



The enigmatic genus *Ctenostylum* Macquart with the description of a new species from the Brazilian Amazon Basin and a checklist of world Ctenostylidae species (Diptera)

JOSÉ ALBERTINO RAFAEL^{1,2}, THEREZINHA DE JESUS PIMENTEL³, FABIO SIQUEIRA P. GODOI^{1,4}, RENATO JOSE PIRES MACHADO^{1,4}

¹Instituto Nacional de Pesquisas da Amazônia, Coordenação de Pesquisas em Entomologia, Caixa Postal 478, 69011–970, Manaus, Amazonas, Brasil. E-mail: jarafael@inpa.gov.br

²Fellow of CNPq.

³Museu Paraense Emílio Goeldi, 66040–170, Belém, Pará, Brasil. E-mail: tpimentel@museu-goeldi.br

⁴Fellow of the Programa de Capacitação Institucional – PCI, MCT/CNPq/INPA. E-mail: fgodoi@gmail.com, renatojpmachado@yahoo.com.br

Abstract

The genus *Ctenostylum* Macquart, 1851 was known only from two male specimens, one from Brazil and one from Costa Rica. *Ctenostylum fuscomaculatum* n. sp., is described based in one female specimen collected in the Amazon Basin, the third specimen known. The diagnosis of the genus *Ctenostylum* is redefined and its relationships with other ctenostylid genera are discussed.

Key words: Amazon Basin, Ctenostylidae, *Ctenostylum*, Diptera, taxonomy

Introduction

Ctenostylidae is a little-known family which now includes 13 described species in seven genera from the Neotropical, Afrotropical, Palearctic and Oriental Regions (table 1).

The name Ctenostylidae was used by Brues and Melander (1932), Lopes (1935) who also reviewed the history of the family and McAlpine (1989). These authors recognized it as a distinct family but of obscure relationships. In the Neotropical Region it was catalogued within the family Pyrgotidae (Steyskal 1967).

McAlpine (1989) stated that the group does not belong to the Pyrgotidae and apparently not even to the Tephritoidea. Barraclough (1994, 1995, 1998) confirmed their exclusion from Pyrgotidae as a separate family. The superfamily placement of the Ctenostylidae is still not clear. McAlpine (1997) suggested that Ctenostylidae may somehow be related to Diopsoidea and Korneyev (2001) suggested that it is related to the Platystomatidae + Pyrgotidae + Tephritidae group of families (Tephritoidea).

McAlpine (1989) used the name Ctenostylidae to cover five genera: *Ctenostylum* Macquart; *Taurocypson* Curran; *Lochmostylia* Hendel; *Furciseta* Aczél; and *Ramuliseta* Keiser. All are Neotropical, except for the latter, which is restricted to the Old World. Two more genera have since been added to the family: *Nepaliseta* Barraclough and *Sinolochmostylia* Yang. Both are known from the Oriental Region and the latter has also been recorded from the Palearctic Region (Han 2006).

Ctenostylid specimens are known for their rarity in collections and for their unusual morphological features that separate them from other acalyptratae flies. These characters include absent or vestigial mouthparts, a lack of ocelli, a female arista with fan-shaped branching, characteristic female facial structure with transparent lateral zones, a nearly transverse mesonotum, a broadly trapezoidal prosternum, a pictured