



## A new species of deepwater tilefish (Percoidea: Branchiostegidae) from the Philippines, with a brief discussion of the status of tilefish systematics

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### Abstract

A new rare species of deepwater *Branchiostegus* is described from two specimens collected from Bayangas, Laiya, Philippines (13° 38.5' N, 121° 25.6' E). A total of four specimens were caught by hook and line in 2009 and 2011 between 210–220 m over a rocky-sand bottom, only two were preserved. The species may also be endemic to the Philippines and inhabit burrows as do the other known species of this genus. The combination of the following characters distinguish the new species from its congeners: prominent dark predorsal ridge bordered by bright yellow-orange background (only *B. semifasciatus* from West Africa has a more prominent and dark predorsal ridge, but the ridge has no underlying orange-yellow colour), a great body depth (28–29% SL; other species of *Branchiostegus*, usually 27% SL) longer head length (30–31% SL; other species of *Branchiostegus*, usually 28%), greater head depth (26–27% SL; other species of *Branchiostegus*, usually 26% SL); long pre-dorsal length (35% SL; other species of *Branchiostegus*, usually 32% SL), and distinctive body, head and caudal fin colouration; skin over dorsal tips of branchiostegals characteristically bright yellow. A brief discussion of the status of tilefish systematics is included.

**Key words:** Malacanthidae, *Branchiostegus saitoi*, Bayangas, Philippines, Branchiostegidae

### Introduction

A species of *Branchiostegus* was caught by hook and line off Batangas, Laiya, Philippines in 2009 and photographed by Mr. Jiro Saito, an amateur angler. The two initial specimens were eaten. An internet picture was discovered by the junior author and brought to the attention of the then visiting senior author who recognized it as a new species. Contact of Mr. Jiro Saito by the junior author ultimately resulted in two additional specimens (over 1 kg each) caught in April, 2011 off Bayangas, Laiya, Philippines, photographed by Mr. J. Saito, then send frozen to the junior author. These specimens were again photographed, muscle samples taken then examined by the senior author and confirmed as belonging to a new species.

**Systematic background.** The tilefishes (=Branchiostegidae) are comprised of three genera and 30 nominal species world-wide and are found along the edges of continental and oceanic plates as adults from warm temperate to tropical waters. Dooley (1978 & 1998), Dooley and Paxton (1975), Dooley and Kailola, (1988) and others consider the tilefishes as belonging to two related, but distinct families (Branchiostegidae and Malacanthidae) based on morphological and molecular character differences. Tilefish belong to the deeper water tilefishes Branchiostegidae (generally inhabiting self constructed burrows, at around 200 m depths, species may range from 90–500 m). The shallower water sand tilefishes (=Malacanthidae) consist of two genera and about 16 nominal species. They live in self-constructed mounds or burrows, generally from 5–50 m for *Malacanthus*. Some species of *Hoplostettilus* may be found to 100 m depths. Recent molecular research tends to support a tilefish two-clade hypothesis (Jimenez, 2007; Kelleperuma, 2009). An early paper explored the intrafamilial relationships of the family Branchiostegidae based on comparative head myology (Marino and Dooley, 1982).

Based primarily on a suggested synapomorphic larval character, other authors have consider the tilefishes as belonging to a single family (Malacanthidae) with two subfamilies, Latilinae and Malacanthinae, (see: Johnson, 1984, Nelson, 1984 & 2006; and Eschmeyer and Bailey, 1990). Tilefishes share somewhat similar spinous pelagic