



A new species of *Neenchelys* (Anguilliformes: Ophichthidae: Myrophinae) from the eastern Indian Ocean

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Abstract

A new worm eel, *Neenchelys andamanensis*, is described based on a single specimen collected from a depth of 520–531 m, Andaman Sea, eastern Indian Ocean. The new species is similar to *N. daedalus*, *N. nudiceps*, and *N. similis* in its total vertebral count and slender body, however, it differs from the latter three in having a shorter tail (60% TL vs. 70–76%), more numerous preanal vertebrae (77 vs. 59–71), and shorter pectoral fins (2.4% HL vs. 21–27%). Although the new species resembles *N. mccoskeri* in some proportional characters, the former species is distinguishable from the latter by its higher total vertebral count (221 vs. 172–184), position of the dorsal-fin origin (horizontal distance from the origin to a vertical through mid-anus 65% of trunk length vs. 46–59%) and width of the interorbital region (4.5% of head length vs. 8.2–16%). A revised key to the species of *Neenchelys* is provided.

Key words: *Neenchelys*, new species, Andaman Sea, Indian Ocean, key to species

Introduction

The Indo-Pacific genus *Neenchelys* Bamber 1915 (Ophichthidae, Myrophinae) was recently revised by Ho *et al.* (2013) including the descriptions of three “new species” and a key to the species. However, all nomenclatural acts performed in that article are unavailable under the Code [ICZN (2012: Article 8.5.3.)] because no ZooBank number was represented in that online article, and immediate solutions were required for that problem (Tashiro *et al.* 2015). That problem was resolved by re-publication in this volume (Ho *et al.* 2015). After Ho *et al.* (2013), three undescribed species were found from various locations by various ichthyologists. One species was already described (Tashiro *et al.* 2015), and other one is described in this volume (Ho & Loh 2015). We found a single unique specimen from the collection of the Phuket Marine Biological Center during YH and SK’s visit in March 2014. The specimen can be clearly distinguished from all other congeners, we herein describe it as a new species, and provide a modified key from that of Ho *et al.* (2013).

Materials and methods

Counts and measurements generally follow Castle & McCosker (1999) except for the following measurements; preanal length: distance from the tip of snout to mid-anus; upper-jaw length: distance from the tip of snout to the posterior margin of maxilla, inferred from surface; length of mouth gape: distance from the tip of snout to the posterior end of mouth rictus. Total and head lengths are abbreviated as TL and HL, respectively. Vertebral counts were made from soft-X ray photos. Institutional abbreviations of materials deposited follow Fricke & Eschmeyer (2014). The revised key is based on that of Ho *et al.* (2013) including the species described by Ho & Loh (2015), Ho *et al.* (2015) and Tashiro *et al.* (2015).