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## Description of the nymph of *Anacroneuria singularis* Righi-Cavallaro & Lecci (Plecoptera: Perlidae) and a new locality record for northern Brazil

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### Abstract

The last instar nymph of *Anacroneuria singularis* Righi-Cavallaro & Lecci is described and figured from reared specimens collected in Pará State, Brazil, a new locality record for Brazil. The nymphs of this species differ from other known species by the uniformly dark brown anterior of the head and the ochraceous spots of the pronotum.

**Key words:** Immatures, stoneflies, aquatic insects, Amazon

### Introduction

The genus *Anacroneuria* contains more than 300 described species distributed mainly in the Neotropical Region from northern Argentina to Texas and Arizona in the USA. In Brazil, about 75 species are known (Stark *et al.* 2009, Froehlich 2010, 2012, Bispo & Lecci 2012), of which about 15 are known from the Brazilian Amazon (Ribeiro & Rafael 2009, Froehlich 2010, Ribeiro & Gorayeb 2014). Nymphs of most species of Brazilian *Anacroneuria* are unassociated. The Brazilian species with described nymphs include *A. othafroehlichii* (Righi-Cavallaro & Lecci, 2010), *A. debilis* (Pictet 1841), *A. ofayae* Froehlich 2007, *A. marlieri* Froehlich 2001, *A. minuta* Klapálek 1922, and *A. manauensis* Ribeiro-Ferreira 2001. These nymphs were described in the last five years (Righi-Cavallaro & Lecci 2010, Silva *et al.* 2011; Novaes *et al.* 2012, Ribeiro & Gorayeb 2014). The last three species are known from the Amazon and the nymphs of these species were described in 2014 (Ribeiro & Gorayeb 2014). In this paper we describe the mature nymph of *A. singularis* Righi-Cavallaro & Lecci 2010 from the southern Pará State, Brazil in the eastern Amazon. Our material represents a new locality record for Brazil.

### Material and methods

Specimens were collected in the protected natural area, Parque Estadual Serra dos Martírios-Andorinhas that has a total area of 248.97 km<sup>2</sup> located in São Geraldo do Araguaia, in southern Pará State, Brazil. This area reaches an altitude of 600 m.a.s.l. and is a mosaic of different vegetation types, especially forest islands in a savanna (cerrado) matrix (Amaral *et al.* 2008). Collections were made in October 2011 and December 2013, in five streams. Adults were collected using a Malaise trap and light traps placed on stream banks. Nymphs were collected by hand using aquatic dip nets and sieves. Last instar nymphs were reared in situ until emergence of the adults. All material was preserved in 80% ethanol and deposited in the collections of the Museu Paraense Emílio Goeldi (MPEG, Belém), Museu de Zoologia da Universidade de São Paulo (MZUSP, São Paulo), Instituto Nacional de Pesquisas da Amazônia (INPA, Manaus), and Universidade Estadual Paulista “Júlio de Mesquita Filho” (UNESP, Assis).