A new species of Larimichthys from Terengganu, east coast of Peninsular Malaysia (Perciformes: Sciaenidae)

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Abstract

A new species of Larimichthys from Terengganu, east coast of Peninsular Malaysia is described from specimens collected from the fish landing port at Pulau Kambing, Kuala Terengganu. Larimichthys terengganu can be readily distinguished from other species of the genus by having an equally short pair of ventral limbs at the end of the gas bladder appendages, which do not extend lateral-ventrally to the lower half of the body wall, and fewer dorsal soft rays (29–32 vs. 31–36) and vertebrae (24 vs. 25–28). Larimichthys terengganu can be distinguished from L. polyactis and L. crocea by having a gill raker at the angle of first gill arch shorter than the gill filament. Furthermore, the second anal spine in L. terengganu is equal or slightly shorter than eye diameter (vs. shorter in L. polyactis); L. terengganu has 8–9 anal soft rays (vs. only 7 in L. pamoides). Snout length of L. terengganu is greater than eye diameter, whereas in L. crocea the snout is shorter than eye diameter. A key to species of Larimichthys is provided. All obtained specimens of the species were recorded from Terengganu waters, east coast of Peninsular Malaysia.

Key words: taxonomy, new species, Sciaenidae, Larimichthys, Malaysia, South China Sea

Introduction

Sciaenid fishes, commonly known as croakers or drums, are known as “gelama” in Malaysia. Sciaenids are the main trawl fish species in Malaysia, trawl landings amounting to about 38 024 metric tons in 2012 (Department of Fisheries [DOF], 2012). These are preferably processed into a popular dried salty fish locally known as “ikan masin”. The Sciaenidae is reported as monophyletic family with a cosmopolitan distribution throughout the continental shelf waters of tropical regions (Chao, 1978, 1986; Sasaki, 1989), and are easily distinguished from all other Perciformes by having a long continuous dorsal fin, with a deep notch separating a shorter anterior spinous portion from a longer posterior portion supported by soft rays. All sciaenids have one or two spines in the anal fin (usually three or more in other Percoidei).

Sciaenids are characterized by a well-developed acoustico-lateralis system, comprising pored lateral-line scales extending to the tip of the caudal fin and a thick gas bladder often with elaborated appendages. Sciaenids also have one or two pairs of extremely large and thick otoliths. The sulcus is characteristically tadpole-shaped, with a shallow, oval head portion (ostium) and a J-shaped, deeply grooved tail portion (cauda) (Trewavas, 1977; Chao, 1978, 1995).

Comprehensive diagnosis of synapomorphies and the phylogenetic relationship of worldwide Sciaenidae were first analyzed by Sasaki (1989) and recent genetic analysis was done by Lo et al. (2015, in press), and shows a New World origin and Early Miocene diversification of tropical sciaenids.