

Zootaxa 3702 (2): 150–158 www.mapress.com/zootaxa/

Copyright © 2013 Magnolia Press





http://dx.doi.org/10.11646/zootaxa.3702.2.4

http://zoobank.org/urn:lsid:zoobank.org:pub:42A262A2-959D-4AB5-B493-98F66CE87775

The adults of *Camelobaetidius janae* Dominique & Thomas, 2001 and *C. yacutinga* Nieto, 2003, with a new synonym for *C. leentvaari* Demoulin, 1966 (Ephemeroptera: Baetidae)

R. BOLDRINI^{1,5}, LUKE M. JACOBUS², F.F. SALLES³ & A.M.O. PES⁴

¹Divisão de Curso de Entomologia (DCEN), Instituto Nacional de Pesquisas da Amazônia (INPA), CEP 69060-001, Manaus, AM, Brazil. E-mail: rafaelboldrini.2@gmail.com

²Division of Science, Indiana University Purdue University Columbus, Columbus, Indiana, 47203, USA.

E-mail: lukemjacobus@alumni.purdue.edu

³ Laboratório de Sistemática e Ecologia de Insetos, Depto. de Ciências Agrárias e Biológicas, Universidade Federal do Espírito Santo, CEP 29.933-415, São Mateus, ES, Brazil. E-mail: ffsalles@gmail.com

⁴Coordenação de pesquisa em Entomologia (CPEN), Instituto Nacional de Pesquisas da Amazônia (INPA), CEP 69060-001, Manaus, AM, Brazil. E-mail: anampes@gmail.com

Abstract

The genus *Camelobaetidius* Demoulin, 1966 has 39 species distributed throughout the Nearctic and Neotropical Regions, being one of the most studied genera of the family Baetidae. Based on material from Brazil, the aim of the present paper is to describe adults of *C. janae* Dominique & Thomas, 2001 and *C. yacutinga* Nieto, 2003, and to recognize a new synonym for *Camelobaetidius leentvaari* Demoulin, 1966 (= *C. mantis* Traver & Edmunds, 1968 **nov. syn.**) based on the examination of type material.

Key words: macroinvertebrate, South America, spatulate tarsal claw, taxonomy

Introduction

The genus *Camelobaetidius* Demoulin, 1966 (Ephemeroptera: Baetidae) currently is comprised of 39 species (Jacobus & McCafferty, 2005; Salles & Serrão, 2005; Domínguez *et al.*, 2006; Boldrini *et al.* 2012c), and it has a wide geographic distribution in the Western Hemisphere, ranging from Argentina and Uruguay in the south (Traver & Edmunds, 1968) to Saskatchewan, Canada, in the north (Lehmkuhl, 1976).

The genus is probably of Neotropical origins (McCafferty, 1998). *Camelobaetidius* and its Neotropical sister genus, *Corinnella* Thomas & Dominique, 2006 form a distinct monophyletic clade in the family Baetidae that is supported by four synapomorphies, which include a robust maxillary palp, labial palp segment 3 being wider than long, spatulate tarsal claws and the absence of scales and scale-bases on the abdominal terga (Nieto, 2010; Boldrini *et al.*, 2013).

Camelobaetidius achieves its greatest specific diversity in Brazil, where 20 species have been reported (Salles & Serrão, 2005; Boldrini & Salles, 2009; Falcão *et al.*, 2011). Several Brazilian species have been known only from the nymphal stage. We undertook a study of four of these species and detail our findings here.

Material and methods

Pictures were taken with a Leica (M165C) stereomicroscope with a DFC420 digital camera; a series of partially focused images were processed with the program Leica Application Suite V3.4.1. (Version 2009) to produce final images with enhanced quality. Line drawings were made with the aid of a camera lucida, photographs, or both. Final illustrations were prepared according to Coleman (2003, 2006). The slides were prepared with Euparal[®], except for wings that were mounted dry. Terms used in descriptions of the adult thorax are from Kluge (1994).