A New Genus and Two New Species of Myrophine Worm-eels, with Comments on Muraenichthys and Scolecenchelys (Anguilliformes: Ophichthidae)

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ABSTRACT. Skythrenchelys n.gen. differs from other myrophine ophichthids in the condition of its gill openings (moderately elongate and below lateral midline), dentition (large, conical and uniserial), posterior nostril (entirely outside mouth), and other characters. Skythrenchelys zabra n.sp., the type species, is described from India, the Philippines, Indonesia and northern Australia; S. lentiginosa n.sp. is described from the Red Sea. Scolecenchelys Ogilby, previously a subgenus of Muraenichthys Bleeker, is generically distinct on the basis of differences in dentition (teeth conical and uniserial or biserial vs blunt and multiserial), cephalic pores (2 pores between anterior and posterior nostrils vs 1 pore), and its posterior nostril condition (within vs outside mouth). Valid species of Muraenichthys and Scolecenchelys and their synonyms are identified.


The most recent revision of the snake-eel and worm-eel family Ophichthidae (McCosker et al., 1989) recognised 55 genera, including 44 in the Subfamily Ophichthinae and 11 in the Myrophinae. The family is worldwide in distribution, principally but not exclusively in inshore waters of tropical seas. Its members mainly live burrowed tail first in soft sediments and readily avoid capture by most sampling methods, though they are variously vulnerable to ichthyocides. This may explain why some of the approximately 250 ophichthid species are known from few or even single specimens. Ophichthids have distinctive leptocephali, many of which were documented in the Atlantic by Leiby (1989), though most have not yet been identified.