*Zootaxa* 2064: 39–56 (2009)
www.mapress.com/zootaxa/


**Article**

ISSN 1175-5326 (print edition)
**ZOOTAXA**
ISSN 1175-5334 (online edition)

# Revision of the genus *Macrostomus* Wiedemann (Diptera: Empididae: Empidinae). I. The *ferrugineus* species-group

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## Abstract

All species of *Macrostomus* Wiedemann allied with the type-species, *Macrostomus ferrugineus* (Fabricius), are treated in the *ferrugineus* species-group. Three currently recognized species and six new species are included, namely *M. fuscithorax*, **n. sp.** from Brazil (Amazonas state), *M. fusciventris*, **n. sp.** from Brazil (Amazonas and Acre states), *M. melanothorax*, **n. sp**. from Peru and Brazil (Amazonas state), *M. ferrugineus* (Fabricius), *M. longipennis*, **n. sp.** from Brazil (Amazonas state), *M. flavus*, **n. sp.** from Brazil (Roraima and Amazonas states), *M. furcatus*, **n. sp.** from Brazil (Amazonas and Acre states), *M. fulvithorax* (Curran) and *M. occidentalis* Rafael & Cumming. A key to species is presented.

**Key words**: Amazon Basin, distribution, taxonomy, *Macrostomus*, Empididae

## Introduction

The genus *Macrostomus* Wiedemann was redefined by Rafael & Cumming (2004) to include 13 species, with six new species subsequently added by Rafael & Cumming (2006). The genus is restricted almost entirely to the Amazon Basin with only a few peripheral records (Rafael & Cumming 2006). Here we describe six additional new species that belong to the *M. ferrugineus* species-group diagnosed herein. All species treated in the *M. ferrugineus* species-group are distributed in the northwest Neotropical region (NW) as defined by Amorim & Pires (1996), Amorim & Silva (2002) and Amorim (2009) (Fig. 7). This species-group appears to be a monophyletic lineage based on the reduction to one pair of ocellar setae, the absence of supra-alar postsutural setae, the elongation of male tergite 8 posteriorly with the apex narrower than the base, and female wing wider than in male and somewhat rounded. This paper dealing with the *M. ferrugineus* species-group is the first in a series by the authors that will treat each of the species-groups in *Macrostomus*. Revision of the remaining species, including descriptions of several new species will be published group by group in the near future. The last paper in the series will include a key to the species-groups and will analyze their phylogenetic relationships.

## Material and methods

This study is based on the examination of specimens housed in the following institutions: American Museum of Natural History (AMNH), New York, USA; California Academy of Sciences (CAS), San Francisco, USA; Canadian National Collection of Insects (CNC), Ottawa, Canada; Instituto Nacional de Pesquisas da

*Accepted by N. Evenhuis: 2 Mar. 2009; published: 6 Apr. 2009*