

## Two fish at once: redescription and neotype designation of two Andean trichomycterids

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### ABSTRACT

The Trichomycteridae is the second most diverse family in Loricarioidei, comprising 444 valid species in nine subfamilies, occurring in almost all Neotropical cis- and trans-Andean drainages, from Costa Rica to Patagonia. Despite much activity on the systematics and phylogenetic relationships of the family in recent decades, many species remain known only by their original descriptions, often extremely brief, and one or few specimens in scientific collections. This results in myriad taxonomic uncertainties, as is the case with *Trichomycterus taenia* and '*Trichomycterus*' *laticeps*, both described by Kner in 1863 from the Western slope of the Andes in Ecuador. Their entire type material was lost during World War II. The latter species, sometimes considered *species inquirenda*, is currently allocated in the genus *Ituglanis*, but even this generic assignment is questionable. *Trichomycterus* specimens from near the type locality of *Trichomycterus taenia* and '*T.*' *laticeps* were recently located in the fish collection at Harvard's Museum of Comparative Zoology (MCZ) and they match those species in all verifiable traits. We herein redescribe the two species based on morphological data (*e.g.*, measurements and counts, CT-scan and X-ray approaches) and suggest the need for designation of respective neotypes. The redescription of this species is particularly important as it highlights taxonomic issues with significant implications for the family's phylogeny, biogeography, and conservation.

**Palavras-chave:** Andean region, Catfish, Systematic, Taxonomy, Trichomycterinae.

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