

dorsal and anal fins angular; pectoral fins with 16 or 17 rays; caudal fin truncate or slightly emarginate. Scale rows on back rising obliquely above lateral line. Colour: upper back golden-brown; sides silvery-white; a broad yellow to brownish stripe from eye to caudal fin base; a series of yellow horizontal lines (one per scale row) on lower half of body, and similar lines running obliquely above lateral line; fins pale yellow to whitish.

Geographical Distribution : Widespread in the Indo-West Pacific from the Solomon Islands to East Africa and from Australia to southern Japan.

Habitat and Biology : Inhabits offshore coral reefs and trawling grounds to depths of at least 90 m. Frequently seen in large schools of more than 100 individuals. Feeds on fishes and crustaceans. Spawning has been reported during March and November in the Gulf of Aden and off East Africa respectively, and from January to June in the Gulf of Suez. Estimated maximum age: at least 11 years.

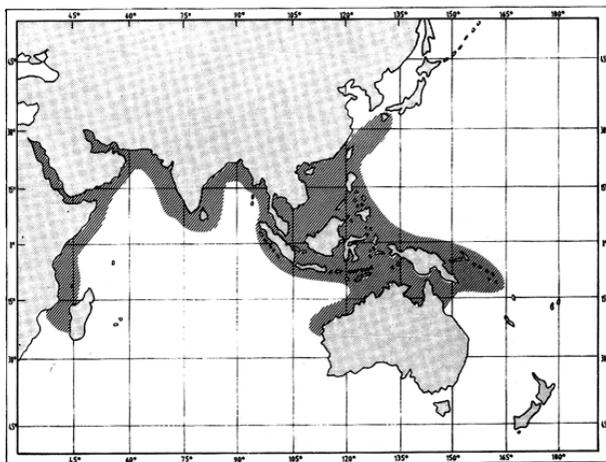
Size : Maximum total length about 30 cm; common to 20 cm. Matures at about 12 cm.

Interest to Fisheries : One of the more common snappers found in the markets. Forms about 10 to 20% of the trawl catch in the Gulf of Suez. A total catch from this area of 2 256 metric tons was reported to FAO between 1979 and 1982. Caught mainly with handlines and with bottom trawls in some areas. Usually offered fresh.

Local Names : JAPAN: Kinsen-fuedai; KUWAIT: Naisarah; NEW CALEDONIA: Lutjan à lignes jaunes; SRI LANKA: Hunu ranna; TANZANIA: Janja, Sorora, Tembouzi; THAILAND: Pla kapong; THE PHILIPPINES: Burara, Maransing, Maya-maya, Nagan, Saging-saging.

Literature : Kyushin *et al.* (1977, *L. lineolatus*); Fischer & Bianchi (eds) (1984); Gloerfelt-Tarp & Kailola (1984); Masuda *et al.* (1984, as *L. lineolatus*); Shen (1984, as *L. lineolatus*); Allen & Talbot (1985).

Remarks : Usually referred to as *Lutjanus lineolatus* by previous authors.



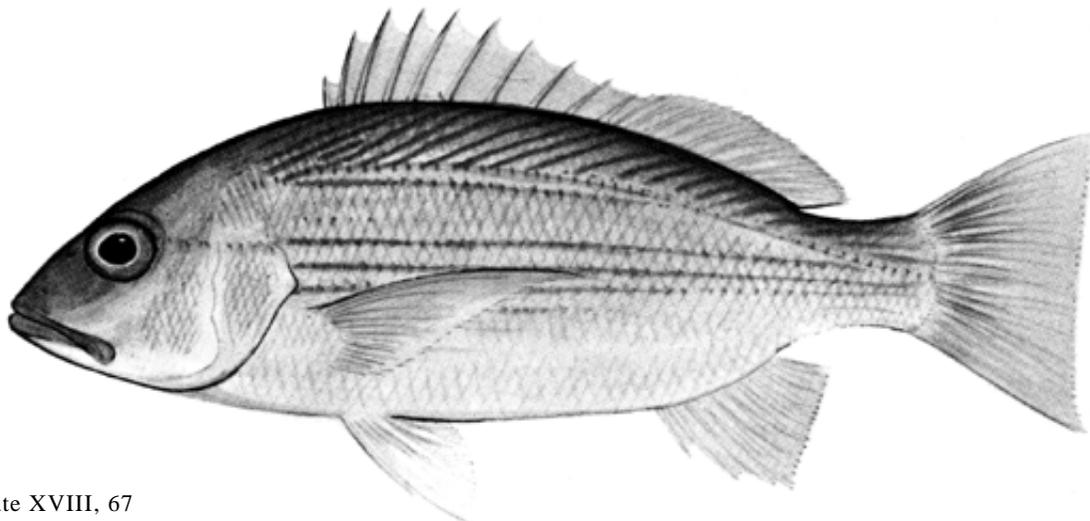
Lutjanus madras (Valenciennes, (1831)

LUT Lut 38

Mesoprius madras Valenciennes (*in* C. & V.), 1831, *Hist.Nat.Poiss.*, 7:446 (Mahé, Seychelles).

Synonyms : None.

FAO Names : En - Indian snapper; Fr - Vivaneau madras; Sp - Pargo madrasedor,



Diagnostic Features : Body fusiform, somewhat slender (greatest depth 2.6 to 3.1 times in standard length). Dorsal profile of head moderately to gently sloped; preorbital width about equal to 2/3 of eye diameter; preopercular notch and knob poorly developed; vomerine tooth patch triangular with a medial posterior extension or diamond-shaped; tongue with a patch of granular teeth; gill rakers on lower limb of first arch (including rudiments) 12 to 15, total rakers on first arch 18 to 21. Dorsal fin with 10 spines and 13 (rarely 11 or 14) soft rays; anal fin with 3 spines and 8 (rarely 9) soft rays; posterior profile of dorsal and anal fins angular; pectoral fins with 16 or 17 rays; caudal fin truncate or slightly emarginate. Scale rows on back rising obliquely above lateral line. Colour: upper back brownish; sides whitish with a series of fine yellow horizontal lines, one per scale row, on lower half of body, and similar brownish lines running obliquely above lateral line; fins yellow except pelvics frequently white or faintly yellow.

Geographical Distribution : Western Pacific and Indian Ocean from New Guinea and the Philippines to the Laccadive Islands; also found in the Seychelles.

Habitat and Biology : Inhabits coral and rocky reefs at depths between about 5 and 90 m.

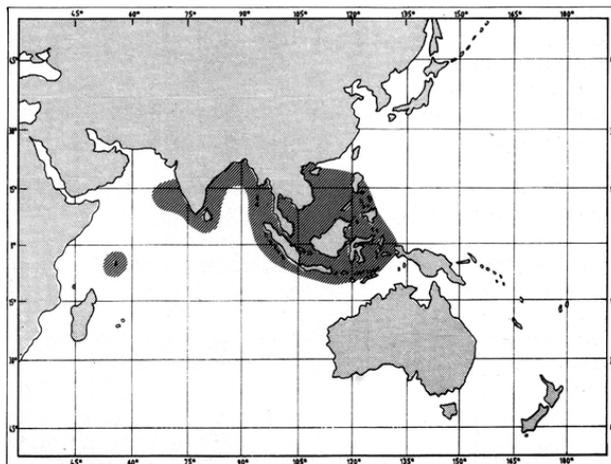
Size : Maximum total length about 30 cm; common to 20 cm.

Interest to Fisheries : Common in some markets, for example at Sri Lanka. Caught mainly with handlines, traps and gill nets. Usually offered fresh.

Local Names :-

Literature : Kyushin *et al.* (1977, *L. lutjanus*); Fischer & Bianchi (eds) (1984); Gloerfelt-Tarp & Kailola (1984); Allen & Talbot (1985).

Remarks : Usually referred to as *Lutjanus lutjanus* by previous authors.



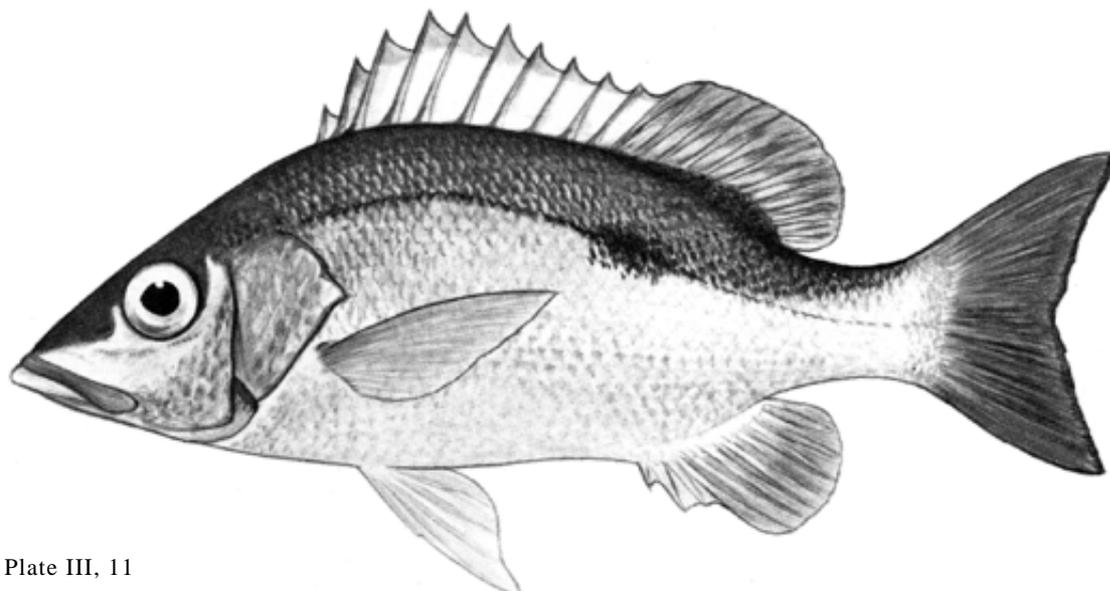
Lutjanus mahogoni (Cuvier, 1828)

LUT Lut 20

Mesoprius mahogoni Cuvier (in C. & V.), 1828, *Hist.Nat.Poiss.*, 2:447 (Martinique).

Synonyms : *Mesoprius ricardi* Cuvier (in C. & V., 1828); *Mesoprius ojanco* Poey (1860).

FAO Names : En - Mahogany snapper; Fr - Vivaneau voyeur; Sp - Pargo ojón.



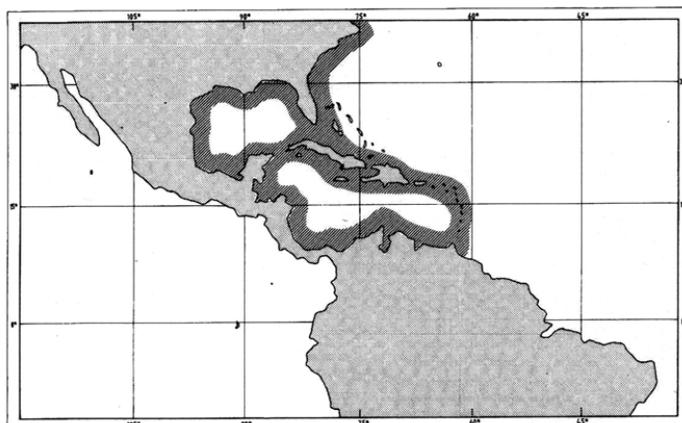
See Plate III, 11

Diagnostic Features : Body moderately deep. Lower jaw projecting slightly beyond upper jaw; lower corner of preopercle greatly projecting and strongly serrated; preorbital bone broad; maxilla extending nearly to mid-eye level; preopercular notch and knob moderate; canine teeth in both jaws moderately developed and about equal in size; vomerine tooth patch V-shaped or crescentic, with an elongate medial posterior extension. Dorsal fin with 10 spines and 12 (rarely 11) soft rays; anal fin rounded, with 3 spines and 8 soft rays; pectoral fins with 14 or 15 rays; caudal fin moderately forked. Scale rows on back rising obliquely above lateral line. Colour: back and upper side grey to dark olive grading to silvery on lower sides and belly; usually with a red tinge over entire body; usually a black spot, about eye size, on upper back at level of lateral line below anterior dorsal soft rays; fins usually reddish to yellow, caudal fin with a dusky margin.

Geographical Distribution : Tropical western Atlantic Ocean as far north as the Carolinas and south to Venezuela. Common at Bermuda and islands of the Caribbean.

Habitat and Biology : Inhabits clear shallow waters over rocky bottoms in the vicinity of coral reefs, less frequently in sandy or seagrass areas. often forms large aggregations during the day. Feeds at night mainly on small fish, shrimps, crabs and cephalopods. Spawning has been reported during August in the northeastern Caribbean Sea.

Size : Maximum total length of 48 cm; common to 38 cm.



Interest to Fisheries: Of interest to both commercial and sport fisheries because of the good quality flesh. Caught mainly with traps, gill nets, and angling gear. Marketed mostly fresh and frozen.

Local Names : CUBA: Ojanco; MARTINIQUE: Sarde; SANTO DOMINGO: Ojanco.

Literature : Jordan & Evermann (1896); Anderson (1967); Randall (1968); Fischer (ed.) (1978).

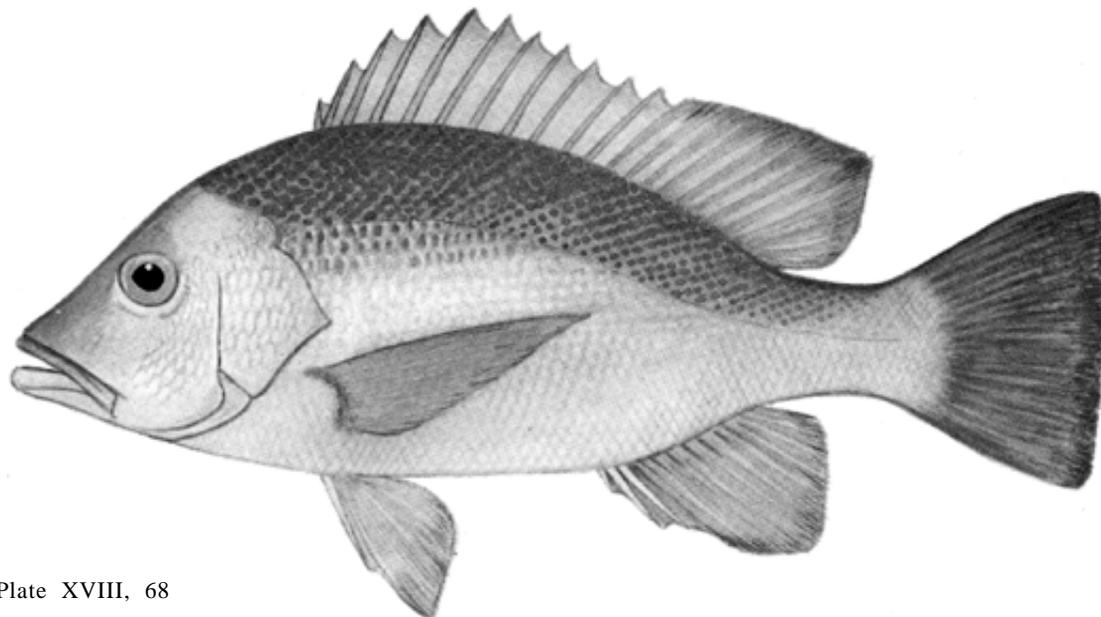
Lutjanus malabaricus Schneider, 1801

LUT Lut 10

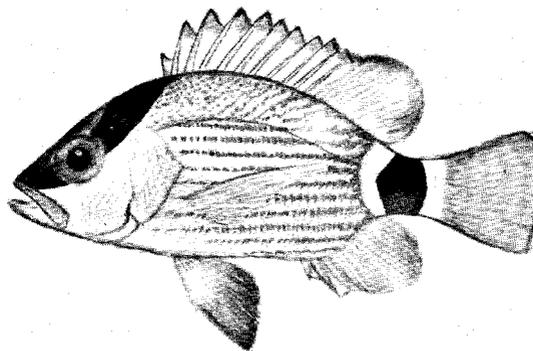
Sparus malabaricus Schneider (in Bloch & Schneider), 1801, Syst. Ichth.:278 (Coromandel).

Synonyms : Mesoprion dodecacanthus Bleeker (1853).

FAO Names : En - Malabar blood snapper; Fr -Vivaneau malabar; Sp - Pargo malabárico.



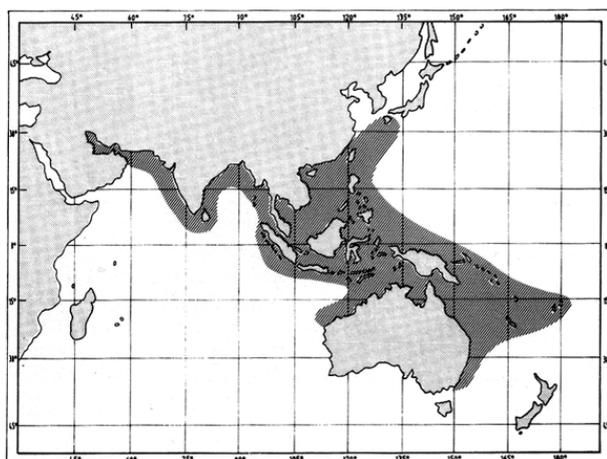
Diagnostic Features : Body relatively deep (greatest depth 2.2 to 2.8 times in standard length). Dorsal profile of head steeply sloped; snout profile straight or slightly concave; preorbital bone much broader than eye diameter; preopercular notch and knob poorly developed; vomerine tooth patch crescentic or triangular, without a medial posterior extension; tongue smooth, without teeth; gill rakers on lower limb of first arch (including rudiments) 12 to 14, total rakers on first arch 18 to 20. Dorsal fin with 11 spines and 12 to 14 soft rays; anal fin with 3 spines and 8 or 9 soft rays; posterior profile of dorsal and anal fins slightly rounded to angular; pectoral fins with 16 or 17 rays; caudal fin truncate. Scale rows on back rising obliquely above lateral line. Colour: back and sides red or red-orange, lighter on lower parts; fins reddish; juveniles with a broad, oblique band of brown or black from upper jaw to beginning of dorsal fin, and a prominent black band across caudal peduncle with a pearly-white anterior border; young also with a series of narrow reddish horizontal lines (sometimes absent) on sides.



See Plate XVIII, 68a juvenile

Geographical Distribution : Widespread in the Indo-West Pacific from the Fiji Islands to the Arabian Sea and Persian Gulf, and from Australia to southern Japan.

Habitat and Biology : Inhabits both coastal and offshore reefs. In Australia it frequently forms mixed shoals with L. erythropterus. Depth range from about 12 to 100 m. Feeds mainly on fishes and benthic crustaceans. Spawning occurs throughout most of the year in lower latitudes with peak activity during spring and summer at New Caledonia. The von Bertalanffy growth coefficient (K) and exponential rate of mortality (M) were estimated as 0.31 and 0.42 respectively for the Vanuatu (New Hebrides) population (Brouard & Grandperrin, 1984). Estimated maximum age: 10 to 12 years.



Size : Maximum total length about 100 cm; common to 50 cm.

Interest to Fisheries : An excellent food fish, found regularly in markets but usually in small quantities. One of the principal market fishes of Kuwait and other "Gulf" ports (over 25 000 metric tons landed at Kuwait between 1980 and 1984). Also constitutes about 5% of trawl catch on the Northwest Shelf of Australia in combination with L. erythropterus and L. sebae (1971 to 1976 data). Caught mainly with handlines, bottom longlines and bottom trawls. Marketed fresh or dried-salted.

Local Names : AUSTRALIA: Scarlet sea-perch; JAPAN: Yoko-fuedai; KUWAIT: Hamrah; MADAGASCAR: Bobtsy, Fiamasiaka, Fiamena; NEW CALEDONIA: Perch écarlate; PALAU: Sebus; SAUDI ARABIA: Hamrah; SRI LANKA: Gola, Konde sevalai (T), Para galla (S); THAILAND: Pla kapong dang; THE PHILIPPINES: Ahaan, Bakba-an, Dapak, Lapu-lapu, Maya-maya, Polahan.

Literature : Fischer & Bianchi (eds) (1984); Gloerfelt-Tarp & Kailola (1984); Masuda et al. (1984, as L. erythropterus); Shen (1984, as L. erythropterus in part); Allen & Talbot (1985).

Remarks : Frequently misidentified as L. sanguineus. There are unsubstantiated reports of this species off East Africa.

Lutjanus maxweberi Popta, 1921

LUT Lut 58

Lutjanus max weberi Popta, 1921, Meded.Rijks.Mus.Natuurh.Hist.Leiden, 6:203 (Celebes).

Synonyms : Lutjanus palmeri Fowler (1931).

FAO Names: En - Pygmy snapper; Fr - Vivaneau nain; Sp - Pargo enano.