



Review of Neotropical *Chonocephalus* Wandolleck (Diptera: Phoridae)

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Abstract

16 new species are described and a key to the males of 27 of the 28 Neotropical species known is provided (the omitted species being only known in the female sex). A partial key to the females is also provided but most are given code letters only until they can be linked to their males.

Key words: Diptera, Phoridae, *Chonocephalus*, new species, keys, Neotropical Region

Introduction

The tiny scuttle flies of the genus *Chonocephalus* Wandolleck are noted for their sexual dimorphism, with the females being flightless but the males being normally winged. Many species breed in ripe fruits, while some exploit other sources of fermenting detritus or plant material, and some are fungivores. The males transport females to suitable larval pabula during nuptial flights (Disney, 1994).

Many casual collectors have seemed unaware of the sexual dimorphism in this genus and consequently have tended to collect only one sex. The naming of undescribed species on the basis of one sex only created the current taxonomic chaos. The growing list of undescribed males and females had become such that I am now naming undescribed males but assigning code letters only to undescribed females as yet unassociated with their males. Such a policy runs the risk that we may describe as new some named species already known in the female sex only. As these are associated with their males, we will thereby create some synonyms. This is probably a smaller price to pay than a confusing proliferation of species (described from males alone) known by code numbers only alongside a smaller list of females known only by code letters. Museum collections abound in misidentified specimens and many species awaiting description. In order to provide the basis for moving forward, all named species in the literature were reviewed and keys to the Nearctic and Palearctic species were provided (Disney, 2002). Furthermore this revision of the 43 previously recognised species on the world list reduced this to 32 valid species, with the possibility that some only known in the female sex might be the missing females of some species only known in the male sex (Disney, 2002). The Afrotropical species were then revised (Disney, 2005). In both papers new species were only named when males were available. Undescribed females not yet associated with their males were given code letters only.

In this paper I describe 16 new Neotropical species and provide keys to the males of the species of this region. Some females only known in this sex are given code letters only.

Methods and material

The identification of members of this genus requires slide mounted specimens. Indeed the females can only be reliably identified by means of internal features of the abdomen (see below). The preferred mounting medium is the so called Berlese Fluid gum chloral medium, used with coverslips of 10 mm and 6 mm diameter (Dis-