

## POMACANTHIDAE

angelfishes, emperorfishes

### Pomacanthus imperator

(Bloch, 1787)



Photo : Daniel Golani

Relevant synonyms: None  
Misidentification: None  
Meristic formula: D, XIII-  
XIV+19-21; A, III+19-21;  
P, 19-20; V, I+5; LL, 77-79

#### SHORT DESCRIPTION

Oval shaped, compressed deep body. Small head, slightly concave in its upper profile. Small protractile slender mouth with rows of tightly-packed depressible teeth, forming brush-like surface. Interior teeth in both jaws are longer, decreasing in length toward the posterior part of the jaws. Small gill rakers, 6-7 on the upper limb of the first arch and 13-14 on the lower limb. Small eyes with wide space between them. Edge of preoperculum finely serrated. Long stout spine at lower angle of preoperculum. A single, long, based dorsal fin. Clear incisions between the first 4 - 5 spines, decreasing toward the soft rays portion which has no incision. Caudal fin round. Deep incisions between anal fin spines. First ray of ventral fin often elongated. Body and head covered with small ctenoid scales.

**color:** in adults, body and posterior portion of dorsal fin with diagonal alternating stripes of narrow yellow and wider bluish-purple. Black mask with bluish margin on the eye. Large black triangular area stretches from the pectoral fin base upward. Posterior dorsal fin and caudal are yellow. Anal fin grey to reddish-brown with blue stripes. Pectoral fin dark grey and pelvic fin dark-bluish grey with orange rays.

- in juveniles : (up to 14 cm TL), body dark blue with white and blue vertical stripes on the head curving progressively and forming circles on the posterior half of the body.

**common size:** 10-30 cm (max. 40 cm).

#### DISTINGUISHING CHARACTERISTICS

The color pattern of this species differs significantly from all other Mediterranean species.

## BIOLOGY / ECOLOGY

Live solitary or in pairs. Feeds mainly on sponges and algae. The male defends its territory aggressively; only after removal from the territory do the young fish change their color pattern and dominate the territory. Eggs and larvae are pelagic.

**habitat:** among coral reefs and rocky habitats at depth of 5-60 m.

## DISTRIBUTION

**Worldwide:** Indo-Pacific.

**Mediterranean:** two specimens were collected from Israel (Golani *et al.*, 2010; Rothman and Stern, 2019), one from Syria (Saad, *et al.*, 2018) and one from Turkey (Gürlek *et al.*, 2019). Two other specimens were recorded in Israel (D. Golani pers. comm.), Syria (Capapé *et al.*, 2018) and Egypt (Mabruk *et al.*, 2021).

## MODE OF INTRODUCTION

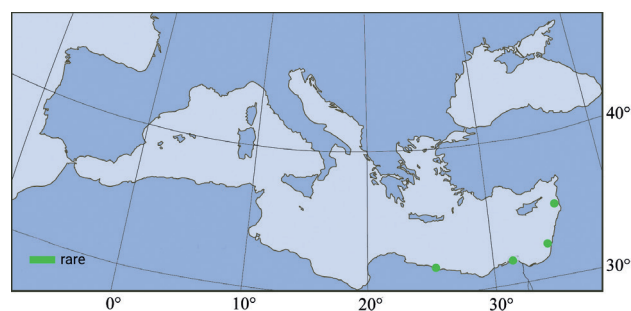
Via the Suez Canal or as aquarium release/escapee.

## ESTABLISHMENT SUCCESS

Very rare.

## IMPORTANCE TO HUMANS

None in the Mediterranean; popular species in the aquarium trade.



1<sup>st</sup> Med. record  
Israel, 2009.

## KEY REFERENCES

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- Gürlek M., Erguden D., Atay B. and Turan C. 2019. First record of *Pomacanthus imperator* (Bloch, 1787) from Turkish Marine waters. *Natural and Engineering Sciences*, 4(3): 231-236.
- Rothman S.B.S. and Stern N. 2019. Confirmation evidence of established population of Angelfish (Pomacanthidae) in the Levant Basin. *Mediterranean Marine Sciences* 20(2): 419-420.
- Saad A., Alkusaury H. and Sabour W. 2018. First record of the Emperor angelfish, *Pomacanthus imperator* (Athenoptergii: Pomacanthidae) in the Syrian coast (Eastern Mediterranean). *Marine Biodiversity Records*, 11: article n. 16.