



A new phreatic catfish of the genus *Phreatobius* Goeldi 1905 from groundwaters of the Iténez River, Bolivia (Siluriformes: Heptapteridae)

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Abstract

Phreatobius sanguijuela, new species, is described from an artificial well located within the Río Paraguá drainage, a tributary of the Río Iténez, Bolivia. The new species is distinguished from its sole congener, *P. cisternarum*, by the absence of eyes, presence of 25–34 (versus 42–50) dorsal procurrent caudal-fin rays, 14–16 (versus 22–26) ventral procurrent caudal-fin rays, and 45–46 (versus 54–59) vertebrae. Both *Phreatobius* species are phreatic and known only from artificial wells penetrating near-surface aquifers of the Amazon River basin. Material of the new species represents the first records of *Phreatobius* from the upper Amazon, some 2000 km from reported locations of *P. cisternarum* near the Amazon River mouth. *Phreatobius* can be readily distinguished among siluriforms by the following combination of characters: dorsal and ventral procurrent caudal-fin rays extended rostrally, continuous with anal fin ventrally; caudal fin round; anal-fin rays unbranched; mouth prognathous, with jaws displaced dorsally on head; adductor mandibulae muscle hypertrophied, covering most of skull and posteriorly inserting onto first neural spine; first pectoral-fin ray soft, not spinous; bright red in life. This species is under severe threat from overexploitation by local people, who routinely capture and destroy it on the presumption that it represents a dangerous parasite.

Key words: phreatic catfish, *Phreatobius*, groundwaters, Bolivia, new species

Introduction

The Neotropical region is remarkable for its high diversity of subterranean fishes (about 30 species; Weber *et al.* 1998; Weber 2000), comparable only to the diversity of subterranean fishes recorded for central-southern Asia (25 species). The great majority of hypogean fishes from South America are siluriforms belonging to Heptapteridae (several genera), Trichomycteridae (*Trichomycterus*, *Ituglanis*, *Silvinichthys*), Loricariidae (*Ancistrus*) (Reis *et al.* 2006). Fishes known exclusively from phreatic habitats, as revealed by their occasional capture from artificial wells penetrating near-surface aquifers are quite rare compared to the more abundant and diverse fishes that inhabit caves and associated subterranean pools (Fernandez & de Pinna 2005). In South American freshwaters, only three phreatic fishes are known: the characiform *Stygichthys typhlops* Brittan and Böhlke, 1965, and the siluriforms *Phreatobius cisternarum* Goeldi, 1905 and *Silvinichthys bortayro* Fernandez and Pinna, 2005. Basic knowledge of the biology and natural history of phreatic fishes is severely limited by serendipity of their discovery and the relative inaccessibility of the phreatic habitat (Fernandez & de Pinna 2005).