



Anacroneuria (Plecoptera, Perlidae) from the Mantiqueira Mountains, São Paulo State, Brazil

CLAUDIO G. FROEHLICH

Department of Biology, University of São Paulo at Ribeirão Preto, 14040-901 Ribeirão Preto, SP, Brazil. E-mail: cgfroeh@usp.br

Abstract

Seven species of *Anacroneuria* Klapálek are considered; of these 4 were known, *A. debilis* (Pictet, 1841), *A. flintorum* Froehlich, 2002, *A. toriba* Froehlich, 2002 (the female is described herein), and *A. vanini* Froehlich, 2004. Three are new: *A. mantiqueirae*, *A. simulans*, and *A. tabatae*.

Key words: Stoneflies, Campos do Jordão, Anacroneuria, Brazil, São Paulo

Introduction

The bulk of the material comes from the State Park of Campos do Jordão and has been collected by the author, students and collaborators. The park is located in the Serra da Mantiqueira and is one of the oldest protected areas of the state, having been established in 1941. The park encompasses ca. 8341 ha and the altitude varies from 1030 to 2007 m a.s.l. A significant part of the area supports the original *Araucaria-Podocarpus* forest, while other parts consist of montane grasslands, humid Atlantic forest, and silviculture. Most streams originate within the park and are nearly pristine. The park is situated in the Sapucaí-Guaçu River basin, the main stem of which flows through the lower altitudes of the park. Upstream from the park the river flows through the town of Campos do Jordão, where it receives both untreated sewage and sediment from urban development. Along the road from the town to the park there is growing urbanization, posing a threat to aquatic communities occurring in the river. More information about the park may be found in Schroeder-Araujo *et al.* (1986) and at Instituto Florestal (2009).

Methods

The collection sites in the park were delimited by a polygon defined by the coordinates 22°39'49" to 22°41'44"S and 45°26'56" to 45°29'30"W. Altitudes varied between 1500 and 1600 m. The streams were 1st to 4th order and most collections were from the Galharada Stream basin, within the *Araucaria* forest. Most adults were collected at lights.

In addition to specimens collected by the author and collaborators, the following material was available. Entomologists of the Museum of Zoology, São Paulo, led by Lauro Travassos Filho, collected in Engenheiro Eugenio Lefèvre (22°49'29"S, 45°37'40"W), a station on the railroad from Guaratinguetá to Campos do Jordão at ca. 1200 m a.s.l., from September 1962 to March 1963. On the labels the municipality is given as Campos do Jordão, as appeared in my older papers (Froehlich 1984, 1988, 1990), but in fact it belongs to the municipality of Guaratinguetá. Two species of *Anacroneuria* were collected at that locality, *A. flintorum* Froehlich and *A. tabatae* sp.n. A single *Anacroneuria* (*A. toriba* Froehlich 2002) was collected in Campos do Jordão by John Lane in December 1945; another (*A. simulans* sp.n.), by H. Reichardt Filho in January 1976.

Specimens from Pindamonhangaba Municipality, collected by A.S. Melo in December 1998 and January