

## SHORT COMMUNICATION

### **First record of *Heteropriacanthus cruentatus* (Lacepède, 1801) (Chordata: Priacanthidae) in the Mediterranean Sea from the Lebanese waters**

**Ali Badreddine\*, Ghazi Bitar**

Department of Marine Biology, Faculty of Sciences, Lebanese University, Hadath, Beirut, LEBANON

\*Corresponding author: ali.badreddine@hotmail.com

---

#### **Abstract**

*Heteropriacanthus cruentatus* (Lacepède, 1801) was reported for the first time in the Mediterranean Sea from the Lebanese deep sea. A photograph of the glasseye fish was posted on the social media network Facebook™. The specimen was caught from the deep sea of Lebanon on 29 April 2019 by a recreational longline fishermen.

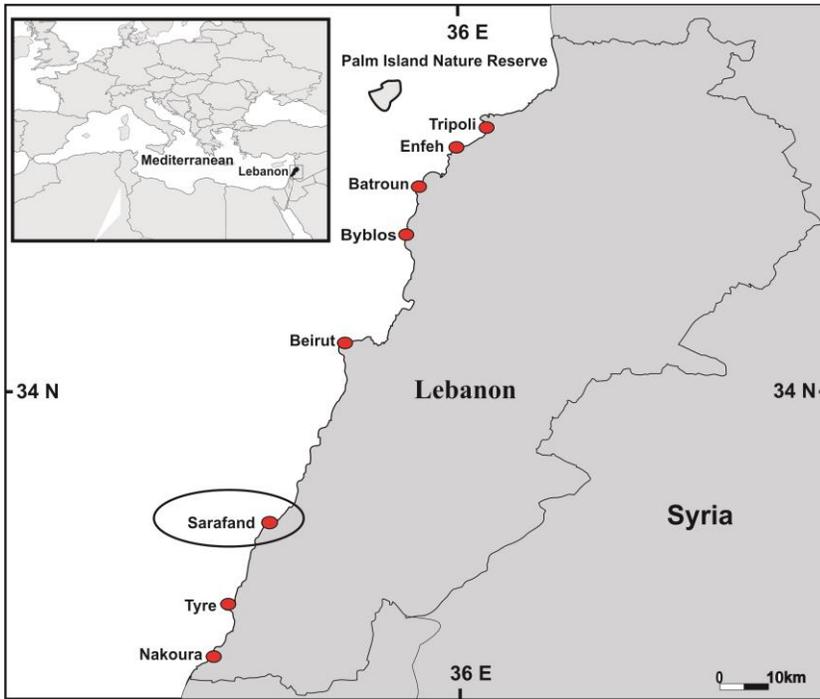
**Keywords:** *Heteropriacanthus cruentatus*, glasseye fish, Lebanese deep sea

**Received:** 03.06.2019, **Accepted:** 29.06.2019

---

Glasseye fish, *Heteropriacanthus cruentatus* is a circumtropical and a monotypic genera of the family Priacanthidae (Oken, 1817). It has not previously been reported neither from the Mediterranean Sea nor from the Red Sea. This species is distributed in the southern and western Atlantic and in the Indo-Pacific (Froese and Pauly 2019; Gaither *et al.* 2015 and references therein).

A specimen of *H. cruentatus* was caught on 29 April 2019 by a recreational longline fisherman at a depth of 95 m in Sarafand (33°27'10.98"N, 35°16'54.20"E) for the first time in the Mediterranean Sea (Figure 1). A photo of this specimen was posted on a social media network, Facebook™. The fisherman who caught the specimen and submitted its photo to was contacted for more detailed information. Subsequently, we received the information of another record of the species (Figure 2) at the same zone and depth.



**Figure 1.** Location of Sarafand (the name is circled) where *Heteropriacanthus cruentatus* was observed and caught

The morphological description of *H. cruentatus* in the Lebanese waters is in agreement with the specimens reported by Fernandez-Silva and Ho (2017) and Gaither *et al.* (2015). The specimen collected weighed around 0.5 kg and is characterized by laterally compressed body, entirely red and the mouth reaches straight to the eye marked by an red iris. The fins with white spines, is also red without any distinct spots and the end of the tail fin is slightly darker (Fernandez-Silva and Ho 2017). In comparison with *Heteropriacanthus carolinus* (Cuvier 1829), the specimen was morphologically similar to *H. cruentatus*: the first seven dorsal-fin spines in *H. cruentatus* are shorter than in *H. carolinus* (Fernandez-Silva and Ho 2017).

The occurrence of a new Chordata species in the Lebanese waters, more in general, in the eastern basin of the Mediterranean, may be related to the introduction of Indo-Pacific origin species into the Mediterranean Sea via the Suez Canal. According to the fishermen and the volunteer citizen scientists along the Lebanese coast, this species has become frequent in the Lebanese deep sea.



**Figure 2.** *Heteropriacanthus cruentatus* caught in Sarafand (photo credit: Fadia Nehmeh Joumaa)

It is worth noting that *H. cruentatus* is one of the vulnerable species according to the IUCN Red list (Dooley *et al.* 2015) and it is commercially important in the aquarium trade (Calado 2006). Furthermore, when considering the increase in marine aquaria trade worldwide, fish species released in the wild have been documented to increase in the Mediterranean during the last decade (Zenetos *et al.* 2016). Alternatively, the presence of *H. cruentatus* in the Lebanese coasts may be related to a ship-mediated transport.

The present report highlights the importance of social media in the early detection of new marine species (Azzurro *et al.* 2013; Al Mabruk and Rizgalla 2019). In this context, it is important to mention that social media and citizen science are an effective tools for monitoring the fauna in the Lebanese waters.

### **Acknowledgements**

The authors wish to thank Ms Fadia Nehmeh Joumaa for her cooperation and her help to obtain the photo of the species.

### **References**

Al Mabruk, S.A.A., Rizgalla, J. (2019) First record of lionfish (Scorpaenidae: Pterois) from Libyan waters. *J Black Sea/Medit Environ* 25(1): 108-114.

Azzurro, E., Broglio, E., Maynou, F., Bariche, M. (2013) Citizen science detects the undetected: the case of *Abudefduf saxatilis* from the Mediterranean Sea. *Management of Biological Invasions* 4(2): 167-170.

Calado, R. (2006) Marine ornamental species from European waters: a valuable overlooked resource or a future threat for the conservation of marine ecosystems?

*Scientia Marina* 70(3): 389-398.

Dooley, J., Collette, B., Aiken, K.A., Marechal, J., Pina Amargos, F., SinghRenton, S. (2015). *Heteropriacanthus cruentatus* (errata version published in 2017). The IUCN Red List of Threatened Species 2015: e.T16749737A115363551.

Fernandez-Silva, I., Ho, H. C. (2017) Revision of the circumtropical glasseye fish *Heteropriacanthus cruentatus* (Perciformes: Priacanthidae), with resurrection of two species. *Zootaxa* 4273(3): 341-361.

Froese, R., Pauly D. (2019) Fish Base World Wide Web electronic publication. [www.fishbase.org](http://www.fishbase.org). (Accessed 02/2019)

Gaither, M.R., Bernal, M.A., Fernandez-Silva, I., Mwale, M., Jones, S.A., Rocha, C., Rocha, L.A. (2015) Two deep evolutionary lineages in the circumtropical glasseye *Heteropriacanthus cruentatus* (Teleostei, Priacanthidae) with admixture in the south-western Indian Ocean. *Journal of Fish Biology* 87: 715-727.

Zenetos, A., Apostolopoulos, G., Crocetta, F. (2016) Aquaria kept marine fish species possibly released in the Mediterranean Sea: first confirmation of intentional release in the wild. *Acta Ichthyologica & Piscatoria* 46(3): 255-262.