A new deepwater fish, *Chauliodus sloani* Bloch & Schneider, 1801 (Osteichthyes: Stomiidae), from the Turkish waters of Levant Sea (Eastern Mediterranean)

Levant Denizi'nin Türkiye sularından (Doğu Akdeniz) yeni bir derin deniz balığı: *Chauliodus sloani* Bloch & Schneider, 1801 (Osteichthyes: Stomiidae)

Cem Dalyan and Lütfiye Eryılmaz*

Istanbul University, Science Faculty, Department of Biology, Vezneciler, 34134 Istanbul, Turkey

Abstract

The first record of the Viperfish *Chauliodus sloani*, with morphometric and meristic characteristics, in Turkish waters of Levant Sea are reported. One specimen was caught in a trawl on 26 April 2004 at a depth of ca. 400 m in (36°02′- 36°05′ N, 35°37′ - 35°29′ E). The specimen is the first sample which is caught of this species from Levant Sea.

Keywords: Stomiidae, Chauliodus sloani, Deepwater fish, Levant Sea

Introduction

Stomiidae is a family of marine fishes, commonly called barbeled dragonfishes. This family consists of five subfamilies. Stomiinae, one of these subfamilies, is represented by two tribe, Stomiini and Chauliodontini. Viperfishes (Tribe: Chauliodontini) has contained one genera with eight species (Nelson, 2006). *Chauliodus sloani* Bloch &

_

^{*} Corresponding author: E-mail: lutmazer@istanbul.edu.tr

Schneider, 1801 can be distinguished from $C.\ danae$ Regan & Trewavas, 1929 by its predorsal length 17-28% L_S and dorsal fin origin over fourth to eighth photophore in lateral series. $C.\ sloani$ are found in warm and temperate parts of all oceans (Atlantic, Indian and Pasific Oceans) and in the western Mediterranean (Gibbs, 1989). $C.\ sloani$ has been reported so far from Greek territorial waters of the Aegean Sea (Papaconstantinou, 1988). Golani (1996) simply listed the $C.\ sloani$ among the fishes distributed in the Eastern Levant Sea comprising Turkish waters, but with no reference being cited and no explanation of the date, location, morphometric measurements etc. Galil (2004) mentioned from the video records southwest of Cyprus, at 2900 m, $C.\ sloani$ – none of which had been photographed previously in the Levantine bathyal. Akşıray (1987) reported from Turkish waters without indicating the seas in which they were found; Fricke et al., (2007) represented from Turkish waters of the Aegean Sea.

Materials and Methods

On 26 April 2004, one specimen of *C. sloani* was captured with commercial vessel by trawl between 05:00 to 08:00 in the Turkish waters of Levant Sea (36°02′- 36°05′ N, 35°37′ - 35°29′ E), at a depth of ca. 400 m (Fig.1-2). The specimen was identified as *C. sloani* with the diagnostic characteristics described by Gibbs (1989). The sample was deposited at Istanbul University, Science Faculty, Hydrobiology Museum, Istanbul (IUSHM 31700-667).

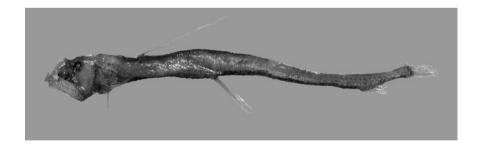


Figure 1. Chauliodus sloani, 160 mm L_S , Turkish waters of Levant Sea (IUSHM 31700-667).

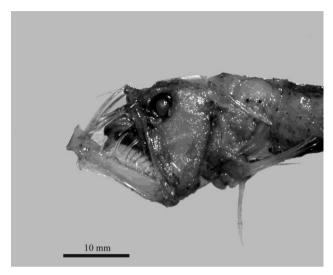


Figure 2. Head of examined specimen of *Chauliodus sloani*.

Results and Discussion

This study was carried out for the determination of C. sloani living on Turkish waters of Levant Sea. The specimen is described as follows: Body long, flattened sidewise, maximum depth of body at back of head. Head short and about as deep as long. Furthermore, the snout is so short that the very wide mouth gapes for back of the eye. Numerous very large teeth on premaxilla and dentale, fang-like and extending over front of head to above eye when mouth is closed. The lower jaw is longer than the upper, the upper is armed with four fangs on each side. Dorsal fin far forward, close to head, the first ray prolonged; dorsal adipose fin present near tail; anal fin close to tail. Two ventrolateral rows of photophores on body, between bases of pectoral and pelvic fins 21, between pelvic fin base and origin of anal fin 26, posterior to anal fin origin 11. Dorsal finrays 5 and its origin over between seventh and eighth photophores in lateral series, anal finrays 11, pectoral finrays 13, ventral finrays 7. Eye diameter about five times in head length $(L_{\rm H})$. Maximum depth of body 8%, $L_{\rm H}$ 14%, predorsal length 19%, all of $L_{\rm S}$. Eye diameter 20%, snouth length 19%, all of $L_{\rm H}$. Its morphometric characteristics are listed below, indicating lengths in millimetres (Table 1). All counts and measurements

agree with descriptions given by Gibbs, 1989. Therefore, this is the first record to indicate that *C. sloani* is found in Turkish waters of Levant Sea.

Table 1. Morphometric characteristics of the *Chauliodus sloani* specimen caught from Turkish waters of Levant Sea

	Measurements (mm)	
Total length $(L_{\rm T})$	173	
Standart length (L_S)		160
Body depth		12.84
Predorsal length	30.94	
Head length $(L_{\rm H})$	22.93	
Snout length		4.46
Eye diameter	4.64	

Özet

Levant Denizi'nin Türkiye Sularından, *Chauliodus sloani*'nin ilk kaydı morfometrik ve meristik özellikleriyle birlikte bildirilmiştir. 26 Nisan 2004 tarihinde yapılan trol çalışması sonucunda yaklaşık 400 m derinlikte (36°02′-36°05′ N, 35°37′ - 35°29′ E) bir adet *C. sloani* yakalanmıştır. Bu birey, türün Levant Denizi'nden yakalanan ilk örneğidir.

Acknowledgements

We thank Cabir DALYAN and Semir DEMIR for providing the specimen.

References

Fricke, R., Bilecenoglu, M., Sari, H. M., (2007). Annotated checklist of fish and lamprey species (Gnathostomata and Petromyzontomorphi) of Turkey, including a Red List of threatened and declining species. *Stuttgarter Beiträge zur Naturkunde*. Ser. A (706), 3 Abb., 8 Tab., 169 pp.

Galil, B. S., (2004). The limit of the sea: the bathyal fauna of the Levantine Sea. *Scientia Marina*, 68 (Suppl. 3): 63-72.

Gibbs, R. H., Jr., (1989). Chauliodontidae. In: Whitehead, P.J.P., Bauchot, M.-L., Hureau, J.-C. Nielsen, J., Tortonese, E., eds. Fishes of the north-eastern Atlantic and the Mediterranean, Vol. 1. Paris, Unesco, pp. 336-337.

Golani, D., (1996). The Marine Ichthyofauna of the Eastern Levant-History, Inventory, and Characterization. *Israel Journal of Zoology*, Vol. 42: 15-55.

Nelson, J. S., (2006). Fishes of the World. John Wiley and Sons, Inc. New York. 4th edition. 601 pp.

Papaconstantinou, C., (1988). Fauna Graeciae, IV Pisces. Check-list of Marine Fishes of Greece. National Centre for Marine Research, Hellenic Zoological Society, Athens, Greece, 257 pp.

Received: 30.11.2007 Accepted: 12.12.2007