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Maxfischeria tricolor gen.n. et sp.n. from Australia

(Insecta: Hymenoptera: Braconidae)

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Abstract

Maxfischeria tricolor gen.n. et sp.n. from Australia (New South Wales) is described. The new genus represents a new tribe (Maxfischeriini trib.n.) and is provisionally classified in the braconid subfamily Helconinae. The systematic position of the new genus is discussed.

Key words: Braconidae, *Maxfischeria*, new genus and species, taxonomic and systematic considerations, description.

Zusammenfassung

Maxfischeria tricolor gen. und sp.n. wird aus Australien (New South Wales) beschrieben. Die neue Gattung repräsentiert eine neue Tribus (Maxfischeriini trib.n.) und wird vorläufig in die Unterfamilie Helconinae (Braconidae) eingereiht. Die systematische Stellung der neuen Gattung wird diskutiert.

Introduction

In the braconid material taken by the joint Australian-Hungarian zoological collecting trip to East Australia (New South Wales) 1980 - 1981 (HANGAY & al. 1981) I have found three specimens which represent a new genus as well as a new species and received the taxonomic name *Maxfischeria tricolor* sp.n. The new genus is provisionally ranged as tribe Maxfischeriini trib.n. in the subfamily Helconinae considering its exceptional character-assemblage. The new genus increases the number of the genera restricted in their distribution to the Australian region.

Terminology follows that of VAN ACHTERBERG (1979), EADY (1968) and HARRIS (1979).

Maxfischeria gen.n.

Type species: *Maxfischeria tricolor* sp.n.

The new genus, *Maxfischeria* gen.n., is provisionally ranged in the subfamily Helconinae giving it a tribal rank Maxfischeriini trib.n. with the remark that in the future the tribe would be emended to subfamily rank considering its features which differentiate it from all other helconine genera: 1. Head entirely smooth (i.e. frons without midlongitudinally raised carina, occipital and hypostomal carina absent); 2. Pronope absent; 3. Hind femur entirely smooth; 4. Hind trochanter rather slender; 5. Fore wing: (a) vein 1-SR present (Fig. 8), (b) m-cu antefurcal, (c) 2A and a present (Fig. 10), (d) r-m present; 6. Hind

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wing: cu-a subvertical; 7. Pair of spiracles somewhat anteriorly from middle of propodeum (Fig. 4); 8. Maxillary palp with six and labial palp with four segments; 9. Prescutellar sulcus and lateral field of scutellum (or axilla) smooth (i.e. not crenulate).

There are six features which seem to render the new genus in a relationship to the helconine wasps, they are as follows: 1. Prepectal carina present; 2. Costal cell present vestigial (Fig. 8); 3. Veins 2A and a (i.e. first and second anal veins) of fore wing present (albeit 2A vestigial, Fig. 10); 4. Hind wing with sclerotized veins 1-2-SR and 2-M; 5. Flagellum long (i.e. distinctly longer than body and with 52 flagellomeres); 6. Metasoma with eight visible tergites.

The tribe Maxfischeriini is nearest to Helconini, the two tribes are distinguished by the following features keyed (see also VAN ACHTERBERG 1983: 282, AUSTIN & WHARTON 1992: 59):

1 (2) Frons with medio-longitudinal lamella. Hind femur rugose ventrally. Propodeal spiracle situated medially. Six genera in Australian region..... **Helconini ASHMEAD, 1900**

2 (1) Frons without medio-longitudinal lamella. Hind femur smooth ventrally. Propodeal spiracle situated somewhat anteriorly from middle (Fig. 4). One genus in Australia... ..... **Maxfischeriini trib.n.**

Description of the new genus. - Head in dorsal view (Fig. 1) transverse, occiput without occipital and hypostomal carinae, i.e. head behind smooth. Antennal socket above middle level of eye (Fig. 2). Antenna filiform. Mandible bifid (Fig. 2). Mesosoma in lateral view longer than high. Prepectal carina present, postpectal carina absent. Precoxal suture (or sternaulus) present. Pronope absent. Propodeum (and mesosoma) greyish hairy as usually (i.e. not pubescent or tomentose). Metasoma joining to propodeum just above hind pair of coxae. Dorsope absent, spiracle of first tergite on notum and anteriorly to middle of tergite (Fig. 12). Fore tibial spur long, somewhat more than half as long as basitarsus (Fig. 5); fore tibia and tarsus equal in length. 2A and a (= first and second transverse anal veins) of fore wing present (2A vestigial, Fig. 10). Shape of marginal cell of hind wing as in the genus *Helcon* NEES.

Etymology. - The new genus is dedicated to my colleague and good friend, Dr. Maximilian Fischer (Naturhistorisches Museum in Wien), the well-known world specialist of braconid (opiine) wasps celebrating his 65th birthday in 1994. Gender masculine.

Maxfischeria tricolor sp.n.

(Figs. 1 - 15)

Material examined. - ♀ holotype and 2 ♀♀ paratypes: Australia, SE New South Wales, Kosciusco National Park, Black Derry Rest Area, 13 January 1981, MV lamp at night, leg. Hangay, No. 108[1]. - Holotype deposited in the Australian National Insect Collection, Canberra; 2 ♀♀ paratypes in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. Nos 7646-7647 (paratypes).

Description of the ♀ holotype. - Body 6.5 mm long. Head in dorsal view (Fig. 1) transverse, twice as broad as long, eye large and protruding, 4.8 times as long as temple, latter constricted. Ocelli large, fore ocellus round and hind two ocelli elliptic, nearer to each other than greatest diameter of hind ocellus. POL : OD : OOL as 6 : 10 : 7. Eye in lateral view 1.5 times as high as wide, clearly 2.3 times as wide as temple (Fig. 2).

[1] See the collecting report by HANGAY & al. (1981).

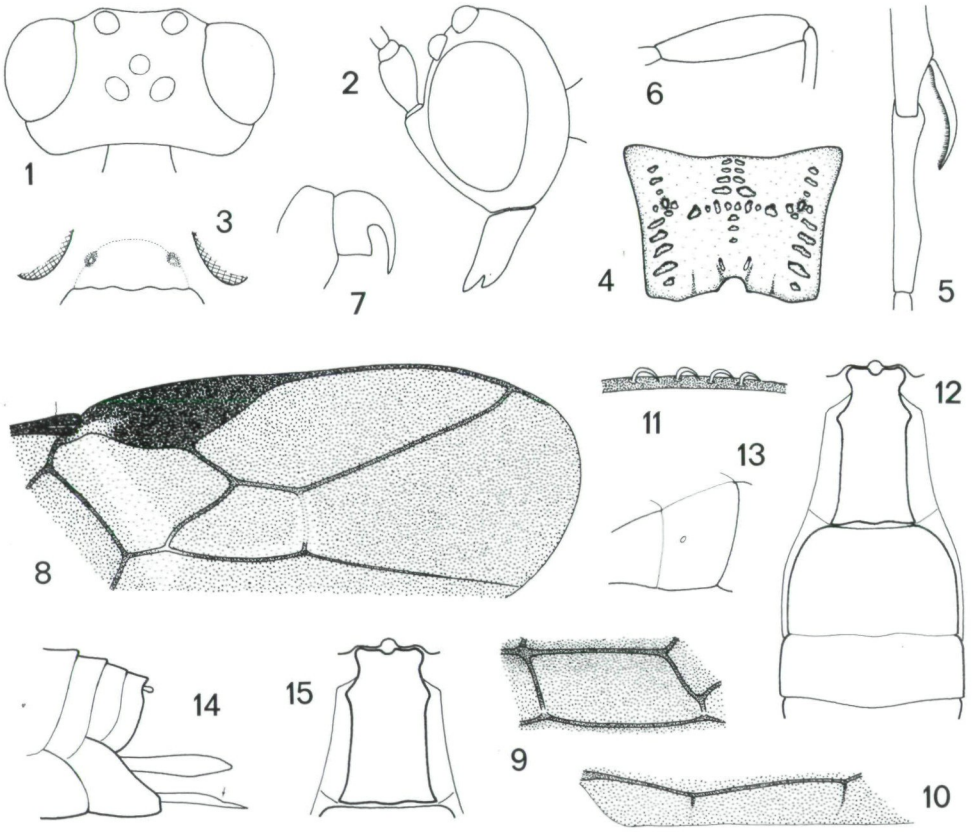
Malar space very short, one-third as long as basal width of mandible. Face one-fourth wider than high, tentorial pits three times as far from each other as to margin of eye, suture between clypeus und face indistinct, clypeus 2.5 times as wide as high and its lower margin weakly undulate (Fig. 3). Head smooth, shiny and haired, face densely haired, eye bare. - Antenna long, flagellum filiform, nearly twice as long as body. Scape 1.6 times as long as broad, flagellum indistinctly attenuating and with 52 flagellomeres. First flagellomere three times and penultimate flagellomere 1.75 times as long as broad, last flagellomere pointed distally.

Mesosoma in lateral view twice as long as high. Notauli restricting to anterior declivous part of mesonotum, finely crenulate. Mesonotum with a median dimple before prescutellar furrow. Prescutellar furrow uncrenulate, a medio-longitudinal carina dividing it in two foveolae. Metanotum with a median foveola (posteriorly from scutellum), without crenulation. Propodeum laterally canaliculate-foveolate, medially smooth, shiny, on its upper or horizontal surface a medio-longitudinal and a transverse row of foveolae with variable sizes, latero-anterior spiracle elliptic, distinct (Fig. 4). Precoxal suture (or sternaulus) finely crenulate and situated medially in mesopleuron. Mesosoma smooth and shiny, hind suture of pro- and mesopleuron as well as fore suture of metapleuron crenulate. - Legs of usual form. Fore tibial spur long, longer than half basitarsus, bent (Fig. 5) and its inner (or concave) surface with fine comb-like setae. Hind femur (Fig. 6) four times as long as medially broad. Pair of spurs of hind tibia short, inner spur longer than outer spur and about one-third als long as basitarsus. Tarsal claws with a well developed basal lobe (Fig. 7).

Fore wing somewhat longer than body. Pterostigma (Fig. 8) three times as long as wide, issuing radial vein (or r) from its middle, r (= r1) somewhat shorter than width of pterostigma; 3-SR (= r2) as long as width of pterostigma and one-fourth shorter than 2-SR (= cuqu1), SR1 (= r3) straight and ending before tip of wing; 1-2-R1 (= metacarp) approaching tip of wing, marginal (or radial) cell along metacarp distinctly longer than pterostigma; m-cu (= n. rec.) antefurcal; cu-a (= nervulus) just postfurcal; subdiscal cell distally closed (Fig. 9); 2A and a (= first and second transverse anal veins) present, 2A vestigial (Fig. 10). - Hind wing anteriorly with four hamuli (Fig. 11); cu-a (= nervellus) straight, M+CU (= n.med.1) three times as long as 1-M (= n.med.2), 1-2-SR (= r1-2) and 2-M (= cu2) evenly sclerotized.

Metasoma as long as head + mesosoma together, with eight visible tergites. First tergite 1.78 times as long as broad behind (Fig. 12), with parallel sides, pair of spiracles anteriorly from middle of tergite and protruding, pair of basal keels absent. Second tergite less transverse, 1.66 times as broad behind as long medially, third tergite more transverse and one-fourth shorter than second tergite, its hind margin weakly arched. Spiracle of second tergite in epipleuron (Fig. 13). Further tergites shortening, i.e. more and more transverse. In lateral view hypopygium apically rather truncate; ovipositor sheath short, as long as second tarsomere of hind tarsus; apex of ovipositor above notched (Fig. 14). Metasoma smooth and shiny.

Body tricoloured: head and fore leg yellow, mesosoma, middle + hind legs and metasomal tergites 4 - 8 black, tergites 1 - 3 and hind margin of tergites 4 - 7 white. Mandible apically dark brown. Stemmaticum black. Antenna dark brown, scape anteriorly with yellowish tint. Palpi yellow. Tegulae black. Tergites 1 and 3 medially with a black macula. Wing brownish fumous, pterostigma and veins blackish brown.



Figs 1 - 15. *Maxfischeria tricolor* gen.n. et sp.n.: (1) head in dorsal view, (2) head in lateral view, (3) clypeus, (4) propodeum, (5) fore leg: end of tibia with spur and basitarsus, (6) hind femur, (7) claw, (8) distal part of right fore wing, (9) subdiscal cell, (10) submedial vein (= 1 A + 2 A/1 A) with 2 A and a (= first and second transverse anal veins), (11) hamuli of hind wing, (12) tergites 1 - 2, (13) epipleuron of second tergite with spiracle, (14) posterior end of metasoma with hypopygium and ovipositor + its sheath, (15) first tergite (of paratype).

Description of the paratypes (2 ♀♀). - Similar to the ♀ holotype. Deviations from the holotype: head in dorsal view 1.92 times as broad as long, eye 3.3 times as long as temple. Eye in lateral view 2.46 times as wide as temple. Antenna with 52 flagellomeres (1 ♀ without antenna). On upper (or horizontal) part of propodeum medio-longitudinal and transverse row of foveolae hardly distinct (1 ♀) (cf. Fig. 4). Hind femur 4.6 times and 4.3 times as long as broad medially. Colour of body similar to that of holotype (1 ♀), or first tergite with laterotergite, second tergite fully and margin of further tergites more or less light brownish (and not white, 1 ♀).

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