

UNDESCRIBED SPECIES OF ANISOPODIDÆ
FROM NEW ZEALAND—PART II

(Diptera)

By CHARLES P. ALEXANDER

The first part under this general title was published in 1923 (Ins. Ins. Mens., 11, 73-74). The new species described at this time were collected by Mr. T. R. Harris in Westland, and at Taumarunui in the North Island, and by Mr. Leon Curtis in Otago. Recently, Mr. Edwards has made the interesting discovery that all of the New Zealand crane-flies hitherto described as species of *Trichocera* should be referred to *Paracladura* Brunetti, which was based upon a species from northern India. The genus is distinguished from *Trichocera* chiefly by the venation and the much abbreviated basitarsi. Besides the twelve species now known from the Maorian subregion, *Paracladura* includes four species from India and Formosa, and *P. trichoptera* (Osten Sacken) of western North America. The types of the new species described forthwith are preserved in the writer's collection through the kindness of the collectors, Messrs. Harris and Curtis.

Paracladura harrisi, new species.

Male.—Length about 3.7 mm.; wing 4.4 mm.

Rostrum, palpi, antennae and head dark brown. Mesonotum and pleura uniformly fuscous. Halteres pale, the knobs brown. Legs with the coxae yellowish brown; remainder of the legs pale brown with only the terminal tarsal segments a little darker. Wings subhyaline, the veins dark brown. Venation: Sc_1 ending opposite r , Sc_2 at about midlength of Rs ; R_{2+3} a little longer than the basal section of R_2 ; $r-m$ oblique, inserted at the fork of M ; cell 1st M_2 closed but m weak; cell M_1 about twice its petiole; $m-cu$ about two-thirds m .

Abdomen dark brown throughout. Male hypopygium with the disti-styles moderately elongate, the mesal face near the basal third produced into an obtuse lobe which is entirely covered with microscopic setae as is the remainder of the mesal face. Each gonapophyse appearing as a flattened plate, the

caudal margin of which is produced into four or five conspicuous spines, in the type there being five on the right side and four on the left; beneath this apophyse and possibly a part of it, appears a complex structure which is densely set with appressed, feebly curved spines.

Habitat.—New Zealand (South Island).

Holotype, ♂, Rewanui, Paparoa Range, Westland, altitude 600-800 feet, February 15, 1923 (T. R. Harris).

Paracladura harrisi is named in honor of the collector, Mr. Thomas R. Harris, to whom the writer is vastly indebted for invaluable collections of New Zealand crane-flies. It is most nearly related to the larger *P. antipodeum* (Mik.) of the Auckland Islands; the latter species differs in the obliteration of $m-cu$, and in the details of structure of the hypopygium, as the short, broad-based aedeagus, the differently constructed gonapophyses, and other details.

Paracladura curtisi, new species.

Male.—Length 2.6-2.8 mm.; wing 3.4-3.6 mm.

Female.—Length 3-3.3 mm.; wing 3.6-4.2 mm.

Head and appendages dark brown. Mesonotum dark brown, the lateral ends of the suture and the scutellum a little paler. Pleura brown. Halteres dark brown, only the extreme base of the stem paler. Legs dark brown throughout. Wings subhyaline, the veins dark brown. Macrotrichiae of veins long and conspicuous; base of cell 1st A with macrotrichiae. Venation: Sc_1 ending some distance beyond r , Sc_2 before midlength of Rs ; r on R_2 a little more than its own length beyond the end of Rs ; $r-m$ just beyond the fork of M on M_{1+2} ; cell M_1 comparatively shallow, subequal to its petiole; cell 1st M_2 open by the atrophy of m ; $m-cu$ longer than r in the ♂, subequal in the ♀, in alignment with the basal section of M_3 ; cell 2nd A narrow.

Abdomen dark brown, including the hypopygium. Male hypopygium of the same simple structure as *P. macrotrichiata* (Alexander); dististyles cylindrical, not at all produced on mesal face. Aedeagus and gonapophyses of very simple structure, the latter subtending and exceeding in length the

former, appearing as slender, straight rods directed caudad and lying very close together along the median line of the body. Just beyond mid-length of the aedeagus, on either side, appears a small oval lobe, gently divergent, directed caudad. Ovipositor obscure yellow, the tip darker.

Habitat.—New Zealand (South Island).

Holotype, ♂, Ben Lomond, Otago, altitude 2,500 feet, April 7, 1923 (L. Curtis).

Allotopotype, ♀.

Paratopotypes, 15 ♂♂.

Paracladura curtisi is named in honor of the collector, Mr. Leon Curtis, who has collected much valuable material in the vicinity of Lake Wakatipu and on Stewart Island. It is most closely allied to the larger *P. macrotrichiata* (Alexander) from which it differs chiefly in the details of structure of the male hypopygium and in the venation, especially in the relatively shallow cell M_1 . The macrotrichiae are neither so numerous nor so extensively distributed as in *macrotrichiata*. In the latter species, the aedeagus extends far beyond the gonapophyses which are recurved and decussate across it.

Paracladura decussata, new species.

Male.—Length about 2.8 mm.; wing 3 mm.

Generally similar to, and a close relative of, *P. obtusicornis* (Alexander), from which it differs chiefly in the structure of the male hypopygium. Head dark grey. Mesonotum shiny brown. Wings paler. Venation: Sc_1 ending shortly beyond the fork of R_{2+3} ; Sc_2 about opposite one-fourth the length of R_s ; m faint, beyond midlength of the petiole of cell M_1 ; cell 2nd A long and narrow.

Male hypopygium with the dististyles relatively short, cylindrical, feebly arcuated, entirely without lobes. Gonapophyses very conspicuous, appearing as powerful chitinized arms, directed caudad and thence mesad so as to be decussate across the genital chamber, the extreme tips suddenly narrowed and acute. In *P. obtusicornis*, besides the flattened, obtuse plates, there are slender and very delicate, strongly curved horns directed cephalad and thence mesad.

Habitat.—New Zealand (North Island).

Holotype, ♂, Taumarunui, April 30, 1923 (T. R. Harris).

Paracladura complicata, new species.

Male.—Length about 3.2 mm.; wing 3.7–3.8 mm.

Female.—Length about 3.4 mm.; wing 4 mm.

Generally similar to and a close ally of *P. lobifera* (Alexander), from which it differs in the darker coloration and the very distinct structure of the gonapophyses of the hypopygium.

The general coloration is much darker than in *lobifera* but paler than in *maori*. The anterior part of the mesonotal praescutum is darker than the sclerites behind the suture. Wings pale brown, the veins darker. Venation: m far out on the petiole of cell M_1 , usually less than its own length from the fork, due chiefly to the great depth of cell M_1 .

Male hypopygium with the dististyle bearing a conspicuous, subbasal lobe on mesal face, as in *lobifera*, the apex of this lobe subacute and glabrous. The armature of the genital chamber is very intricate; the lateral pair of plates bear one or two apical spines that are directed caudad, and two or three long spines on the outer or lateral edge that are directed laterad. A transverse slender bar lying across the chamber has the mesal end terminating in two powerful spines, the mesal one small, the lateral one about twice as large, directed chiefly caudad; lateral or outer ends of this bar extend laterad and terminate in numerous powerful curved chitinized hooks, the terminal ones largest, becoming smaller mesally and obsolete near midlength of each arm; the arms of either side lie almost in a straight line across the genital chamber. What seems to be the aedeagus is a massive, central plate, each lateral angle produced into a slender arm directed caudad, the tips strongly mesad, to produce a somewhat lyriform appearance.

Habitat.—New Zealand (North Island).

Holotype, ♂, Taumarunui, April 30, 1923 (T. R. Harris).

Allotopotype, ♀.

Paratopotypes, 5 ♂♂; paratypes, 2 ♂♂, Ohakune, May 10, 1923 (T. R. Harris).