

A REMARKABLE NEW BIBIONID FLY FROM AUSTRALIA (Diptera: Bibionidae)*

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The discovery of a species of the recently described *Enicoscolus* Hardy is a most exciting find and adds new evidence in support of the theory of an ancient land connection between the new world and Australia by way of the antarctic continent, and also points out the sparsity of our knowledge concerning the distribution of bibionid flies throughout the vast neotropical region. This find indicates that it is highly probable that still further species of *Enicoscolus* occur throughout South America, especially on the western slopes of the Andes.

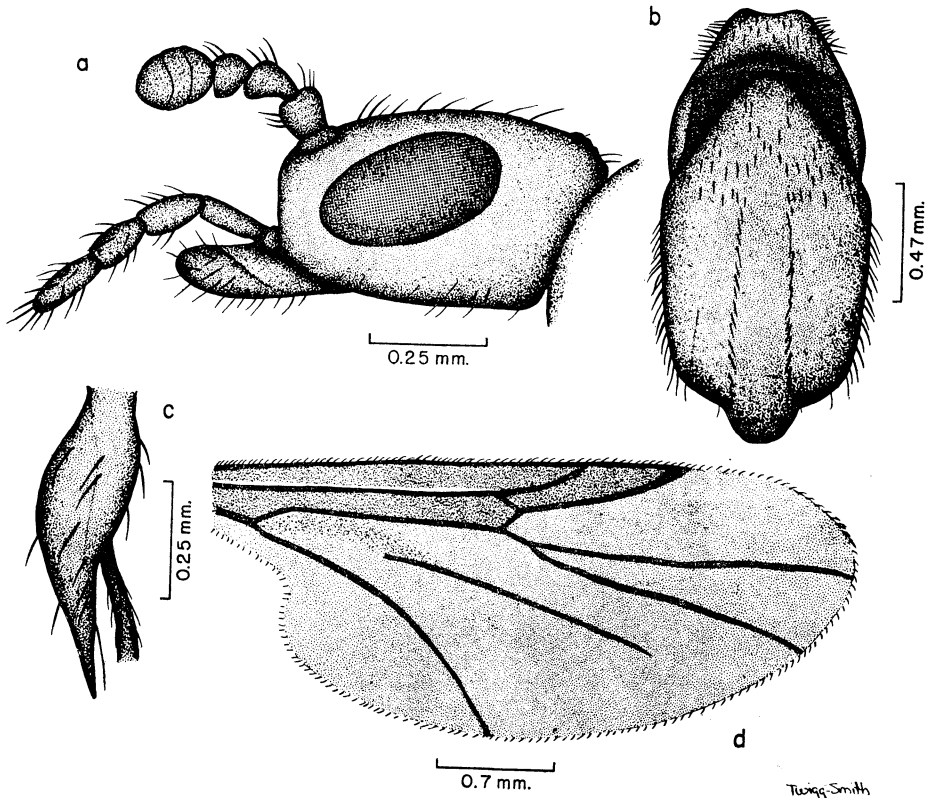
The genus *Enicoscolus*, to the present, has been based upon two species (5 ♀♀ specimens) from Mexico (Hardy 1961, Ent. Soc. Wash., Proc. 63 (2) : 81-84, figs. 1 and 2a-e). Very recently Dr. Donald Colless, Commonwealth Scientific and Industrial Research Organization, Canberra, Australia, brought to my attention a specimen of *Enicoscolus* which had been collected in a light trap in Queensland. I am grateful to Dr. Colless for his alertness in recognizing this unusual fly and it is with pleasure that I name the species after him.

Enicoscolus collessi Hardy, n. sp. Figs. a-d.

This species shows definite relationship to *E. brachycephalus* Hardy from Mexico but the ocellar triangle is not so prominent and is situated at the back edge of the vertex, rather than the ocelli being situated on a distinct prominence, with the back part of the head being narrowed and extending distinctly posterior to the ocellar triangle as seen in direct dorsal view; the space between the ocellar triangle and the eye margin is nearly two times longer than the triangle in *collessi*, rather than about equal to the length of the triangle; the antennae are much more strongly clavate (fig. a) and the palpi are quite differently developed, lacking the elongate apical segment which is characteristic of *brachycephala* (ref. to fig. 1, *op. cit.* : 83) the polished black coxae and pleura, and the predominantly polished black mid and fore femora will also readily differentiate *collessi*.

Female. Head: Entirely polished black and sparsely covered with short brown to black hairs. As seen from direct lateral view the head, measured to the front margin of the rostrum, is 1.6× longer than high. Rostrum (the sclerotized portion of head in front of eyes) short, about equal in length to segment 2 of palpus. Head behind compound

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Figs. a-d. a, head, lateral view; b, thorax, dorsal view; c, fore tibia; d, wing.

eyes equal to about $1/2$ length of eye (fig. a). Ocellar triangle situated at back portion of head and is just slightly raised. Front about $2/3$ as wide as one eye. Scape and pedicel of antenna brown, flagellar segment 1 yellow, flagellar segment 2 yellow at base and brown apically, and remainder of antenna dark brown to black. The 2 basal flagellar segments distinctly separated, apical portion consists of 3 or possibly 4 segments closely joined into a large capitate knob (fig. a). Apical segment of palpus $1/3-1/2$ longer than preapical segment. Palpi dark brown to black, tinged slightly with rufous in ground color. *Thorax*: Entirely polished black except for a tinge of rufous on humeral ridges, and just above each fore coxa and just below wing base. Bases of halteres yellow, knobs dark brown to black. Setae of dorsal portion of thorax arranged as in figure b. *Legs*: Almost entirely polished black, yellow, tinged with brown on trochanters. Fore tibiae reddish brown, fore femora tinged with red on outer and inner surfaces. Fore tibia is shaped as in figure c, inner spur rudimentary as is typical of members of this genus. Apical spurs on mid tibia slender, straight-sided, blunt at apices, and extended slightly over $1/3$ length of basitarsus. Apical spurs of hind tibia short and thick, about $1/4$ as long as basitarsus. *Wings*: Anterior margin brown from humeral crossvein to apex of cell R_1 . Base of radial sector short, scarcely over $1/3$ as long as r-m crossvein. Stem of veins M_1 and M_2 almost as long as r-m crossvein. Vein M_{3+4} does not extend to wing margin, apical por-

tion widely interrupted, also m-cu crossvein (which appears as base of vein M_{3+4}) interrupted (fig. d). Vein Cu well-developed and extends to wing margin. *Abdomen*: Sclerites opaque, dark brown to black; conjunctive yellow. Cerci densely covered with intermixed yellow and black hairs.

Length: body 3.7 mm; wings 4.0.

Holotype ♀ (C.S.I.R.O., Canberra, Australia) Forestry Road, 50 km SW of Ingham, Queensland, 800 m, light trap, 18. IV. 1961 (R. Straatman).

The drawings have been prepared by Miss Elisabeth Twigg-Smith, University of Hawaii. I greatly appreciate this help.

KEY TO KNOWN SPECIES OF ENICOSCOLUS, BASED UPON FEMALES

1. Head elongate, 2× longer than wide, rostrum produced, sclerotized portion of head in front of eyes 2/3 as long as eye and nearly equal to portion of head behind eyes (fig. 2a, *op. cit.*). Thorax all rufous (Mexico) **dolichocephalus** Hardy
Head short, not much longer than wide. Rostrum not produced, sclerotized portion in front of eyes not extending beyond bases of antennae and scarcely as long as 1 antennal segment (fig. a). Dorsum of thorax shining black..... 2
2. Antennae strongly clarrate (fig. a). Apical segment of palpus 1/3-1/2 longer than preapical segment. Pleura and coxae polished black. Fore and mid femora predominantly polished black. (Queensland, Australia)..... **collessi** n. sp.
Flagellum of antenna gently swollen on median portion (ref. fig. 1, Hardy *op. cit.* p. 83). Apical segment of palpus is 4-5× longer than preapical segment. Propleura, fore and mid coxae yellow, remainder of pleura yellow, tinged with brown. Fore and mid femora predominantly yellow (Mexico)..... **brachycephalus** Hardy

RECENT LITERATURE ON PACIFIC INSECTS

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- Abdullah, M. 1961. A revisional study of some Australian species of *Egestria* (Pedilidae). *Coleopt. Bull.* **15** (1): 27-30, 13 figs.
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