## **APOGONIDAE**

cardinalfishes

# Javdia smithi

Kotthaus, 1970



Relevant synonyms: Apogon smithi Misidentification: None Meristic formula: D1, VII; D2, I + 9; A, II + 8; P, 15-16; V, I + 5; LL, 24 + 3; 14-18 Photo : Daniel Golani

## SHORT DESCRIPTION

Body oblong and slightly compressed. Two dorsal fins, the first with deeply notched membrane, the 3rd-4th spines the longest. Second dorsal fin much higher. Anal fin origin slightly behind origin of second dorsal fin. Caudal fin rounded to truncated. Terminal and oblique mouth, jaws reaching back at least to vertical of the posterior eye margin. Large eye. Preoperculum edge serrated with 3-7 flat serrae at the angle of its lower posterior margin. Large finely ctenoid scales.

**color:** body tan to light brown shading to off-white belly. Five to six wide dark fainted vertical bars. (These bars are almost absent in specimens larger then 10 cm TL). Upper part of first dorsal black. Series of dark dots forming horizontal line on the first third of the second dorsal fin. Edges of second dorsal and caudal fins black. Pectoral and pelvic fins transparent to white becoming light grey in large specimens.

common size: 4-10 cm (max. 15 cm).

## DISTINGUISHING CHARACTERISTICS

- Jaydia queketti: longitudinal rows of dark spots on the body; two developed gill rakers on the arch's upper limb.
- Apogonichthyoides pharaonis (known until recently in the Mediterranean as A. nigripinnis): three wide and distinct horizontal bars, large dark spot surrounded by a yellow ring at the midside of the first bar.
- Cheilodipterus novemstriatus: five black longitudinal stripes.
- Apogon imberbis: red body; six spines in the first dorsal fin.

**Epigonidae:** Base of soft ray portion of dorsal, anal and caudal fins covered with scales.

Serranidae, Teraponidae, Haemulidae, Sparidae and Labridae: A single dorsal fin.



## BIOLOGY / ECOLOGY

Nocturnal species. Inhabits sandy to muddy substrate at depths of 30-50m. Feeds on invertebrates. Spawning season in the warmer months. Mouth brooder, the males incubate the eggs.

**habitat:** during the day hides in rocky habitat, while at night preys in open water close to the substrate to depths of 50 m.

#### DISTRIBUTION

Worldwide: wide Indo-Pacific from the Red Sea to Indonesia and Taiwan.

**Mediterranean:** Israel and south-eastern Turkey (Golani *et al.*, 2008), Egypt (Rizkalla and Akel, 2015) and Syria (Alshawy *et al.*, 2017).

## MODE OF INTRODUCTION

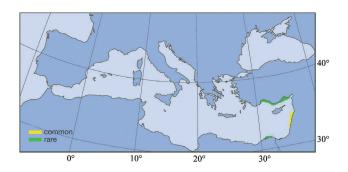
Via the Suez Canal.

## **ESTABLISHMENT SUCCESS**

Common, caught in large numbers by trawl at depths of 30-50m.

## **IMPORTANCE TO HUMANS**

None.



1<sup>st</sup> Med. record Israel, 2008.

# KEY REFERENCES

- Alshawy F. et al. 2017. First Record of the Lessepsian Migrant Smith's Cardinalfish Jaydia smithi Kotthaus, 1970 (Pisces: Apogonidae) from Syrian Marine Waters. Basrah Journal of Agric. Science, 30(2).
- Golani D., Appelbaum-Golani B. and Gon O. 2008. *Apogon smithi* (Kotthaus, 1970) (Teleostei: Apogonidae), a Red Sea cardinalfish colonizing the Mediterranean Sea. *Journal of Fish Biology*, 72: 1534-1538.
- Gon O. 1996. Revision of the cardinalfish subgenus *Jaydia* (Perciformes, Apogonidae, *Apogon*). *Transactions of the Royal Society of South Africa*, 51: 147-194.
- Gon O. and Randall J.E. 2003. A review of the cardinalfishes (Perciformes: Apogonidae) of the Red Sea. Smithiana Bulletin, 1: 1-48.
- Goren M., Galil B., Yokes M.B. and Diamant A. 2009. Indo-Pacific cardinal fish in the Mediterranean Sea new records of *Apogon smithi* from Turkey and *A. queketti* from Israel. *Marine Biodiversity Records*, 2.