



## ***Trichomycterus argos* (Teleostei: Siluriformes: Trichomycteridae), a new species from the Doce River Basin, Eastern Brazil**

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### **Abstract**

*Trichomycterus argos*, new species, is described from the Rio Doce basin, situated in the Serra do Brigadeiro (part of the Serra da Mantiqueira) range, southeastern Brazil. The new species is diagnosed by the following characteristics: presence of six branched rays in the pectoral fin; presence of pelvic fins; tip of nasal barbels extending to posterior border of opercular plate of odontodes; presence of a large *foramen for ramus lateralis accessorius facialis*, visible in dorsal view, in the parietosupraoccipital bone; transverse and straight border between the parietosupraoccipital and frontal bones; pectoral-fin ray prolonged as a filament; body covered with spots that seldom attain eye diameter; pelvic-fin origin placed one or two ocular diameters anterior to dorsal-fin origin; absence of spots fused as elongated marks on dorsum or flank.

**Key words:** catfishes, freshwaters, Neotropical Region, Serra do Brigadeiro

### **Introduction**

Trichomycteridae are a family of Central and South American catfishes present in a wide array of environmental conditions, such as in Andean basins at 4,300 m above sea level (Arratia 1983), lacustrine systems (Arratia *et al.* 1978), cave systems (Trajano & de Pinna 1996) and in Atlantic rain forest rivers (Campanario & de Pinna 2000). A great diversity of lifestyles can also be observed in these fishes, such as burrowing in *Eremophilus* Humboldt (Eigenmann 1918), torrent-dwelling in *Trichomycterus* Valenciennes, lepidophagy in Stegophilinae, and hematophagy in Vandelliinae (de Pinna 1992).

The family is divided into eight subfamilies (de Pinna 1998): Copionodontidae, Trichogeninae, Trichomycterinae, Vandelliinae, Stegophilinae, Tridentinae, Glanapteryginae and Sarcoglanidinae. Some works, such as Eigenmann (1918) and Arratia *et al.* (1978), include diagnoses of Trichomycterinae. However, the characters proposed were interpreted as not synapomorphic by de Pinna (1989), who considered the Trichomycterinae to be possibly paraphyletic. Arratia (1990 *apud* Arratia 1998) proposed four new synapomorphies for the subfamily. Posteriorly, Datovo & Bockmann (2010) considered these characters as not being synapomorphies for the Trichomycterinae.

Trichomycterinae is composed by eight genera (de Pinna & Wosiacki 2003; Wosiacki 2005): *Eremophilus*, *Hatcheria*, *Scleronema*, *Silvinichthys*, *Bullockia*, *Rhizosomichthys*, *Ituglanis* and *Trichomycterus*. *Trichomycterus* is the most speciose genus of Trichomycterinae, with more than 130 valid species (e.g. de Pinna & Wosiacki, 2003) and probably with a significant number still to be described. Each species often is restricted to a short section of a river drainage (Alencar & Costa 2004; Alencar & Costa 2006; Costa 1992; Lima *et al.* 2008; Lima & Costa 2004; da Silva *et al.* 2010). In opposition to the other genera of the subfamily, *Trichomycterus* is not defined by any synapomorphy (de Pinna 1998).

The objective of the present paper is to describe a new species of *Trichomycterus* from the limits of the Rio Doce and Rio Paraíba do Sul basins (Minas Gerais State, Brazil) in the Serra do Brigadeiro range, itself situated in the Serra da Mantiqueira range (Fig.1), and to justify its allocation to the genus, using external morphological and osteological features.