

***Minipteryx robusta*—a New Genus and Species of Micropterous Limnophilinae (Insecta: Diptera: Tipuloidea: Limoniidae) from Australia**

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ABSTRACT. A new genus and species of the subfamily Limnophilinae of the tipuloid family Limoniidae from Australia, *Minipteryx robusta* gen. nov. sp. nov., is described and illustrated. It is a rather large micropterous crane fly. Its affinities to existing genera remain unclear. The unique male was collected in late austral autumn at a small creek in alpine vegetation (elevation 1638 m a.s.l.) of Kosciuszko National Park, New South Wales. A review is provided on the Australian Tipuloidea with reduced wings.

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Introduction

The Tipuloidea (formerly Tipulidae) is the largest family group taxon of Diptera, with some 15,000 described species (Oosterbroek, 2015). Well over 1000 species are recognized from Australia. Of these, only ten species are known to have micropterous/brachypterous females, and only one Tasmanian endemic is known to be micropterous in both sexes. This makes a micropterous male recently discovered in Kosciuszko National Park, New South Wales, the first micropterous male crane fly from mainland Australia. As the systematics and identification of tipuloids at the generic level is mainly based on wing venation, the male from Mt Kosciuszko cannot be classified with confidence. Its general body and genital features suggest that it is a member of the family Limoniidae, subfamily Limnophilinae, but it does not fit neatly into any of the described genera. It is therefore described below as a new genus and species.

Material and methods

The unique individual of the taxon described in this paper was collected by accident. It was extracted from a kick sample obtained during general aquatic macroinvertebrate sampling in riffle sections (approximately 0.5–1.0 m wide) of Pipers Creek at 1638 m a.s.l. This sampling is part of the Kosciuszko National Park Resort Water Quality Monitoring program for which OEHL (Office of Environment and Heritage) is monitoring, twice a year, the impact of ski resorts, their infrastructure and management on the waterways in their vicinity.

Morphological terminology follows Alexander & Byers (1981). The specimen was preserved in 75% ethanol. Line drawings were made using a camera lucida and are not to scale. The unique specimen (holotype of *Minipteryx robusta*) with hypopygium in glycerol is lodged in the Entomology collection of the Australian Museum, Sydney (AMS).