



Systematic review of the neotropical shovelnose catfish genus *Sorubim* Cuvier (Siluriformes: Pimelodidae)

MICHAEL W. LITTMANN

Department of Zoology, Field Museum of Natural History, Chicago, IL 60605, USA. E-mail: hypophthalmus@gmail.com

Abstract

The genus *Sorubim* Cuvier, 1829, and two species, *S. lima* (Bloch & Schneider 1801) and *S. trigonocephalus* Miranda-Ribeiro, 1920, are redescribed based on the examination of type material and about 400 non-type specimens from ichthyological collections in Europe and North and South America. The five species of the genus are, in addition to *S. lima* and *S. trigonocephalus*, *S. elongatus* Littmann, Burr, Schmidt and Isern 2001, found in the Essequibo, Orinoco, and Amazon basins; *S. cuspidus* Littmann, Burr and Nass 2000, occurring in the Sinu, Cauca, and Magdalena rivers of Colombia and the Lago Maracaibo basin of Colombia and Venezuela; and *S. maniradii* Littmann, Burr and Buitrago-Suarez 2001, known from the upper and middle Amazon basin. *Sorubim lima* is the widest-ranging species, occurring in most of the major drainage basins of South America. *Sorubim trigonocephalus* is extremely rare in natural history collections and is currently known from only two major tributaries of the Amazon basin. Three species (*S. maniradii*, *S. elongatus*, and *S. lima*) occur syntopically. Species of *Sorubim* are diagnosed on the basis of body and head shape, differences in fin ray and gill-raker numbers, mental barbel position, and degree of pigmentation of the lateral stripe. At least two of the species (*S. lima* and *S. elongatus*) make up part of the ornamental fish trade and are sold for food in local fish markets in South America. A key to adults of the five species is included.

Key words: Pimelodidae, South America, taxonomy

Introduction

Sorubim, a small genus of pimelodid catfishes with five recognized species, is characterized by its shovel-like projecting upper jaw exposing a large premaxillary tooth patch, eyes set laterally on a depressed head, and a distinct black horizontal stripe running the entire length of the fish. Species are distributed throughout most of the major freshwater drainage systems in South America including the Amazon, Essequibo, Orinoco, Maracaibo, Magdalena and Paraná. Specimens have been collected in 10 countries spanning much of the continent. One species reportedly reaches nearly 80 centimeters in total length, and all five species probably provide an important source of subsistence protein, being sold in many local fish markets throughout South America. Additionally, species of *Sorubim* are recognized by ornamental fishers, and are known to aquarium traders and hobbyists as shovelnose catfishes.

Mainly lowland inhabitants and locally abundant throughout their ranges, the species occur in both lotic and lentic systems including lakes adjacent to rivers, bays and coves, large rivers and the lower reaches of smaller tributaries. They are usually collected over substrates of mud, sand, and clay, often associated with vegetation (i.e., root masses, tall reeds, grasses).

The objectives of this study are to redescribe *S. lima* and *S. trigonocephalus* and update information on their geographic distributions. The additional three species of *Sorubim*, all described since 2000 (Littmann *et al.* 2000; 2001a; 2001b), are diagnosed and illustrated with photographs. A key to the five recognized species is provided.