



<http://dx.doi.org/10.11646/zootaxa.3846.4.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:F2E1FAE7-2A57-4666-ABBC-9DD9B4F8C767>

Ceriomicrodon petiolatus Hull, 1937 (Diptera, Syrphidae, Microdontinae): Redescription and new records

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Abstract

The monotypic genus *Ceriomicrodon* Hull, 1937 was known in the current literature by a few specimens, all from Brazil but with records only for Mato Grosso and Roraima states. The only species of the genus is here redescribed including the description of the female and its terminalia, in addition to a preliminary description of the egg. Images of male and female genitalia and egg are provided. New Brazilian records for Amazonas, Maranhão and Rondônia and a brief diagnosis to distinguish that genus from other similar Microdontinae genera are presented.

Key words: flower flies, hover flies, Neotropical region, SEM images, taxonomy

Introduction

Ceriomicrodon Hull, 1937 (type-species: *Ceriomicrodon petiolatus* Hull, 1937) was based on a single specimen collected in Mato Grosso, Brazil. Hull (1937, p. 25) erected the genus and species based on the extremely petiolate abdomen, with a very narrow and long second abdominal segment, and briefly compared it to *Rhopalosyrphus* Giglio-Tós, 1891 due to the ventral bulging of the face. Hull (1937) also noticed the distinct narrow crease, with enlarged ommatidia, on the eyes of the specimen. Thompson *et al.* (1976, p. 60) treated the genus as a subgenus of *Microdon* Meigen, 1803. Cheng & Thompson (2008, p. 35) ranked it as a genus, also stating that the previous position as a subgenus of *Microdon* was due to the bifid aedeagus. The last treatment of the taxon, and there recognized as a genus, was in Reemer & Ståhls (2013a), where the authors developed more on the diagnosis of the taxon, distinguishing it from their new definition of *Microdon*, and depicted the male genitalia. Reemer & Ståhls (2013b) hinted at the proximity of the genus to *Pseudomicrodon* Hull, 1937 and *Rhopalosyrphus*.

This work will base the redescription of *C. petiolatus* in the description given for the genus *Ceriomicrodon* in Reemer & Ståhls (2013a) plus additional characters and description of the female and its genitalia.

Material and methods

The studied specimens were borrowed from the collections at Instituto Nacional de Pesquisas da Amazônia (INPA, curator Márcio Luiz de Oliveira), Museu Paraense Emílio Goeldi (MPEG, curator Orlando Tobias) and Coleção Zoológica do Maranhão (CZMA, curator Francisco Limeira de Oliveira). Pictures of the holotype at the Smithsonian Institution were analyzed and compared to the current redescription. The genitalia of the holotype were checked against this study's images by Dr. F.C. Thompson (Smithsonian Institution).

The specimens to be dissected were kept in a moisturizing chamber for 3 h and later had their genitalia removed, at the base of the 4th segment for the females and just the epandrium + hypandrium for the male. The genitalia were then macerated in heated (~150°C) 85% lactic acid for 15–20 min and placed in an excavated slide with glycerin for study. The female genitalia was gently flattened, dorso-ventrally, to help extend the apical segments and, when this was not enough, an entomological micro-pin was used to help push the segments out from the inside.

egg is still relevant to identify eggs of *C. petiolatus*, the description of the structures should be taken as preliminary until fresh material can be analyzed.

Material examined: Brazil, **Amazonas**, Parque Nacional do Jaú, Cachoeira, margem direita do rio Jaú, Igapó, Malaise trap, 22–29.VI.2003, D.M. Takiya (1 ♂, INPA-DT0000066); 25km NE de Manaus, Reserva Ducke, suspended trap at 20m, 01.xii.1988, J.A.Rafael (1 ♀, INPA-DT0000003); **Maranhão**, Bom Jardim, REBIO-Res. Biol. Gurupi, suspended trap, 17–27.I.2010, F. Limeira-de-Oliveira, J.T. Câmara & M.B.A. Neto (2 ♀, GFGM-CZMA0005 and 6); 02–11.IX.2010, F. Limeira-de-Oliveira, E.A.S. Barbosa & J.C. Silva (2 ♀, GFGM-CZMA0004 and 7); **Rondônia**, Ouro Preto do Oeste, suspended trap at 80m, 08–11.XI.1984 (1 ♀, GFGM-MPEG 0009); **Roraima**, Rio Uraricoera, Ilha de Maraca, Shannon trap, 02–13.V.1987, J.A. Rafael, J.E.B. Brasil & L.S. Aquino (1 ♀, INPA-DT0000741); suspended trap, 19–24.VII.1987, J.A. Rafael & L.S. Aquino (1 ♀, INPA-DT0000742).

Acknowledgements

I thank Dr. F.C. Thompson for sending information on the holotype's genitalia and Dr. Menno Reemer for enlightening conversations. I also thank Dr. Daniel Rodrigo Rodrigues Fernandes for his comments on an earlier version of the manuscript, and the curators at INPA (Dr. Márcio Luiz de Oliveira), CZMA (Dr. Francisco Limeira de Oliveira) and MPEG (Dr. Orlando Tobias). I would also like to acknowledge funding provided by PRONEX (016/2006, Process number 1437/2007) for the Leica stereomicroscope used in this study. Thanks to Wilson Meirelles and Lucas Castanhola for help in preparing the samples and obtaining the MEV images at Laboratório Temático de Microscopia Ótica e Eletrônica (LTMOE/INPA).

The author received funding through the MCTI/INPA PCI program (Process number 313083/2013-4).

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