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A new species of *Atanatolica* Mosely 1936 (Trichoptera: Leptoceridae) from Serra Bonita, Bahia, Brazil

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Abstract

The Neotropical genus *Atanatolica* includes 17 species distributed from Costa Rica to Brazil, but only two, *A. brasiliانا* and *A. flinti*, have been recorded from Brazil, both occurring in Rio de Janeiro and São Paulo States. A new species, *Atanatolica bonita* n. sp., is described and illustrated based on males and females from the Atlantic Forest in Bahia State in northeastern Brazil. The new species can be diagnosed by the following characters: Apicomesal and apicolateral processes of segment X of same length, long and digitate; and second article of each inferior appendage well developed, long, and thumb-shaped. Notes on demographic changes and correlations with seasonal variation and precipitation are also given.

Key words: Atlantic Forest, caddisflies, Neotropics, seasonal variation, taxonomy

Introduction

Leptoceridae Leach 1815 is the second largest family in Trichoptera with more than 2,000 described species (Holzenthal *et al.* 2011) classified, according to Malm and Johanson (2011), in four subfamilies: Leptocerinae Leach 1815, Leptorussinae Morse 1981, Grumichellinae Morse 1981, and Triplectidinae Ulmer 1906.

The subfamily Grumichellinae currently contains six genera: *Grumichella* Müller 1879, *Atanatolica* Mosely 1936, *Triplexa* Mosely 1953 (in Mosely & Kimmins 1953), *Gracilipsodes* Sykora 1967, *Amazonatolica* Holzenthal & Pes 2004 and *Osflintia* Calor & Holzenthal 2008. According to Calor & Holzenthal (2008) these genera share 14 characters uniquely, five by the adults (forewing fork V originating basally of crossvein m-cu; absence of lateral setal warts on the pronotum; and in the male genitalia: the second article of each inferior appendage very reduced; the presence of stout, spine-like setae on the mesal surface of each inferior appendage; the dilated apical region of each inferior appendage).

Mosely (1936) erected the genus *Atanatolica* for a single species, *Mystacides brasilianus* Brauer 1865. Two additional species, *A. dominicana* Flint 1968 and *A. botosaneanui* Flint 1981 were described) before the genus was revised by Holzenthal (1988), describing 14 new species (*A. acuminata* Holzenthal 1988, *A. aurea* Holzenthal 1988, *A. caldas* Holzenthal 1988, *A. choco* Holzenthal 1988, *A. cotopaxi* Holzenthal 1988, *A. flinti* Holzenthal 1988, *A. manabi* Holzenthal 1988, *A. moselyi* Denning & Holzenthal 1988, *A. muyupampa* Holzenthal 1988, *A. nigra* Holzenthal 1988, *A. nivea* Holzenthal 1988, *A. panamensis* Holzenthal 1988, *A. penai* Holzenthal 1988, and *A. zongo* Holzenthal 1988). Immatures have been described by Flint (1968), Botosaneanu (1974), Botosaneanu and Flint (1982), and Holzenthal (1988).

The genus now includes 17 species distributed from Costa Rica to Brazil, and only two of them have been recorded exclusively from Brazil: *Atanatolica brasiliانا* and *A. flinti*, both from the states of Rio de Janeiro and São Paulo (Holzenthal 1988; Paprocki *et al.* 2004; Dumas *et al.* 2009; Calor 2011). Below, *Atanatolica bonita* n. sp., is described and illustrated as male and female based on material from the Atlantic Forest in Bahia State,

especially in first order streams. Rainfall interacts with local factors such as topography and riparian characteristics (e.g., with or without vegetative cover); and variations of current speed, water volume, and dissolved oxygen, among other factors, to cause dramatic impacts on the aquatic insect fauna (Yokoyama *et al.* 2012). Thus, seasonal variation in the precipitation regime could possibly be responsible for demographic differences during the year.

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