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THE SECOND RECORD OF CRESTED OARFISH *LOPHOTUS LACEPEDE* (LOPHOTIDAE) FROM THE ALGERIAN COAST (SOUTHERN MEDITERRANEAN SEA)

SUMMARY

The authors report on the capture of a specimen of crested oarfish, *Lophotus lacepede* Giorna, 1809 from the Algerian coast. It was a large sized specimen which measured 150 cm total length (TL) and 142 cm standard length (SL) and weighed 3.5 kg. The specimen was described including some morphometric measurements and meristic counts. This rare finding represents the second record of the species for the Algerian waters. It constitutes also the westernmost extension range of the species for the Maghreb shore but also for the Mediterranean Sea.

INTRODUCTION

Crested oarfish, *Lophotus lacepede* Giorna, 1809 is widely distributed in most oceans from the surface to a depth of 300 m (Knudsen, 2015). The species is known along the western coast of Atlantic (Robins & Ray, 1986) and and in the Pacific from southern Australia (May & Maxwell, 1986). *L. lacepede* is found from the eastern coast of Africa (Smith & Hemstra, 1986; Knudsen, 2015) and also in the waters surrounding Réunion Island (Letourneur *et al.,* 2004).

Lophotus lacepede is known in the eastern Atlantic, off Portugal, and southward from Madeira and Canaries Islands (Palmer, 1986; Knudsen, 2015). In the Mediterranean, Palmer (1986) noted that the species only occurred in the

entire western Basin and not in the eastern Basin.. However, more recent observations and captures of *L. lacepede* indicated that such distribution should be differently assessed in this sea.

The species was recorded off some northern regions of the western Basin, from Gibraltar (Rey, 1983) to Italian Seas (Tortonese, 1970; Minos *et al*,. 2015) and the coast of Sicily which constitutes the southern extension range of the species in this basin, as well (Ragonese *et al*., 1997). Conversely, southward, *L. lacepede* is only known from the Algerian coast (Bachouche *et al*., 2016) but unknown to date from Morocco (Lloris & Rucabado, 1998) and Tunisia (Ounifi-Ben Amor *et al*., 2016; Rafrafi-Nouira, 2016).

Lophotus lacepede is known in the Adriatic Sea, historical and recent captures were listed by Dulcic & Ahnelt (2007), additionally, records of large specimens were reported in the same sea (Sprem *et al*., 2014). The species extended its distribution to the eastern Mediterranean Basin, on captures from the Aegean Sea, in Greek waters (Minos *et al*., 2015), in Turkish waters (Yapici, 2019), and reached the coast of Syria constituting to date, its easternmost extension range (Ali *et al*., 2021).

Routine monitoring in eastern Algerian waters since two decades and with the assistance of experienced fishermen, we were informed that a specimen of *L. lacepede* was captured in the area. The present paper provides a short description of the specimen, including main morphometric measurements and meristic counts, together with some comments about the real status of the species in the area and the southern Mediterranean Sea.

MATERIAL AND METHODS

The present specimen of *L. lacepede* was captured on 07 December 2020, by hand line of 15 metres long supporting 15 hooks baited with cuttlefish *Sepia officinalis* (Linnaeus, 1758). The handline was spread at depth 10-15

Fig. 1 - Map of the Algerian coast indicating the capture sites of *Lophotus lacepede*. 1. Off Tipasa (see Bachouche et al., 2016). 2. Off Cape Falcon, 35 km east to Oran (this study).

m and its water depth reached to 200 m., in the water column. The capture occurred at about 4-5 km from the Algerian shore, off Cape Falcon, 35 km east to Oran, 35° 48′ 02 N and 0° 46¢ 13 W (Fig. 1). All measurements were recorded to the nearest centimetre, and included in Tab. 1, together with meristic counts. The specimen was rapidly cut into slices and sold to local consumers, and unfortunately it cannot be preserved.

Tab. 1 - Morphometric measurements (in mm, and as %TL), total body weight in kg, and meristic counts recorded in the specimen of *Lophotus lacepede* caught off Cape Falcon.

Morphometric measurements	**cm**	**%TL**
Total length	150	100.0
Standard length	142	94.6
Head length	23	15.3
Eye diameter	6	4.0
Pectoral fin length	92	6.1
Dorsal fin length	135	90.0
Crest length on the head (first ray of dorsal fin)	45	30.2
Anal fin length	22	3.0
Meristic counts		
Dorsal fin rays	238	
Anal fin rays	18	
Pectoral fin rays	15	
Caudal fin soft rays	19	
Total body weight (kg)	3.5	

RESULTS AND DISCUSSION

The studied specimen measured 150 cm total length (TL) and 142 cm standard length (SL) and its total body weight was 3500 g. Following Palmer (1986) and Minos *et al*. (2015), the species size ranged between 21 and 1900 mm, but usually smaller. The present *L. lacepede* was a large sized specimen, similar to the first specimen caught in the Algerian marine waters which measured 132 cm TL and weighed 4.9 kg (Bachouche *et al*., 2016).

The specimen was identified as *L. lacepede via* the combination of the following morphological characters: body elongate, compressed and tapering to caudal fin; head with an occipital crest extending forward to level

of mouth;; dorsal fin long based and low, with anterior ray elongated; anal fin short very close to the caudal fin; pectoral fin with rays inserted horizontally; pelvic fin absent; scales thin, oblong, cycloid; lateral line present with smooth plates; colour silvery blue dorsally without brilliant spots; fins pinkish (Fig. 2).

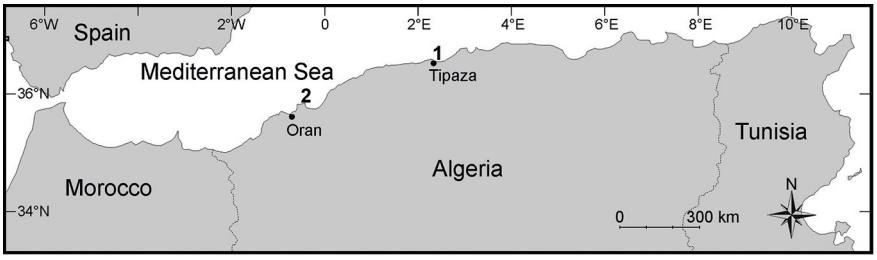

Fig. 2 - Specimen of *Lophotus lacepede* caught off Cape Falcon, scale bar = 20 cm.

Morphology, morphometric measurements, meristic counts and colour are in total agreement with previous descriptions of the species (Tortonese, 1970; Palmer, 1986; Sprem *et al*., 2014; Minos *et al*., 2015; Bachouche *et al*., 2016). This second record of *L. lacepede* for the Algerian ichthyofauna is not sufficient to state about the occurrence of a viable population in the area.

However, the rarity of *L lacepede* is probably due to the fact it inhabits deep waters generally poorly exploited by commercial fishing gears. On the other hand, this fish has not a real commercial value, it is a by-catch species, sometimes discarded at sea by fishermen after landing on board. Additionally, it could escape to a real identification or may be misidentified with other species similar in form, such as for instance, ribbon fish *Trachipterus trachypterus* (Gmelin, 1789). Francour *et al*. (1994) and furtherly Minos *et al*. (2015) added that the global warming of the Mediterranean Sea enhances the homogenisation of fish fauna, and the captures of species unknown or considered as rare in a region. This well-documented capture constitutes the westernmost extension range of the *L. lacepede* not only for the Algerian coast (see Bachouche *et al*., 2016) but also for the entire Mediterranean Sea.

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