CHILOMYCTERUS SPILOSTYLUS, A NEW SPECIES OF INDO-PACIFIC BURRFISH (PISCES, TETRAODONTIFORMES, DIODONTIDAE)

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SUMMARY

A new spiny puffer (Diodontidae) *Chilomycterus spilostylus,* is described from ten specimens, from the northern Red Sea, the South China Sea and the Philippine Islands. *C. spilostylus* is distinguished from all other Indo-Pacific *Chilomycterus* by colour, spine morphology, and spine arrangement. All spines are fixed and short, and many on the head have four rather than three subdermal bases. A single medial frontal spine is located between the nostrils and three spines are over the eye. We tentatively conclude that the form incorrectly called *Cyclichthys echinatus* (Gronow) is the pelagic juvenile stage of *C. spilostylus.*

INTRODUCTION

The fishes of the tetraodontiform family Diodontidae have long attracted the attention of ichthyologists because of their unusual appearance and ability to inflate. This attention has resulted in a large number of synonyms in this relatively small family. For example, only five of the 28 nominal species of *Diodon* are valid (Leis 1978). A similar situation exists among the other diodontid genera which include approximately 50 nominal species. Thus, it is surprising to discover a widely distributed species of *Chilomycterus* (sensu lato) which is undescribed. This species, described below as *Chilomycterus spilostylus,* has been ignored or confused with *C. orbicularis* (Bloch) or *Cyclichthys echinatus* (Linnaeus). It first came to our attention when it was collected by Randall in the Gulf of Aqaba, Red Sea. We describe this species here in order to make the name available in advance of revisionary studies of the family by Leis.

MATERIALS AND METHODS

Counts, measurements and definitions generally follow Leis (1978), but some require amplification. The interpectoral spines (P-D-P spines) make up the transverse row over the dorsum between the upper bases of the pectoral fins. The spine arrangement on the top of the head gives the number of spines in the successive transverse spine rows from the frontal spine through the row at the level of the gill opening. This count excludes the supraorbital spines and other spines in an approximate longitudinal row with these (i.e. spines along the dorsolateral edge of the head). The second and third transverse rows are often irregular, and each could be interpreted as constituting more than one row. However, rows with an odd number of spines have the middle spine approximately on the dorsal midline, and those with an even number should have equal numbers on each side of the midline. The frontal spines constitute the anterior-most spine row on the top of the head (again excluding the supraorbital spines). Preserved specimens of diodontids are often distended due

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