

ACANTHURIDAE

surgeonfishes

Acanthurus coeruleus

Bloch and Schneider, 1801

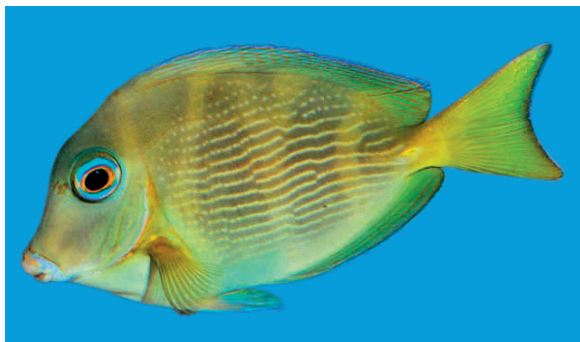


Photo : Smithsonian Institution

Relevant synonyms: None
Misidentification: None
Meristic formula: D1, IX; D2, 26-28; A, III +24-26;
P, 16-17; V, I + 5; GR 26+28

SHORT DESCRIPTION

Deep body (1.5 times in SL) and very compressed. Head profile very steep. Small mouth. Jaws not reaching back to the vertical of anterior of eye. Series of close-set teeth, each with 3-5 denticulate edges. Sharp horizontal lancet-like spine on each side of the caudal peduncle. Small ctenoid scales covering the entire body including the head and the basis of dorsal and anal fins. Continuous dorsal fin. Anal fin originating under the last dorsal spine. Caudal fin emarginated. First ray of pectoral and pelvic fins longest, the length of the rest of the rays decreasing gradually.

color: young specimens yellow with blue edge on dorsal, anal and caudal fins and blue ring around the eye. Adults turn yellowish-brown and in the terminal stage they are blue.

common size: 8-25 cm (max 39 cm).

DISTINGUISHING CHARACTERISTICS

- *Acanthurus monroviae*: an elliptical bright yellow area on the caudal peduncle.
- Young *Zebrasoma flavescens*: yellow body without blue edge on dorsal, anal and caudal fins and blue ring around the eye.

Other **Mediterranean** spp.: lack of sharp horizontal lancet-like spine on each side of the caudal peduncle.

BIOLOGY / ECOLOGY

Feeds on benthic algae. Live solitary or in small groups. Eggs and larvae are planktonic.

habitat: Near coral reefs, usually in calm areas and lagoons of shallow water to 50 m.

DISTRIBUTION

Worldwide: western Atlantic Ocean from New York to Florida, Mexico and Brazil, and Ascension Island in the Mid-Atlantic.

Mediterranean: Israel (Golani *et al.*, 2015), Cyprus (Langeneck *et al.*, 2012) and Malta (Evans *et al.*, 2017)

MODE OF INTRODUCTION

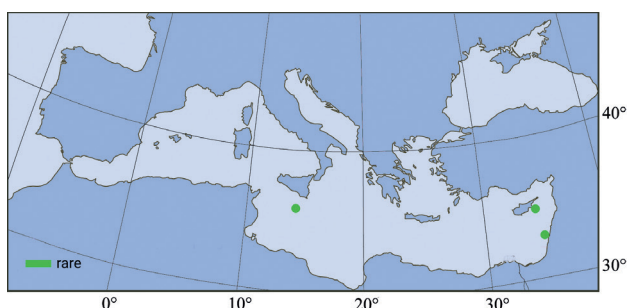
Aquarium release and / or via Gibraltar.

ESTABLISHMENT SUCCESS

Rare.

IMPORTANCE TO HUMANS

One of the most popular marine aquarium species.



1st Med. record
Cyprus 2011,
(observation)
(Langeneck
2012).

KEY REFERENCES

- Evans J., Tonna R. and Schembri P.J. 2017. A bevy of surgeons: first record of *Acanthurus chirurgus* (Bloch, 1787) from the central Mediterranean, with notes on other Acanthuridae recorded in the region. *BioInvasions Records*, 6(2): 105-109.
- Golani D., Askarov G. and Appelbaum-Golani B. 2015. First confirmed record of the Blue tang, *Acanthurus coeruleus* in the Mediterranean. *Acta Ichthyologica et Piscatoria*, 45(3): 311- 313.
- Langeneck J., Marcelli M. and Simak H.C. 2012. Unexpected alien species in Cyprus water: *Acanthurus coeruleus* (Actinopterygii: Acanthuridae). *Marine Biodiversity Records*, 5: e116.
- Randall J.E. 2002. Acanthuridae. Surgeonfishes. pp. 1801-1805. In: Carpenter, K.E. (ed.) The living resources of Western Central Atlantic. Vol. 3. Part 2. (Opistognathidae to Molidae), sea turtles and marine mammals. FAO Species Identification Guide for Fishery Purposes and The American Society of Ichthyologists and Herpetologists. Special publication 5. FAO, Rome.