

POMACENTRIDAE

damsel-fishes

Abudefduf saxatilis

(Linnaeus, 1758)



Photo : NC Fishes

Relevant synonyms: None
 Misidentification: None
 Meristic formula: D, XIII+12-13; A, II+10-12; P, 18-19;
 V, I+5; LL, 21-22

SHORT DESCRIPTION

Body deep and compressed. Small head with slightly oblique mouth, its jaws reaching back to the vertical of anterior edge of eye. One row of closed-set incisiform teeth in both jaws. Each tooth having small notch on its upper end. Preopercular edge smooth. Continuous dorsal fin, its spines shorter than its rays. Caudal fin forked. Pectoral and pelvic fins relatively long, reaching vertical of anus. First pelvic ray elongated.

color: silvery-white belly and yellow upper body, greenish yellow above, shading to white below, with five prominent vertical black bars, the first from dorsal fin origin to pectoral fin base, the fifth from the posterior margin of dorsal and anal fins; two black spots often present on the caudal peduncle, close to the basis of caudal fin, one black spot at the upper base of the pectoral fins. The adult male becomes dark bluish.

common size: 10- 15 cm (max. 23 cm).

DISTINGUISHING CHARACTERISTICS

- *Abudefduf vaigiensis*: the last dark vertical body bar does not reach the posterior margin of dorsal and anal fin.
- *Chromis chromis*: body uniformly brown, no vertical bars.
- **Sparidae**: two pairs of nostrils; continuous lateral line.
- **Apogonidae**: two dorsal fins.

Recent studies (Dragičević *et al.*, 2021) have shown that major morphological characters previously used to distinguish *A. saxatilis* from *A. vaigiensis* are not consistent within the species and thus not sufficiently reliable for their discrimination.

BIOLOGY / ECOLOGY

Littoral species. Lives in small to medium groups. Feeds on small planktonic invertebrates, small fishes, as well as colonial anemones and algae. Eggs attached to hard substrate and guarded by the adults.

habitat: shallow waters to depth of 20 m near rocks and coral reefs, also sandy substrates and tide pools.

DISTRIBUTION

Worldwide: both sides of the Atlantic, Canada to Uruguay in the western Atlantic, mid-Atlantic islands and from Cape Verde to Angola in the eastern Atlantic.

Mediterranean: a record from the Catalan Sea, Spain (Azzurro *et al.*, 2013) and other records from Israel (Tsadok *et al.*, 2015), the latter supported by molecular analyses. There is also an observation from Malta with uncertain identification (Deidun and Castriota, 2014) and a questionable early record from Naples (Tardent, 1959).

MODE OF INTRODUCTION

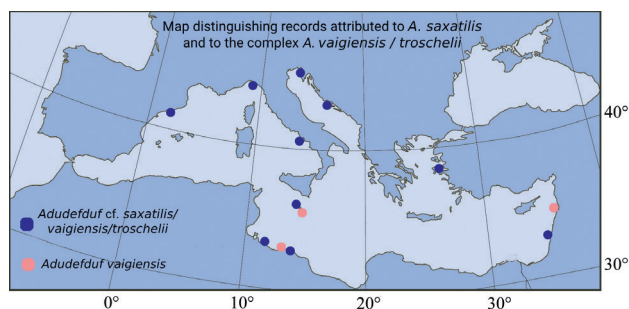
Most likely ship transport and/or aquarium release.

ESTABLISHMENT SUCCESS

Not clear due to possible confusion with *Abudefduf vaigiensis* and *A. troschelii*.

IMPORTANCE TO HUMANS

Of some relevance for aquarium trade.



1st Med. record
Catalan Sea,
Spain, 2009.

KEY REFERENCES

- Allen G.R. 1991. Damselfishes of the world. Mergus Publishers, Melle, Germany. 271 p.
- Azzurro E., Broglio E., Maynou F. and Bariche M. 2013. Citizen science detects the undetected: The case of *Abudefduf saxatilis* from the Mediterranean Sea. *Management of Biological Invasions*, 4(2): 43-50.
- Dragičević B., Fricke R., Ben Soussi J., Ugarković P., Dulčić J. and Azzurro E. 2021. On the occurrence of *Abudefduf* spp. (Pisces: Pomacentridae) in the Mediterranean Sea: a critical review with new records. *BioInvasions Records*, 10.
- Tardent P. 1959. Capture d'un *Abudefduf saxatilis vaigiensis* (Pisces, Pomacentridae) dans le Golfe de Naples. *Revue Suisse de Zoologie*, 66: 347-351.
- Tsadok R., Rubin-Blum M., Shemesh E. and Tchernov D. 2015. On the occurrence and identification of *Abudefduf saxatilis* (Linnaeus, 1758) in the easternmost Mediterranean Sea. *Aquatic Invasions*, 10(1): 101-105.