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Acanthoplesiops cappuccino, a new species of acanthoclinine fish from the Red Sea (Teleostei: Plesiopidae)

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Abstract

Acanthoplesiops cappuccino is described from the 16.4 mm SL holotype collected from Jeddah, Saudi Arabia, Red Sea. The following combination of characters distinguishes it from congeners: dorsal-fin rays XVIII,4; anal-fin rays VII,4; pectoral-fin rays 18; caudal fin not connected to last rays of dorsal and anal fins by membrane; and caudal peduncle with a pale yellowish brown bar, which extends broadly on to caudal fin. An underwater photo of the anaesthetised holotype is provided, as well as one of the freshly dead holotype and only known specimen of the similar species *A. naka*. Tables summarizing diagnostic characters of the six known species of *Acanthoplesiops* are included.

Key words: ichthyology, systematics, morphology, Acanthoclininae

Introduction

The Plesiopidae is an Indo-Pacific family of small, tropical and subtropical reef-associated fishes. The family is divided into six subfamilies: Trachinopinae, Assessorinae, Paraplesiopinae, Fraudellinae, Plesiopinae and Acanthoclininae (Mooi 1993). The Acanthoclininae were most recently revised by Smith-Vaniz and Johnson (1990) who recognized twelve species in four genera: *Acanthoclinus* Jenyns (1841), *Acanthoplesiops* Regan (1912), *Beliops* Hardy (1985) and *Belonepterygion* McCulloch (1915). Subsequently, Mooi and Gill (2004b) added the genus *Notograptus* Günther (1867), which had been previously classified in its own family (Notograptidae). The genus *Acanthoplesiops* is unique among acanthoclinines (and plesiopids) in having the following characters: 1 or 2 secondary opercular spines; pectoral radial formula 3-0-1; supracleithral lateral-line canal absent; anterior/posterior ceratohyal suturing both medial and lateral; scales in mid-lateral series bilobed (Mooi & Gill 2004b). Smith-Vaniz and Johnson (1990) included four species in *Acanthoplesiops*, and an additional species was added by Mooi and Gill (2004a): *A. echinatus* Smith-Vaniz and Johnson (1990) from the Sulu Archipelago (Philippines) and eastern Indonesia; *A. hiatti* Schultz (in Schultz *et al.* 1953) from throughout the tropical West Pacific; *A. indicus* (Day 1888) from the western Indian Ocean (east Africa, Seychelles, southern Oman, and southeast India); *A. naka* Mooi and Gill (2004a) from Tonga (misidentified by Randall *et al.* 2003 as *A. indicus*); and *A. psilogaster* Hardy (1985) from the northern Philippines, Taiwan and southern Japan (Fig. 1). Although *Acanthoplesiops* spans the longitudinal range of the subfamily (east Africa to Tonga)—and is the only acanthoclinine genus in the western Indian Ocean—it is unknown from Australia, where it is replaced by its sister genus *Notograptus* (Mooi & Gill 2004b). Up until now it was unknown from the Red Sea. However, in June 2013, during field work conducted by King Abdulaziz University, the second author collected a single specimen at Jeddah, Saudi Arabia. The specimen represents a new species, which we herein describe.

Remarks. Smith-Vaniz and Johnson (1990) cladistically diagnosed *Acanthoplesiops* by several synapomorphies, one of which was the presence of a symphyseal flap on the lower lip. Mooi and Gill (2004b) noted that the flap is relatively long in some individuals, and concluded that it is homologous with the elongate barbel-like flap in *Notograptus* and thus a synapomorphy linking the two genera. The flap is extremely well developed in the holotype of *A. cappuccino*—where it is as well developed as in some *Notograptus* specimens—lending support to Mooi and Gill’s homology assessment.

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