

A New Species of the Genus *Prostomis* (Coleoptera, Prostomidae) from Sulawesi, Indonesia

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Abstract *Prostomis trigona* sp. nov. is described from Sulawesi, Indonesia. This species is similar to *P. lawrencei* SCHAWALLER, 1993, but differs from it by the characteristics of mandibles, jugular process and male genitalia.

Introduction

Prostomidae (Coleoptera, Tenebrionoidea) is a small family widely distributed in the world (except for South America), and about 30 species under two genera have been known (SCHUNGER *et al.*, 2003; SEAGO & BEUTEL, 2010). The genus *Prostomis* LATREILLE, 1825 is represented by 27 species from the Holarctic, the Oriental, the Papuan-Pacific, the Australian and the South African Regions (SCHAWALLER, 2003; SEAGO & BEUTEL, 2010). From the Oriental and the Australian (including the Papuan-Pacific) Regions, 13 and 10 species are known respectively, but no species has been recorded from the Wallacea (SCHAWALLER, 2003).

In the present paper, we describe a new species from Sulawesi, Indonesia.

Materials and Methods

General observations, dissections and microstructures of dissected parts were made under a Leica MZ95. After the observation, the dissected parts were mounted on the same card with the specimen. Photographs were taken under a Leica MZ95. Illustrations were drawn by Olympus BH2.

The materials examined in this paper are preserved in Ehime University Museum, Matsuyama (EUMJ), and Museum Zoologicum Bogoriense, Bogor, Indonesia (MZBI).

Terminology mainly follows SCHAWALLER (1993), and SEAGO and BEUTEL (2010). Morphological abbreviations used in this paper are as follows: BL — total body length (HL+PL+EL); EL — length of elytra in suture from anterior margin of scutellum to elytral apex; EW — maximum width of elytra; HL — head length from front margin of pronotum to front median margin of clypeus; HW — maximum width of head across eyes; JLL — length of left jugular process from behind of mentum to apex; JRL — length of right jugular process from behind of mentum to apex; MLL — length of left mandible from front median margin of clypeus to apex; MRL — length of right mandible from front median margin of clypeus to apex; PL — length of pronotum in median line; PW — maximum width of pronotum. The average value is given in parenthesis after the range.

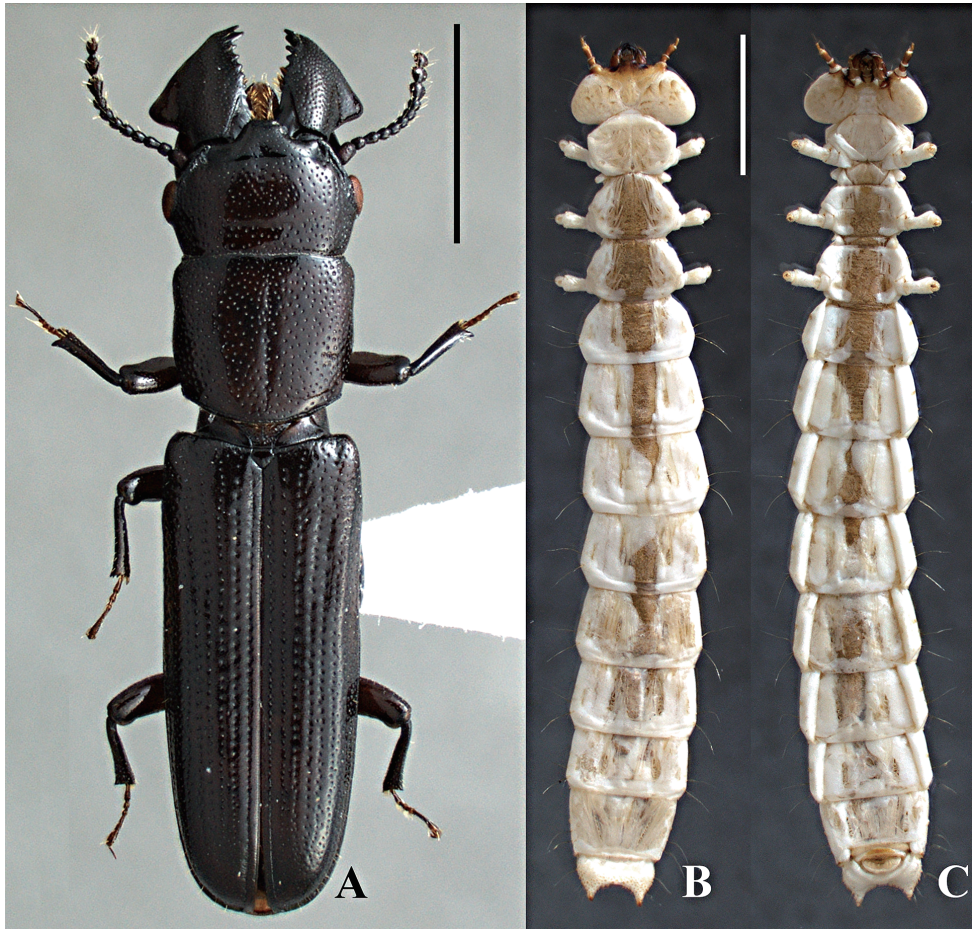


Fig. 1. Adult (A) and larva (B, C) of *Prostomis trigona* sp. nov. — A, Habitus of male, holotype; scale bar = 2.0 mm. B, Dorsal side; C, ventral side; scale bar = 1.0 mm.

Taxonomy

Prostomis trigona sp. nov.

(Figs. 1–3)

Type series. Holotype: male (EUMJ), “Indonesia: Wawo, Northe Kolaka Sulawesi Tenggara Mt. Mekongga, 1500–1800m 3°38'17"S. 121°11'34"E–3°37'44"S. 121°12'55"E 17. XII. 2013. R OGAWA”. Paratypes (EUMJ, MZBI): 12 exs., same data as for the holotype.

Description. Adults. Body (Fig. 1) oblong, distinctly flat, shiny; surface scattered with fine punctures; BL 6.34–7.54 (6.97) mm. Coloration of body fully reddish to dark brown.

Head short; HL/HW 0.60–0.77 (0.68); HW/PW 0.95–1.12 (1.07); clypeus projecting anteriorly. Eyes moderate in size, prominent. Antennae (Fig. 3D) moniliform, bearing several setae except for basal three segments; 4th segment bearing very short setae; 1st and 2nd segments slender; 9th to 11th

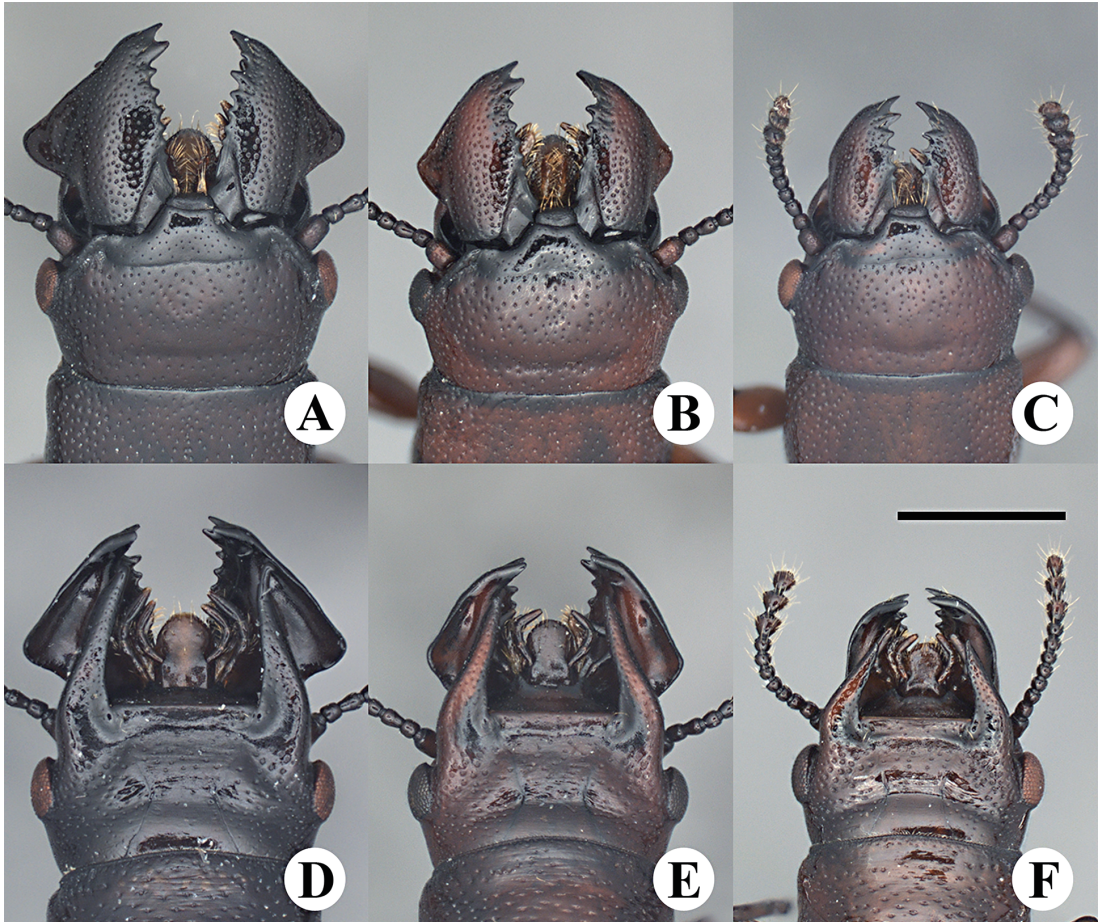


Fig. 2. Head of *Prostomis trigona* sp. nov. showing individual variations. — A, B, C, Dorsal sides; D, E, F, ventral sides. Scale bar = 1.0 mm.

segments loose. Mandibles slender and large, lacking punctures in ventral side, projecting triangularly (= “ear-like dilatation” in SCHAWALLER, 1993) at lateral margin in large body size specimens (Fig. 2A), weakly projecting in medium body size specimens (Fig. 2B), lacking projections in small body size specimens (Fig. 2C); MLL/MRL 0.94–1.12 (1.07). Jugular processes slender and slightly asymmetrical, having small tubercle in outside and rounded tips in large body size specimens (Fig. 2D), slender and lacking tubercle outside in medium body size specimens (Fig. 2E), stout, lacking tubercle in outside, and with blunt tips in small body size specimens (Fig. 2F); JLL/JRL 1.02–1.16 (1.08).

Pronotum subsquare, subparallel-sided, with shallow longitudinal groove in median line; PL/PW 0.90–0.98 (0.93). Scutellar shield pentagonal, glabrous. Elytra oblong, subparallel-sided near base to apical 1/4, having six rows of punctures; EL/EW 1.58–2.58 (2.44).

Aedeagus oblong (Fig. 3A–C); parameres slender, gently tapered apically, then rapidly tapered in apical 1/4, with two pairs of short setae in apical 1/4, with a long apical seta; median lobe (= “penis guide” in SEAGO & BEUTEL, 2010) stout, gradually narrowed apically, shorter than parameres, covered with punctures in ventral surface; basal piece (= basale in SEAGO & BEUTEL, 2010) oval, as long as parameres, arcuate at basal margin, widest at basal 1/2.

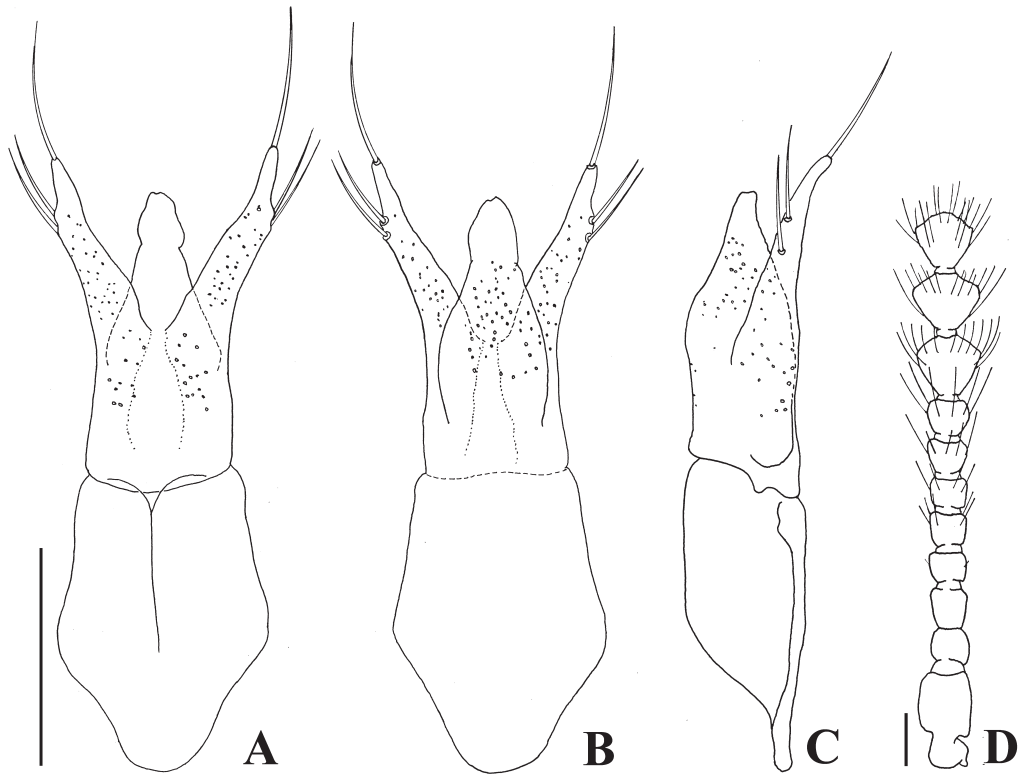


Fig. 3. Aedeagi (A–C) and left antenna (D) of *Prostomis trigona* sp. nov. — A, Dorsal side; B, ventral side; C, lateral side. Scale bars = 0.1 mm.

Measurements. Male and female (n = 10). MLL 0.70–1.02 (0.91) mm; MRL 0.63–1.08 (0.85) mm; JLL 0.46–0.88 (0.73) mm; JRL 0.45–0.85 (0.70) mm; HL 1.05–1.28 (1.16) mm; HW 1.54–1.89 (1.71) mm; PL 1.35–1.61 (1.49) mm; PW 1.43–1.71 (1.60) mm; EL 3.94–4.96 (4.32) mm; EW 1.56–2.66 (1.80) mm.

Larvae (Fig. 1B–C). Body about 4.5 mm, distinctly flat; urogomphi relatively long, well separated each other, projecting postero-dorsally.

Remarks. This species is similar to *Prostomis lawrencei* SCHAWALLER, 1993 known from Papua New Guinea in the shapes of jugular process and male genitalia (SCHAWALLER, 1993), but differs from it by the following characteristics: 1) lateral margins of mandibles projecting laterally in large and medium body size specimens (lacking projections in *P. lawrencei*); 2) tips of jugular process weakly bent in outside (weakly bent in inside in *P. lawrencei*); 3) parameres rapidly tapered in apical 1/4 (gently tapered in *P. lawrencei*). The larva of this species is similar to the previously known larvae of three species (*P. mandibularis* (FABRICIUS, 1801), *P. edithae* SCHAWALLER, 1991 and *P. latoris* REITTER, 1889), but the urogomphi are relatively long and well separated from each other (HAYASHI, 1969; SCHAWALLER, 1991; SCHUNGER *et al.*, 2003).

Biological notes. The type series were collected from rotten woods with six larval specimens.

Etymology. The specific name of this species is derived from the projection of mandibles.

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要 約

伊藤哲成・吉富博之：インドネシアからデバヒラタムシ属(鞘翅目デバヒラタムシ科)の1新種。———
デバヒラタムシ属 *Prostomis* は全北区, 東洋区, オーストラリア区, エチオピア区から 27 種が知られており,
そのうち 13 種が東洋区から, 10 種がオーストラリア区から記録されている。本論文では, ワラセアに位置
するインドネシアのスラウェシ島から 1 新種 *P. trigona* sp. nov. を記載した。本種は, 頭部や雄交尾器の特徴
からパプアニューギニアから知られる *P. lawrencei* SCHAWALLER に類似するが, 大顎や頭部腹面角状突起, 雄
交尾器により区別することができる。

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