(Forsskål, 1775)



Relevant synonyms: Adioryx ruber, Adioryx rubrum, Holocentrus rubrum, Holocentrus ruber, Sargocentron ruber Misidentification: None Meristic formula: D, XI + 12-14; A, IV + 8-10; P, 13-15; V, I + 5-6;L.L., 34-40; GR, 6-8 + 9-12.

Photo : Ernesto Azzurro



Sargocentron rubrum

Drawing : Tuvia Kurz

SHORT DESCRIPTION

Body oblong and moderately compressed. Head profile slightly convex; its bones with grooves, ridges and spinules. A strong spine at the lower corner of preoperculum subequal to eye diameter. 1-2 spines on the posterior edge of operculum at eye level. Large eye, 2.5-2.7 times in head length. Terminal mouth with villiform teeth. Coarsely ctenoid scales.

color: body with alternating longitudinal red and whitish yellow stripes of about the same width. common size: 12-22 cm (max. 27 cm).

DISTINGUISHING CHARACTERISTICS

Holocentrus adscensionis: the opercular spine shorter than the preopercular spine. The last dorsal spine elongated. The color pattern distinguishes this species from other Mediterranean species.

106 I Atlas of Exotic Fishes in the Mediterranean Sea

BIOLOGY / ECOLOGY

A nocturnal species. During daytime inhabits caves and crevices at depths of 10-40 m. Feeds mainly on decapods and to a lesser extent on polychaetes, isopods, molluscs and fish. Spawning season from July to August. Pelagic eggs and larvae. Early stage (until 30 mm) characterized by a long rostral preopercular and supraoccipital spines. Settles in rocky habitat when it reaches 30-35 mm. **habitat:** rocky.

DISTRIBUTION

Worldwide: Red Sea, eastern Africa to Durban, wide Indian- Pacific to Samoa and Japan.

Mediterranean: recorded first in Palestine (Haas and Steinitz, 1947) and then in Greece, Rhodes (Laskaridis, 1948), Cyprus (Demetropoulos and Neocleous, 1969) and Libya (Štirn, 1970). Recently it has been reported from the south western Aegean Sea and Peloponnese (Zenetos *et al.*, 2013), Tunisia (Amor *et al.*, 2016) and Malta (Deidun *et al.*, 2016). Molecular evidence (Bariche *et al.*, 2015) highlighted that more than one species of *Sargocentron* could occur in the Mediterranean Sea.

MODE OF INTRODUCTION

Via the Suez Canal.

ESTABLISHMENT SUCCESS

Very common.

speculated reasons for success: paucity of nocturnal competitors might facilitate its population growth.

IMPORTANCE TO HUMANS

Caught in small quantities mainly by trammel net, occasionally by hook and line.



KEY REFERENCES

- Amor K.O.B., Rifi M., Ghanem R., Draeif I., Zaouali J. and Souissi J.B. 2016. Update of alien fauna and new records from Tunisian marine waters. *Mediterranean Marine Science*, 17(1): 124-143.
- Bariche M., Torres M., Smith C., Sayar N., Azzurro E., Baker R. and Bernardi G. 2015. Red Sea fishes in the Mediterranean Sea: a preliminary investigation of a biological invasion using DNA barcoding. *Journal of Biogeography*, 42(12): pp.2363-2373.
- Deidun A., Attard S., Camilleri M., Gaffiero J.V., Hampson D., Said A., Azzurro E. and Goren M. 2016. The first record of the *Sargocentron* genus from the Maltese Islands (Central Mediterranean)-who will unravel the current conundrum? *BioInvasions Records*, 5(2): 123-126.
- Golani D., Ben-Tuvia A. and Galil B. 1983. Feeding habits of the Suez Canal migrant squirrelfish, *Sargocentron rubrum*, in the Mediterranean Sea. *Israel Journal of Zoology*, 32: 194-204.
- Haas G. and Steinitz H. 1947. Erythrean fishes on the Mediterranean coast of Palestine. Nature, 160: 28.

Atlas of Exotic Fishes in the Mediterranean Sea | 107