

Article



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New species and records of *Anacroneuria* (Plecoptera: Perlidae) from Rio de Janeiro State, Brazil

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Abstract

Six species of *Anacroneuria* are recorded from Parque Nacional do Itatiaia and Bacia do Rio Macaé, Rio de Janeiro State, Brazil including the description of a new species, *A. itatiaiensis. Anacroneuria debilis* (Pictet) is redescribed from newly collected specimens. Comments on other *Anacroneuria* species from Rio de Janeiro State, Brazil are also presented.

Key words: aquatic insects, streams, diversity, Neotropical

Resumo

Seis espécies de *Anacroneuria* são registradas no Parque Nacional do Itatiaia e Bacia do Rio Macaé, Estado do Rio de Janeiro, Brasil incluindo a descrição de uma nova espécie, *A. itatiaiensis. A. debilis* (Pictet) é redescrita a partir de novos espécimes coletados. Comentários sobre outras espécies de *Anacroneuria* do Estado do Rio de Janeiro, Brasil, também são apresentados.

Palavras chave: insetos aquáticos, riachos, diversidade, Neotropical

Introduction

The Brazilian Plecoptera fauna comprises two families, Gripopterygidae and Perlidae. The Perlidae are represented by the genera *Enderleina* Jewett, *Kempnyia* Klapálek, *Macrogynoplax* Enderlein, and *Anacroneuria* Klapálek, the latter three known from Rio de Janeiro State, southeastern Brazil. Among all Plecoptera, the genus *Anacroneuria* includes highest number of described species, approximately 330 (Froehlich, 2010a), representing about 10% of the species known for the order. It is a Neotropical genus, occurring as far North as the southwestern United States (Stark *et al.* 2009). Since Burmeister (1839), approximately 70 *Anacroneuria* species have been described from Brazil (Froehlich, 2010a). However, until the 1960s, the descriptions were often incomplete, often based only on females, making species identifications difficult. In addition, several types have been lost. From the 1970s, the study of the male penial armature has made species distinctions possible (Zwick, 1972, 1973; Stark, 1995; Froehlich, 2002).

Recent studies have documented and described new *Anacroneuria* species in different regions of Brazil, including the South (Froehlich, 2002 in part; De Ribeiro & Froehlich, 2007), Southeast (Dorvillé & Froehlich, 1999; Bispo & Froehlich, 2004a; Righi-Cavallaro & Lecci, 2010), Center West (Bispo & Froehlich, 2004b; Bispo *et al.*, 2005; Froehlich 2007) and North (Ribeiro-Ferreira & Froehlich, 2001). These studies have allowed a more comprehensive view of the diversity of this genus throughout Brazil.

Recently, Nessimian *et al.* (2009) reported thirteen *Anacroneuria* species for Rio de Janeiro State based on a literature review, examining museum records, and consulting experts. Four of the above records need to be verified and one species is considered a *nomen dubium*.