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**Systematics of the family Ariidae (Ostariophysi, Siluriformes),
with a redefinition of the genera**

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Systematics of the family Ariidae (Ostariophysi, Siluriformes), with a redefinition of the genera

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Abstract

The taxonomic *status* of all the nominal genera of the Ariidae are reviewed and ariid genera are diagnosed by exclusive characters as well as by a combination of internal and external morphological features. The results are based on a phylogenetic analysis undertaken by the senior author (Marceniuk, 2003). The species so far recognized are taxonomically reevaluated and considered as valid, *inquirendae* or synonyms under each diagnosed genus based on direct examination of specimens or use of diagnostic characters available in the literature. A key to identification of genera is provided based on morphological characters that can be easily recognized. In the new classification proposed, Ariidae comprises the following twenty six valid genera: *Amissidens*, *Arius*, *Aspistor*, *Bagre*, *Batrachocephalus*, *Brustarius*, *Cathorops*, *Cephalocassis*, *Cinetodus*, *Cochlefelis*, *Cryptarius*, *Doiichthys*, *Galeichthys*, *Genidens*, *Hemiaris*, *Ketengus*, *Nedystoma*, *Nemapteryx*, *Neoarius*, *Netuma*, *Notarius*, *Osteogeneiosus*, *Pachyula*, *Plicofollis*, *Potamarius* and *Sciades*. Three new genera are erected. The nominal genera *Bagre* Oken, 1817, *Glanis*, *Stearopterus*, *Breviceps non* Merrem, 1820, *Felichthys*, *Ailurichthys*, *Mystus non* Scopoli, 1777 and *Anemanotus* are considered junior synonyms of *Bagre* Cloquet, 1816. *Hexanemateichthys*, *Sciadeichthys*, *Selenaspis*, *Ariopsis* and *Leptarius* are synonyms of *Sciades*. The nominal genus *Pseudarius* is an objective synonym, and *Ariodes* a subjective synonym, of *Arius*. *Sciadeops* is synonymous with *Notarius*. *Catastoma* and *Sarcogenys* are synonyms of *Netuma*. *Tetranesodon* is preliminary considered junior synonym of *Pachyula*. *Hemipimelodus* is a synonym of *Cephalocassis*. *Septobranchus* is a junior synonym of *Cinetodus*, and *Guiritinga* is a new synonym of *Genidens*.

Key words: Ariidae, Systematics, Revision of Genera

Introduction

The Ariidae are widely distributed, most of its species occurring along tropical and temperate areas of the world in coastal waters of the continents, estuarine regions and lower portions of coastal rivers. A restricted number of species is either entirely confined to marine waters where they can be found at depths of 150 meters or to fresh waters in the upper courses of rivers 500 kilometers away from their mouths.

The group was established by Bleeker (1862) as *Phalanx* Arii and formally defined by Regan (1911). Since then the inaccurate description of new taxa sometimes based on ontogenetic phases of the same species or on sexual differences added to the proliferation of names. The genera presently recognized were primarily defined on the basis of traditional morphological characters, such as shape of tooth plates, eye position on head, presence or absence of skin over the eye, extension of the branchial opening, type of ornamentation of skull bones, number and shape of barbels, etc., presently considered inconsistent or of limited information (pers. obs.).