## A NEW CRANE-FLY FROM VICTORIA (Tipulidae, Diptera)

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During the past sixteen years I have received for study and naming many striking and beautiful crane-flies from my good friend, F Erasmus Wilson. These were taken by him in South Australia, Victoria, Tasmania, New South Wales and Queensland, and included many scores of new and rare forms, the types and uniques of which are preserved in the Wilson Collection, undoubtedly the largest and most valuable series of these flies in Australia. Very recently I received a further shipment that included, among others, three specimens of a crane-fly that proved to be new to science and very distinct from all known allied forms. I consider it to be one of the most attractive species of these flies that I have ever seen.

Before describing this striking novelty I would like to issue an appeal to the younger members of the Field Naturalists' Club who are interested in insect collecting to save any specimens of these fragile, long-legged flies that they may find, particularly if they are favoured by opportunity to collect in out-of-the-way spots or in hitherto little-worked areas. It seems certain that further collecting on the Bogong' High Plains will yield many additions to the Victoria list, since a considerable number of species have been taken in the mountains of southern New South Wales that have not yet been discovered in Victoria. If such specimens could be turned over to Mr. Wilson, they would be sent to me for study and would possibly add to our still incomplete knowledge of the Tipulidae of the State.

## GYNOPLISTIA (PARALIMNOPHILA) WILSONIANA SP.NOV

Size large (wing, male, 17 mm. or more); antennae with unbranched segments; colour of mesonotum grey, more yellowish on the praescutal interspaces; praescutum with four conspicuous dark brown stripes; pleura light grey with two conspicuous, dark brown, longitudinal stripes, the more dorsal ending at posterior portion of the mediotergite; halteres yellow; femora with a yellow subterminal ring; tibiae with a yellowish white subbasal annulus; tarsi brownish black; wings yellow, handsomely patterned with dark brown, including larger costal areas, the one in the region of the sigma V-shaped; male hypopygium with the gonapaphyses appearing as slender pointed horns.

Male: Length about 18-20 mm.; wing 17-19 mm.; antenna about 3·4-3·6 mm.

Rostrum dark brown, sparsely pruinose; palpi black. Antennae with scape dark brown, pedicel slightly more reddish brown; basal flagellar segments uniformly light yellow, the outer ones more infuscated; flagellar segments simple, unbranched, elongate-oval to subcylindrical, with the lower face a trifle more bulging than the upper; verticils conspicuous, much

exceeding the segments in length. Head dark grey, the anterior vertex slightly more yellowish; anterior vertex elevated into a small conical point;

setae of posterior vertex black, proclinate.

Pronotum dark grey, restrictedly infuscated medially. Mesonotal praescutum with the humeral region silvery grey pruinose, the interspaces more golden-yellow; disk with four conspicuous dark brown to blackish stripes, the intermediate pair separated only by a capillary ground vitta except at suture, where they are more widely separated; pseudosutural foveae large, circular in outline, reddish brown; scutum grey, the lobes conspicuously patterned with dark brown, the median region less conspicuously darkened; posterior sclerites of mesonotum grey, narrowly darkened medially to produce a vague stripe; posterior and lateral portions of mediotergite and dorsal margin of pleurotergite blackened, being a direct prolongation of the dorsal pleural stripe. Pleura light grey, with two conspicuous dark brown longitudinal stripes, the more dorsal one involving the ventral propleura, anepisternum and dorsal pteropleurite on to the postnotum, as described; the lower stripe is chiefly restricted to the ventral sternopleurite; dorsopleural region light yellow. Halteres yellow. Legs long and slender; coxae light grey pruinose, vaguely patterned with dusky, especially the fore pair; trochanters reddish brown, sparsely pruinose; femora black, with a conspicuous yellow ring more than its own length from the blackened apex; tibiae brownish black, with a slightly more vellowish white ring less than its own length beyond the base; remainder



of legs brownish black to black. Wings (Figure) clear yellow, heavily and conspicuously patterned with dark brown; prearcular and costal fields more saturated yellow; dark areas distributed as follows: Cell C except at base with its central portion blackened; a major area in radial field at near midway between arculus and origin of Rs; origin of Rs; a V-shaped area with the basal arm extending from Sc2 caudad across the fork of Rs to r-m, the outer arm from the stigma caudad to r-m; other areas along posterior cord, outer end of cell 1st  $M_2$ , tips of longitudinal veins, especially vein  $R_3$  and a long continuous streak along outer half of vein  $R_5$ , widened outwardly; still further seams and clouds at fork of  $M_1+2$ ; along most of veins M and Cu, except on their basal portions, these latter areas tending to be broken into individual spots; clouds at near midlength of cells Cu and 1st A, about in transverse alignment with the origin of Rs; a conspicuous cloud near outer end of cell 2nd A, opposite the narrowest part of the cell; veins yellow, scarcely evident in the more saturated ground areas, darker brown in the patterned fields. Venation:  $R_2+3+4$  longer than basal section of  $R_5$ ; cell  $M_1$  from 2.5 to 3 times its petiole; m-cu more than one-third its length beyond the fork of M; vein 2nd A sinuous.

Abdomen with tergites reddish brown to dark brown, still darker on lateral and posterior portions; sternites brownish black, more reddish on central portion; hypopygium brownish black. Male hypopygium with the caudal border of tergite strongly emarginate or concave, forming two rounded dusky lateral lobes. Outer dististyle as in other members of the

subgenus. Inner dististyle with the basal lobe unusually large, rounded, conspicuously setiferous. Gonapophyses appearing as slender, gently curved horns that narrow to acute tips. Aedeagus a little longer than the gonapophyses.

Holotype, &, Mount Donna Buang, above Warburton, altitude 4,000 feet, January 21, 1943 (F. E. Wilson); in the Wilson Collection. Paratopotypes, 2 &, one preserved in the writer's collection, one returned to

Wilson.

I take unusual pleasure in dedicating this beautiful fly in honour of Erasmus Wilson. To him, more than to any other individual, is due our great increase in knowledge of the Australian, and particularly the Victorian, Tipulidae. This is one of the most striking and distinct crane-flies known to me. It belongs to the group of the subgenus having the antennae simple, without branches of any sort. Among the approximately 35 species of Paralimnophila now known from Australia and Tasmania, the only species having similarly simple antennae are Gynoplistia (Paralimnophila) indecora Alexander and G. (P.) woodhilli Alexander (and possibly G. (P.) incompta Alexander, the latter still known only from the unique type that had lost the antennae). Elsewhere within the range of the subgenus, all of the known species have the antennae simple, these including two species in New Zealand, and rather numerous forms in southern Chile and south-eastern Brazil.

The present fly superficially resembles certain large and showy local members of the genera Austrolimnophila Alexander, Epiphragma Osten Sacken, and Limnophila Macquart, but is readily told by the diagnostic features indicated above. The Australian species of Paralimnophila Alexander with simple antennae, as listed above, are much smaller than the present fly and have entirely different patterns of the wings and legs.

Wilson's notes on the occurrence of this fly are of interest and I quote this part of his letter: "Spent a week-end on Mount Donna Buang in the Warburton district where I took Eutanyderus wilsoni Alexander some years ago. We went up to collect a series of two alpine butterflies that occur there. I got a very fine Tip new to me from a damp spot under Nothofagus trees. I took several specimens of Austrolimnophila pristina Alexander in association with this species. The altitude of 4,000 feet is much higher than Belgrave where I formerly took the latter."