

First record of two-spot razorfish, *Iniistius bimaculatus* (Rüppell, 1829) from Visakhapatnam waters

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Short Communication

Abstract

The two-spot razorfish, *Iniistius bimaculatus* (Rüppell, 1829), of the family Labridae is being reported for the first time from Visakhapatnam waters. A single specimen was collected from the fishing harbour at Visakhapatnam on 22 March, 2012. The total length and the weight of the recorded specimen were 196 mm and 43.7 g. Morphometric and meristic measurements were taken, photographed and the specimen was deposited in the Museum of Visakhapatnam Regional Centre of CMFRI. The present finding highlights the occurrence of this species in Visakhapatnam waters.

Keywords: *Iniistius bimaculatus*, two-spot razorfish, Visakhapatnam, distribution.

Introduction

Iniistius bimaculatus (Rüppell, 1829), commonly known as two-spot razorfish belongs to family Labridae, which comprises of wrasses, hogfishes, razorfishes and tuskfishes. Labrids are known to be variable in shape, color and size, and the majority of the species attain a maximum length of less than 20 cm (Gomon and Randall, 1984). The colour is generally bright and elaborately patterned, often differing between sexes and changing with age (Gomon and Randall,

1984). These fishes are common in shallow waters in a variety of habitats, including bare sand and rock, grass and algae-covered bottoms and coral reefs but rare in muddy areas. They have a wide distribution and are known to occur in the Atlantic, Indian and Pacific waters. They are active only during day time, burrowing in the sand and sleeping in rock or coral shelters at night (Saravanan *et al.*, 2011). The present specimen is observed for the first time from Visakhapatnam waters.

Material and methods

One specimen was collected from Visakhapatnam fishing harbour, on 22 March, 2012. The specimen was a stray catch caught by a single day trawler (SDF) operated at 30 m depth along with *Nemipterus randalli*. Identification was confirmed following FAO (Gomon and Randall, 1984), Fishbase (Froese and Pauly, 2012) and Smith and Heemstra (1986). Photographs were taken and specimen was preserved in 4% formalin and deposited in the Museum of Visakhapatnam Regional Centre of CMFRI.

Results and discussion

The morphometric and meristic characteristics of the specimen identified as *Iniistius bimaculatus* (Fig. 1) are given in Table 1.

Table 1. Morphometric measurements of *Iniistius bimaculatus* (Rüppell, 1829) (female) from Visakhapatnam

Characters	Measurement
Total length (mm)	196
Standard length (mm)	173
Head length (mm)	45
Eye diameter (mm)	10
Pre orbital length (mm)	22
Pre dorsal length (mm)	29
Dorsal fin base (mm)	110
Pectoral fin base (mm)	10
Pectoral fin length (mm)	37
Pelvic fin base (mm)	4
Pelvic fin length (mm)	25
Anal fin length (mm)	64
Caudal peduncle length (mm)	30
Caudal peduncle height (mm)	23
Caudal fin length (mm)	29
Body depth (maximum) (mm)	63
Dorsal fin count	VIII + 14
Anal fin count	I + 13
Pectoral fin count	I + 11
Pelvic fin count	I + 5
Caudal fin count	14
Maturity	II
Stomach	Empty
Weight (g)	43.7

Distribution of this species is in the Indo-West Pacific and it is a marine demersal species known to attain a maximum length of 285 mm (TL) (Gomon and Randall, 1984). The species has been reported earlier from different centres along the east and west coasts of India, as stray occurrences in trawl landings. From the east coast one specimen has been recorded from Tuticorin in 1975 having a length of 148 mm (SL) and another specimen of 109 mm length (Froese and Pauly, 2012). It has been observed in trawl landings at Chennai in 2008 along with another species *Xyrichtys cyanifrons* Valenciennes, 1840 and other triggerfishes (CMFRI, 2009). From the west coast, one specimen has been recorded from Vizhinjam in 1980 having a length of 183 mm (TL) and another specimen of 123 mm length. From Mangalore, one specimen has been observed along with threadfin breams in 2010, measuring 139 mm (TL) (Saravanan *et al.*, 2011).

In the present specimen the top of the head and snout are compressed into a knife like edge (Fig. 1) which is a characteristic feature of the Labridae family. The fish is bright pink in colour with darker pink colouration on the tip of the

dorsal fin. A black spot is seen close to the middle of the body. Yellow colouration (not a complete spot) is seen before the black spot. The snout region has tinge of yellow colouration on the upper jaw. The lateral line is interrupted below the dorsal fin with 21 pored scales in lateral line. The specimen has a protrusible mouth with 2 pairs of outward jutting caniniform teeth, 2 on the upper jaw and 2 on the lower jaw with gaps between teeth. Moderately large cycloid scales are seen on the body of the fish with 9 rows of scales on cheek. Light blue striations are observed near the operculum. On the anal fin 1 spine and 13 rays are present having yellow and blue coloured striations on the entire fin. The caudal fin also has these striations and has 14 rays. The specimen was a female in immature stage and the stomach was empty.

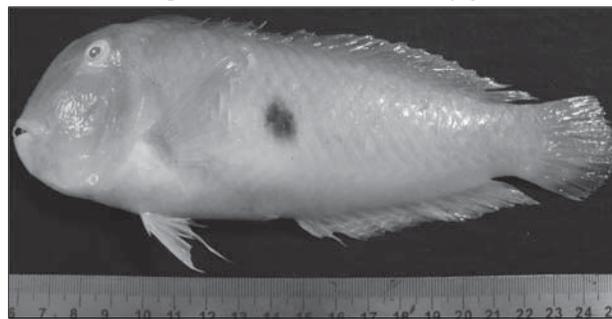


Fig. 1. Two spot razorfish, *Iniistius bimaculatus* (Rüppell, 1829) from Visakhapatnam.

This fish, because of its bright colouration, is very popular as an aquarium fish (Saravanan *et al.*, 2011). They are known to feed heavily on bottom-dwelling invertebrates, especially hard-shelled forms (Paolo and Randall, 2000).

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