



## A new Nearctic species of *Atrichopogon* (*Meloehalea*) and a redescription of *Atrichopogon* (*M.*) *chilensis* Ingram & Macfie (Diptera: Ceratopogonidae)

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### Abstract

A new species of Ceratopogonidae from Canada, *Atrichopogon* (*Meloehalea*) *ladislavi* Tóthová, is described. The Patagonian species *Atrichopogon* (*M.*) *chilensis* Ingram & Macfie is restored from synonymy, its female is redescribed and the male is described for the first time.

**Key words:** Diptera, Ceratopogonidae, *Atrichopogon*, *Meloehalea*, new species, biting midge, Neotropical, Nearctic, distribution

### Introduction

The diverse biting midge genus, *Atrichopogon* Kieffer, contains 506 species worldwide (A. Borkent, pers. comm.).

The subgenus *Meloehalea* Wirth includes ectoparasitic species that feed on the haemolymph of blister beetles (Coleoptera: Meloidae) and false blister beetles (Oedemeridae) (Borkent & Rocha-Filho 2006). Currently, there are 16 species in this subgenus that are known from non-Neotropical regions, 10 of which occur in the Palearctic, three in the Nearctic, two in the Holarctic and one in the Afrotropical Region (Wirth 1980, Szadziewski & Borkent 2004). The Nearctic and Holarctic species of *Meloehalea* were treated by Wirth (1956, 1980).

With regard to the Neotropical species, Borkent & Picado (2004) published a detailed study on the *Atrichopogon* species of Costa Rica, describing 18 new species based mainly on males with distinctive features on their genitalia, but they did not find any species that could readily be assigned to *Meloehalea*. However, the Holarctic species *A. (M.) oedemerarum* Storå was recently reported from Guatemala by Tóthová (2008). Spinelli & Wirth (1992) redescribed *A. obnubilus* Ingram & Macfie from Argentinean and Chilean Patagonia, a species bearing two spermathecae and with well-developed mandibular teeth. They placed the species in the subgenus *Meloehalea*, and recognized *A. chilensis* Ingram & Macfie and *A. assimilis* Ingram & Macfie as junior synonyms. This synonymy was accepted in several subsequent publications (Borkent & Wirth 1997; Borkent & Spinelli 2000, 2007; Spinelli *et al.* 2006), but a recent study of the types of the three species by one of us (GRS) in the Natural History Museum, London (BMNH) revealed that *A. chilensis* should be restored from synonymy.

Adults of *Atrichopogon* (*Meloehalea*) are usually distinguished by their morphological characters such as TR (tarsal ratio), number of mandibular teeth, proboscis length, etc. (Wirth 1956, 1980, Szadziewski *et al.* 1995, Szadziewski *et al.* 2007). As indicated by Szadziewski *et al.* (1995), Borkent & Picado (2004) found little to no support for distinguishing subgenera based on morphological features of the adults of the Neotropical Region, but we believe that the females of the two Patagonian species have distinctive mouthparts