



## First record of the genus *Atrichobrunettia* Satchell in Mexico, with the description of a new species (Diptera, Psychodidae, Psychodinae)

SERGIO IBÁÑEZ-BERNAL

Instituto de Ecología, A. C. Departamento de Biodiversidad y Ecología Animal. Km 2.5 carretera antigua a Coatepec No. 351, Congregación El Haya, Xalapa, Veracruz, C. P. 91070, México. E-mail: sergio.ibanez@inecol.edu.mx

### Abstract

Genus *Atrichobrunettia* Satchell is represented in the Americas by 14 described species, 13 from Brazil, and one from Costa Rica. *Atrichobrunettia xalapaensis* **sp. nov.** is described based on male and female characteristics and constitutes the first record of this genus in Mexico. This species belongs to subgenus *A. (Polibrunettia)* Bravo, but is easily distinguished from other described species of *Polibrunettia* by the form of the parameres and aedeagus in the male.

**Key words:** Mormiini, Brunettina, *Polibrunettia*, Neotropical, taxonomy

### Introduction

Ježek and Goutner (1995) recognized the subtribe Brunettina of Mormiini to include *Gerobrunettia* Quate and Quate, *Atrichobrunettia* Satchell, and *Brunettia* Annandale, a proposal that was later corroborated with a phylogenetic analysis by Bravo (2006). Bravo's analysis also served to establish or confirm the subgenera of these three genera, thus including the Neotropical species with antennae composed of 14 flagellomeres, and reorganizing species in a clear manner based on affinities. It is important to mention that *Gerobrunettia* species are apparently restricted to Papua New Guinea, whereas *Brunettia* and *Atrichobrunettia* species are widespread in the world tropics, with the exception of *Atrichobrunettia* which has not yet been recorded in Africa.

In the Neotropics, *Atrichobrunettia* is represented by two subgenera: *A. (Polibrunettia)* Bravo with 9 species and *A. (Pachybrunettia)* Bravo with 3 species, as well as 2 ungrouped species, *Atrichobrunettia bora* (Bravo) and *A. pennata* Bravo. Of these, 14 species are described from Brazil and only one from Costa Rica (Bravo, 2006, 2007).

In the process of reviewing all material previously collected in the state of Veracruz in order to synthesize information about the family Psychodidae as part of the "Estratificación de tres enfermedades prioritarias en áreas de riesgo con base en sus insectos vectores en el estado de Veracruz, México" (CONACYT-FOMIX-Veracruz-Salud, n°68317; INECOL N° 1333) project, some specimens of one species of *Atrichobrunettia*, a genus not previously recorded in Mexico, were found. In this report the new species of *Atrichobrunettia* is described based on male and female characteristics.

### Materials and methods

Collections were made by Malaise trap during 48 h (from November 10 to 12, 2002, in a suburban area of Xalapa, Veracruz, at the side of Río Coapexpan basin, in which there is a remnant of cloud forest. Specimens were prepared and mounted in permanent slides following the procedure described by Ibáñez-Bernal (2005).