

## First record of Shorthead fang blenny, *Petroscirtes breviceps* (Valenciennes, 1836), from Chilika lagoon, India.

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Shorthead fang blenny, *Petroscirtes breviceps* (Valenciennes, 1836), a species of the family Blenniidae (Order Blenniiformes) is reported here as first record from Chilika Lagoon, Odisha, India based on 20 specimens collected from Chilika lagoon. This also forms the first record from coastal waters of Odisha.

[**Keywords:** Blenniiformes; Blenniidae; Fishes; New record.]

### Introduction

Chilika lagoon, the largest coastal wetland on the Indian subcontinent<sup>1</sup>, a Ramsar site, and an incredible biodiversity hotspot, a unique ecosystem of marine, brackish and freshwater components<sup>2</sup>. Mohanty et al.<sup>2</sup> reviewed the 100 years fish species diversity from Chilika and documented 317 species belonging to 207 genera in 88 families and 23 orders<sup>2</sup>. In addition, four species of carangids, *Caranx papuensis*, *Carangoides ferdau*, *Trachinotus botla* and *Trachinotus baillonii* and one species of the family Apogonidae, *Taeniamia macroptera* and the electric ray, *Narcine timplei*, were reported recently<sup>3,4,5</sup>. Thus, the total number of fish species reported from Chilika lagoon increased to 323 species.

The only species of the family blenniidae from Chilika lagoon reported was *Omobranchus zebra* (Bleeker, 1868)<sup>2</sup>. Recently while working out the old collections of Chilika expedition of the year 1985–1987, twenty specimens of family blenniidae were identified as *Petroscirtes breviceps* (Valenciennes, 1836), which was not yet reported from the Chilika lagoon. This paper reports the Shorthead fang blenny, *Petroscirtes breviceps* (Valenciennes, 1836) from the Chilika lagoon as well as in Odisha Coast for the first time.

### Materials and Methods

During Chilika expedition of the year, 1985–1987 few blenniid specimens were collected from the Chilika lagoon and remained unidentified among the

general collections of the Estuarine Biology Regional Centre, Gopalpur-on-Sea, Odisha. The exact location of the collected specimens was not specified. The collected samples were identified as *Petroscirtes breviceps* (Valenciennes, 1836) following standard literature<sup>6,7</sup>. The specimens were registered and deposited at Estuarine Biology Regional Centre (Reg No. EBRC/ZSI/F9830). Specimens were preserved in 70 % alcohol. Photographs and the detail morphometric measurements were taken from the preserved specimens. All measurements were made by digital calipers.

### Results

Taxonomic account of the identified species is presented here:

Class Actinopterygii

Order Blenniiformes

Family Blenniidae

Genus *Petroscirtes* Rüppell 1830

***Petroscirtes breviceps* (Valenciennes, 1836)**

### Diagnostic characters

D X-XI, 19-20; A II, 18-19; P 14-15; V I, 3; C 11.

Body elongated but small and scaleless. Its depth ranges from 5.2 – 6.3 in total length. Head is associated with the pores and mouth on ventral side, 4.2–4.8 in total length. Profile of the snout oblique, snout length 2.8–3.2 in head length. Eyes not very large with size ranging between 3.2–3.9 in head length. Interorbital space slightly concave, 2.9–3.8 in

head length. Dorsal and anal fin base long and fins are very flexible. Origin of dorsal fin distinctly behind rim of orbit and pre-dorsal ranges from 5.3–5.9 in total length. Dorsal fin and anal fin rays segmented. Anal fin origin immediately after anus and preanal length 2.2–2.7 in total length. Last ray of dorsal and anal fins broadly bound by a membrane to caudal peduncle. Upper and lower jaw have a series of incisor-like teeth and the lower jaw have a long canine teeth which do not possess any groove along anterior surface. Gill opening entirely above the pectoral fin base. Caudal fin rays not branched. Symphyseal mandibular cirri simple; posttemporal cirrus present; other cirri mostly not traceable or minute.

#### *Colour of the preserved specimen*

Body yellowish in colour with a broad dark band along head and lateral side of the body. In the head and body above the dark band is having some black dots. Dorsal fin base with dotted lines and also has some black dots on fin. Caudal fin without any dots and it is yellowish.

#### Discussion

This species was first described as *Blennechis breviceps* from Bay of Bengal<sup>8</sup> though exact locality not mentioned. But the species seems to be rare. Though Francis Day in his monumental work<sup>9</sup> included this species, not mentioned any specific locality nor given the Figure 1. From Indian waters, it has been recorded from Matla river, West Bengal<sup>10</sup>; from Rutland Island, South Andaman<sup>11</sup>; and from Gulf of Mannar, Tamil Nadu<sup>12</sup>.

Out of 11 valid species known<sup>6,13</sup> in the genus *Petroscirtes*, only 4 species have dark horizontal stripes on the body and others usually speckled or variable in colour<sup>12</sup>. In *P. breviceps* a dark stripe is parallel to the dorsal body surface and extends up to the base of the dorsal fin covering the entire length of the body, the second stripe if present faintly developed; distally the dorsal fin is either spotted or reticulated and the anal fin is either spotted, reticulated or almost uniformly dark with a minute orbital cirrus<sup>13</sup>. *P. pylei* have the lowermost dark stripe extending into the anal fin; *P. fallax* has two dark stripes, but the dorsal fin is uniformly coloured with a black spot, normally located to the distal margin of the interradiation membranes of the first 3 or 4 spines; *P. marginatus* has a narrow dusky area



Fig. 1 — *Petroscirtes breviceps* (Valenciennes, 1836), from Chilika Lake, Odisha, India

proximally on dorsal fin, a comparatively wider pale stripe above, and the distal half to two-thirds of the fin is comparatively darker; in both the species, the ventral body stripe does not extend up to the base of anal fin<sup>13</sup>. While *P. pylei* is known from Fiji Islands, *P. fallax* endemic to eastern Australia and *P. marginatus* recorded from China, and only *P. breviceps* have a wider range of distribution in Indo-west Pacific.

The present study records occurrence of *Petroscirtes breviceps* (Valenciennes, 1836) first time from Chilika lagoon and Odisha coast as well.

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