



<http://dx.doi.org/10.11646/zootaxa.4020.1.1>

<http://zoobank.org/urn:lsid:zoobank.org:pub:482D28F2-0A2B-4B3B-980F-DFCC7C3EE772>

Revealing the diversity of *Cloeodes* Traver, 1938 (Ephemeroptera: Baetidae) in the Neotropics: description of eleven new species from Brazilian mountain ranges

F.F. SALLES^{1,2,4}, F.C. MASSARIOL^{1,3}, K.B. ANGELI^{1,3}, M.M. LIMA¹, J-L. GATTOLLIAT² & M. SARTORI²

¹Laboratório de Sistemática e Ecologia de Insetos, Universidade Federal do Espírito Santo, Departamento de Ciências Agrárias e Biológicas, 29933-415, São Mateus, ES, Brazil

²Museum of Zoology, Palais de Rumine, Place Riponne 6, CH-1005 Lausanne, Switzerland

³Programa de Pós-Graduação em Biologia Animal, Universidade Federal do Espírito Santo, Vitória, Brazil

⁴Corresponding author. E-mail: ffsalles@gmail.com

Table of contents

Abstract	1
Introduction	2
Material and methods	2
Results	3
New species descriptions	3
<i>Cloeodes aiuruoca</i> Massariol, Angeli & Salles, sp. nov.	3
<i>Cloeodes amantkyra</i> Angeli, Massariol & Salles, sp. nov.	8
<i>Cloeodes atlanticus</i> Salles, Massariol & Angeli, sp. nov.	16
<i>Cloeodes boldrinii</i> Salles, Massariol & Angeli, sp. nov.	19
<i>Cloeodes guara</i> Salles, Massariol & Angeli, sp. nov.	22
<i>Cloeodes ioachimi</i> Salles, Massariol & Angeli, sp. nov.	25
<i>Cloeodes lucifer</i> Salles, Massariol & Angeli, sp. nov.	28
<i>Cloeodes magnus</i> Salles, Massariol & Angeli, sp. nov.	31
<i>Cloeodes melanotarsus</i> Salles, Massariol & Angeli, sp. nov.	34
<i>Cloeodes tracheatus</i> Salles, Massariol & Angeli, sp. nov.	37
<i>Cloeodes xyrognathos</i> Salles, Massariol & Angeli, sp. nov.	40
Comments on the presence in Brazil of <i>Cloeodes irvingi</i> Waltz & McCafferty, 1987 and <i>Cloeodes opacus</i> Nieto & Richard, 2008.	46
Material examined	46
Discussion	46
Acknowledgements	49
References	49

Abstract

In the present work, based on material from distinct mountain ranges in Brazil, 11 new species of *Cloeodes* with hind wings or hind wing pads are described, illustrated and discussed. Among the new species, in *C. aiuruoca*, *C. amantkyra*, *C. atlanticus*, *C. boldrinii* and *C. ioachimi*, the apex of the fore femora in the nymphs is extremely projected (a characteristic previously found only in two species of the genus). *Cloeodes guara* and *C. tracheatus* share the presence of unusual large and dark gills. *Cloeodes melanotarsus* is readily distinguished by conspicuous blackish tarsi, *C. lucifer* by the bright yellow coloration of tergum I, and *C. xyrognathos* by blade-like incisors. *Cloeodes magnus*, besides being the largest species of the genus, with a body size reaching 12 mm, possess short maxillary palp. Comments on the presence of *C. irvingi* and *C. opacus* in Brazil are also provided. An interactive online key is provided for the nymphs of all the species of *Cloeodes* in which hind wing pads are present.

Key words: Mayfly, taxonomy, South America, macroinvertebrate