Gymnotus ucamara: a new species of Neotropical electric fish from the Peruvian Amazon (Ostariophysi: Gymnotidae), with notes on ecology and electric organ discharges

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Abstract

A new species of Neotropical electric fish, Gymnotus ucamara, is described from floodplain habitats in the Rio Ucayali Basin, Peru. The new species is distinguishable from all congeners by the following combination of characters: a clear patch at the caudal end of the anal fin; two laterosensory canal pores (from the preopercular-mandibular series) in the dorso-posterior portion of the preopercle; a coloration pattern with 18–24 dark brown bands separated by narrow pale interbands which are less than one-third the width of the dark bands; a long head (12.2–13.4 % total length); many (10–11) scales rows over the anal fin pterygiophores; few (38-43) pored lateral-line scales to the first lateral-line ramus; and a low (75–91) total number of pored lateral-line scales.

Key Words: biodiversity, electrogenesis, Gymnotiformes, várzea

Introduction

The weakly electric Neotropical fish genus Gymnotus has been the subject of several taxonomic studies in recent years (Mago-Leccia 1994; Albert & Miller 1995; Campos da Paz 1996; Campos da Paz & Costa 1996; Albert et al. 1999; Campos da Paz 2000; Albert 2001; Albert & Crampton 2001; Campos da Paz 2002). Until recently Gymnotus was recognized as the only genus in the family Gymnotidae. The monotypic genus Electrophorus Gill, comprising the single strongly electric species Electrophorus electricus (L.) was recently included in the Gymnotidae (Albert 2001).