A new genus of the tribe Pambolini from Australia (Hymenoptera: Braconidae)

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A new genus of the tribe Pambolini (Braconidae: Rhyssalinae), *Notiopambolus* gen. nov. (type-species: *N. depressicauda* spec. nov.) from Australia is described and fully illustrated. The new taxon is related to the Palaearctic genus *Dimeris* Ruthe, 1854.

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Introduction

The junior author discovered in the Australian National Insect Collection (ANIC, Canberra) a species with a highly aberrant (depressed) ovipositor (figs. 9, 10). It proved to be a new genus belonging to the tribe Pambolini (Rhyssalinae). The Pambolini are a widely distributed group, which is also common in the Australian region. It contains several genera, ofwhich some are undescribed. The distribution agrees with the impression (based on the morphology of the adults) that this tribe is an old (archaic) group within the "cyclostome"-lineage (Quicke & van Achterberg, 1990). The host of the new genus is unknown, but other species of the Pambolini are, as far as is known, parasites of coleopterous larvae (Chrysomelidae and Buprestidae).

For the terminology used in this paper, see van Achterberg, 1988: 5-11.

Description

Notiopambolus gen. nov.

Type-species: *Notiopambolus depressicauda* spec. nov.

Etymology: from "notios" (Greek for "south") and the generic name *Pambolus* because it is related to the genus *Pambolus* Haliday, 1836, and it seems to be restricted to the southern hemisphere. Gender: masculine.

Diagnosis.— Antennal segments about 40; scapus medium-sized and apically truncate (fig. 12); maxillary and labial palpi with 6 and 4 segments, respectively; occipital carina strongly curved ventrally and connected to hypostomal carina (fig. 7); frons smooth; labrum flat, glabrous and partly rugose, its ventral margin slightly upcurved (fig. 5); malar suture absent; pronope absent; anterior subalar depression strongly crenulate (fig. 13); prepectal carina complete, wide and reaching anterior margin of mesopleuron; precoxal sulcus completely crenulate (fig. 13); pleural and

mesosternal sulci crenulate; episternal scrobe deep and isolated (fig. 13); metapleural flange large (fig. 13); notauli complete (fig. 8); mesoscutum largely glabrous (setose along notauli only), without medio-posterior depression, and anteriorly truncate (fig. 8); median metanotal carina present posteriorly but not protruding (fig. 8); surface of propodeum strongly areolate, its areola elongate, and with pair of small tubercles (figs. 11, 13); veins r-m, CU1b, and cu-a of fore wing present (fig. 1); vein m-cu of fore wing antefurcal; vein 3-CU1 of fore wing distinctly longer than vein CU1b (fig. 1); vein m-cu of hind wing present; vein M+CU of hind wing about as long as vein 1-M (fig. 1); hind coxa roundly protruding anteriorly, but not angulate (fig. 6); tarsal claws without lobe (fig. 3); first metasomal tergite subsessile (fig. 11); laterope medium-sized; dorsope deep (fig. 11), and its spiracles in front of middle of tergite; second metasomal tergite smooth and its spiracles in epipleuron; second metasomal suture absent; ovipositor curved upwards, without teeth or notch, and strongly (ribbon-like) depressed (figs. 9, 10); ovipositor sheath about 0.4 times fore wing; venom gland reservoir elongate, and with annular rings (fig. 14); venom glands branched (?tubular), and inserted basally on the reservoir; venom duct moderately densely with ductules.

Note.— Doubtlessly belonging to the tribe Pambolini of the Rhyssalinae (Quicke & van Achterberg, 1990), despite its aberrant ovipositor shape. It shares with the Pambolini the propodeal tubercles, the shape of the head, and the flat labrum. It does not belong to the Opiinae because of the distinctly concave clypeus, the crenulate anterior subalar depression and the presence of a complete prepectal carina.

Within the Pambolini the new genus is characterized by the depressed and upcurved ovipositor, the large number of antennal segments, the peculiar shape of the occipital carina ventrally (fig. 7), and the subsessile first metasomal tergite. *Notiopambolus* comes close to the Palaearctic genus *Dimeris* Ruthe, 1854, which also has a truncate scapus and comparatively robust first tergite. *Dimeris* differs by the normal ovipositor and (in macropterous specimens) by the position of vein CU1a at the same level as vein 2-CU1.

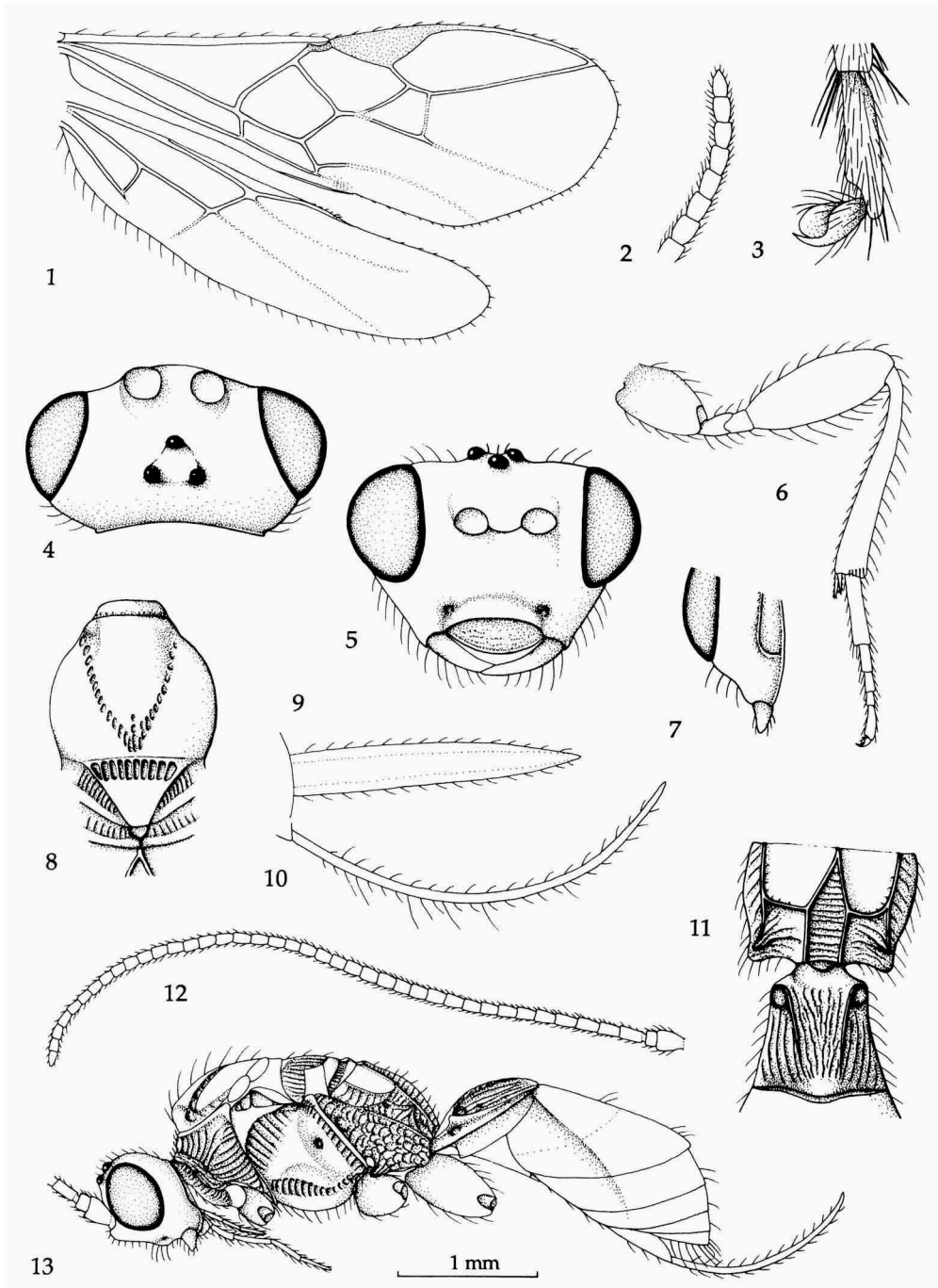
Distribution.— Australia (New South Wales, Queensland), and New Caledonia.

Notiopambolus depressicauda spec. nov.
(figs. 1-13)

Material.— Holotype, ♀ (ANIC), "Lucas Hts., N.S.W., 26.x.1986, G.A. Holloway". Paratypes: 2 ♀♀: 1 ♀ (QU), "5 mi. S. Mendoran, N.S.W., 19.ii.1972, mv lamp, G. Daniels"; 1 ♀ (RMNH), "Canberra, A.C.T., Malaise trap, coll. 1-3.xii.1978, C.R. Tidemann".

Holotype, ♀, length of body 4.4 mm, of fore wing 4.0 mm.

Head.— Antennal segments 41, length of third segment 1.1 times fourth segment, length of third, fourth and penultimate segments 2.1, 1.9 and 1.5 times their width, respectively (figs. 2, 12); length of maxillary palp 1.5 times height of head; length of eye in dorsal view 3.5 times temple (fig. 4); OOL:diameter of ocellus:POL = 14:4:7; face smooth; clypeus flat, transverse and smooth (fig. 5), its ventral margin not differentiated; length of malar space 1.4 times basal width of mandible; mandible distinctly twisted apically, with dorsal tooth distinctly longer than ventral tooth.



Figs. 1-13, *Notiopambolus depressicauda* gen. nov. & spec. nov., ♀, holotype. 1, wings; 2, apex of antenna; 3, outer hind tarsal claw; 4, head, dorsal aspect; 5, head, frontal aspect; 6, hind leg; 7, detail of ventral part of occipital and hypostomal carinae; 8, mesosoma, dorsal aspect; 9, ovipositor sheath, dorsal aspect; 10, ovipositor sheath, lateral aspect; 11, propodeum and first metasomal tergite, dorsal aspect; 12, antenna; 13, habitus, lateral aspect. 1, 6, 12, 13: 1 × scale-line; 2, 4, 5, 9, 10: 2 ×; 3: 5 ×; 7: 1.8 ×; 8, 11: 1.3 ×.

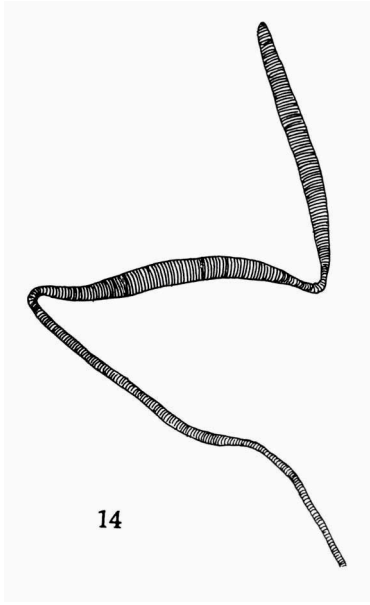


Fig. 14, *Notiopambolus depressicauda* gen. nov. & spec. nov., ♀, paratype. Venom gland reservoir from rehydrated specimen.

Mesosoma.— Length of mesosoma 1.6 times its height; side of pronotum costate-crenulate (fig. 13); epicnemial area coarsely costate-crenulate (fig. 13); remainder of mesopleuron (except precoxal sulcus) smooth; metapleuron coarsely vermiculate; scutellar sulcus wide and deep, with 9 longitudinal carinae (fig. 8); scutellum smooth and flat; propodeum rugose medially, except anteriorly (fig. 11); propodeal spiracle small and round, and medially at propodeum (fig. 13).

Wings.— Fore wing: r:2-SR:SR1 = 6:5:40; 1-CU1:2-CU1 = 2:15; 2-SR:3-SR:r-m = 13:5:10; m-cu far postfurcal and converging to 1-M posteriorly (fig. 1). Hind wing: marginal cell absent apically; wing membrane setose basally.

Legs.— Hind coxa smooth; setae long; length of femur, tibia and basitarsus of hind leg 2.3, 7.6 and 4.0 times their width, respectively; length of hind tibial spurs 0.45 and 0.40 times hind basitarsus; ventral row of setae of hind tarsus present.

Metasoma.— Length of first tergite 0.9 times its apical width, its surface rugose medially, costate and striate laterally, and basally rather concave (fig. 11); dorso-lateral carinae of first tergite complete and its dorsal carinae up to apical tenth of tergite (fig. 11); second and following segments without complete sharp lateral crease (fig. 13); length of ovipositor sheath 0.37 times fore wing; hypopygium medium-sized, and its tip rounded (fig. 13).

Colour.— Black; 20th-24th antennal segments, and palpi pale yellowish; mandibles, legs (but telotarsi dark brown), and metasoma (except first tergite) reddish-brown; wing membrane somewhat infuscated.

Variation.— Antennal segments 41(2); length of fore wing 3.8-4.0 mm; length of ovipositor sheath 0.34-0.37 times fore wing

Biology.— Unknown; other Pambolini are parasites of coleopterous larvae belonging to the families Chrysomelidae and Buprestidae.

Note.— In addition to the type series, the junior author has seen 2 ♀ ♀ (CNC) of probably the same species from Mount Tamborine N.P., Queensland, Australia, 700 m, iii.1984.

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