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Saurenchelys gigas sp. nov., a new nettastomatid eel (Teleostei, Anguilliformes, Nettastomatidae) from the western central Pacific

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Abstract

Some large *Saurenchelys* specimens collected from Daxi, Yilan, NE Taiwan, and Da Nang, Vietnam, by bottom trawl at depths of 100–200 m, are described as *Saurenchelys gigas* new species. They differ from all known adult *Saurenchelys* species by predorsal length 40.9–46.8, head length 36.8–39.3in % of preanal length, 38–40 preanal vertebrae, 63–70 precaudal vertebrae, 38–42 preanal lateral-line pores, 56–63 preanal dorsal fin rays, and larger size (the maximum size 1155 mm TL).

Key words: new species, taxonomy, Nettastomatidae, large, Pacific

Introduction

Saurenchelys is a genus within the family Nettastomatidae characterized by the absence of pectoral fins, the position of the posterior nostrils at mid-eye level, and the presence of pterygoid teeth. Like other nettastomatid eels, the species of *Saurenchelys* inhabit tropical and subtropical offshore waters of the continental shelf and slope worldwide (Nelson, 2006).

The convoluted history of this genus was summarized by Smith (1989:591). It was originally described by Peters (1864) for his new species *Saurenchelys cancrivora*. There was initial confusion over where this specimen was collected, but subsequent studies indicate that it was from India. Since then, seven additional species have been described from adult specimens: *S. petersi* Day, 1878; *S. fierasfer* (Jordan & Snyder, 1901); *S. finitima* (Whitley, 1935); *S. elongata* (Kotthaus, 1968); *S. cognita* Smith, 1989; *S. meteori* Klausewitz & Zajonz, 2000; and *S. taiwanensis* Karmovskaya, 2004. In addition, there are two names based on larvae: *S. stylura* (Lea, 1913) and *S. lateromaculata* (D'Ancona, 1928).

The taxonomy of this genus is still poorly known, and the status of the nominal species is uncertain. The differences between species are subtle, and some characters, such as vertebral counts, are not visible externally. In addition, there are a number of undescribed species. More work needs to be done, but the new species described in this paper is the most distinctive, and we choose to describe it now and treat the other species in a subsequent paper.

Materials And Methods

The type specimens from Taiwan were fixed in 95% ethanol or 10% formalin and then transferred into 70% ethanol, and are now deposited at National Taiwan Ocean University, Laboratory of Aquatic Ecology, Taiwan

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