



### **A new species of Short Brown Unpatterned Moray Eel of the Genus *Gymnothorax* (Anguilliformes: Muraenidae) from the Bay of Bengal**

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**Abstract.** A new species of short brown unpatterned moray eel of the genus *Gymnothorax*, *Gymnothorax mishrai* sp. nov. is described from a specimen of 324 mm total length, collected from the Bay of Bengal. The species is distinguished by having the dorsal-fin origin before gill opening, jaw pores with brown rim, two branchial pores, total vertebrae 134 (MVF: 9-59-134), three median intermaxillary teeth, uniserial maxillary and vomerine teeth. The new species is distinctly different from the other eight described species of this group. This species is also the first species of short brown unpatterned moray eel to be reported from India.

**Key words:** India, marine fish, moray, new species

#### **Introduction**

Among the order Anguilliformes, or true eels, the family Muraenidae is one of the most diverse and abundant. Commonly known as morays, they occur in tropical and subtropical seas around the world, where they are commonly found in coral reef areas and other benthic habitats from the shore line to the edge of the continental shelf (Smith, 2012). Nearly 200 species are recognized worldwide (Smith, 2012). Although many morays have conspicuous color patterns, others are plain colored without any obvious markings. The unpatterned moray eels were reviewed thoroughly by Böhlke (1997, 2000), who categorized them into two groups: larger, more elongate species with total vertebrae more than 150 (Böhlke, 1997); and smaller, shorter species with total vertebrae less than 150 (Böhlke, 2000). The only unpatterned species previously reported from Indian waters were *Strophidon sathete* (Hamilton, 1822), and very recently *Gymnothorax prolatus* Sasaki & Amaoka, 1991, by Mohapatra *et al.* (2015) from the Bay of Bengal. However, both the reported species belong to the elongate unpatterned group with vertebrae more than 150. Recently one specimen of a small, brown unpatterned moray was collected from the Shankarpur fishing harbour from the trawlers, which, after thorough examination, is identified as a new species with sufficient characters to differentiate it from the other reported small, brown unpatterned morays. Detailed characters and diagnosis of the new species along with comparison with related species is presented here.

#### **Material and methods**

The specimen (324 mm total length) was collected from fishing boats at a fish landing center located at Shankarpur, West Bengal, India. The fishing boat was trawling at a depth of 22 metres at 21°06.55' N, 87°058.68' E. Terminology, counts and measurements follow Böhlke (1989, 2000). All measurements are in mm and were made with digital calipers and recorded to the nearest 0.1 mm. Vertebrae were counted by means of digital x-ray. Meristic and morphometric values are presented in Table 1.