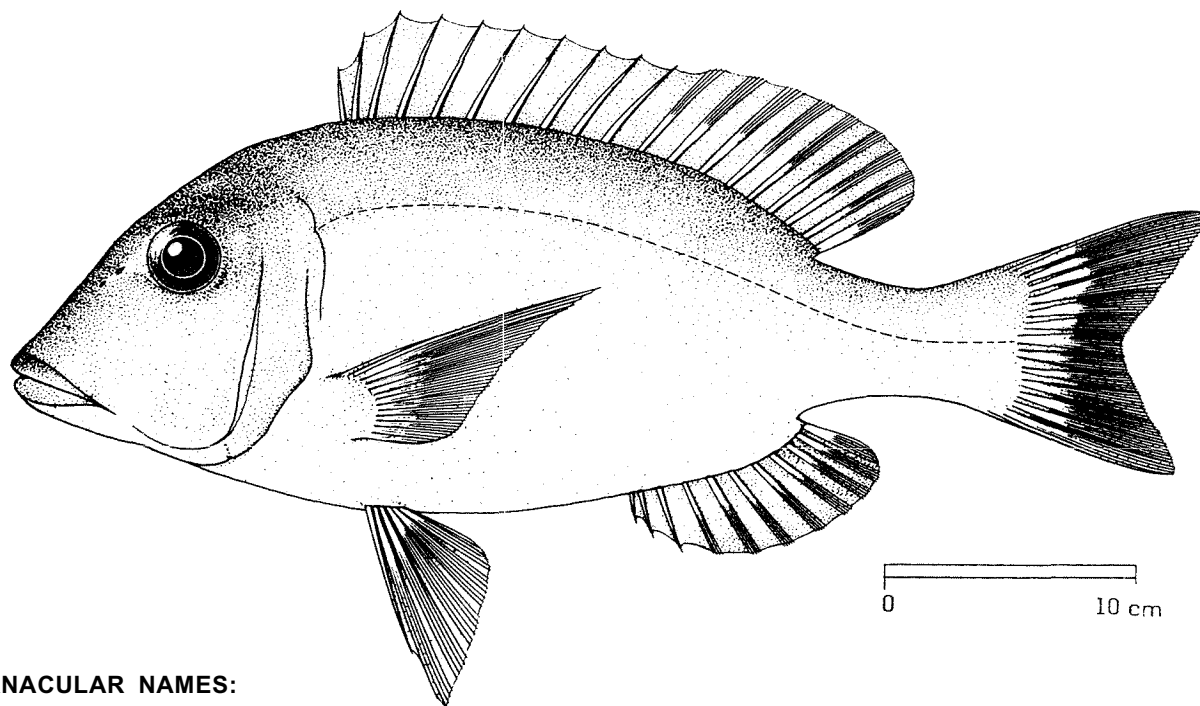


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: LETHRINIDAE

FISHING AREA 51
(W. Indian Ocean)Lethrinus mahsena (Forsskå, 1775)OTHER SCIENTIFIC NAMES STILL IN USE : Lethrinus caeruleus Valenciennes, 1830*
Lethrinus sanguineus Smith, 1955**

VERNACULAR NAMES:

FAO : En - Mahsena emperor
 Fr - Empereur mahsena
 Sp - Emperador mahsena

NATIONAL:

DISTINCTIVE CHARACTERS:

Body depth greater than head length, the greatest depth well forward. Interorbital space flat or slightly convex; snout blunt, forming an angle of 65° to 71° with the maxilla and 89° to 98° with a line drawn from the pectoral fin base through centre of eye; hind tip of maxilla nearly reaching to vertical from posterior nostril, its length almost equal to least depth of caudal peduncle; distance between anterior and posterior nostrils 12.4 to 16.7 times in head; posterolateral teeth in jaws include distinct molars in adults, anterior teeth caniniform. Third to 6th dorsal fin spines longest. Four scale rows between lateral line and median dorsal fin spines in most populations (excluding small scales at base of fin); inner surface of pectoral fin base scaled. Faint dark bars may be present on body.

Colour: body olive-grey to green, becoming white below, belly tinged pink anteriorly. Head brownish green with bronze reflections on side of face; upper lip pinkish red, scarlet at gape. Dorsal and anal fins membranes red, sometimes orange, the edges bright red; upper rim of pectoral, and anterior rim of pelvic fins may be blue or white. A crimson-red blotch may be present on dorsal head profile above eyes (see footnote).

* Might be a valid species, but kept here as a synonym until further evidence on this matter has been produced. This form can be distinguished by a characteristic crimson red blotch on dorsal profile of head, above eyes.

**Regarded as a valid species by some authors

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Lethrinus crocineus: 5 scale rows (excluding very small scales at base of dorsal fin) between lateral line and median dorsal fin spines (4 in L. mahsena).

L. mahsenoides: 6 scale rows between lateral line and median dorsal fin spines.

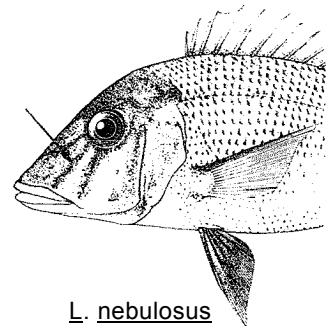
L. nebulosus: usually 2 or 3 blue stripes on head; hind tip of maxilla not reaching beyond anterior nostril; interorbital space well convex; 6 scale rows between lateral line and median dorsal fin spines.

L. ramak: conspicuous yellow-orange stripes present on body; body not a deep, 2.9 to 3 times in standard length (2.3 to 2.8 times in L. mahsena); hind tip of maxilla not extending beyond vertical from anterior nostril.

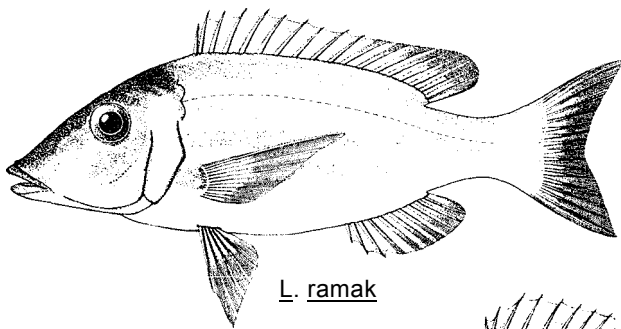
L. harak: a conspicuous dark blotch on sides of body.

L. elongatus, L. microdon and L. variegatus: body more slender, its depth less than head length; no molars among posterolateral teeth; inner surface of pectoral fin base scaleless. Furthermore, distinctive colour patterns in L. elongatus and L. microdon.

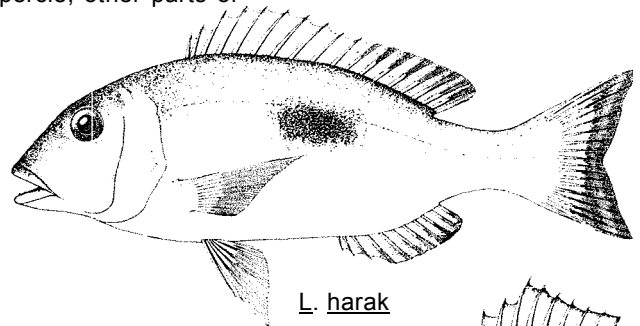
Other Lethrinus species: conspicuous red colour on opercle, other parts of head or pectoral fin base.



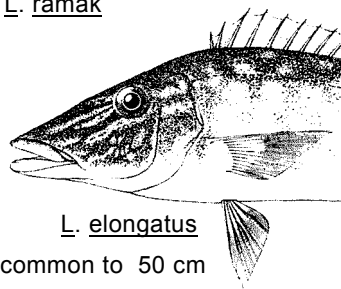
L. nebulosus



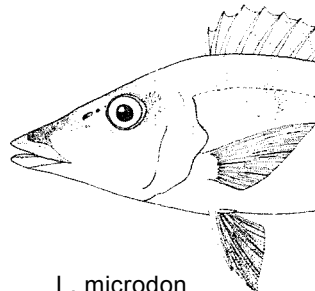
L. ramak



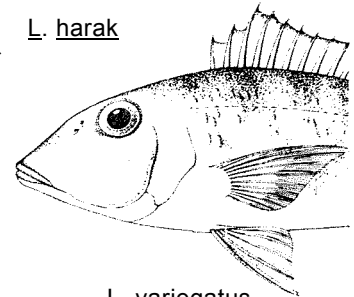
L. harak



L. elongatus



L. microdon



L. variegatus

SIZE:

Maximum: 65 cm; common to 50 cm

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR

Within the area, reported from the east African coast from about 28°S northward into the Red Sea; Madagascar, Aldabra, Mauritius, Seychelles, the "Gulf" and Chagos Archipelago. Elsewhere off northern Australia and in the Western Central Pacific northward to Japan and eastward to the Tuamotu Archipelago.

Inhabits coral reef and inshore waters to 50 m depth.

Feeds predominantly on crustaceans, molluscs and echinoderms.

PRESENT FISHING GROUNDS:

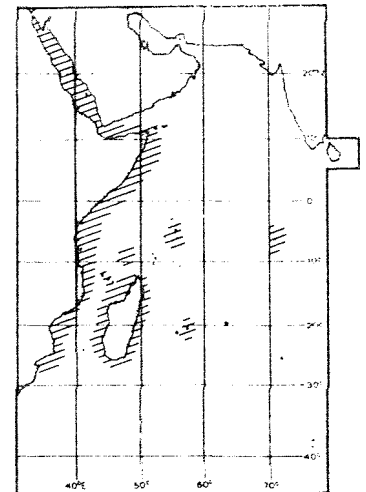
Coastal and coral reef waters.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with handlines, gillnets and traps.

Marketed mostly fresh. One of the commonest fish at Seychelles markets.



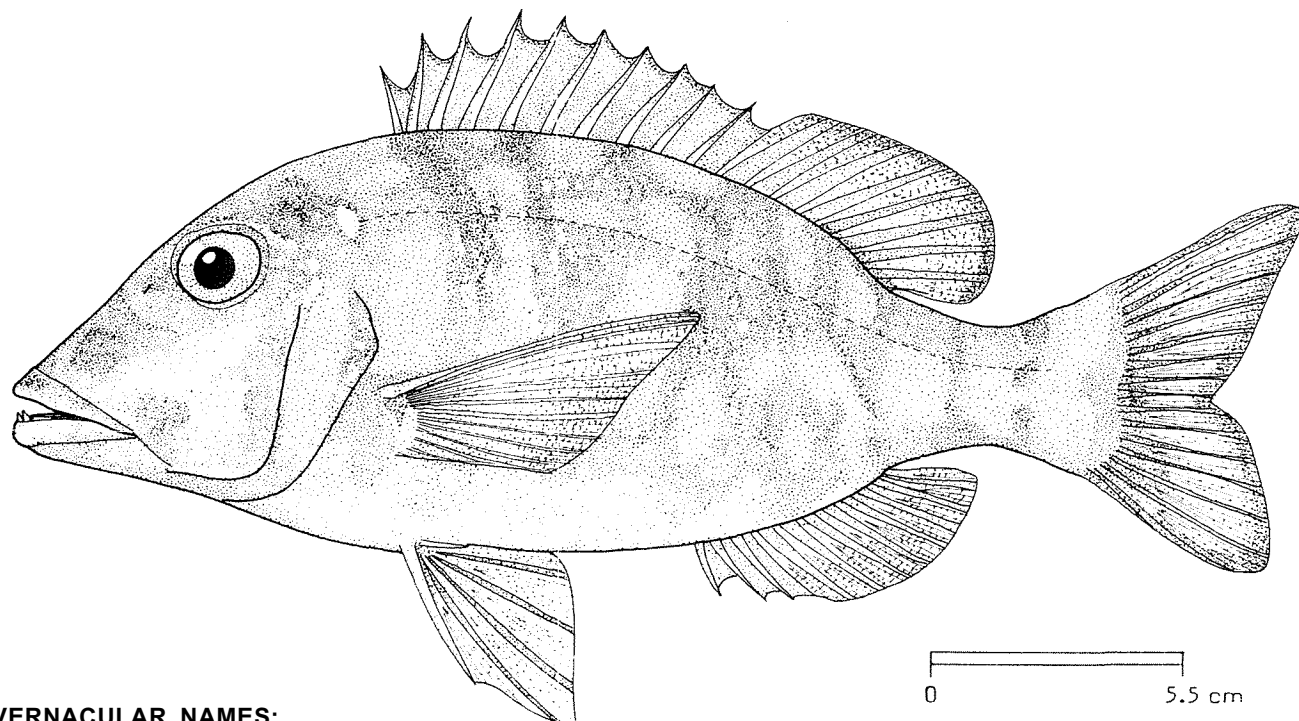
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: LETHRINIDAE

FISHING AREA 51
(W. Indian Ocean)

<i>Lethrinus mahsenoides</i> Valenciennes, 1830

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Saburbir emperor
 Fr - Empereur dame berris
 Sp - Emperador saburbir

NATIONAL

DISTINCTIVE CHARACTERS:

Body depth much greater than head length. Interorbital area flat or slightly convex, eye large and below dorsal profile, snout length excluding upper lip equal to, or less than cheek depth; snout profile steep, convex over orbits to slightly concave between anterior nostril and snout tip, forming in adults an angle of 72° to 79° with maxilla and 90° to 92° with a line drawn from upper edge of pectoral fin base through centre of eye (snout not so steep in young, angles around 65° and 103°, respectively); maxilla reaching beyond posterior nostril to below eye, its length contained 2.8 times in head; posterolateral teeth in jaws include distinct molars in adults, anterior teeth caniniform. Third to 5th dorsal fin spines longest. Six scale rows between lateral line and median dorsal fin spines; inner surface of pectoral fin base densely scaled.

Colour: body green-yellow lighter below; each scale on body with a yellow centre. Head greenish to yellowish-brown, with some red blotches and sometimes white spots on the face. Dorsal, anal and caudal fins with reddish margins; pectoral and pelvic fins paler. Young are not as vividly coloured as adults.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Lethrinus mahsena: 4 scale rows (excluding the very small scales at base of dorsal fin) above lateral line to median dorsal fin spines (6 in L. mahsenoides).

L. crocineus: 5 scale rows (excluding the very small scales at base of dorsal fin) between lateral line and median dorsal fin spines.

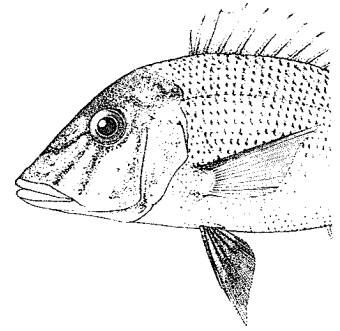
L. nebulosus: usually 2 or 3 blue stipes on head; hind tip of maxilla not reaching beyond anterior nostril; interorbital space well convex; 6 scale rows between lateral line and median dorsal fin spines.

L. ramak: conspicuous yellow-orange stripes present on body; body not as deep, 2.9 to 3 times in standard length (2.3 to 2.8 times in L. mahsena); hind tip of maxilla not extending beyond vertical from anterior nostril.

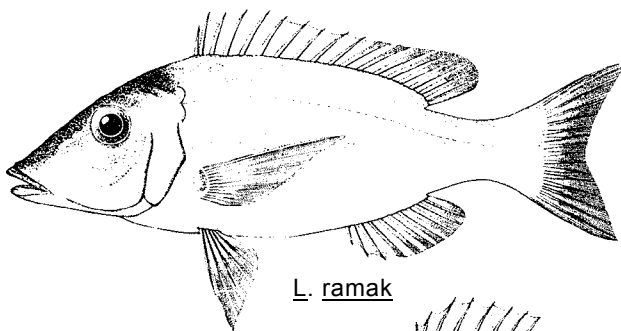
L. harak: a conspicuous dark blotch on sides of body.

L. elongatus, L. microdon and L. variegatus: body more slender, its depth less than head length; no molars among posterolateral teeth; inner surface of pectoral fin base scaleless. Furthermore, distinctive colour patterns in L. elongatus and L. microdon.

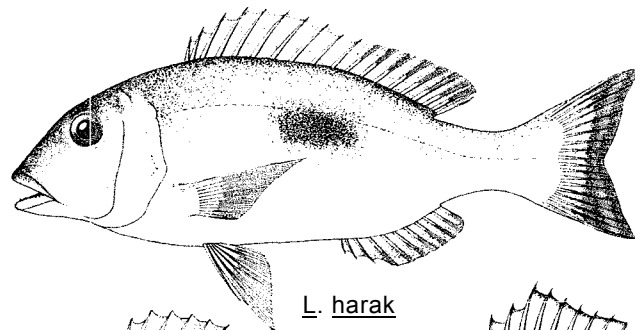
Other Lethrinus species: conspicuous red colour on opercle, other parts of head or pectoral fin base.



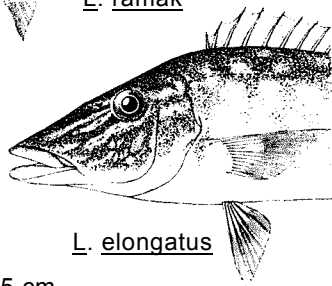
L. nebulosus



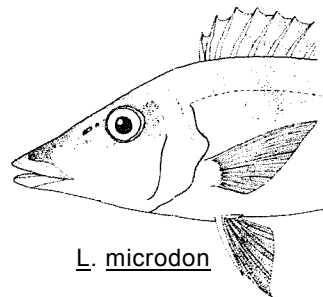
L. ramak



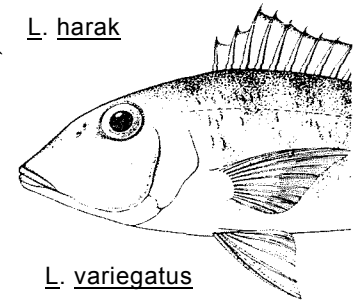
L. harak



L. elongatus



L. microdon



L. variegatus

SIZE:

Maximum: 35 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, reported from the east African coast at about 25°S into the Red Sea and the "Gulf"; south India and Sri Lanka. Elsewhere in the Western Central Pacific (from Fiji to Polynesia) as far as the Philippines.

Inhabits coastal waters.

Feeds on crustaceans, echinoderms and molluscs.

PRESENT FISHING GROUNDS:

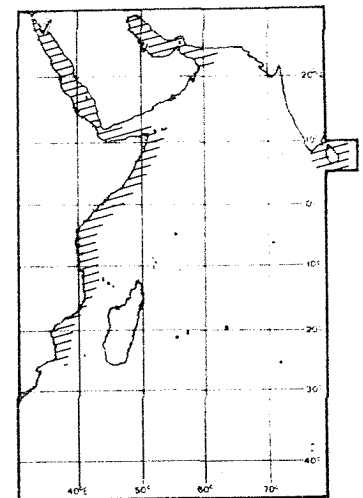
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

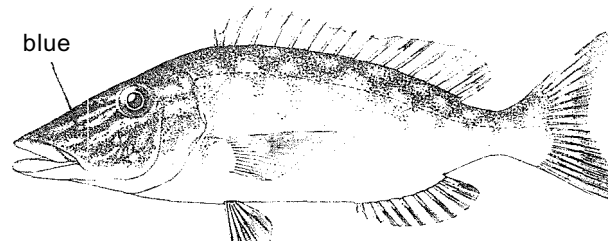
Caught mainly with handlines, gillnets and traps.

Marketed mostly fresh.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

The only other Lethrinus species that may have bluish lines radiating from eye are L. nebulosus and L. elongatus. L. elongatus has a much more pointed snout, a longer head, and a conspicuous red line above and below the lips. L. nebulosus is deeper-bodied, with the body depth greater than head length and has longitudinal bands on body; posterolateral dentition includes distinct molars.



L. elongatus

SIZE:

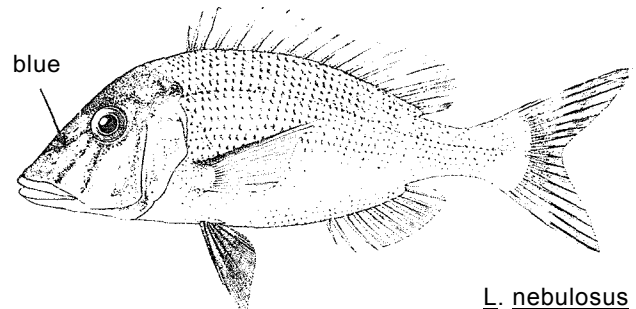
Maximum: 60 cm; common to 40 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, reported from east Africa between about 0° to 5°S, in the Red Sea, the coasts of Pakistan, India and Sri Lanka. Elsewhere, it occurs in the Eastern Indian Ocean and Western Central Pacific, extending eastward to northern Australia and New Caledonia.

Inhabits coral reef and inshore waters.

Feeds on crustaceans, molluscs and small fishes.



L. nebulosus

PRESENT FISHING GROUNDS:

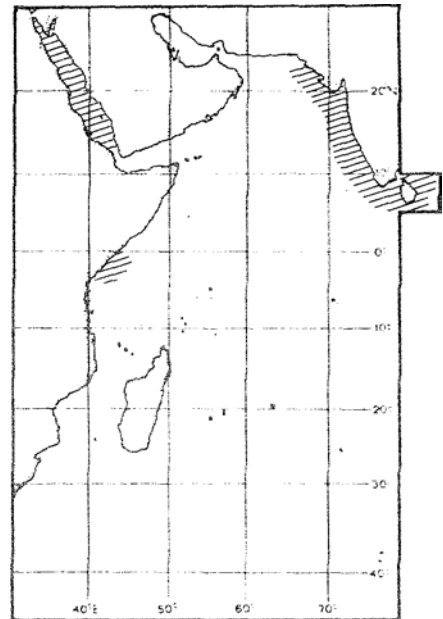
Coral reefs and inshore waters.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with handlines, gillnets, traps and bottom trawls.

Marketed mostly fresh.

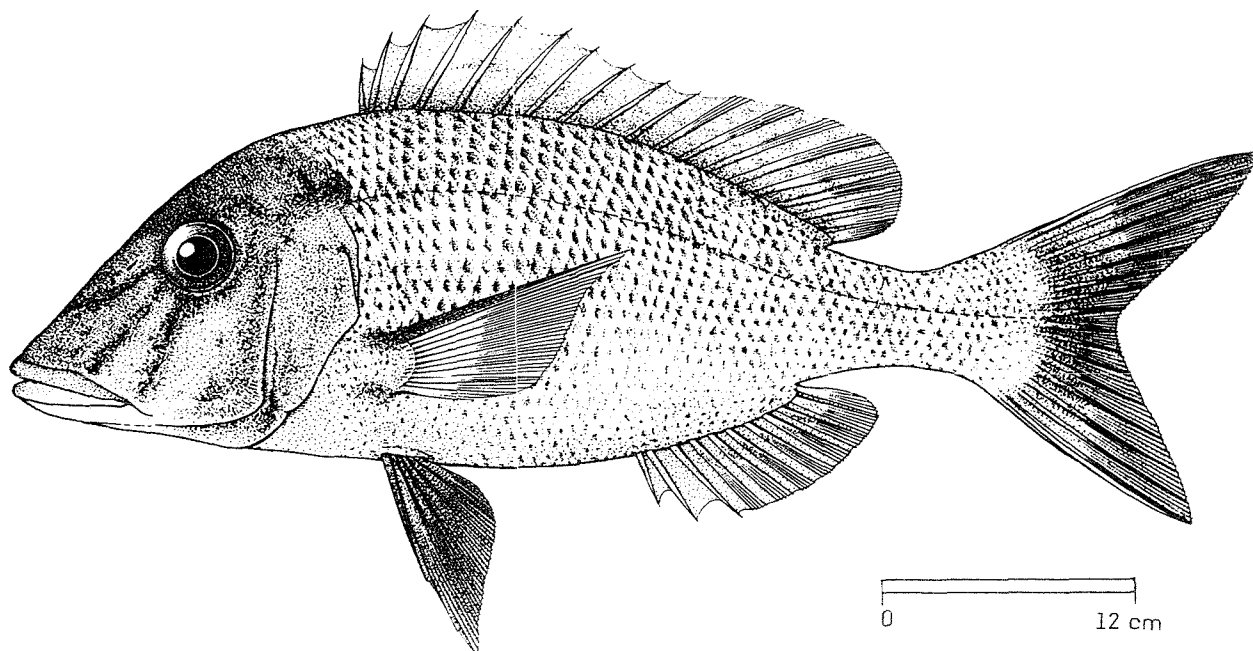


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: LETHRINIDAE

FISHING AREA 51
(W. Indian Ocean)Lethrinus nebulosus (Forsskål, 1775)

OTHER SCIENTIFIC NAMES STILL IN USE:

Lethrinus choerorhynchus (Bloch & Schneider, 1801)*Lethrinus fraenatus Valenciennes, 1830*Lethrinus fletus Whitley, 1943Lethrinus opercularis Valenciennes, 1830**

VERNACULAR NAMES:

FAO : En - Spangled emperor
 Fr - Empereur moris
 Sp - Emperador relámpago

NATIONAL :

DISTINCTIVE CHARACTERS:

Body depth greater than head length. Interorbital space convex; snout profile straight or slightly concave above nostrils, convex beyond, forming an angle of 60° to 68° with chin and 100° to 110° with a line drawn from upper edge of pectoral fin base through centre of eye; maxilla reaching a little beyond the vertical from anterior nostril, its length almost equal to least depth on caudal peduncle; distance between anterior and posterior nostrils 14.8 to 19.8 times in head; posterolateral teeth in jaws include distinct molars in adults, anterior teeth caniniform. Third to 5th dorsal fin spines longest; 4th dorsal fin ray 2.5 to 3.3 times in head length. Six scale rows between lateral line and median dorsal fin spines; inner surface of pectoral fin base scaled.

Colour: olive-green above, paler below; usually 2 or 3 blue streaks radiating from eye, each scale on the back with a white to blue centre; usually several yellow longitudinal stripes on sides, giving an overall effect of blue and yellow, although one colour may predominate. A white spot on post-temporal conspicuous in life; fins yellow, mottled or striped with orange to red; upper margin of pectoral fin blue; pelvic fin usually dark.

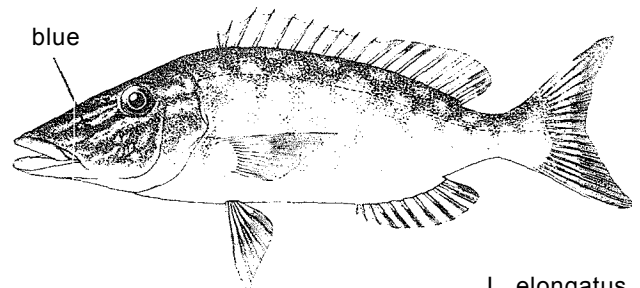
*Might be a valid species, but kept here as a synonym until further evidence on this matter has been produced

**Regarded as a valid species by some authors

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

The yellow-blue streaks on body, together with the blue bands radiating from eye, and the absence of red colour on opercle or pectoral fin base, easily distinguishes this species from other lethrins occurring in the area.

Other species with blue lines radiating from eye are L. elongatus and L. microdon, but none of them have yellow-blue streaks on body and 211 have different colour patterns. Furthermore, L. elongatus and L. microdon are more slender, the body depth being smaller than the head length; L. elongatus is characterized by a long and pointed snout, a very small eye and a conspicuous red stripe above and below the lips.



L. elongatus

SIZE:

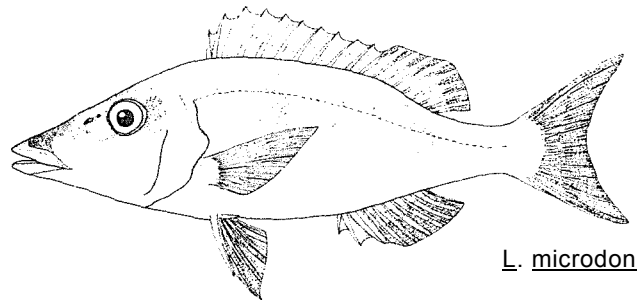
Maximum: 87 cm; common to 60 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, reported from the east African coast from 33°S northward, Mauritius, Réunion, Aldabra, Madagascar, Seychelles, Red Sea, the "Gulf", west and south coasts of India and Sri Lanka. Elsewhere, it occurs in the Eastern Indian Ocean and the Western Central Pacific extending eastward to northern Australia, Tonga and Samoa.

Inhabits coral reefs and inshore waters to 50 m depth; also found in mangrove creeks and around jetties and wharves. Juveniles occur inshore and adults in deeper waters.

Feeds on molluscs, crustaceans and echinoderms, particularly molluscs.



L. microdon

PRESENT FISHING GROUNDS

Coral reef and coastal waters. Commercially important in Mauritius, Sri Lanka, India and the "Gulf".

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

Separate statistics are not reported for this species.

Caught with bottom trawls, seine nets, traps, gillnets and handlines.

Marketed mostly fresh or frozen.

