



First record of the fish genus *Symphysanodon* (Teleostei: Perciformes: Symphysanodontidae) from the western South Atlantic Ocean

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Abstract

Two larval *Symphysanodon*, collected off the coast of Rio de Janeiro, southern Brazil (at 22°32'50.0" S, 040°04'09.0" W), beyond the 1,000 m isobath, are the first specimens of the monotypic family Symphysanodontidae to be reported from the western South Atlantic Ocean. We are unable to assign the larvae to a described species and entertain the idea that the Brazilian material may represent an undescribed species.

Key words: larvae, Brazil, range extension

Introduction

The marine fish family Symphysanodontidae is represented by a single genus, *Symphysanodon* (Anderson and Springer, 2005). Adults are small to medium-sized, occurring in depths of about 80 to 700 m, in the Atlantic, Pacific, and Indian oceans (Anderson and Springer, 2005). Anderson and Springer (2005) recognized 10 species in the genus—six previously described, three that they described, and an undescribed one known only from the stomach contents of a specimen of *Latimeria chalumnae*. Recently, two other new species have been described—one by Khalaf and Krupp (2008) from the Gulf of Aqaba (Red Sea), the other by Quérou *et al.* (2009) collected off Reunion Island in the southwest Indian Ocean. Three species of *Symphysanodon* are known from the Atlantic Ocean (*S. berryi* Anderson, 1970; *S. mona* Anderson and Springer, 2005; and *S. octoactinus* Anderson, 1970), but the family has not been reported previously from the Brazilian coast (Menezes *et al.*, 2003; Anderson and Springer, 2005; Bonecker and Castro, 2006; Costa *et al.*, 2007).

Anderson and Springer (2005), in their key to the species of *Symphysanodon*, relied almost entirely on meristic and morphometric characters. That key works well for adults and most juveniles, but is not very useful for larvae. Although larvae of *Symphysanodon* are relatively easy to identify to genus, because of their distinctive head spination, they are often difficult to identify to species (Anderson and Springer, 2005). Many specimens, including some from the Atlantic, were not identified to species by Anderson and Springer (2005), in their review, in most cases, because of their small size, being larvae or postlarvae.

There is little published information on the larvae of species of *Symphysanodon*. Johnson (1984) illustrated (figure 254A) a 5.1-mm SL larva of an unidentified species of the genus, Leis and Trnski (1989:228-231, figure 51; 2000:394-398, figure 100) described and illustrated larvae collected in the Pacific, and Konishi (1988) described and illustrated larvae (of 3.8 and 10.5 mm) identified as *S. katayamai*, a Pacific species. In this work, we report the first larval specimens (indeed the first specimens of any size) of *Symphysanodon* known to have been collected off the Brazilian coast.