

## Description of *Notarius biffi* n. sp. and redescription of *N. insculptus* (Jordan and Gilbert) (Siluriformes: Ariidae) from the eastern Pacific, with evidence of monophyly and limits of *Notarius*

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### Abstract

A new species of ariid catfish, *Notarius biffi* n. sp., from the eastern Pacific, is described. The species is distinguished from other eastern Pacific species of *Notarius* by the following features: mouth small (width 34.2–39.3% head length); eye large (diameter 3.8–4.5% standard length); mandibular barbels short (length 10.2–13.1% standard length); distance between anterior nostrils short (17.9–20.8% head length); caudal peduncle relatively slender (depth 6.1–6.7% SL); gill rakers on the first arch 11–12. *N. insculptus* (Jordan and Gilbert, 1883) new combination is redescribed herein. This species is distinguished from other eastern Pacific *Notarius* as follows: highly developed, sculptured epioccipital bones, forming with the supraoccipital a basally wide complex process which tapers drastically posteriorly; supraoccipital process length 0.7–0.9 in the base of the complex process; predorsal plate narrow and crescent-shaped; mouth large (width 45.8–54.8% head length); maxillary barbels long (length 26.7–30.3% standard length). Based on mitochondrial phylogenetic evidence (combined cytochrome *b* and ATP synthase 8/6 data set with 1937 base pairs) and general morphology, the amphiamerican genus *Notarius* is expanded to include a total of 14 species, eight of which are presented as new combinations (*N. cookei*, *N. insculptus*, *N. kessleri*, *N. luniscutis*, *N. neogranatensis*, *N. phrygiatus*, *N. quadriscutis*, and *N. rugispinis*). The nomenclatural status of the eastern Pacific ariids *Hexanematichthys henni*, *Arius hassleriana*, *A. festae*, *A. labiatus*, *A. planiceps*, and *A. osculus* is discussed. Finally, a key to identify seven described species of *Notarius* from the eastern Pacific is presented.

**Key words:** *Notarius biffi*, *Notarius insculptus*, Ariidae, sea catfishes, eastern Pacific

### Introduction

The family Ariidae is a monophyletic group of siluriform fishes that inhabits marine, brackish, and freshwater environments, and is widespread over the world's tropical and