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FIRST RECORD OF STARGAZER SNAKE EEL *BRACHYSOMOPHIS CIRROCHEILOS* (FAMILY: OPHICHTHIDAE), FROM PAKISTANI WATER

Syeda Kashifa Zohra and Hamid Badar Osmany

Marine Fisheries Department, Karachi, Pakistan.
(hamid61612002@yahoo.com)

ABSTRACT

The paper describes the first ever confirmation of existence of *Brachysomophis cirrocheilos* Bleeker known as stargazer snake eel from Pakistani water. As ample was collected from the Swatch area of Sindh coast of Pakistan on 6thJanuary 2016. This document provides a short description with photographs of the sample and distribution.

Key-words: Stargazer snake eel, *Brachysomophis cirrocheilos,*Ophichthidae, Sindh, Pakistan.

INTRODUCTION

Brachysomophis cirrocheilos (Bleeker) described with the name of *Ophisurus cirrocheilos* by Bleeker in 1857 from Ambon, Indonesia. Family Ophichthidae (snake eel and worm eel) comprises 5 genera and 7 species in Pakistan (Talwar, 1991; Remadevi and Ravichandran, 1997; Castle and McCosker, 1999; Moazzam and Osmany , 2015**)**. The family Ophichthidae (snake eels) has a typical feature of finless firm pointed tail tip.

MATERIALS AND METHODS

The specimen was collected from Karachi fish harbor on Jan 08th, 2016. The information regarding location of the specimen, length, weight and different body parts measurements to the nearest mm were noted. Then photographs of all body parts which help to identified as a new record of this species. After confirmation and measurements, specimen was fixed in 10% formalin in the museum of the MFD, Govtof Pakistan.

DESCRIPTION

The sample showed a grouping of feature, like firms sharp tail tip among dorsal fin along with anal fin which ends ahead of tail tip (Fig. 1) and pectoral fins are well developed (Fig. 2), whereas both upper and lower lip were fringed through a sequence of tiny barbells (cirri) (Fig. 3).Anterior nostrils are like a short tube (Fig. 7) , head pores, inconspicuous, supra-orbital 1+3, infra-orbital 4+3, mandular-preopercular 5+12 (Fig 4 and 6) canine and vomer like teeth on oral cavity (Fig. 5), its dorsal fin is well at the back its pectoral fin beginning and tail regarding half of entire length (Fig. 8). The above morphometric and meristic character of this sample reconcile by Smith and McCosker (1999) and McCosker and Randall (2001), Biswas,*et al.*(2010) and therefore, it is assigned to the genus *Brachsomophis*Kaup, 1856. The species was identified as *Brachsomophis cirrochelos* (Bleeker, 1857) the stargazer snake eel (Figure 8) which is based on the detail description below with measurements given in parameter.

The eel possesses strong and elongated body, having no scales. Trunk region triangular in cross section, after anus body shape tapering hard and pointed to the tail.Total length measured 1220.0 mm.The tail (620.0mm) occupies 51.6 % and head (131.0 mm) 10.7 % of entire length. Body depth at anus (48.0 mm) about 25times shorter than the entire length.Snout (16.0 mm) small and plump, about 8.18times shorter then head length.Nostril like a short tube. Eyes (9.0 mm) small.dorsal surface of head smooth from centre to snout tip. Numerous Branchiostegal rays present, which be considerably overlap.

Mouth opening considerably very wide, reached near hind of eyes. Lips of the fish were fringed in a sequence of tiny cirri. The length of upper jaw was 60.0 mm, about 2.1 times shorter than the head extent. Inferior jaw was longer relatively which was extended further than snout tilt. Teeth on oral cavity were pointed form, which were canine having a spaced of anonlyline on inferior jaw bone while upper jaw had two rows of teeth with considerably gaps. Maxillary teeth not appeared while oral cavity was closed. Tongue was joined.

Fig. 1.Hard pointed tail tip.

Fig. 2.Pectoral fin.

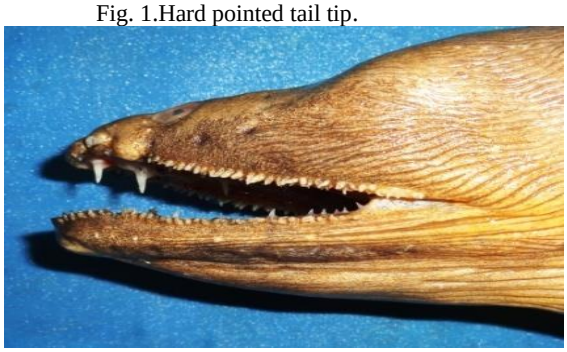

Fig. 3.Series of small barbells.

Fig. 4. Head pores.

Fig. 5.Teeth on jaws.

Fig. 6. Head pores.

Fig. 7.Tube like nostril.

Fig. 8.Ventral, dorsal and side view.

Head of nape have slightly free sensory neuromasts. A row of pores across head present at the back of mouth. Lateral line pores were not visibly clear. Gill opening relatively wide and narrow.

Well developed vertical fins. Origin of dorsal fin well develops at the back of pectoral fin. Pre dorsal distance (250.0 mm), about one fifth of entire body length. Dorsal as well as anal fins mutually ended a short distance earlier than tail tilt. Well developed Pectoral fin (35.0 mm) and its length was 26.71 % of head extent. Pectoral fin bottom was restricted to upper half of gill aperture which is approximately half of fin distance end to end. Pelvic and caudal fins were missing.

Color of dorsal part of body was light brownish golden by unequal dark brown blotches. Ventral surface was yellowish. Fins were blackish grey.

DISTRIBUTION

Brachsomophis cirrocheilos found inside the Indo West Pacific area covering a wide range as of the Red Sea and East Africa toward Japan, Taiwan, New Guinea, Indonesia, Malaysia as well as Australia. It was reported to

have been found near the waters of Sri Lanka during 1929 (Deraniyagala, 1929; MCosker and Randall 2001). Recently it was reported from the India in 2008 (Biswas, *et al.,* 2010). However there was no record available occurrence along the Pakistani waters. This paper provides the first record of its presence from Pakistani waters.

The eel occurrence reported to have been in petty grimy and mud-covered coastal sea water by coral reefs about at the depth of up to 38 m, it regularly gets into the sand with help of tail primarily stocking it into sand first until just its eyes and peak of snout or top able to be seen. Similar to other snake eel nocturnal and owed on the way to this practice still the general species hardly seen. It lives on undersized fish as well as crustaceans and undamaging. Information gathered since universal established that it is normally trapped by trawlers or clip and line. The species has not been proved suitable for eating or healthful for human use.

DISCUSSION

The genus *Brachsomophis* comprises seven species (McCosker and Randall, 2001). With the exception of *B. porphyreus* all further species of this genera change as of this species due to a particular feature of quite small tail, which is moreover the same to or is less than its top and body collective (generally less than 50% of its entire length)

Brachsomophis porphyreus known by a particular feature of having the occurrence of tiny barbells which approximately unable to see in big specimen. Teeth of outer maxillary visible when jaw closed, no dark smudges on its dorsal surface of the body were seen while body is equally brownish purple in colour. Allocation point of view, single species found only in the Atlantic Ocean, four of these originate in the western Pacific Ocean as well as remaining two found commonly in the Indo West Pacific.

B. crocodilinus which found in the Indian Ocean area, which dissimilar in having a relatively small tail and proboscis, small pectoral fin also minor (10 % of head) and a diverse color style. Commonly, dark blotch or spots not found, dorsal surface brownish by a lighter shadow under and resting on fins. In large specimen minute dark spots present unevenly on the edge which were among the on the side line and dorsal fin.

CONCLUSION

According to the concerned fishermen, this sample was captured on January 6th, 2016 from Khori great bank of Sind which located at the opening of the river Indus in shallow water about 140 nautical miles from the Karachi at depth of about 20 m in the bottom set gillnet. This was the first time reported from Pakistani waters.

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