A new genus of Braconinae with depressed ovipositor-tip from the Oriental region (Hymenoptera: Braconidae)

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Key words: Braconidae; Braconinae; Trullabracon; Oriental.

Trullabracon gen. nov. (Braconidae: Braconinae; type-species: T. fuscipennis spec. nov.) from Sumatra is described and fully illustrated.


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Introduction

The junior author discovered in the collection of the Queensland University Museum a new genus of the subfamily Braconinae Nees, 1812 (Braconidae). It has a peculiarly flattened tip of the ovipositor, and the lower valve is finely transversely striated (figs. 10, 14). The biology is unknown, but related genera are parasites of larvae of Cerambycidae and Buprestidae living in dead wood. The colour pattern indicates that is occurs in the rainforest.

For the terminology used in this paper, see van Achterberg, 1988.

Description

Trullabracon gen. nov.

Type-species: Trullabracon fuscipennis spec. nov.

Etymology: from “trlla” (Latin for “little spoon”) and the generic name Bracon because the tip of the ovipositor is depressed and spoon-like, and the new genus belongs to the Braconinae. Gender: masculine.

Diagnosis.— Head and mesosoma smooth dorsally; scapus suboval, gradually narrowed basally, its apex concave and somewhat protruding ventrally (fig. 3), and its inner apical margin simple (fig. 6); pedicellus cylindrical; frons nearly flat (fig. 8); eyes glabrous and not emarginate (fig. 9); face reticulate; clypeus without dorsal carina, and its ventral margin thin and rather protruding outwards (fig. 4); malar suture absent; labio-maxillary complex hardly protruding (fig. 4); labrum concave; mesoscutum largely glabrous; notauli absent, except for a pair of shallow depressions sub-anteriorly (fig. 11); pleural sulcus obsolescent; mesosternal sulcus smooth; antescutal depression absent; metapleural flange absent; median carina of metanotum largely absent (fig. 11); propodeum smooth and only slightly elevated antero-dorsally (fig. 11); propodeal spiracle round, behind middle of propodeum, and without tubercle
above it (fig. 4); angle between veins 1-SR and S+SC+R of fore wing approximately 20° (fig. 7); vein 1-SR+M of fore wing straight; vein 3-SR of fore wing slightly curved (fig. 1); vein cu-a of fore wing just postfurcal and vertical (fig. 1); vein 1-M of fore wing straight; vein CU1b of fore wing medium-sized and reclivous (fig. 1); vein m-cu of fore wing parallel to vein 1-M (fig. 1); vein 1-R1 of fore wing much longer than pterostigma, ending at apex of wing, and distad of apex of vein 3-M (fig. 1); vein 1-SR of fore wing normal (fig. 7); vein 3-CU1 of fore wing slender; vein r of fore wing oblique and nearly as long as width of pterostigma (fig. 1); second submarginal cell of fore wing slender and subparallel-sided (fig. 1); vein 1-SR+M of fore wing weakly and smoothly curved; vein 2-SC+R of hind wing subquadrate (fig. 1); vein 1r-m of hind wing slightly shorter than vein SC+R1 and straight; hind wing with 1 bristle baso-anteriorly and with 3 hamuli on vein SC+R1; tarsal claws without lobe and only setose (fig. 2); tarsal segments normal and with medium-sized bristles (fig. 2); fore tibia with one spur, 0.35 times fore basitarsus; fore tibia with robust bristles and apically with row of minute pegs (figs. 4, 13); first tergite with deep pit medio-basally (fig. 13), in lateral view low basally (fig. 4), with weak median carina, its medial area strongly elevated and with angulate sides, and movably joined to second tergite; second tergite with rather large triangular and smooth medio-basal area (fig. 13), without large V-shaped area medially, and with deep antero-lateral depressions (fig. 13); second metasomal suture deep and crenulate (fig. 13); third and fourth tergites with only incomplete antero-lateral grooves (fig. 4); second and third tergites with lateral crease; apex of ovipositor depressed, spoon-like (fig. 14), ventrally without teeth but finely transversely striated instead (fig. 10); length of ovipositor sheath about 1.5 times length of fore wing and long setose (fig. 5); hypopygium comparatively short (fig. 4) and shallowly emarginate medio-apically.

Distribution.— Oriental: one species.

Note.— Belongs to the Merinotus-group (Quicke, 1987) because of the reticulate face (fig. 9), the median carina of the first tergite not protruding basally (fig. 4), the second tergite with triangular medio-basal area, the ovipositor sheath longer than fore wing, the tarsal claws are simple, the absence of a secondary edge on inner side of scapus apically, the scapus is gradually narrowed basally, and vein 1r-m of hind wing is medium-sized. Differs from all other genera of the group by the spoon-like shape of the ovipositor and by the ventral striae of the lower valve. It differs from Meganura Szépligeti, 1900 and Gronaulax Cameron, 1910 also by the lack of the large V-shaped elevated area on the second tergite, and the normal vein 3-CU1 of the fore wing. In this respect the new genus resembles the Afrotropical genus Merinotus Szépligeti, 1906. However, the new genus differs from all three genera by the angularly elevated area of the first tergite and the nearly flat frons; the area of the second tergite is gradually elevated and the frons is distinctly concave in the three genera.

Trullabracon fuscipennis spec. nov.
(figs. 1-14)

Material.— Holotype, ♀ (Queensland Museum, Brisbane; originally from Queensland University Museum), "Indonesia: West Sumatra, Bukit Subang, nr Solok, 30 Dec. 1983-1 June 1984, R. De Keyzer".
Figs. 1-14, *Trullabracon fuscipennis* gen. nov. & spec. nov., holotype. 1, wings; 2, outer hind claw; 3, scapus, outer lateral aspect; 4, habitus, lateral aspect; 5, ovipositor; 6, scapus, inner lateral aspect; 7, detail of vein 1-SR of fore wing; 8, head, dorsal aspect; 9, head, frontal aspect; 10, apex of ovipositor, ventral aspect; 11, mesosoma, dorsal aspect; 12, hind leg; 13, first-third metasomal tergites, dorsal aspect; 14, apex of ovipositor, lateral aspect. 1, 4, 5, 12: 1 x scale-line; 2, 3, 6, 10, 14: 3.2 x; 7-9: 2 x; 11, 13: 1.5 x.
Holotype, ♀, length of body, and of fore wing both 9.9 mm.

Head.— Remaining antennal segments 8, length of third segment 1.6 times fourth segment, length of third and fourth antennal segments 2.6 and 1.6 times their width, respectively; outer side of third antennal segment depressed; length of maxillary palp equal to height of head; length of eye in dorsal view 1.5 times temple (fig. 8); temple roundly narrowed posteriorly; OOL:diameter of ocellus:POL = 16:7:6; face rather coarsely and densely reticulate laterally, but less distinct medially (fig. 9); clypeus flat, and densely rugulose; length of malar space 0.9 times basal width of mandible.

Mesosoma.— Length of mesosoma 2.1 times its height; episternal scrobe nearly absent; scutellar sulcus not visible because of pin-hole; metapleuron smooth, except for some setiferous punctuation; median carina of propodeum absent.

Wings.— Fore wing: r:3-SR:SR1 = 8:25:46; 1-SR short and linear with 1-M (fig. 1); 1-CU1:2-CU1 = 1:22; 2-SR:3-SR:r-m = 15:25:11.

Legs.— Hind coxa smooth; length of femur, tibia and basitarsus of hind leg 4.4, 13.4, and 10 times their width, respectively; length of hind tibial spurs 0.25 and 0.20 times hind basitarsus.

Metasoma.— Length of first tergite 1.8 times its apical width, medial area with some striae, lateral areas medium-sized and with some crenulae (fig. 13); second tergite sparsely rugose; basal half of third tergite rugose and with weak median carina (fig. 13); remainder of metasoma smooth and depressed; length of ovipositor sheath 1.48 times fore wing.

Colour.— Black; palpi, head (including stemmaticum) and mesosoma (except metapleuron posteriorly, and propodeum), fore leg (except dark brown telotarsus) and tegulae yellowish brown; middle leg largely dark brown; wing membrane, pterostigma and veins dark brown, with two small pale patches below base of pterostigma and near vein 3-CU1 of fore wing.

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References


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