

CALLIONYMIDAE

dragonets

Callionymus filamentosus

Valenciennes, 1837



Photo : David Darom

Relevant synonyms: *Callionymus* cf. *brunneus*, *Callionymus haifae*

Misidentification: None

Meristic formula: D1, IV; D2, 9; A, 9; P, 15-19; V, I+5

SHORT DESCRIPTION

Body elongated with depressed head, subcylindrical flank. In males, first dorsal spine filamentous and separate, other spines short. Second dorsal fin rays much longer, the last one elongated. Anal fin originates beneath 2-3 dorsal ray, last ray elongated. Caudal fin rounded (mostly in females) to lanceolate with two filamentous rays in males. Pectoral fin rounded. Pelvic fin thoracic, inserted before pectoral fin base, the outer rays much longer than inner and connected by membrane to pectoral fin base. Head triangular from dorsal view with pointed snout. Mouth small and protrusible directed downward. Dorso-lateral eyes with very small interorbital distance. Large preopercular spine with 4-7 upward antrorse hook-like serrae. Gill opening small and located above the operculum. No scales.

color: brownish-fawn body with lateral series of dark brown to black blotches and dots. First dorsal of males black, only a black dot in females.

common size: 5-10 cm (max. 18 cm).

DISTINGUISHING CHARACTERISTICS

- *Diplogrammus randalli*: operculum with free flap of skin.
- *Synchiropus sechellensis*: snout shorter than eye. Red-orange body.

Other **Callionymids**: absence of 4-7 upward serrae on the opercular spine. Operculum without free flap skin.

Tripterygiidae, **Clinidae** and **Blennidae**: pelvic fin with 2-3 rays; head not depressed.

Gobiidae: pelvic fins unite to form a sucking disk.

BIOLOGY / ECOLOGY

Feeds on small benthic invertebrates. Clear sexual dimorphism (see description). Spawning season lasts from March to September. Eggs and larvae are planktonic.

habitat: benthic. Sandy and muddy substrate to 100 m.

DISTRIBUTION

Worldwide: Indo-Pacific. Red Sea, east Africa including Madagascar and Mauritius to New Guinea and China.

Mediterranean: recorded first in Israel (Ben-Tuvia, 1953a; Tortonese, 1953) ; successively recorded from Lebanon (George *et al.*, 1964), Turkey (Gücü *et al.*, 1994). Recorded in Rhodes (Corsini *et al.*, 2005) and Cyprus (Yokes *et al.*, 2018).

MODE OF INTRODUCTION

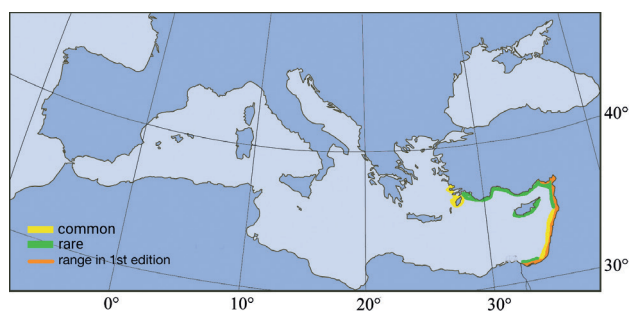
Via the Suez Canal.

ESTABLISHMENT SUCCESS

Very common on trawl grounds.

IMPORTANCE TO HUMANS

No commercial value due to its small size. The huge numbers of fish in the trawl nets with their serrated preopercular spine constitute a great nuisance to local fishermen.



1st Med. record
Israel, 1953.

KEY REFERENCES

- Ben-Tuvia A. 1953a. Mediterranean fishes of Israel. *Bulletin of the Sea Fisheries Research Station, Haifa*, 8: 1-40.
- Corsini M., Margies P., Kondilatos G. and Economidis P. 2005. Lessepsian migration of fishes to the Aegean Sea: First record of *Tylerius spinosissimus* (Tetraodontidae) from the Mediterranean, and six more fish records from Rhodes. *Cybium*, 29(4): 347-354.
- De Meo I., Miglietta C., Mutlu E., Deval M.C., Balaban C. and Olguner M.T. 2017. Ecological distribution of demersal fish species in space and time on the shelf of Antalya Gulf, Turkey. *Marine Biodiversity*, 48: 2105-2118.
- Fricke R. 1983. Revision of the Indo-Pacific genera and species of the dragonet family Callionymidae (Teleostei). Braunschweig, X+774 pp.
- Yokes M. B *et al.* 2018. New Mediterranean Biodiversity Records (November 2018). *Mediterranean Marine Science*, 19(3): 673-689.