inner edge of protibiae with large hooked dent at apex. Outer edges of tibiae denticulate, denticles becoming coarser distalwards; inner surfaces with long dense pubescence.

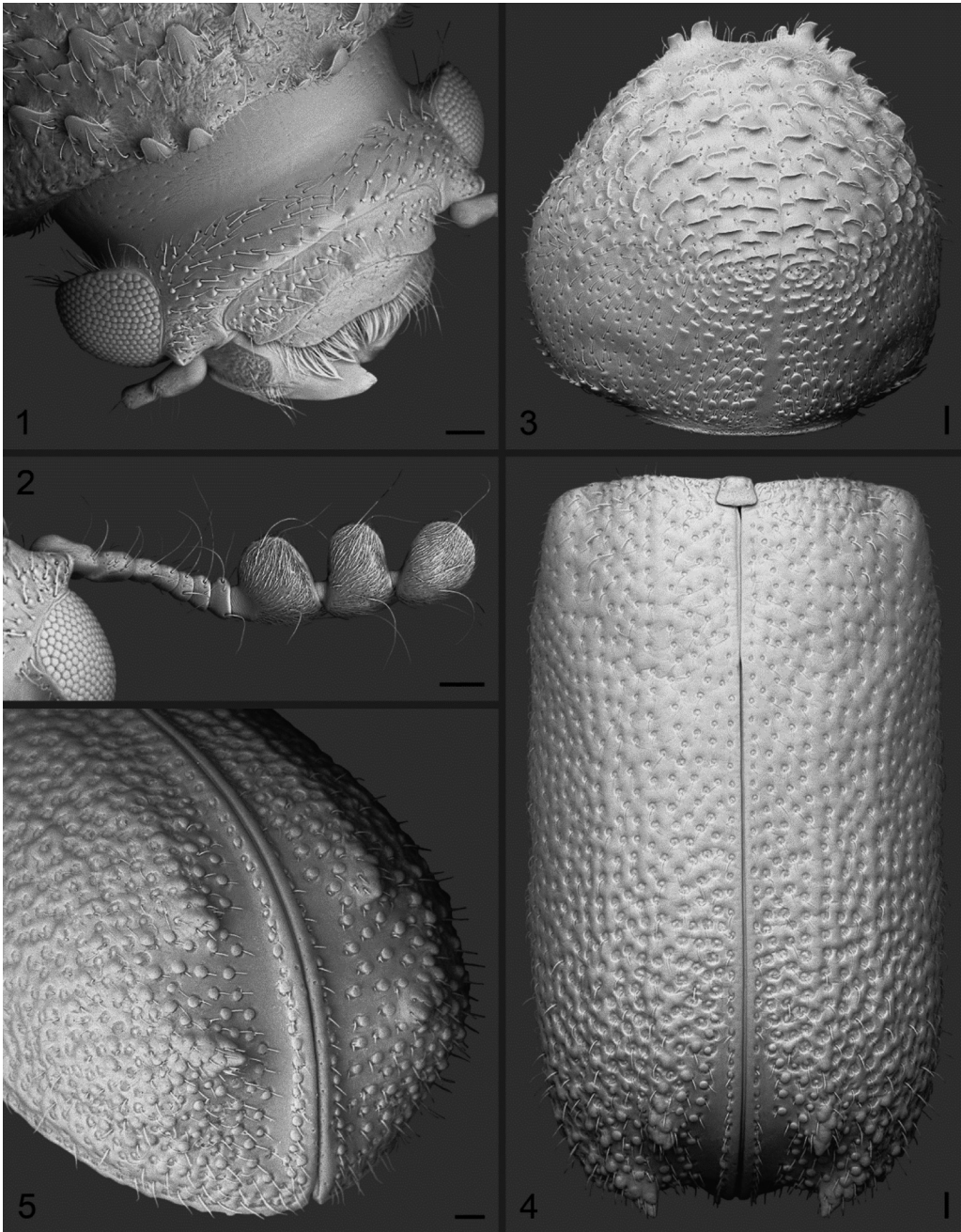
Remarks on the biology of the genus Prostephanus LESNE. The biology of most species of *Prostephanus* remains, unfortunately, unknown. Data on the taxa of, and placement on, host-plants are lacking for the subgenera *Dinoderopsis* LESNE and *Orientoderus* subgen. nov. The situation with the species belonging to the subgenus *Prostephanus* looks somewhat better, although even here the bionomy and host-plants of *P. sulcicollis* and *P. arizonicus* are unknown. Very scarce are biological data on *P. punctatus*. It develops in hard wood of deciduous trees of the family *Fagaceae* e.g. oak (*Quercus* spp.) (MAJKA, 2007). LESNE (1897) reports emerging of this species from dead roots and trunks of oak and hickory (*Carya illinoensis*). Equally scant informations concern *P. apax*, which had been reared from stalks of cultivated (*Gossypium* spp.) and wild (*Thurberia thespesioides*) cotton. The best known is the biology of *P. truncatus*. This species, native to Mexico, inhabits permanently only tropical areas, but developing in stored grains of maize is often introduced with them to various countries all-over the world. According to LESNE (1897) it can also develop in edible plant tubers, but in view of type of substratum normally preferred by Bostrichidae this record probably refers stored and quite dried tubers. NAWROT and KLEJDYSZ (2009) mention its development in tubers of cassava (*Manihot esculenta*), while FISHER (1950) lists black walnut (*Juglans nigra*) and species of the genus *Smilax* as host-plants of *P. truncatus*, but does not specify whether grains or woody sprouts are damaged.

All species of *Prostephanus* readily come to light and are usually collected in this way.

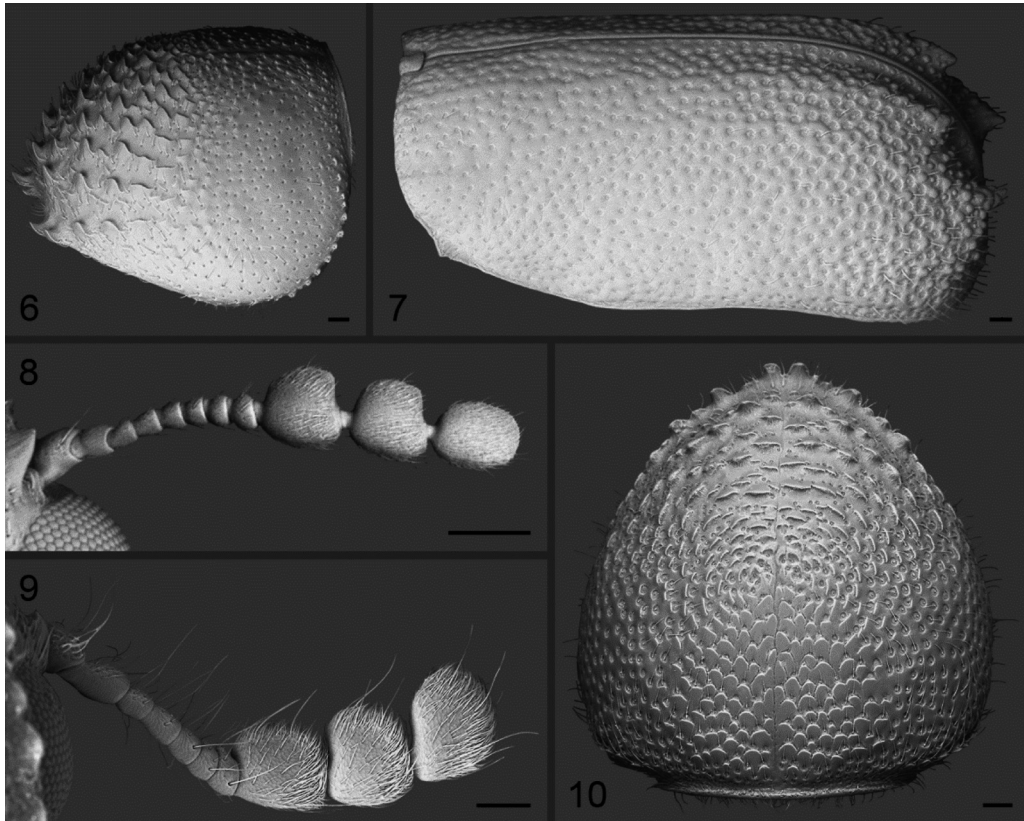
Prostephanus (Orientoderus) orientalis sp. nov.

(Figs. 1–7, 11)

Description. Length 4.6–5.0 mm. Body lustrous, reddish- to chestnut-brown. Club joints transverse, widened on inner edge. Labrum finely, sparsely punctulate. Denticles on anterior margin of epistome fine, sometimes hardly discernible. Front finely punctulated, covered with short, sharp setulae. Posterior margins of eyes with erect pubescence. Anterior edge of pronotum usually with two or three pairs of large hooked denticles. Pronotal sides lustrous, smooth, finely and sparsely punctulated. Scutellum trapezoidal, slightly longer than wide. Elytra lustrous, densely irregularly punctured, only on sides with some tendency to form longitudinal rows. Pubescence of upper side recumbent, thin, short, yellowish-white. Around apical declivity punctures deeper and additionally some papillae between them; on each side two sharply conical tubercles: distinctly smaller pair in upper part, much larger ones at midlength of the declivity. Base and sides of tubercles distinctly papillose. Suture markedly elevated, somewhat widened apicalwards. Apical declivity with narrow smooth stripe along suture, remaining surface papillose.



Figs. 1-5. *Prostephanus (Orientoderus) orientalis* sp. nov. — 1, head; 2, antenna; 3, pronotum; 4, elytra; 5, elytral declivity. Scale bar=0.1 mm.



Figs. 6–10. *Prostephanus* spp. — 6–7, *P. (Orientoderus) orientalis* sp. nov.; 8, *P. (Dinoderopsis) escharipora* (LESNE); 9–10, *P. (P.) punctatus* (SAY) — 6, pronotum, lateral view; 7, elytra, lateral view; 8, 9, antenna; 10, pronotum. Scale bar=0.1 mm.

Pubescence of declivity erect, yellow.

Type material. Holotype: “Thailand, Doi Phuka National Park, headquarters, 26~27-XI-2003, UV light, leg. L. Peregovits, M. Földvári, Á. Körösi, A. Szappanos & B. Maklári-Kis, No. 18” (HNHM coll.). Paratype: “Laos-N (Oudomaxai), 1~9-V-2002, 1,100 m, 20°45' N, 102°09' E, Oudom Xai (17 km NEE), Vit Kubáň leg.” (NMB coll.), determined as *Dinoderopsis serriger* LESNE, 1923 by LIU, Lan-Yu.

Key to the Subgenera of the Genus *Prostephanus* LESNE

1. Antennae 11-jointed, shortly and uniformly pubescent (Fig. 8) *Dinoderopsis* LESNE
- Antennae 10-jointed, their pubescence long and erect (Figs. 2, 9) 2
2. Anterior margin of pronotum conspicuously produced, at middle with pair of hooked, closely approached dents on common base (Fig. 10) *Prostephanus* s. str.
- Anterior margin of pronotum not strongly produced, curved denticles at middle widely separated (Fig. 3) *Orientoderus* subgen. nov.

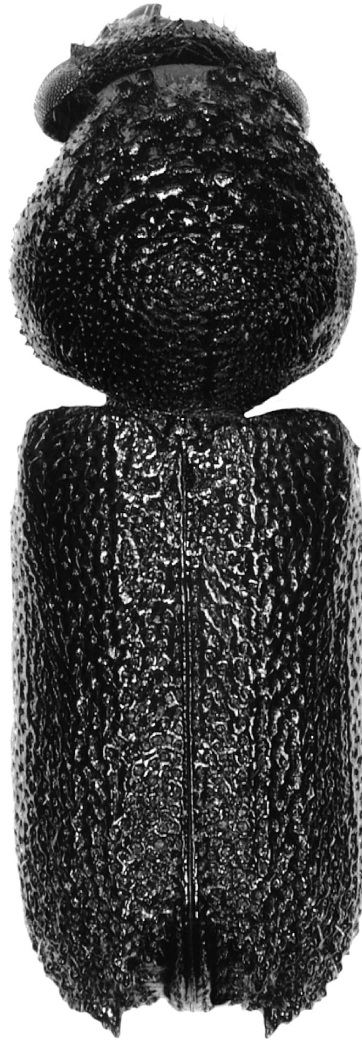


Fig. 11. *Prostephanus (Orientoderus) orientalis* sp. nov., habitus

Catalogue of Species Belonging to the Genus *Prostephanus* LESNE

Genus *Prostephanus* LESNE, 1897

Subgenus *Prostephanus* s. str.

Prostephanus (Prostephanus) apax LESNE, 1930

Distribution. USA, Mexico, Panama.

Prostephanus (Prostephanus) arizonicus FISHER, 1950

Distribution. USA (Arizona).

Prostephanus (Prostephanus) punctatus (SAY, 1826)

Distribution. Canada, USA.

Prostephanus (Prostephanus) sulcicollis (FAIRMAIRE & GERMAIN, 1861)

Distribution. Chile.

Prostephanus (Prostephanus) truncatus (HORN, 1878)

Distribution. USA, Central America, introduced: France, Germany, Middle East, Africa.

Subgenus *Dinoderopsis* LESNE, 1906 stat. nov.

Prostephanus (Dinoderopsis) escharipora (LESNE, 1906) comb. nov.

Distribution. Yemen (Socotra).

Prostephanus (Dinoderopsis) opimus (LESNE, 1938) comb. nov.

Distribution. South Africa.

Prostephanus (Dinoderopsis) serriger (LESNE, 1923) comb. nov.

Distribution. East and South Africa, Yemen.

Subgenus *Orientoderus* subgen. nov.

Prostephanus (Orientoderus) orientalis sp. nov.

Distribution. Laos, Thailand.

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要 約

J. BOROWSKI • P. WĘGRZYNOWICZ: タイとラオスからの1新種に基づく *Prostephanus* 属の新亜属 *Orientoderus* (鞘翅目ナガシクイ科)。——ハンガリー自然史博物館に所蔵されていたタイ産1標本に基づいて新亜属新種 *Prostephanus (Orientoderus) orientalis* を記載した。また LIU (2010) が *Dinoderopsis serriger* と同定しラオスから記録したものは本新種であった。*Prostephanus* 属(北米・南米)と *Dinoderopsis* 属(アフリカ)は互いによく似ているが、隔離分布をしていることから別属として扱われていた。アジア産の本新種が発見され両属の特徴を持つことから、*Dinoderopsis* を亜属に降格し、新亜属 *Orientoderus* を新設した。*Prostephanus* 属の検索表と種カタログを作成した。

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