

A new genus, *Mesostoa* gen. nov., from W. Australia, belonging to a new subfamily (Hymenoptera, Braconidae)

by

C. VAN ACHTERBERG

(*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

ABSTRACT

A new genus, *Mesostoa* gen. nov. and its type species, *compressa* sp. nov., are described from W. Australia. A new subfamily, Mesostoinae, is erected, tentatively placed near the Braconinae.

During my revision of the tribe Blacini (Braconidae, Helconinae) I have seen many genera not related to the group under revision. In the very interesting material of B.M. from Australia 2 very peculiar specimens were present, not easily placed in any subfamily. The relationships of this species are still uncertain. After consultations with colleagues it became more certain that it is neither related to a known genus in the Braconidae s.s. (Prof. Shenefelt: pers. comm.), nor to the Aphidiinae (Dr. Stáry: in litt.). For terminology used, see Van Achterberg.

MESOSTOINAE subfam. nov.

Diagnosis: Clypeus straight medially, somewhat protruding, above an indistinct hypoclypeal depression (fig. 2); anterior tentorial pits small; epistomal suture wanting dorsally; mesoscutum protruding anteriorly (fig. 1); occipital carina, prepectal carina, lateral carina of scutellum and scutellar suture wanting; pleural suture smooth, indistinct; dorsope and laterope of 1st metasomal tergite wanting, its spiracle in the tergite. Distribution: W. Australia, 1 genus.

MESOSTOA gen. nov.

Etymology: From 'mesos' (Greek for 'middle') and 'stoa' (Greek for 'porch') because of the protruding middle part of the mesoscutum, like a porch above the pronotum. Gender: feminine.

Type species: *Mesostoa compressa* sp. nov.

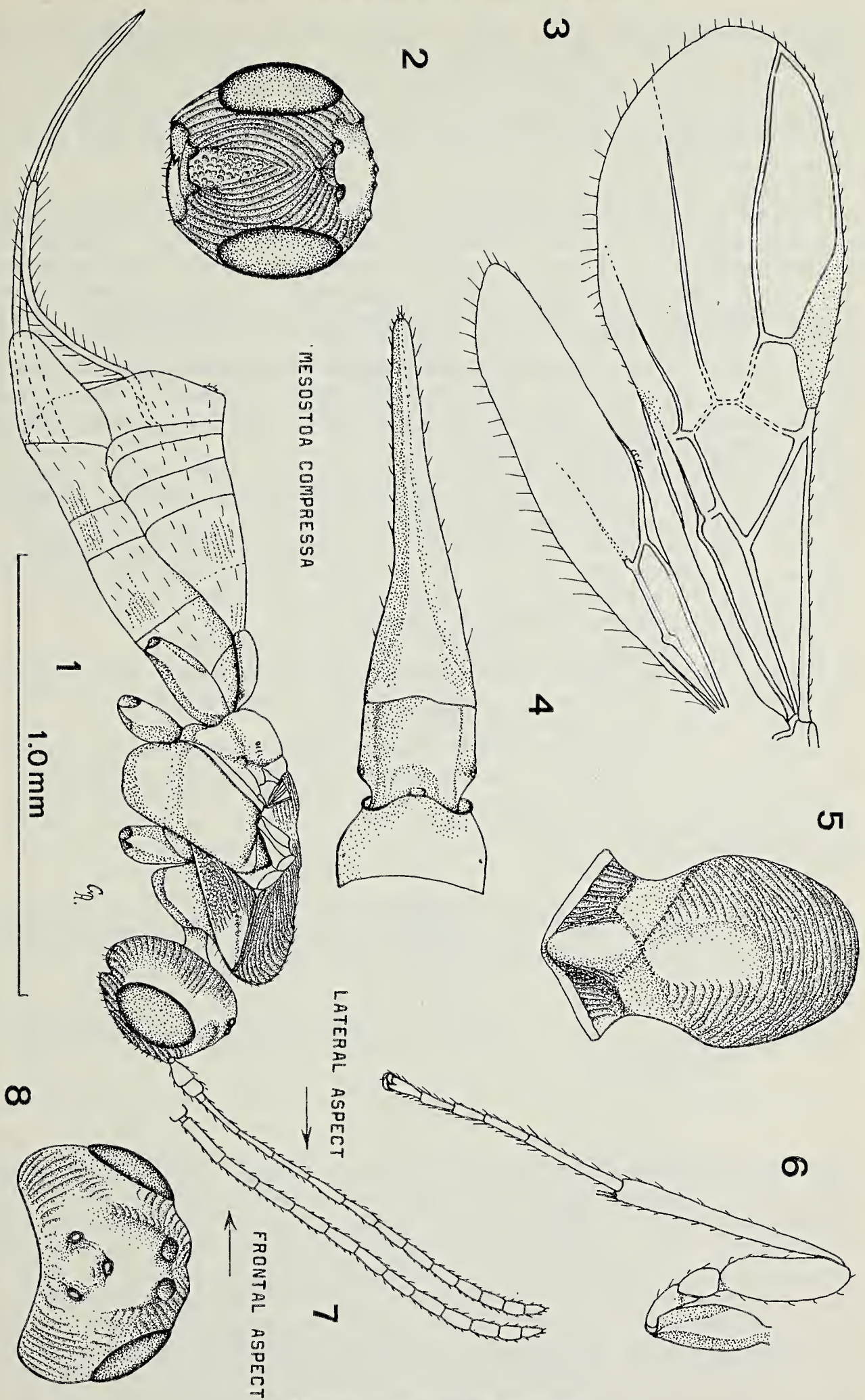
Diagnosis: Antenna few-segmented, compressed; palpi very short; frons concave; genal and metapleural flange completely wanting; cuqu 2 wanting; n. rec. and nervulus far postfurcal (fig. 3); legs and metasoma strongly compressed; length of hind femur 2.8 times its width (in lateral aspect); propodeum smooth; 1st metasomal tergite flattened, without dorsal carinae; metasoma smooth, except for some microsculpture; ovipositor medium-sized, bent upwards; hypopygium large (fig. 1).

Distribution: Australian, 1 sp.

Note: This group possesses a combination of apomorphic characters such as seldom occurs; the only more or less plesiomorphous characters are the concave frons, the absence of the lateral carina of scutellum and the almost closed 1st brachial cell. It would not be surprising if it has a very specialized biology! The shape of the 1st metasomal tergite and of propodeum, together with the hypoclypeal depression indicate a relationship with the stem of the Braconinae, near which it is tentatively placed.

Mesostoa compressa sp. nov.

Holotype, ♀, length of body 1.7 mm., length of fore wing 1.6 mm. HEAD. - Antennal segments 14 (in ♀-paratype 13, but apical segment consists of two fused segments, length of 3rd segment 1.3 times 4th segment, length of 3rd and 4th segments 9.0 and 7.0 times (lateral aspect) or 4.5 and 3.5 (frontal aspect) times their width, respectively, length of penultimate segments 2.0 times their width, antenna dilating apicad in lateral aspect (fig. 1); palpi very short, not well visible; eye bare (except for some setae); dorsal length of eye 1.2 times temple; temple superficially and very finely striate, with



Mesostoa compressa sp. nov.

Figs. 1-8, holotype, *Mesostoa* gen. nov. *compressa* sp. nov. 1, habitus, lateral aspect; 2, head, frontal aspect; 3, wings; 4, propodeum and metasoma, dorsal aspect; 5, mesonotum, dorsal aspect; 6, head, dorsal aspect. Enlargement: 1, 3, 6, 7 as scale-line; 2, 4, 5, 8 as 1.5 × scale-line.

smooth patch behind eye (fig. 8); POL : Ø ocellus : OOL = 17 : 5 : 11; frontal and malar suture wanting; frons concave with sides somewhat protruding (fig. 2); vertex rather convex, smooth, except for some microsculpture; anterior tentorial pits small, rather shallow; clypeus finely rugose (as area above it, fig. 2), slightly wider than long, its apical margin straight medially, truncate; malar space slightly longer than breadth of base of mandible.

MESOSOMA. - Length of mesosoma 1.6 times its height; dorsal half of sides of pronotum finely striate, ventral half smooth anteriorly, closely placed and finely punctulate posteriorly (fig. 1); side of protruding mesoscutum striate (fig. 1), mesopleura completely smooth; precoxal suture wanting, somewhat depressed, which may be artificial; pleural suture smooth, very narrow, almost invisible at 80 ×; episternal scrobe wanting; metapleura smooth, with deep pit between anterior and posterior part; notauli wanting; mesoscutum transversely and finely striate (fig. 5), but apico-medially ± smooth, convex, but flattened apically; scutellar suture wanting, but scutellum with a narrow, shallow, chevron-shaped suture anteriorly (fig. 5); scutellum smooth, convex, its lateral carina wanting, but laterally finely striate; propodeum smooth, without carinae; propodeal spiracle small, flat.

WINGS. - First discoidal cell sharp anteriorly; parastigma rather small; r 2 almost straight (fig. 3); cu 1, cuqu 1 and n. rec. weakly developed; nervellus indistinct; d 1 : d 2 = 6 : 13; 1st brachial cell almost closed.

LEGS. - Legs compressed, especially hind coxa concave ventrally; hind leg smooth; all tarsal claws simple, rather stout; length of femur, tibia and basitarsus of hind leg (in lateral) 2.8, 9.3 and 6.0 times their width, respectively; spurs of hind tibia equal, their length ± ¼ times length of basitarsus, straight.

METASOMA. - Length of 1st tergite 0.9 times its apical width, convex medially, but flattened laterally, spiracle somewhat protruding (fig. 4), surface smooth; length of ovipositor sheath 0.42 times fore wing (ovipositor in exerted position 0.50 times: fore wing in holotype); hypopygium truncate posteriorly.

COLOUR. - Yellowish brown; head, brown; legs, tegulae, base of antenna, hypopygium, pterostigma, 1st and 2nd metasomal tergites, palpi and mandible, yellowish.

Holotype in BM, London: "Yanchep, 32 mls. N. of Perth, 3-19.XII.1935", "W. Australia: R. E. Turner, B.M..1936-28".

Paratype: 1 ♀, topotypic (AC).

ACKNOWLEDGEMENTS

My sincere thanks are due to Mr. T. Huddleston (London), Dr. F. Riek (Canberra), Prof. Dr. R. D. Shenefelt (Madison) and Dr. P. Stáry (Prague).

LITERATURE

Achterberg, C. van, in press. A revision of the tribus Blacini (Hym., Braconidae). - *Tijdschr. Ent.*

DELTOTE BANKIANA FABRICIUS IN ZEELAND (LEP., NOCTUIDAE). Zoals bekend was deze kleine Noctuide in ons land oorspronkelijk een bewoner van vochtige veenachtige terreinen, die zich in de loop van deze eeuw sterk uitgebreid heeft over de droge zandgronden. Tot mijn verrassing trof ik de soort nu ook in een heel ander milieu aan. Op 24 juni 1975 was ik in Yerseke. Het weer was niet best: 's morgens regenachtig en de gehele dag een straffe wind. Toen het 's middags droog geworden was, trok ik toch naar de Oosterscheldedijk, die hier begroeid is met grassen, bramen, akkerwinde, knoopkruid, agrimonie en prachtige pollen marjolein. Meer glijdend dan lopend langs de helling van de dijk joeg ik behalve enkele Pyraliden ook een exemplaar van *bankiana* op, dat door de sterke wind echter ontsnapte. In elk geval is de vaststelling van deze vindplaats een nieuw bewijs voor de expansiedrift van de soort. — Lpk.