

MULLIDAE

goatfishes

Upeneus moluccensis

(Bleeker, 1855)



Photo : Michel Bariche

Relevant synonyms: *Upeneoides moluccensis*
 Misidentification: *Mulloidides auriflamma*, *Mulloidides flavolineatus*,
Mulloidichthys auriflamma
 Meristic formula: D1, VIII; D2, 8-9; A, I + 6-8; P, 15-16; V, I + 5;
 LL, 35-38; GR, 23-31.

SHORT DESCRIPTION

Body elongated subcylindrical in the first half of body, becoming somewhat compressed towards the tail. Two well-separated dorsal fins. First dorsal spine minute, second spine the largest. Second dorsal fin opposite the anal fin. Caudal fin deeply forked. A pair of barbules on the chin not reaching rear of preoperculum margin. Villiform teeth on both jaws, vomer and palatine. 5 - 7 scales between dorsal fins.

color: back pinkish-red; belly white. A distinct single longitudinal yellow stripe running from eye to caudal fin base. Upper caudal fin lob striped.

common size: 7 - 20 cm (max. 27 cm).

DISTINGUISHING CHARACTERISTICS

- *Upeneus pori*: no yellow longitudinal stripe; both caudal fin lobes striped; seven dorsal spines.
- *Mullus* spp.: no teeth in upper jaw.
- *Pseudupeneus prayensis*: spine on opercular margin; no stripes on caudal fin.
- *Parupeneus forsskali*: black longitudinal stripe and a black dot on the caudal peduncle.

BIOLOGY / ECOLOGY

Feeds on benthic and sub-benthic organisms detected by chemoreceptor-rich barbles on the chin. Crustaceans dominate its diet, with fish becoming progressively important as size increases. Spawning season from end of July to September. Ripe eggs diameter 0.3-0.4 mm. Eggs and larvae are planktonic. Benthic settlement at size of 4-5 cm. Maturity at age of 12 months, when size is ca. 10 cm.

habitat: benthic. Sandy or muddy substrate to 100 m (single record at 200 m).

DISTRIBUTION

Worldwide: Indo-Pacific.

Mediterranean: recorded first in Palestine as *Mulloides auriflamma* by Haas and Steinitz (1947); successively recorded in Rhodes Island (Serbetis, 1947), Egypt (Ben-Tuvia, 1966), Cyprus (Demetropoulos and Neocleous, 1969), Libya (Stirns, 1970).

MODE OF INTRODUCTION

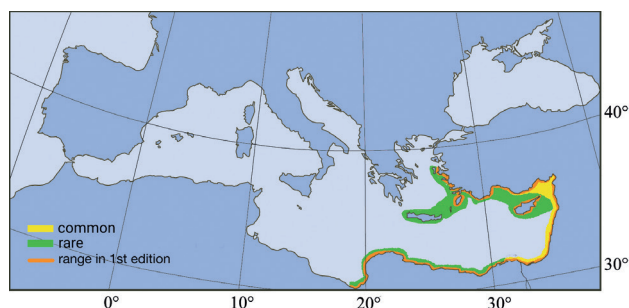
Via the Suez Canal.

ESTABLISHMENT SUCCESS

Very abundant in the Eastern Levant.

IMPORTANCE TO HUMANS

Commercially important in trawl fishery.



KEY REFERENCES

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- Haas G. and Steinitz H. 1947. Erythrean fishes on the Mediterranean coast of Palestine. *Nature*, 160: 28.
- Kaya M., Benli H.A., Katagan T. and Ozaydin O. 1999. Age, growth, sex-ratio, spawning season and food of golden bend goatfish, *Upeneus moluccensis*, (1855, Bleeker) from the Mediterranean and south Aegean Sea coast of Turkey. *Fisheries Research*, 41: 317-328.
- Peristeraki P., Lazarakis G., Skarvelis K., Georgiadis M., Tserpes G. 2006. Additional records on the occurrence of alien fish species in the eastern Mediterranean Sea. *Mediterranean Marine Science*, 7(2): 61-66.