DESCRIPTION OF A NEW TRICHOMYCTERIDAE FROM CENTRAL AMERICA: THE SECOND NORTHERNMOST DISCOVERY OF THE FAMILY, WITH A BIOGEOGRAPHIC DISCUSSION

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ABSTRACT

The Trichomycteridae is the second most diverse family in the Loricarioidei, comprising 444 valid species in nine subfamilies, occurring in almost all Neotropical cis- and trans-Andean drainages, from Costa Rica to Patagonia. Members of this catfish family exhibit broad phenotypic diversity, with diverse feeding strategies, and occupying multiple habitats. The greatest diversity of Trichomycteridae is found in the Amazon basin. Some trichomycterids have relatively wide distributions, while others are restricted or even narrowly endemic, some of which qualifying as relictual. The diversity of lineages, phenotypes, and habitats within this group makes it an excellent model for taxonomic, evolutionary, and biogeographic studies. Despite advances in understanding the diversity and phylogenetic relationships within Trichomycteridae, the patterns and processes of diversification of the family remain underexplored. This study aims to describe a new species of *Trichomycterus* from Pacific drainages in eastern Panama. The discovery is particularly important as it represents only the second species of the family from Central America (*T. striatus* being the other) and it is found at or near the northernmost distributional limit of Trichomycteridae. Diagnosis of the new species is based on morphological data (*e.g.*, pigmentation pattern, measurements and counts taken from Ct-Scan and digital x-ray imaging) and is readily distinguished from its Andean congeners by the unique color pattern with adults having dorsal and caudal fins with white bases and dark distal portions *vs*. adults with uniform or spotted dorsal and anal fins; juveniles with small brown spots along the dorsolateral region of body *vs*. juveniles with a strip along the body or tiny dots; and by having a single supraorbital pore S6 *vs*. S6 bilaterally paired. This discovery has significant implications for the phylogeny, biogeography, and conservation of the family.

Palavras-chave: Andean region, Biogeography, Catfish, New species, Trichomycterinae.

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