[Reprinted from Insecutor Inscitiæ Menstruus, Vol. IX, Nos. 10–12, 1921]

TWO UNDESCRIBED TIPULOIDEAN FLIES FROM NEW ZEALAND

(Diptera, Tanyderidæ and *Rhyphidæ)*

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Family TANYDERIDÆ

In 1920 the writer erected the subfamily Bruchomyiinæ for the new genus and species, *Bruchomyia argentina,* from the Sierra of Argentina. Later, Edwards [1] described a new species of the group from amber. In the same paper Edwards indicated that the insufficiently known genus *Nemopalpus* Macquart (*Palaeosycorax* Meunier) was a member of this subfamily, which includes, besides the genotype, *N. flavus* Macquart (Canary Islands), the fossil species *N. tertiariæ* (Meunier) and *N. molophilinus* (Edwards). Mr. Edwards believed that the group was more properly referable to the family Psychodidæ and proposed the subfamily Nemopalpinæ to receive the species of *Nemopalpus* and *Bruchomyia.* The writer can see no just reason for rejecting the subfamily name Bruchomyiinæ, based on the genus *Bruchomyia,* in favor of the earlier described *Nemopalpus.* The name Bruchomyiinæ was the first higher group to be proposed for these flies and if any rules of priority apply to groups of animals higher than the genus, this name should be retained. It is on this same basis that the family Tanyderidæ is used, the genus *Tanyderus* being the third to be proposed. If the earlier names are used the family will become the Macrochilidæ or

[1] Edwards, F. W. A note on the subfamily Bruchomyiinæ (Diptera Nematocera), Ann. Mag. Nat. Hist., ser. 9, vol. 7, p. 437, 1921.

the Protoplasidæ, depending on whether or not the name *Macrochile* is preoccupied. There has been considerable argument during the past year as to the basis for family and subfamily names in entomology and several workers have maintained that the law of priority should refer to higher groups, that is, the first family names proposed should be preserved. In this connection a note by Dr. Aurivillius should be consulted.[2]

As to whether or not the subfamily Bruchomyiinæ is to be referred to the Psychodidæ as is believed by Edwards, Tonnoir and other authorities on the Nematocerous Diptera, to the Tanyderidæ as is now believed by the writer, or to represent a distinct family of flies ancestral to both the Psychodidæ and Tanyderidæ, is a question that future studies must settle. Until more evidence is submitted, the writer is inclined to follow his first assignment of *Bruchomyia* to the family Tanyderidæ.

Among some very interesting microscope slides of Diptera sent the writer by Dr. J. W. Campbell, there was included a slide of the wing of an undescribed member of this palaeogenic group. Although only the wing is available, it is thought best to call attention to this fly at this time.

Nemopalpus zelandiae, new species

Sex ?.—Wing 5.8 mm.

Wings with a slight brownish suffusion, the bases of cells *R* and *M* much paler; a crossband before the cord and cells M_3 and M_4 are slightly darker than the cells in the apical half of the wing; veins brown. Venation: *Sc* ending opposite *r–m;* both Sc_1 and Sc_2 present and subequal in length; *Rs* originating far basad; cell R_2 about as long as its petiole; *M* incrassated before its fork; petiole of cell M_3 short, about twice *m–cu,* the latter faintly indicated, situated at the fork of M_3 and M_4; *Cu* and *1st A* distinct. Several veins of the wing are enlarged and all are provided with abundant setigerous punctures.

[2] Aurivillius, Chr. Descriptions of some South African Heterocera (Lepidoptera), Ann. South African Museum, vol. 18, part 2, art. 4, p. 241, 1921, footnote.

Habitat.—New Zealand (South Island).

Holotype, a wing in balsam, Little River, Canterbury, January 12, 1921 (Gourlay).

This wing is preserved in the writer's collection through the kindness of Dr. Campbell and Mr. Gourlay. The location of the remainder of the type-specimen is not known to me at this time but may possibly be in the collection of Dr. Tillyard at the Cawthron Institute.

The details of the wing venation lead me to refer this fly to *Nemopalpus* rather than to *Bruchomyia.* Compared with *N. molophilinus,* the present species is notable by its large size, the long *Sc, Sc*$_1$ ending opposite *r–m,* and the sessile cell M_1, the *r–m* crossvein connecting with M_1+_2 exactly at the fork. More material may demonstrate that the generic reference is incorrect.

Family RHYPHIDÆ

Trichocera maori, new species.

Size small (wing of male under 4 mm.); general coloration brown, the mesonotal praescutum ochraceous with a brown median line; head gray; legs dark brown; male hypopygium with the gonapophyses densely set with small chitinized spines; penis-guard with the tips appearing as divergent horns.

Male.—Length 3.2 mm.; wing 3.6 mm.

Female.—Length 3.6 mm.; wing 4.7 mm.

Rostrum and palpi brown. Antennæ with the scapal segments obscure yellow; flagellum dark brown. Head gray.

Pronotum dark brown. Mesonotal praescutum ochraceous with a conspicuous dark brown median stripe; lateral stripes feebly indicated; remainder of mesonotum pale brown. Pleura darker brown. Halteres pale, the knobs dark brown. Legs dark brown. Wings pale grayish subhyaline, unmarked except for a pale brown oval spot at the end of vein R_1; veins dark brown. Venation: Sc_1 ending opposite *r; Sc*$_2$ beyond the origin of *Rs,* the distance about one-half longer than R_2+_3; R_2+_3 a little shorter than the basal section of R_2; *m–cu* very long, only a little shorter than *r.*

Abdomen brown. Male hypopygium with the pleurites short, the single pleural appendage elongate, the proximal face provided with abundant short setæ. Gonapophyses appearing as conspicuous cushion-shaped structures densely set with small, slightly curved spines, the whole structure suggesting a mace. Penis-guard projecting caudad of the level of the apophyses, each side terminating in a long, laterally directed, divergent horn. In *T. antipodum* Mik, the only described antipodal *Trichocera,* the gonapophyses are armed only with four conspicuous spines and the penis-guard is short, broad-based, tapering to a slender median point. Ovipositor more elongate than in *T. antipodum.*

Habitat.—New Zealand (South Island) .

Holotype, male, Riccarton Bush, 1921 (Gourley) ; in alcohol.

Allotype, female, Otira, altitude 1,260 feet, January 10, 1920 (J. W. Campbell).

Paratopotypes, 3 males, in alcohol.

Type in the writer's collection.