



Catalogue of the Ctenostylidae (Diptera, Schizophora) of the World

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Abstract

A catalogue of Ctenostylidae of the world is presented comprising 14 described species in seven recognized genera. An unnamed species of *Ctenostylum* Macquart from Costa Rica is also listed. All valid and invalid names and synonyms are presented, totaling 33 names. All references known to us from the taxonomic and biological literature, including references for figures and plates are included. Condition and sex of the type material, type location and geographic distributions with new records for some species are also included. *Lochmostylia lopesi* Keiser and *Tauroscypson andina* Aczél have their distributional records enlarged to Paraná (Brazil) and Rondônia (Brazil) respectively. *Tauroscypson andina* is recorded from Brazil for the first time.

Key words: bibliographic revision, distribution, list of species, nomenclature, Tephritoidea, type locality, type material.

Introduction

Ctenostylids are schizophorous flies of unusual appearance, distributed mainly in the circumtropically and adjacent areas. Currently, the family comprises 14 described species in seven genera: *Ctenostylum* Macquart (2 spp.), *Furciseta* Aczél (2 spp.), *Lochmostylia* Hendel (2 spp.) and *Tauroscypson* Curran (2 spp.) from the Neotropical Region, *Nepaliseta* Barraclough (2 spp.) from the Oriental Region, *Ramuliseta* Keiser (3 spp.) from the Afrotropical and Oriental Regions and *Sinolochochmostylia* Yang (1 sp.) from the Palearctic Region. Additionally, there is an unnamed species of *Ctenostylum* from Costa Rica.

Four striking features are peculiar to Ctenostylidae: vestigial mouthparts; lack of ocelli; viviparity; and the very complex branching of the female arista (McAlpine 1990). Additionally, the ctenostylids are recognized by their light yellow color pattern (with some red or black spots), the sexually dimorphic head, the subequal size of the head and thorax, their long slender legs and patterned wings (Korneyev 2010). For additional characters see Korneyev (2001, 2010).

The biology of the family is unknown. Most specimen labels show that adults are collected at light traps. Females of *Lochmostylia lopesi*, *Nepaliseta mirabilis* and *Sinolochochmostylia sinica* were collected with first-instar larvae in the abdomen, suggesting a larviparous and parasitic habit although no hosts are known (Lopes 1935; Korneyev 2001; Han 2006).

Historically, Ctenostylidae were classified near the Oestridae (Brauer 1863), Sepsidae (Brauer 1887) and Conopidae (Bigot 1882) and later tentatively placed as subfamily Lochmostyliinae in Pyrgotidae (Keiser 1951; Hennig 1952; Aczél 1956b; Steyskal 1967). McAlpine (1990), through comparative morphological analysis, listed the ctenostylids within Tephritoidea until they could be shown either to have a particular relationship to another Schizophora taxon or in its own superfamily. Posteriorly, the exclusion of Lochmostyliinae from Pyrgotidae was accepted by Barraclough (1994, 1995a, 1995b, 1998), Korneyev (2001), Han (2006), Rafael *et al.* (2009) and Câmara & Rafael (2013).

Korneyev (2001), based on morphological features of adults, proposed an alternative relationship hypothesis

Examined material: BRAZIL. Rondônia. Itapuã do Oeste, Flona do Jamari. 4/xii/2012. Cavichioli, Melo, Rosa & Santos col. 1 male (DZUP).

*Remarks: According with original description of the species, the PT was returned to Dr. Weyrauch (Aczél 1956b: 32).

Actually, the PT is found in the collection of IFML (Dr. Guillermo Claps pers. comm.).

guiana Curran, 1934a: 419. Type material: HT female (AMNH). Type locality: GUYANA, Bartica district, Kartabo. Distr.–Guyana. Refs.

Tauroscypson guiana Curran 1934a: 419 (desc.), 531 (figs.); Curran 1934b: 269 (figs.), 270 (key); Keiser 1951: 123 (redesc.), 124 (key); Aczél 1956a: 182 (checklist); Aczél 1956b: 28 (key), 32 (notes); Steyskal 1967: 2 (cat.); Rafael *et al.* 2009: 64 (tab.); Korneyev 2010: 964, 966 (figs.).

Acknowledgements

The authors would like to thank: Gerardo Lamas (Universidad Nacional Mayor de San Marcos, Lima, Peru [MUSM]), Juan Grados Arauco (MUSM), Angélico Asenjo (DZUP) and Guillermo Claps (IFML) for helping concerning the paratype of *T. andina*; Frank Menzel (SDEI) for helping with type material of *F. plaumanni*; and Christophe Daugeron (MNHN) for clarify the status of the types of *R. madagascariensis*. The authors are grateful to Kirstern Lica Follmann Haseyama (DZUP) and Paula Fernanda Motta Rodrigues (Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil [MZUSP]) for providing important bibliography for this work. Thanks to Dr. Claudio J.B. de Carvalho (DZUP) for kindly grant us permission to study the specimens of DZUP. We would like to thank Neal Evenhuis and one anonymous reviewer for the valuable contributions to the paper. APC is grateful to Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and Fundação de Apoio à Pesquisa do Estado da Paraíba (FAPESQ) for the research scholarship (proc. # 350052/2014-0).

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