

THREE UNDESCRIBED NEMATOCEROUS FLIES FROM NEW ZEALAND

(Diptera)

By CHARLES P. ALEXANDER

Two of the three species of Diptera described herewith were sent to me by Messrs. Harris and Howes, to whom my sincere thanks are extended. The types are preserved in the writer's collection.

Family RHYPHIDAE

Trichocera obtusicornis, new species.

Male.—Length about 2.5 mm.; wing 3 mm.

Female.—Length 2.5–2.8 mm.; wing 3.4–3.7 mm.

Generally similar to *T. maori* Alexander, differing as follows:

Size smaller. General coloration (in alcoholic specimens) much paler brown, the pleura pale brownish testaceous. Wings pale brown, the stigma lacking. Venation: Sc_2 opposite about one-third to one-fourth the length of Rs ; m faint, much shorter than the petiole of cell M_1 . Male hypopygium with the pleural appendages less elongate. Gonapophyses smooth. Penis-guard terminating in obtuse horns, the apex of each with a very shallow incision.

Habitat.—New Zealand (North Island).

Holotype, ♂, Ohakune, altitude 2,060 feet, July, 1921 (T. R. Harris).

Allotopotype, ♀.

Paratopotypes, 3 ♀'s.

Trichocera lobifera, new species.

Male.—Length 3 mm.; wing 3.3 mm.

Female.—Length 3.3 mm.; wing 3.5 mm.

General coloration of alcoholic material pale brownish yellow. Antennae of the female but little shorter than those of the male. Wings tinged with yellowish grey; stigma faint. Male hypopygium with the pleural appendage elongate, on the mesal face at from one-third to one-fourth the length a conspicuous, glabrous perpendicular lobule; mesal face of appendage distad of this lobule with abundant short setae.

Gonapophyses and penis-guard appearing as slender, chitinized rods. Valves of ovipositor fleshy but rather elongate.

Habitat.—New Zealand (South Island).

Holotype, ♂, Little River, Mount Fitzgerald, altitude 1,500 feet, January 24, 1922 (E. S. Gourlay); R. R.

Allotopotype, ♀.

The types were associated with *Molophilus luteipygus* Alexander and *M. banksianus* Alexander, all three species being preyed upon by a small species of Empididae.

Family DIXIDAE

The only *Dixa* so far described from New Zealand is *D. campbelli* Alexander. This may be the species mentioned, but not described, by Marshall (Trans. N. Z. Inst., vol. 28, p. 222, 1896), or the latter may have pertained to some other still undescribed form.

Dixa otagensis, new species.

Male.—Length 3.6 mm.; wing 4.5 mm.

Rostrum and palpi black. Antennae and head black.

Mesonotum brown, the color almost obscured by the very broad black stripes on the praescutal region; scutellum pale brown; postnotum black. Pleura black, the mesepimeron and the lateral sclerite of the postnotum obscure brownish yellow, brightest ventrad of the wing-root. Halteres brown, the extreme base yellow, the knobs darker. Legs with the coxae brown, the posterior coxae more yellowish; trochanters yellow; remainder of the legs black. Wings with a faint brownish tinge, more pronounced in the costal region; a brown cloud at the $r-m$ cross-vein; veins dark brown. Venation: Sc_1 ending immediately before the origin of Rs ; $r-m$ connecting with Rs a little less than its own length before the fork; $m-cu$ a little more than its own length beyond $r-m$; cell M_2 deeper than in *D. campbelli*.

Abdomen dark brownish black.

Habitat.—New Zealand (South Island).

Holotype, ♂, Ben Lomond, Otago, December 30, 1921 (G. Howes).

Paratopotype, Sex?