A new species of the perciform fish genus Symphysanodon (Symphysanodontidae) from the Arabian Sea off the southwestern coast of India

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Abstract

Symphysanodon xanthopterygion, new species, reported herein from 15 specimens collected near Quilon, India, off the Kerala Coast in the southeastern Arabian Sea, becomes the twelfth described species in the genus. The following characters in combination distinguish S. xanthopterygion from its congeners: parapophyses present on first caudal vertebra, total number of gillrakers on first arch 38 to 42, tubed lateral-line scales 54 to 59, sum of lateral-line scales plus total number of gillrakers in individual specimens 94 to 101, head length 33 to 37% SL, head depth 18 to 21% SL, snout length 5 to 6% SL, body depth 24 to 27% SL, lower caudal-fin lobe bright yellow.

Key words: Symphysanodon xanthopterygion, Arabian Sea, India, Kerala Coast, Quilon

Introduction

The marine fish family Symphysanodontidae contains a single genus, Symphysanodon, and 11 previously described species (Anderson and Springer, 2005; Khalaf and Krupp, 2008; Quéro et al., 2009). In addition, McCosker (1979) and Anderson and Springer (2005) reported a species of Symphysanodon, as yet undescribed, that was obtained from the stomach of a coelacanth (Latimeria chalumnae) caught in the Comoros in the southwestern Indian Ocean. Later Heemstra et al. (2006) mentioned an undescribed species of Symphysanodon from the Comoros that may be conspecific with the species reported from the coelacanth stomach. Also, Campos et al. (2009) reported two larval Symphysanodon, collected off southern Brazil, that may represent another undescribed species.

Symphysanodon (with adults reaching less than 175 mm SL) occurs in depths of about 80 to 700 m in the Atlantic, Pacific, and Indian oceans. Four species of Symphysanodon have been described from the Indian Ocean (sensu lato)—S. andersoni Kotthaus, 1974 (southwest of Socotra Island, near the entrance to the Gulf of Aden; also reported from the Gulf of Kutch, an inlet in the northeastern quadrant of the Arabian Sea on the west coast of India by Manilo and Bogorodsky, 2003); S. rhax Anderson and Springer, 2005 (off the Maldives Islands); S. disii Khalaf and Krupp, 2008 (Gulf of Aqaba); and S. pitondelafournaisei Quéro et al., 2009 (off Reunion Island). Herein we describe S. xanthopterygion based on 15 specimens collected in the Arabian Sea off Quilon, India.

Methods and abbreviations

Methods used are those of Anderson (1970) and Anderson and Springer (2005), counting lateral-line scales on left side where possible. Institutional abbreviations are: CAS—California Academy of Sciences, San Francisco; CMFRI—Central Marine Fisheries Research Institute, Cochin, Kerala, India; DNR—Designated National Repository, CMFRI, Cochin, Kerala, India; GMBL—Grice Marine Biological Laboratory, College of Charleston, Charleston, South Carolina; UF—Florida Museum of Natural History, University of Florida, Gainesville;