

0555 NIA II, 551 AB, Monday 12 July 2010

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An Unexpectedly Diverse Group of Miniature and Sexually Dimorphic Neotropical Catfishes Representing a New Genus (Siluriformes, Heptapteridae)

Small body size has been a main limiting factor veiling our knowledge of the Neotropical fish diversity, with most of the currently known miniature species described in the last few decades. Frequently, these are found in museum collections catalogued as immature stages, this being the case for the species reported here. Independent collecting efforts in the Peruvian Amazon and Venezuelan Orinoco as well as a revision of material already available in museums has resulted in the recognition of at least five different species of tiny catfishes, that were identified either as heptapterid juveniles or in the slightly more accurate cases as *Imparfinis* juveniles. Nonetheless, a detailed morphological study revealed that they represent fully mature individuals, easily assignable to the *Nemuroglanis* subclade of Heptapteridae, but not to *Imparfinis* or to any other available name in that family. Morphology of the pectoral girdle and fin exhibits striking contrasting conditions between males and females, and along with modifications of the most anterior ribs, also indicate that they constitute a monophyletic group that is here proposed as a new genus. Derived traits of the transverse process of the fourth vertebra, postcleithral process and head laterosensory system support a sister group relationship between *Horiomyzon* and this new genus, indicating that a single miniaturization event occurred for this subgroup of heptapterids. Some comments on the vast geographic distribution of the new genus related to the psammophily are provided and compared to the deep river channel habitat of *Horiomyzon*.