

SERRANIDAE

groupers

Epinephelus malabaricus

Bloch and Schneider, 1804



Photo : David Darom

Relevant synonyms: *Epinephelus salmoides*
 Misidentification: *Epinephelus tauvina*
 Meristic formula: D, XI + 14-16; A, III + 18-20; P, 18-20;
 V, I +5; LL, 54-64; GR 25-29.

SHORT DESCRIPTION

Body moderately elongated, becoming robust in large specimens. Dorsal fin continuous, the membrane between dorsal spines incised. Dorsal, caudal, anal and pectoral fin posterior edges rounded. Large head with large mouth. Lower jaw slightly projected, extending back to the vertical of posterior edge of eye or slightly beyond it. 2-3 rows of teeth in young individuals increasing to 4-5 in adults. Preoperculum subangular, its margin serrated. Opercular upper margin triangular with three flat spines.

color: body covered with small black and white spots and blotches on greyish to olive-green background with five darker broad bars.

common size: 30-60 cm (max. 120 cm).

DISTINGUISHING CHARACTERISTICS

- Other serranids: lack of well separated black and white spots and blotches. The closely related, *E. coioides*, another lessepsian migrant, has orange to reddish-brown spots and usually 20 pectoral rays (usually 19 in *E. coioides*).
- Other families: lack of three flat spines on the upper posterior corner of the operculum.

BIOLOGY / ECOLOGY

Feeds on fishes, crustaceans and cephalopods. Presumably protogynous hermaphrodite. Eggs and larvae are planktonic.

habitat: very diverse: rocky, sandy and muddy substrate. Penetrates estuaries.

DISTRIBUTION

Worldwide: wide Indo-Pacific; Red Sea to Durban on the east African coast to southern Japan, Philippines, northern Australia to Fiji.

Mediterranean: recorded first, misidentified as *Epinephelus tauvina*, in Israel (Ben-Tuvia and Lourie, 1969). More recently recorded in Malta (Schembri and Tonna, 2011).

MODE OF INTRODUCTION

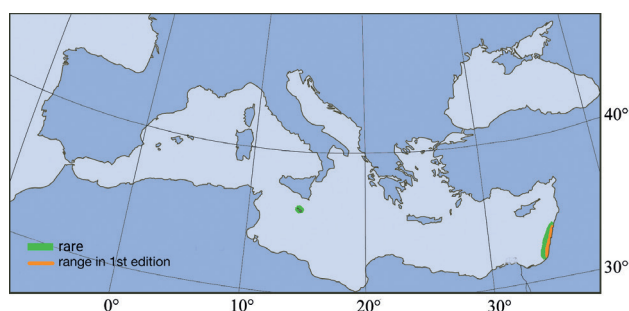
Via the Suez Canal. Shipping and mariculture are also possible vectors.

ESTABLISHMENT SUCCESS

Very rare in the Mediterranean, only three specimens recorded.

IMPORTANCE TO HUMANS

Widely used in mariculture mainly in the Far East.



1st Med. record
Israel, 1969.

KEY REFERENCES

- Ben-Tuvia A. and Lourie A. 1969. A Red Sea grouper *Epinephelus tauvina* caught on the Mediterranean coast of Israel. *Israel Journal of Zoology*, 18: 245-247.
- Heemstra P.C. and Golani D. 1993. Clarification of the Indo-Pacific groupers (Pisces: Serranidae) in the Mediterranean Sea. *Israel Journal of Zoology*, 39: 381-390.
- Heemstra P.C. and Randall J.E. 1993. FAO species catalogue. Vol.16. Groupers of the world (Family Serranidae, Subfamily Epinephelinae). An annotated and illustrated catalogue of the groupers, rockcod, hind, coral grouper and lyretail species known to date. *FAO Fisheries Synopsis. Number 125. Food and Agriculture Organization of the United Nations, Rome*, 382 pp. + 31 pl.
- Schembri P.J. and Tonna R. 2011. Occurrence of the Malabar grouper *Epinephelus malabaricus* (Bloch and Schneider, 1801) (Actinopterygii, Perciformes, Serranidae), in the Maltese Islands. *Aquatic Invasions*, 6 (Suppl. 1): S29-S32.