



The larva of *Allopodagrion brachyurum* De Marmels, 2001 (Odonata: Zygoptera: Megapodagrionidae) from Southern Brazil

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Abstract

The larva of *Allopodagrion brachyurum* De Marmels, 2001 is the first known for the genus. The larva is described and illustrated based on exuviae of reared larvae collected in the upper course of the Rio dos Sinos, in Caraá município, Rio Grande do Sul, Brazil. The larva of *A. brachyurum* can be distinguished from all other neotropical megapodagrionid larvae primarily by the presence of a well developed obtuse tubercle in sub-vertical orientation on each side of occiput; two blunt tubercles on top of the head; and caudal gills thin, stiff, triquetral and extremely long, as long as body.

Key words: aquatic insect, damselfly, Rio Grande do Sul

Introduction

The genus *Allopodagrion* Föster, 1910 occurs only in South America and is represented by three species: *Allopodagrion contortum* (Hagen in Selys, 1862) and *A. brachyurum* De Marmels, 2001, both with occurrence in Brazil and Argentina, and *A. erinys* (Ris, 1913), recorded from Argentina. In Brazil, *A. contortum* has been recorded from the states of Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. *A. brachyurum* was recorded, until now, only in Santa Catarina state (De Marmels 2001). The larva of no species in the genus *Allopodagrion* has been described so far. Hence, the aim of this study is to describe and illustrate for the first time the larva of *A. brachyurum* based on exuviae of larvae reared under laboratory conditions.

Material and methods

The larvae of *A. brachyurum* were sampled in the upper course of the Rio dos Sinos, in the “balneário” João Fernandes (a swimming recreational area), in Caraá município, Rio Grande do Sul, Brazil (29°45'50.4"S; 50°25'39.6"W; 55 m.a.s.l.). The sampled site of the stream has clear water, is 8–12 meters broad and possesses well-preserved riparian vegetation. The stream bottom is composed of gravel with interspersed bedrock (Fig. 1). The larvae were collected among roots at the stream margins, in an area with moderate water flow.

The Rio dos Sinos is one of the main tributaries of the Sinos river watershed, which covers 32 municípios, in an area of 3800 km². The Caraá município is located in the region known as North Littoral of Rio Grande do Sul, 90 km from Porto Alegre. The majority of the upper course of the Rio dos Sinos basin still has well-preserved vegetation and water quality. Relatively low environmental impacts are caused by agricultural activities from small farms, such as cattle breeding and self-subsistence polyculture.

According to Köppen (1948), the climate in the region is humid subtropical (type *Cfa*), with a mean annual precipitation of 1700 mm, mean annual temperature of 20°C and mean annual relative humidity of 82%.