

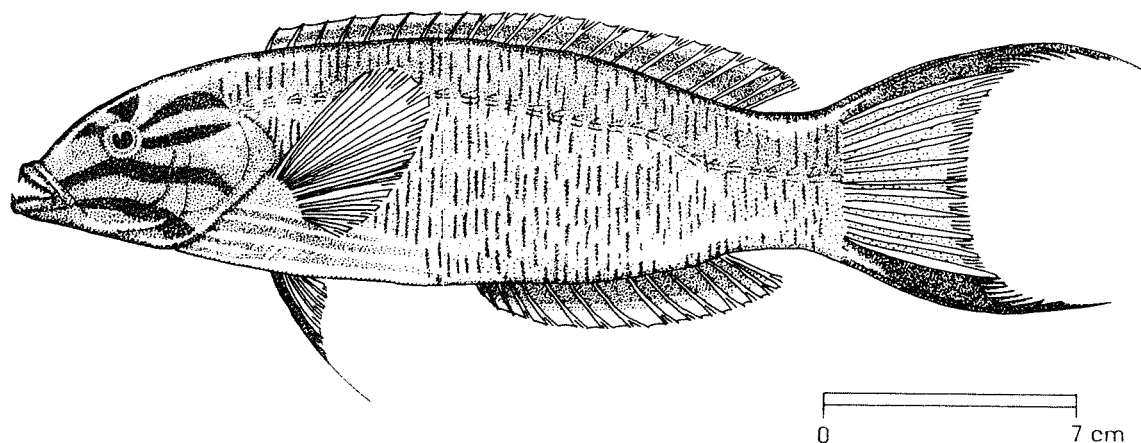
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: LABRIDAE

FISHING AREA 51
(W. Indian Ocean)

<i>Thalassorna lunare</i> (Linnaeus, 1758)
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OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO :	En - Moon wrasse
	Fr - Girelle verte
	Sp - Doncella verde

NATIONAL:

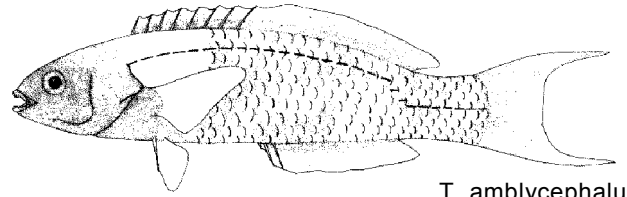
DISTINCTIVE CHARACTERS :

Body moderately slender, greatest depth approximately equal to length of head. Dorsal profile of head describing a slightly convex curve; anterior tip of head forming an acute angle; jaws prominent, though mouth small; 2 prominent canines situated anteriorly in each jaw; no enlarged tooth at rear of upper jaw. Dorsal fin continuous, with 8 spines and 13 soft rays; spines and anterior soft rays of similar length; anal fin with 3 spines and 11 soft rays; pectoral fins with 2 unbranched and 13 branched rays; pelvic fins pointed but not filamentous in large individuals; caudal fin squared off, with upper and lower corners produced into filaments in very large individuals. Lateral line abruptly curved below posterior portion of dorsal fin base, with 28 or 29 pored scales. Scales reaching slightly onto bases of dorsal and anal fins; scales in front of dorsal fin extending forward to about midpoint between origin of fin and eye; a small patch of scales situated on upper end of opercle; head otherwise without scales.

Colour: bright green to blue with a vertical red band on each scale and several, mostly horizontal, prominent, red or purple lines on head; dorsal and anal fins green to blue basally and with pink, blue and yellow horizontal stripes successively; caudal fin green to blue basally and extending along upper and lower edges with a pink stripe directed toward each corner; midposterior portion of fin clear to yellow; pectoral fins blue with a prominent pink stripe directed from base to tip just below upper edge. Small individuals olive-green on upper half of body, blue-white below; head with 1 or 2 horizontal red liners; dorsal fin vermiculated with green and pink and bearing a large black spot midway along it, anal fin red basally and blue to green toward edge; caudal fin light blue with a large black spot at its base; black spots associated with dorsal and caudal fins persisting in larger individuals.

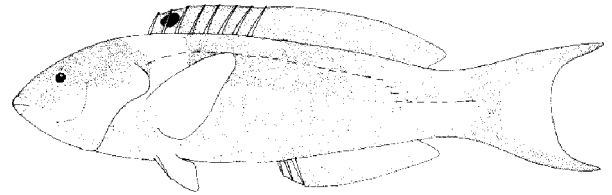
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Thalassoma amblycephalum: head totally without scales; large individuals with reddish violet body and a blue-green vertical band on each scale, but without prominent stripes or bands on sides; small individuals bicoloured brown or black above and white below, without large black spots associated with fins.



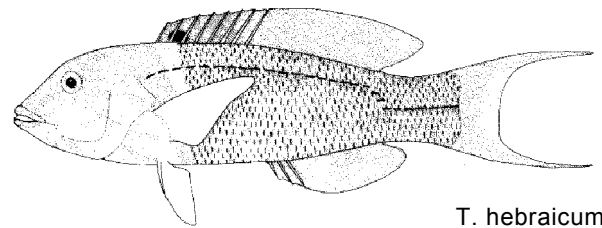
T. amblycephalus

T. genivittatum: large individuals olive-green with a deep red vertical band on each scale and indistinct blue to green, mostly horizontal stripes on a purple head; pectoral fin yellow basally with a black blotch distally; small individuals brown to olive-green above and cream to pale yellow below with a black midlateral stripe; dorsal fin without a large black spot.



T. genivittatum

T. hebraicum: large individuals bright green to blue with a dark blue vertical band on each scale and a prominent yellow band traversing side behind pectoral fin; pectoral fin with black blotch distally; smaller individuals greyish green with several mostly horizontal, green stripes on head; a black spot present on dorsal fin between first few spines.



T. hebraicum

Remaining species of Thalassoma: with prominent horizontal stripes or dark vertical markings.

Other labrid genera: more than 8 dorsal fin spines or 46 to 48 lateral line scales or jaws extended to form a tube-like structure.

SIZE:

Maximum: 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Occurs throughout most of this fishing area, although not very common around islands well removed from mainland coasts. It ranges into the Western and Central Pacific reaching the Tuamotus to the east.

Found on coral and rock reefs at depths of 1 to 20 m.

Feeds primarily on small bottom-dwelling invertebrates and fish eggs.

PRESENT FISHING GROUNDS:

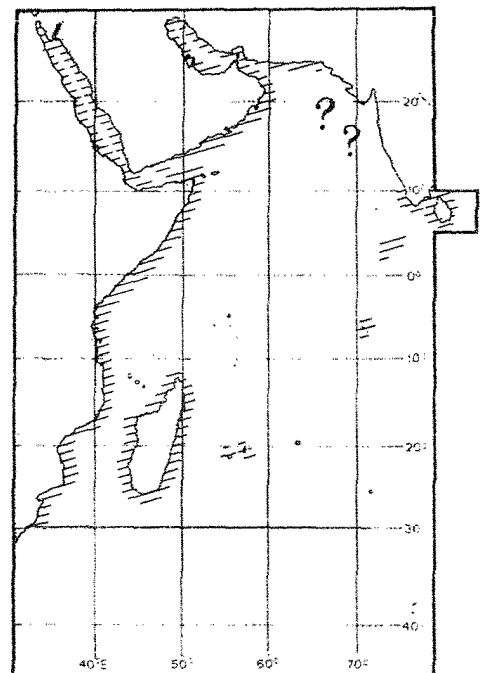
No special fishery. Although this species is not commercially sought, it reaches a sufficiently large size to be marketed when taken.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Taken in fish traps, or with spears by divers.

Marketed fresh.

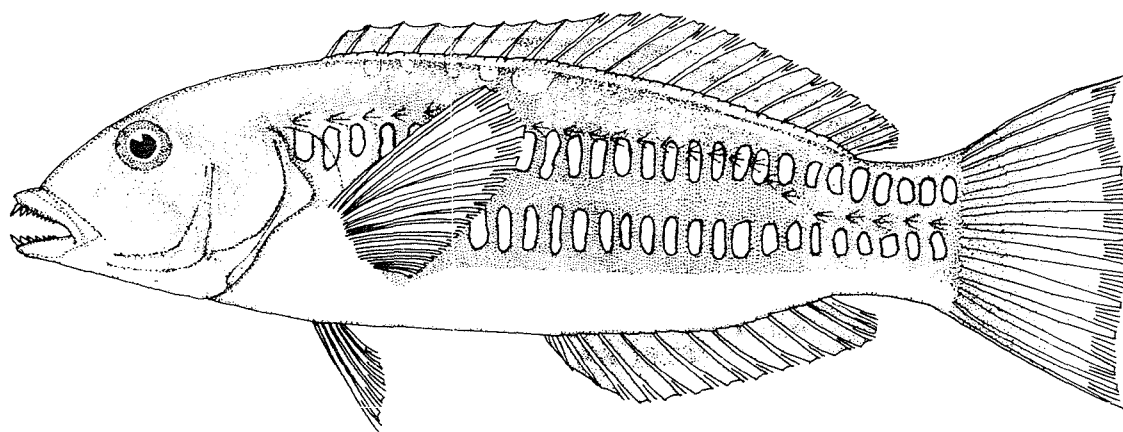


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : LABRIDAE

FISHING AREA 51
(W. Indian Ocean)Thalassoma purpurum (Forsskål, 1775)

OTHER SCIENTIFIC NAMES STILE IN USE: None



VERNACULAR NAMES:

FAO : En - Surge wrasse
Fr - Girelle hublot
Sp - Doncella de mareas

NATIONAL:

DISTINCTIVE CHARACTERS:

Body moderately deep, greatest depth approximately equal to length of head. Dorsal profile of head describing a moderately convex curve; anterior tip of head varying from slightly acute to slightly obtuse; jaws prominent, though mouth small; 2 prominent canines situated anteriorly in each jaw; no enlarged tooth at rear of upper jaw. Dorsal fin continuous, with 8 spines and 13 soft rays; the anterior dorsal soft rays somewhat longer than spines; anal fin with 3 spines and 11 soft rays; pectoral fins with 2 unbranched and 14 branched rays; pelvic fins pointed but not filamentous; caudal fin varying from slightly rounded in young to emarginate or double emarginate in large adults. Lateral line abruptly curved below posterior portion of dorsal fin base, with 26 pored scales. Scales reaching slightly onto bases of dorsal and anal fins; scales in front of dorsal fin extending forward to about midpoint between origin of fin and eye; a small patch of scales situated on upper end of opercle; head otherwise without scales. Gillrakers on first arch 21 to 25 (usually 22 to 24).

Colour: initial phase light red, with 2 longitudinal bands of close-set elliptical or rectangular (long axis vertical) green spots on sides of body; 4 green spots of upper series with dorsal projections to base of dorsal fin; 3 longitudinal light red zones of body often overlaid with a series of dark brown blotches; head greenish dorsally, pale orangish ventrally, sometimes with faint green bands, the upper half and nape with numerous dark reddish spots and short irregular lines; dorsal fin orange with a longitudinal green band above middle of fin, a series of green blotches along base, and a black spot on first 2 interspinous membranes; anal fin with alternating bands of salmon pink and green or blue; caudal fin streaked longitudinally with green and orange, the corners blue; paired fins pale pinkish to yellowish, the base of the pectoral with a light red band which joins a longer streak of the same coloration on thorax that passes faintly onto abdomen. Terminal male phase green with 3 irregular pink stripes on body, becoming turquoise on abdomen and thorax; head turquoise with broad irregular pink bands dorsally and a broad diagonal pink band angled posteriorly and ventrally from eye, branching at preopercle, and continuing to edge of opercle at level of lower pectoral base; dorsal fin green an basal scaled portion, the rest of fin turquoise with a median longitudinal pink band; anal fin turquoise with a longitudinal pink band in lower third of fin; remaining fins turquoise, the pectorals preceded by 2 pink bands on thorax.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Thalassoma fuscum: gillrakers 18 to 23 (usually 19 to 21), compared to 21 to 25 in T. purpureum; caudal fin of terminal males truncate; initial phase coloured like T. purpureum, body of terminal males salmon pink to orange with 2 longitudinal bands along side, each composed of a series of blue-green rectangles (3 or 4 of rectangles of upper series continuing dorsally to join green band at base of dorsal fin), head orangish brown: caudal fin greenish with longitudinal streaks of bright blue in posterior half of fin

T. klunzingeri: a fled Sea species; green with a midlateral orange-red stripe bearing numerous long dorsal and short ventral projections on sides; a pink stripe on lower side; head orange-red with narrow green bands which curve downward anteriorly and posteriorly; caudal fin green with a submarginal orange-red band in each lobe.

T. quinquevittatum: green with 2 pink stripes on body, one midlateral and one along back, the green area in between consisting of a series of vertically elongate, often connected spots; head pink with narrow yellowish green bands radiating from eye and another prominent curved one on cheek nearly touching lower edge of eye in its convex upper part; a diagonal light red streak on thorax and another parallel to it originating in axil of pectoral fin; caudal fin yellowish, the upper and lower lobes light red, narrowly edged in blue.

Remaining species of Thalassoma, without prominent horizontal stripes, at least in adults, or with distinctive; mostly vertical blackish bands on sides; or without scales on head,

Other labrid genera: more than 8 dorsal fin spines or 46 to 48 lateral line scales or jaws extended to form a tube-like structure.

SIZE:

Maximum: 46 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Occurs throughout most of this fishing area. Elsewhere, it extends into the Western and Central Pacific reaching Hawaii and Easter Island to the east.

Found on reef flats and in the surge zone of coral and rocky reefs at depths of 0.1 to 10 m.

Feeds primarily on bottom dwelling invertebrates, particularly crabs and sea urchins and small fishes.

PRESENT FISHING GROUNDS:

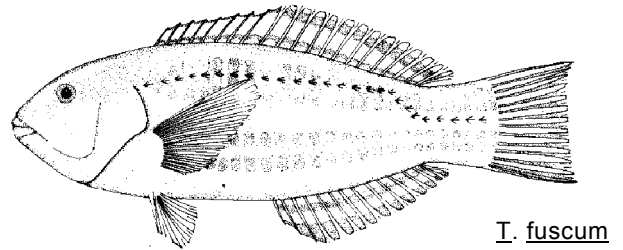
No special fishery. Although this species is not commercially sought; it reaches a sufficiently large size to be marketed when taken.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

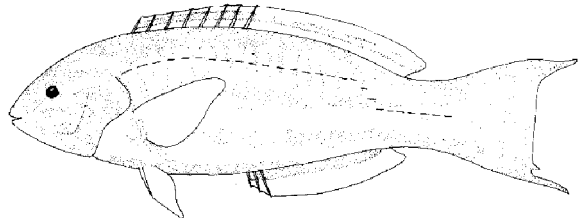
Separate statistics are not reported for this species.

Caught mostly by hook and line.

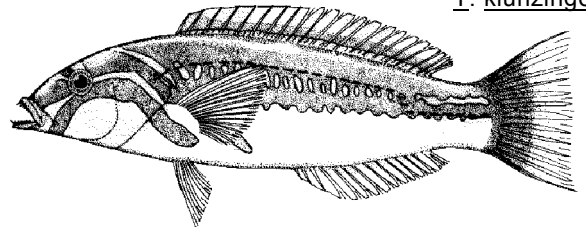
Marketed fresh.



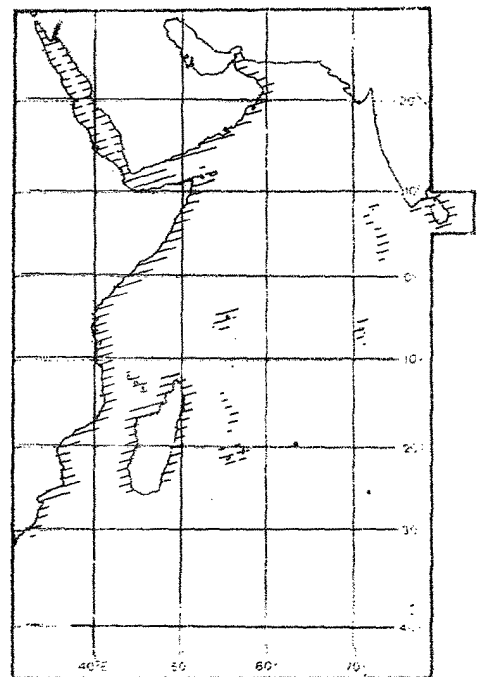
T. fuscum



T. klunzingeri

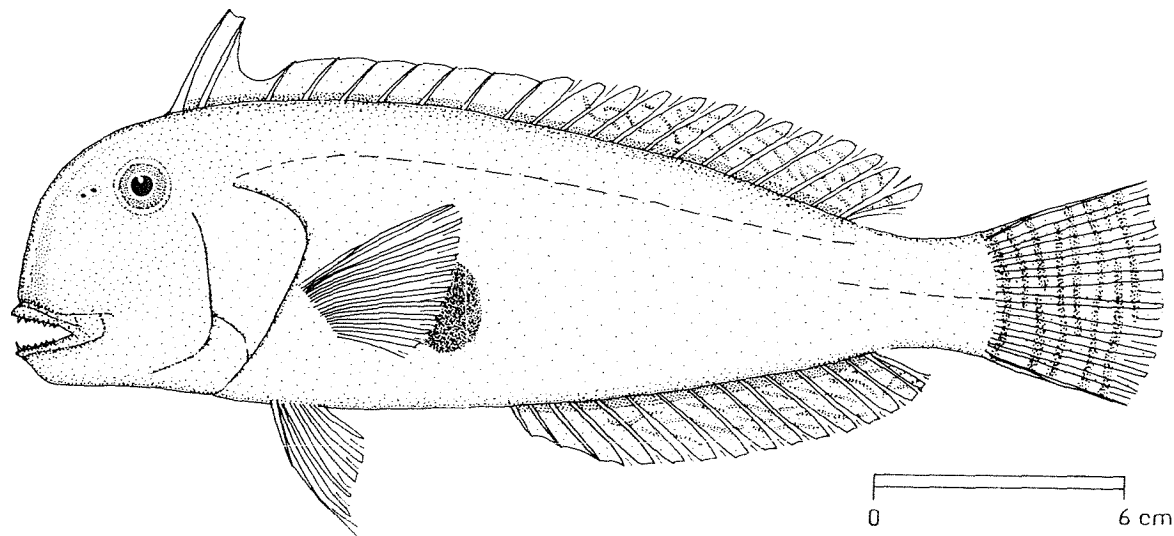


T. quinquevittatum



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: LABRIDAE

FISHING AREA 51
(W. Indian Ocean)*Xyrichtys bimaculatus* Rüppell, 1828OTHER SCIENTIFIC NAMES STILL IN USE : *Hemipteronotus hyospilus* Schultz, 1960

VERNACULAR NAMES:

FAO : En - Two-spot razorfish
 Fr - Rason deux taches
 Sp - Cuchilla de lunar

NATIONAL :

DISTINCTIVE CHARACTERS:

Body moderately deep, the depth equal to or slightly greater than length of head, and compressed, the width about 3 to 3.5 times in depth. Dorsal profile of head compressed to a knife-like edge, the profile extremely convex before eye; snout very steep, almost vertical in adults; jaws prominent, though mouth small; 2 large canines situated anteriorly in each jaw; no enlarged tooth at rear of upper jaw. Dorsal fin continuous, but with a gap between second and third spines, the membrane there deeply notched but not to base of fin, with 9 spines and 12 soft rays; first 2 spines flexible and about twice as long as remaining spines; origin of dorsal fin reaching to, or nearly to a vertical at rear edge of eye; anal fin with 3 spines and 12 soft rays (rarely 2 spines and 13 rays); pectoral fins with 2 unbranched and 10 branched rays; pelvic fins may reach anus in large adults; caudal fin asymmetrically rounded. Lateral line interrupted below posterior portion of dorsal fin, with a total of 24 to 26 pored scales. Scales not extending onto bases of dorsal and anal fins; no scales on upper part of head in front of dorsal fin; cheek with a broad patch of small scales which extend to, or slightly below, level of corner of mouth in males; a few scales of small to moderate size anterodorsally on opercle; head otherwise naked.

Colour: pale grey to pinkish, the males usually with a blackish spot larger than eye on side beneath distal end of pectoral fin; leading edge of head pale blue; caudal fin with faint alternating vertical lines of pale blue and light orange-yellow; dorsal fin usually with similar lines but mainly diagonal, the males with a light blue line at extreme base; anal fin with a pale blue line (may be broken in males) near base, the rest of fin pale yellowish, the males with diagonal pale blue lines.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Xyrichtys aneitensis: patch of small scales on cheek not extending one-half or more distance to corner of mouth; a black spot on back between lateral line and third dorsal soft ray; faint dark bars often present on body; no black spot on side beneath end of pectoral fin in either sex.

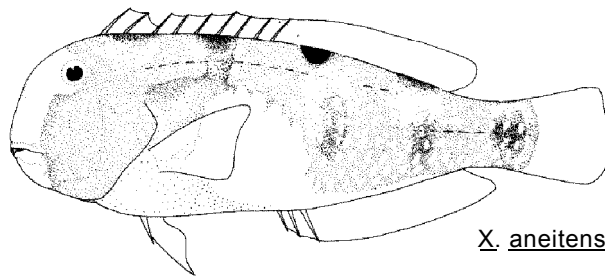
X. sp.: membrane connecting second and third dorsal spines nearly reaching tip of third dorsal spine; a large red area in life anteriorly on side of body; an elongate black spot may be present posteriorly on anal fin.

X. pavo: first 2 dorsal spines completely separated by a large gap from rest of dorsal fin; adults with a black spot between lateral line and sixth dorsal spine

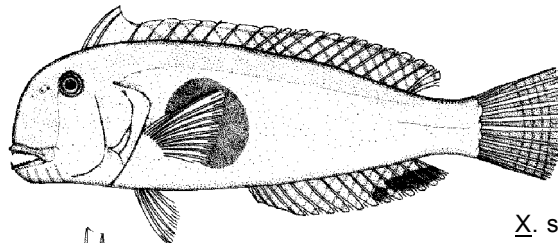
X. pentadactylus: a dusky spot on upper side between distal part of pectoral fin and lateral line, confined to first row of scales below lateral line. Males of X. bimaculatus with blackish spot lower on side of third row of scales below lateral line; scattered orange-red dots on body in life, especially along lateral line, the males with 5 red spots larger than pupil behind eye (the last 4 anteriorly on lateral line).

Novaculichthys species: snout not compressed to a knife-like edge; dorsal fin without a distinct notch in membrane between second and third spines.

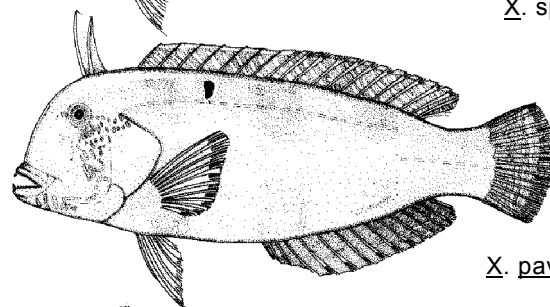
Other labrid genera: with scales in front of dorsal fin and an uninterrupted lateral line or only 8 or 9 segmented anal fin rays.



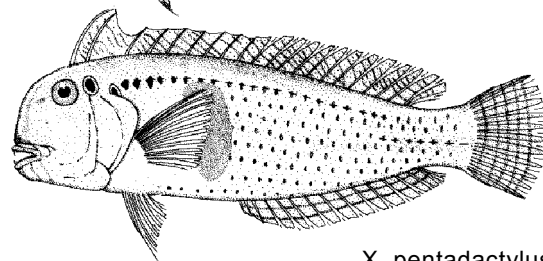
X. aneitensis



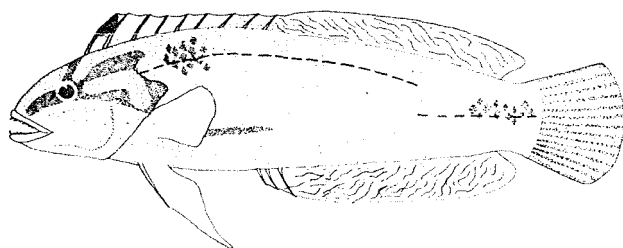
X. sp



X. pavo



X. pentadactylus



Novaculichthys macrolepidotus

SIZE:

Maximum: 28.5 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Presently known only from the Red Sea, the "Gulf", and the coasts of India.

No information available on habits but probably lives on open sandy bottoms and dives head-first into the sand with the approach of danger.

PRESENT FISHING GROUNDS:

No special fishery. Of limited commercial importance but occasionally seen in markets.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Taken mainly by hook and line, at times by trawls.

Marketed fresh.

