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The eels of the genus *Nettenchelys*, with description of a new species from Taiwan (Teleostei: Anguilliformes: Nettastomatidae)

DAVID G. SMITH^{1*}, JAMES LIN², HONG-MING CHEN^{2,3} & JOHN J. POGONOSKI⁴

¹Smithsonian Institution, Museum Support Center, MRC 534, 4210 Silver Hill Road, Suitland, MD 20746, U.S.A.

Email: smithd@si.edu

²Department of Aquaculture, National Taiwan Ocean University, 2 Peining Road, Keelung 20224, Taiwan.

Email: happy221034@gmail.com

³Center of Excellence for the Oceans, National Taiwan Ocean University, 2 Peining Road, Keelung 20224, Taiwan.

Email: hmchen@mail.ntou.edu.tw

⁴CSIRO National Research Collections Australia, Australian National Fish Collection, G.P.O. Box 1538, Hobart, Tasmania 7000, Australia. Email: john.pogonoski@csiro.au

*Corresponding author.

Abstract

The species of the genus *Nettenchelys* are summarized. Nine species are recognized on the basis of adult specimens: *Nettenchelys dionisi* Brito, *N. erroriensis* Karmovskaya, *N. exoria* Böhlke & Smith, *N. gephyra* Castle & Smith, *N. inion* Smith & Böhlke, *N. paxtoni* Karmovskaya, *N. proxima* new species, *N. pygmaea* Smith & Böhlke, and *N. taylori* Alcock. Another species, *N. bellottii* (D'Ancona) is based on a larva. *Nettenchelys gephyra* is redescribed on the basis of additional specimens from northeastern Taiwan, Indonesia and Australia. *Nettenchelys proxima* new species is described from a specimen from southwestern Taiwan. *Nettenchelys* sp. reported by Uyeno & Sasaki (1983) is found to be a specimen of *Facciolella*. Information on larvae is updated based on new knowledge of the genus.

Key words: eel, new species, Nettastomatidae *Nettenchelys*

Introduction

The eels of the genus *Nettenchelys* (Anguilliformes, Nettastomatidae) are known from remarkably few specimens. Including the specimens reported here for the first time, the nine recognized species comprise a total of 30 adult specimens. Four of the species are known from a single specimen each. An additional 215 larval specimens were documented by Smith & Castle (1982). The discovery of 12 new adult specimens, including a new species, is therefore noteworthy and marks a good time to summarize our current knowledge of this genus.

Nettenchelys taylori was described as a new genus and species by Alcock (1898) on the basis of a single specimen collected in the Arabian Sea. The species has never been collected since, and the genus was never mentioned again in the literature until Smith *et al.* (1981) re-examined it and described four new species from the Atlantic (*N. exoria*, *N. inion*, and *N. pygmaea*) and western Pacific, (*N. gephyra*). Uyeno & Sasaki (1983) described, but did not name, a specimen from off Suriname in the western Atlantic that appeared distinct from any of the known species. Brito (1989) described a new species, *N. dionisi*, from two specimens collected in the eastern North Atlantic. Karmovskaya described two new species, *N. erroriensis* (1994) from the Indian Ocean and *N. paxtoni* (1999) from the western Pacific, each represented by a single specimen.

Meanwhile, Smith & Castle (1982) reported 215 specimens of larvae from all oceans, among which they could discern seven distinct morphotypes based on meristic and pigmentation characters. Only one of these, *N. pygmaea*, could be linked to a known adult. Although most of the larvae could not be identified, they did document the widespread occurrence of the genus from the Atlantic to the Central Pacific. D'Ancona (1928) had applied a name to one of these larvae, *Leptocephalus bellottii*, although at the time he did not know what its adult counterpart was. The name, however, remains valid and could be applied to the adult when and if the latter is ever found.