New Status on the Occurrence of Snake Eel *Pisodonophis cancrivorus* (Richardson 1844) from Parangipettai Coastal Waters along Southeast Coast of India

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**ABSTRACT**

Snake eel, *Pisodonophis cancrivorus* is considered as a rare species and also a new addition to the eel distribution in Parangipettai coastal waters along southeast coast of India. This snake eel is occurred in maximum number in the month of December, 2012 throughout the year. Totally 30 specimen were collected as a mass population.

**Key words:** Snake eel, *Pisodonophis cancrivorus*, Parangipettai.

**INTRODUCTION**

In south west coast of India, younger stage of eels called Leptocephalai which are mainly belongs to five families viz., Congridae, Opichthidae and Muraenidae, Nemichthyidae and Synaphobranchidae. Of the five families Congridae, Opichthidae and Muraenidae were distributed in Indian waters (Balu, 2004). The snake eel fauna of the western Indian Ocean is rich diverse and poorly known. Smith, (1962) included 55 species in his monograph of the Western Indian Ocean and Red Sea Opichthids.

Opichthids are predominant member of deep sea demersal fishes from the continental slope of abyssal plain (Alcock, 1899) the earlier synopsis of Opichthidiformes fishes in India reported 15 genera of the family Opichthidae. The first catalogue of Opichthidiformes focused at the genus level and species classification was not complete (Cohen et al., 1978). Subsequently, catalogue published included all Opichthidiformes fishes of the world which describes 48 genera and 218 species of deep sea fishes under the family Opichthidae.

Most Opichthids occupy habitats shallower than 100m, ranging from coral reefs to sand and mud substrates, entering rivers and estuaries. Recent deep water trawling and submersible captures of Opichthids have uncovered a number of new species living at a depth as great as 1300m (Castle and McCosker1999; McCosker and Chen 2000).

Although most Opichthids are undesirable as a human protein. They are readily consumed by other fishes and their role in marine ecosystem is poorly understood. McCosker, (2005) identified *Opichthus pullus* a new species of snake eel, subfamily Opichthidae is described from specimens trawled in deep water (106-154m) off Angola and Guinea-Bissau. McCosker and Chen, (2000) recorded a new species of deep water Snake eel, *Opichthus aphotistos* with comments on *Neenchelys retropinna* (Anguilliformes, Opichthidae) from Taiwan.

**MATERIALS AND METHODS**

Totally 30 specimen of Snake eel (50cm in total length) were collected from Annan Kovil landing centre, Parangipettai (lat.11° 29’N long 79°46’E) along south east coast of India (Fig 1)Specimens...
Peninal Samuel / New Status on the Occurrence of Snake Eel *Pisodonophis cancrivorus* (Richardson 1844) from Parangipettai Coastal Waters along the Southeast Coast of India

were collected on December 2012 by using long line (baited with sardine head) at a depth of about 18m during the night (22:00hrs). The Snake eel were identified based on Morpho metric and meristic characteristics (Fischer and Whitehead, 1974).

RESULTS AND DISCUSSIONS

The description of the specimen examined is as follows: Body elongated almost cylindrical, Anterior nostril tubular, posterior nostril lower along the edge of lip; snout moderately protruding in front of lower jaw; teeth in jaws and on vomer (roof of mouth) granular to molariform, but sharper on jaws and pointed in young and on sides of lower jaw, multi serial; dorsal fin originating over front portion of pectoral fins which are well developed, pelvic fin absent. Total length 50cm, predorsal length 6cm, preanal length 25.2cm, and head length 4cm, body depth 2.5 all as percentage of total length. Eye diameter 0.7cm and snout length 1.2 cm, all as a percentage of head length. Body color was uniform brownish olive above and light yellow below, dorsal fin with a narrow black edge and a blackish spot anteriorly. Based on this characters sample was identified as *Pisodonophis cancrivorus* belongs to the Order- Anguilliformes, Family Opichthidae. It is widely distributed in Indo-pacific: Red sea and East Africa to French Polynesia, North to the Ogasawara Islands, South to Australia.

This long fin Snake eel grows up to maximum size of about 50cm total length male/ unsexed; it is Reef associated, anadramous, freshwater, brackish, marine and it occurs in lagoons and estuaries, entering freshwater. Often in tidal channels where loose groups congregate and usually seen with just the head exposed. Caught most often in tidal areas and estuaries (ref.12693) by using bag nets and similar gear. Marketed fresh harmless to human being and very similar to *Pisodonophis semicinctus* vary in its color that have dark patches (2 on head and 16 over body). The saddled Snake eel is a demersal species found on shallow coast of upto 30cm. Generally, snake eels use to burrow into sandy and muddy bottoms (Bauchot, 1986). It is distributed in the eastern Atlantic from morocco to Angola and the western Mediterranean sea (Algeria, France, Sicily, Ligurian sea, Tunisia) Bilecenoglu et al. (2009) reported a new data on the occurrence of the tropical Atlantic originated saddled Snake eel, *Pisodonophis semicinctus* (Richardson, 1848) and the Indian ocean originated striped piggy, *Pomadasys stridens* (Forsskal, 1775) are being recorded for the first time along Turkish coast. Prokofiev (2006) recorded eight species of morays from the soft grounds in the bay of Nha Trang (central Vietnam); one of these species obviously, new for science *Echidna delicatula*, *Echidna polyzona*, Gymnothorax minor, Gymnothorax prolatus, Gymnothorax reeversii, Gymnothorax punctatofasciatus, Strophidon sathe. McCosker, (2004) identified a new species of finless eel, *Ichthyapus acutinesbris* from the intertidal of Ascension Island. Alam and Islam, (2010) assessed the genetic structure of the fresh water mud eel that could be used as a baseline study for taking any program on conservation and stock improvement of Monopterus cuchia. Mathew, (1990) and Pillai et al.(1996) reported that the need for exploitation on deep sea fishes is gradually gaining importance in the recent years as the production from the present fishing grounds alone would be able to meet the future nutritional demand of the country. The specimen seems to have recently reached south coast, Porto novo, and the local fisherman also stated that the species was absent from landing until recently.

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