

Review of *Platyplastinx* Enderlein, 1937 (Diptera, Psychodidae) with descriptions of four new species

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Abstract

Platyplastinx Enderlein, with eight previously described species, is currently known to occur in the southeastern United States, Costa Rica, Ecuador and Brazil. Four new species from Brazil are described: *Platyplastinx amazonensis* sp. nov., *P. duckhousei* sp. nov., *P. exiguum* sp. nov. and *P. hirsutus* sp. nov. *Platyplastinx obscurus* (Bravo, Lago & Castro, 2004) comb. n. is transferred from *Alepidia*. The generic diagnosis is updated, global species are listed, and an identification key for males of all species is provided. Thirteen species are now known, eight of which are described from Brazil.

Key words: Psychodinae, Setomimini, Taxonomy, Neotropical region, Brazil

Introduction

Platyplastinx Enderlein (Psychodidae, Psychodinae), with eight species are currently included, has been recorded from the southeastern United States, Costa Rica, Ecuador and Brazil (as far south as São Paulo State). The genus appears to be primarily tropical, except for *P. sycophantos* Quate, 1955, which has only been collected in a subtropical part of the Nearctic region. Enderlein (1937) based the original description of *Platyplastinx* on one female specimen of the type species, *P. solox* Enderlein, 1937, from Costa Rica. Quate (1999) later transferred *Tonnoira moragai* Quate, 1963, to *Platyplastinx* and described the diagnostic characters of the males based on those of *T. moragai*.

Four new species from Brazil (three from Amazonas State and one from Espírito Santo State) are described here. Additionally, one species is transferred from *Alepidia* Enderlein to *Platyplastinx*. A key to males of the genus is provided.

Material and methods

Specimens of the new species examined in this study were deposited in the Invertebrate Collection of the Instituto Nacional de Pesquisa da Amazônia, Amazonas, Brazil (INPA) and in the Prof. Johann Becker Entomological Collection of the Museu de Zoologia da Universidade Estadual de Feira de Santana, Bahia, Brazil (MZFS). All specimens were cleared with hot 10% sodium hydroxide (45°C) and subsequently mounted in Canada balsam, as described by Cordeiro & Bravo (2008). The specimens were examined using an Olympus BX51 optical microscope, illustrated using a coupled *camera lucida*, and photographed using a DP25 digital camera. Digital images were processed using Olympus cellSens version 2.3 imaging software in conjunction with build 7045 and Combine ZP software. The type material of *Alepidia obscura* Bravo, Lago & Castro, 2004 (deposited in MZFS), as well as photographs of the holotype of *Platyplastinx crossomiscos* Quate & Brown, 2004, were also studied. The general morphological terminology follows Cumming & Wood (2009); the specific nomenclature of the cerci of Psychodidae follows Wagner & Ibañez-Bernal (2009).