



A threatened new species of *Oligosarcus* and its phylogenetic relationships, with comments on *Astyanacinus* (Teleostei: Characidae)

JUAN MARCOS MIRANDE¹, GASTÓN AGUILERA¹ & MARÍA DE LAS MERCEDES AZPELICUETA²

¹CONICET-Fundación Miguel Lillo, Miguel Lillo 251, 4000 San Miguel de Tucumán, Argentina.

E-mail: mcmirande@gmail.com, gastonaguilera@csnat.unt.edu.ar

²CONICET-División Zoología Vertebrados, Facultad de Ciencias Naturales y Museo, Paseo del Bosque, 1900 La Plata, Argentina.

E-mail: azpeli@museo.fcnym.unlp.edu.ar

Abstract

Oligosarcus itau n. sp. is described. This species is the sister group of the remaining analyzed species of *Oligosarcus* and this relationship is supported by seven morphological synapomorphies: 1) well developed temporal fossa, 2) absence of a dorsal expansion on the rhinosphenoid, 3) posteroventrally angled articulation between second and third infraorbitals, 4) presence of ectopterygoid teeth on a row, 5) laterally displaced cartilage on the ectopterygoid, 6) presence of bony lamellae bordering laterosensory canal of suprapreopercle, and 7) presence of two pairs of uroneurals. The new species is diagnosed by the following combination of characters: 1) two distinct premaxillary rows of teeth, 2) tricuspidate and pentacuspidate teeth on dentary and posterior premaxillary row, 3) presence of a row of 3–4 tricuspidate to conical ectopterygoid teeth, 4) possession of v–vi, 21–23 anal-fin rays, and 5) presence of 41–42 perforated scales on lateral line. *Oligosarcus itau* n. sp. was previously considered as an *Astyanacinus*. *Astyanacinus moorii* (Boulenger), type species of the genus, is included in the *Astyanax* clade and *Astyanacinus platensis* Messner is transferred to *Oligosarcus*.

Key words: Characiformes, cladistics, Ostariophysi, systematics, taxonomy

Resumen

Se describe *Oligosarcus itau* n. sp., que es el grupo hermano de las restantes especies analizadas de *Oligosarcus* y esta relación está apoyada por siete sinapomorfías morfológicas: 1) fosa temporal bien desarrollada, 2) ausencia de expansión dorsal del rinosfenoides, 3) articulación entre el segundo y tercer infraorbital formando un ángulo posteroventral, 4) presencia de una fila de dientes ectopterigoides, 5) cartílago sobre el ectopterigoides desplazado lateralmente, 6) presencia de láminas óseas bordeando el canal laterosensorial del suprapreopérculo y 7) presencia de dos pares de uroneurales. La nueva especie se diagnostica por la siguiente combinación de caracteres: 1) dos filas de dientes premaxilares, 2) dientes tricuspidados y pentacuspidados en el dentario y fila posterior del premaxilar, 3) presencia de una fila de 3–4 dientes tricúspides a cónicos en el ectopterigoides, 4) posesión de v–vi, 21–23 radios anales y 5) presencia de 41–42 escamas perforadas en la línea lateral. *Oligosarcus itau* n. sp. fue considerada previamente como una especie de *Astyanacinus*. *Astyanacinus moorii* (Boulenger), especie tipo del género, se incluye en el clado *Astyanax* y *Astyanacinus platensis* Messner se transfiere a *Oligosarcus*.

Introduction

Oligosarcus is a morphologically homogeneous characid genus composed of 18 described species (Menezes & Ribeiro, 2010) sharing several features associated with predation, such as long snout and acute and numerous teeth. The systematics of this genus was revised by Menezes (1969), who included *Oligosarcus* along with *Acestrorhynchus* in the characin tribe Acestrorhynchini, mainly based on the shared possession of ectopterygoid teeth in both genera. Subsequently Géry (1977) included *Bramocharax* in the tribe Bramocharacini, also within the Characinae. Although Géry did not propose some presumably apomorphic character relating *Bramocharax* with *Acestrorhynchus* and *Oligosarcus*, he alternatively suggested the possibility of such genus to be included in the Acestrorhynchini.