



***Cowanomyia hillaryi* gen. et sp. n., a remarkable new gnoristine (Diptera: Mycetophilidae: Sciophilinae) from New Zealand**

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Abstract

A new genus and a new species, *Cowanomyia hillaryi* **gen. et sp. n.**, of Gnoristini (Mycetophilidae: Sciophilinae) is described from New Zealand. A striking feature of *Cowanomyia* is the one-branched media in combination with the furcate anterior cubitus, which is a pattern found among Mycetophilidae only in *Adicroneura*. *Cowanomyia* and *Adicroneura* are evidently not closely related. The position of *Cowanomyia* among world Gnoristini, as presently known, remains unresolved for the time being.

Key words: Diptera, Mycetophilidae, Gnoristini, new genus, new species, wing venation, New Zealand

Introduction

The wing venation of Mycetophilidae typically includes two forks, an anterior (median) and a posterior (cubital) fork (e. g. Sjøli *et al.* 2000: fig. 44). This pattern is variously modified in different mycetophilid lineages. Occasionally forks are incomplete, with one of the tines being evanescent basally or one of the median or cubital branches totally missing. A striking number of variants of this pattern are realized among mycetophilids, many of which are independently derived. One of the wing venation patterns, however, is found only once: the one-branched media in combination with the furcate cubitus as met in *Adicroneura* Vockeroth 1980 (Vockeroth 1980: fig. 4). This genus has two species in the southern Neotropics (south Chile), *A. meridionalis* Matile 1995 and *A. disjuncta* Matile 1995, besides the type species, *A. biocellata* Vockeroth 1980 from the Nearctic Region (Oregon). One may dispute whether *Adicroneura* is monophyletic. In any case, an *Adicroneura*-like vein pattern is found also among Mycetophilidae of New Zealand, in a single new species that is here classified in a new genus, *Cowanomyia hillaryi*. In the following we describe the new taxa and discuss the affinity of *Cowanomyia* to other mycetophilids.

Among the Mycetophilidae in New Zealand *Cowanomyia* is unmistakable, but its venation is almost identical to that of the supertribe Micromyidi in the Lestremiinae (wood midges), a subfamily of Cecidomyiidae (gall midges). The only differences in venation between Micromyidi and *Cowanomyia* are the presence of two anal branches in the mycetophilid (Micromyidi usually lack anal veins) and a costal break at the juncture with R5 in Micromyidi (as well as in most other Lestremiinae, while Mycetophilidae lack that break). There are other differences of course, such as the presence of tibial spurs in the mycetophilid and the absence of those in the cecidomyiid. Micromyidi are abundant in New Zealand (cf. Jaschhof & Jaschhof 2003, 2004a, b), while *Cowanomyia* is apparently a great rarity.