

<http://dx.doi.org/10.111646/zootaxa.3779.1.9>
<http://zoobank.org/urn:lsid:zoobank.org:pub:4488D1C2-0C35-47E8-82D3-485F4BCEFA06>

Stoneflies (Insecta: Plecoptera) from Serra Bonita, Bahia, Brazil: New species and updated records

TÁCIO DUARTE¹, LUCAS S. LECCI² & ADOLFO R. CALOR¹

¹Laboratório de Entomologia Aquática, Instituto de Biologia, Universidade Federal da Bahia, Rua Barão de Geremoabo, 147, Campus Ondina, CEP 40170-290, Salvador, BA, Brazil. E-mail: dutacio@gmail.com, acalor@gmail.com

²Instituto Federal de Educação, Ciência e Tecnologia de Mato Grosso-Campus Juína Linha J, s/n, Setor Chácara, Zona Rural, CEP 78320-000, Juína, MT, Brazil. E-mail: lucaslecci@gmail.com

Abstract

There are 176 species representing eight genera and two families of Plecoptera known from Brazil. However, only ten of these species are recorded from the State of Bahia. In this study, an inventory of stoneflies from the southern region of Bahia State, Serra Bonita, including the municipality of Camacan, was undertaken from 2007–2012. Stoneflies were collected using UV light pan traps, Malaise traps, and aerial nets. One new gripopterygid species, *Tupiperla bispoi* n. sp., is described and illustrated. Four genera representing ten other species are recorded: *Gripopteryx cancellata*, *G. clemira*, *G. garbei*, *G. pinima*, *Paragripopteryx* sp., and *Tupiperla tessellata* (Gripopterygidae), *Kempnyia alterosarum*, *K. gracilenta*, *K. jatim*, and *K. neotropica* (Perlidae). With the present study, the number of known species of stoneflies recorded from Bahia State is 17, ten of these recorded from the Serra Bonita region.

Key words: Atlantic Forest; Gripopterygidae, Neotropical Region, Perlidae, *Tupiperla*

Introduction

The Plecoptera Burmeister 1839 is a cosmopolitan aquatic insect order (Zwick 2000) of sixteen recognized families including approximately 3,500 described species (Fochetti & Tierno de Figueroa 2008). For Brazil, 176 species have been recorded in two families (Froehlich 2010a, b, 2011a, b; Righi-Cavallaro & Lecci 2010; Lecci & Froehlich 2011; Bispo & Lecci 2011; Avelino-Capistrano & Nessimian 2013; Avelino-Capistrano *et al.* 2013; Righi-Cavallaro *et al.* 2013; Baldin *et al.* 2013; Novaes & Bispo 2014). The Gripopterygidae are represented by four genera: *Gripopteryx* (Pictet 1841), *Paragripopteryx* Enderlein 1909, *Tupiperla* Froehlich 1969 and *Guaranyperla* Froehlich 2001. The Perlidae are also represented by four genera: *Anacroneuria* Klapálek 1909, *Macrogynoplax* Enderlein 1909, *Kempnyia* Klapálek 1914 and *Enderleina* Jewett 1960 (Froehlich 2012).

The stonefly fauna is poorly known in several regions of Brazil. Froehlich (2011c) indicates “ten Brazilian States, mainly in the Northeast have no records of Plecoptera”. Before 2013, two species of *Anacroneuria* (*A. lacunosa* (Navás 1926) and *A. parilobata* Klapálek 1922), three species of *Gripopteryx* (*G. clemira* Lecci & Froehlich 2011, *G. garbei* Navás 1936, and *G. pinima* Froehlich 1993) and records for nymphs of *Tupiperla* and *Paragripopteryx* (Silva & Hamada 2007) had been documented for Bahia State. In 2013, Righi-Cavallaro *et al.* described five additional species of *Anacroneuria* from the municipalities of Amargosa and Lençóis, Bahia State (*A. amargosa* Righi-Cavallaro & Froehlich 2013, *A. quilombola* Righi-Cavallaro & Froehlich 2013, *A. bahiensis* Righi-Cavallaro & Lecci 2013, *A. kariri* Righi-Cavallaro & Lecci 2013, and *A. lencoensis* Righi-Cavallaro & Lecci 2013) increasing the number of stoneflies taxa to ten. The present study provides new generic and species records including the description of another new species from the southern region of Bahia State, Serra Bonita of northeastern Brazil.

Conclusions

Six new Plecoptera species records are reported for the first time from Serra Bonita region of BA, *G. cancellata*, *K. alterosarum*, *K. gracilenta*, *K. jatim*, *K. neotropica*, and *T. tessellata*, including a description of one new species, *T. bispoi*. Our collections increased the number of species of stoneflies known from BA to 17, of which ten are recorded from the Serra Bonita region. This is the first review of stoneflies from the Atlantic Forest of northeastern Brazil.

Acknowledgements

We are grateful to Dra. Angela Zanata, Dr. Rodrigo Johnsson, MSc. Fábio Quintero and Victor Gomes for several suggestions on the manuscript, and the LEAq team by friendship and help in the field and laboratory works. The authors thank to Dr. Vitor Becker and Mrs. Clemira Souza for the support in Serra Bonita Reserve, and the first for the encouragement to undertake this study. We thank Chico Mendes Institute for Biodiversity Conservation (ICMBio) for issuing collecting permits. This work was supported by Coordination of Improvement of Higher Education Personnel (CAPES) fellowship to TD (process 1166005), by Foundation for Research Support of the State of Bahia (FAPESB) grant (process 5716/2009), and National Council for Scientific and Technological Development (CNPq) grant (process 473703/2010-6). The authors are grateful to Dr. Boris Kondratieff, Zootaxa Editor, and two anonymous reviewers for detailed valuable comments and suggestions.

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