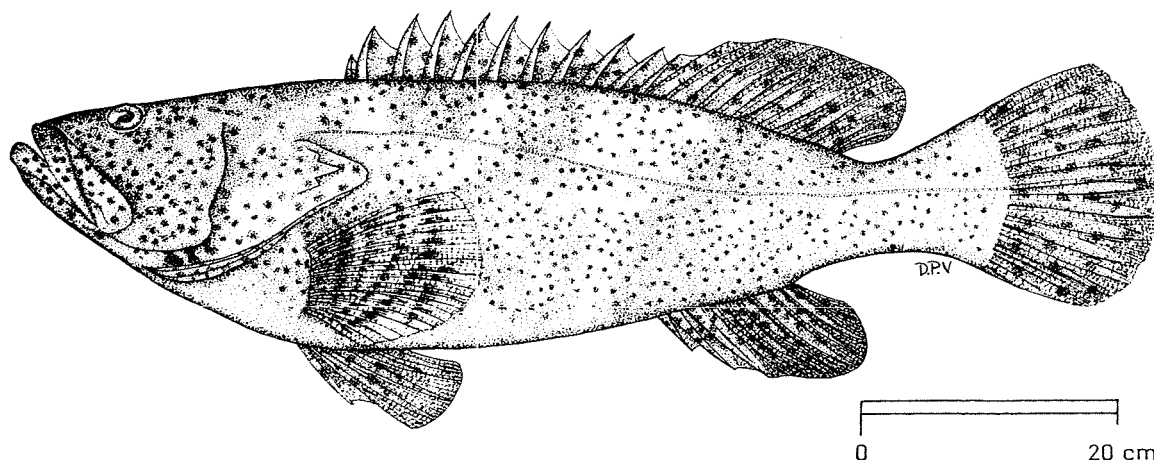


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SERRANIDAE

FISHING AREA 51  
(W. Indian Ocean)Epinephelus malabaricus (Schneider, 1801)OTHER SCIENTIFIC NAMES STILL IN USE: Often misidentified as "Epinephelus tauvina (Forsskål, 1775)", which is a different species

## VERNACULAR NAMES:

FAO: En - Malabar grouper  
Fr - Mérou malabare  
Sp - Mero malabérico

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body depth contained 3.0 to 3.6 times in standard length. Preopercle finely serrate, with a shallow notch, the serrae enlarged at the angle; rear nostrils not more than twice the size of anterior nostrils; lower gillrakers 13 to 16; midlateral part of lower jaw with 2 rows of teeth. Dorsal fin with 11 spines and 14 to 16 soft rays; anal fin with 3 spines and 8 soft rays; pectoral rays 1B to 20. Pored lateral line scales 56 to 67; lateral scale series 98 to 114; midlateral body scales distinctly ctenoid with minute auxiliary scales.

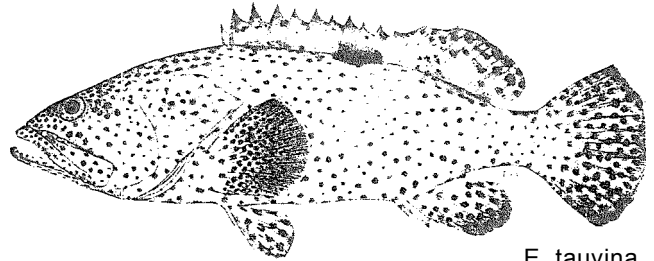
Colour: head and body generally pale greyish brown covered with small orange, golden-brown, or dark brown spots. Five more or less distinct, slightly oblique, irregular, broad, dark bars on body; these bars are darker dorsally and the last 3 are usually bifurcate ventrally; the first 4 bars usually continued onto the dorsal fin, the last bar covers most of the caudal peduncle; usually 3 dark blotches on interopercle, the first 2 sometimes merging to one blotch; small, irregularly shaped and spaced, white spots visible on head and body of some fish; soft dorsal, caudal, anal and pectoral fins brownish-black with small dark spots on basal half of fins.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

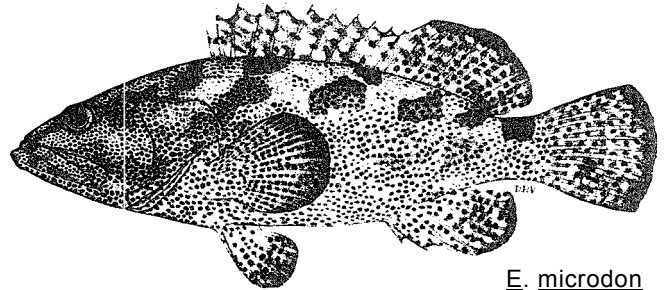
*Epinephelus tauvina*: pored lateral line scales 67 to 74 (56 to 67 in *E. malabaricus*); lower gillrakers 18 to 20 (13 to 16 in *E. malabaricus*); midlateral body scales cycloid (smooth on fish larger than 30 cm standard length); midlateral part of lower jaw with 3 or 4 rows of teeth (2 rows in *E. malabaricus*); maxilla extends well past eye.

*E. microdon*: body depth contained 2.7 to 3.2 times in standard length (3 to 3.6 times in *E. malabaricus*); pectoral fin rays 16 or 17 (18 to 20 in *E. malabaricus*); pored lateral line scales 49 to 53.

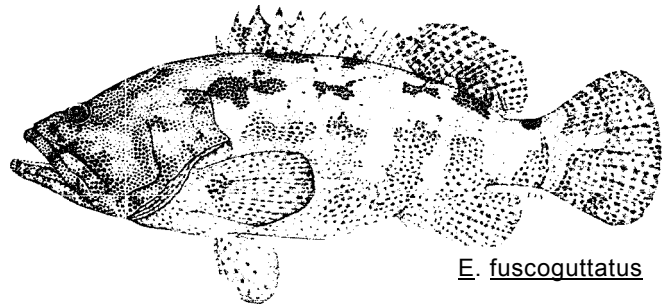
*E. fuscoguttatus*: lower gillrakers 18 to 21; dorsal-head profile with indentation above rear edge of eye.



*E. tauvina*



*E. microdon*



*E. fuscoguttatus*

## SIZE:

Maximum: 100 cm (perhaps 200 cm).

## GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Widespread in the Western Indian Ocean, including the Red Sea and the "Gulf". Also present in the Eastern Indian Ocean, extending eastward to the Western Pacific where it ranges from southern Japan to Queensland. It seems not to extend into Oceania.

Often found in turbid water and estuaries, but also occurs on coral reefs.

## PRESENT FISHING GROUNDS:

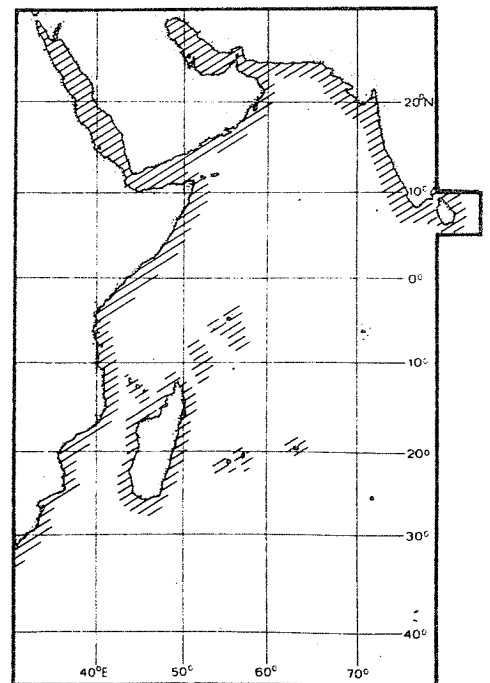
Harbours, estuaries and open ocean to depths of at least 30 m. This is undoubtedly of major economic importance - being the most common inshore species of grouper in the Western Indian Ocean. Very important commercially in the "Gulf" and along the west coast of India.

## CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with hook and line, in traps, gillnets and trawls.

Sold fresh in local markets.

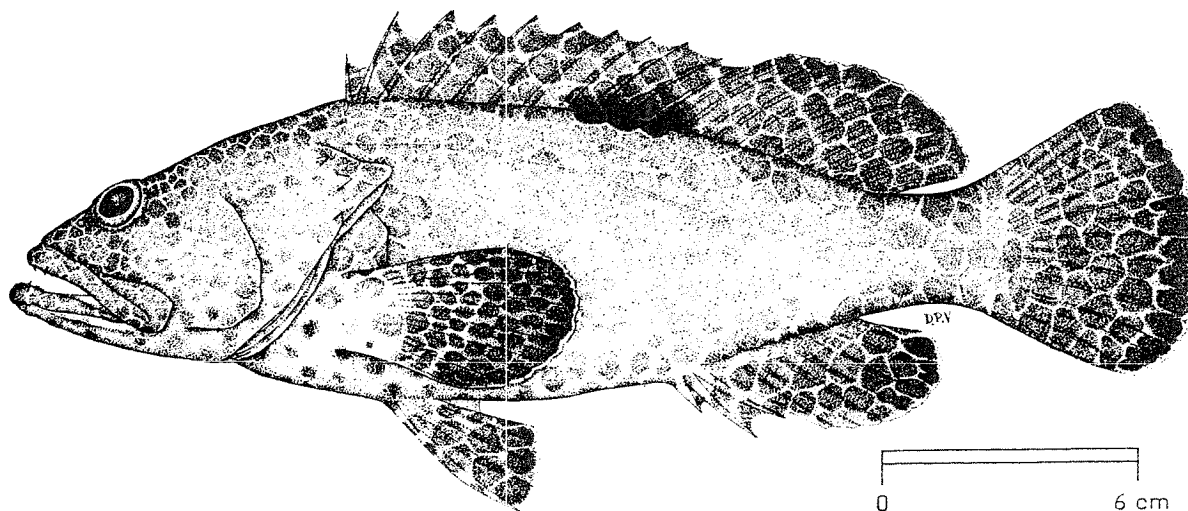


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SERRANIDAE

FISHING AREA 51  
(W. Indian Ocean)Epinephelus melanostigma Schultz, 1953

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO :           En - One-blotch grouper  
                   Fr - Mérou dossard  
                   Sp - Mero espaldarón

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body depth contained 3.0 to 3.4 times in standard length; caudal peduncle depth greater than or equal to length of second anal fin spine. Preopercle finely serrate, rounded, with a slight notch; maxilla reaches well past eye; midlateral part of lower jaw with 3 to 5 rows of teeth; lower gillrakers 17 to 19. Dorsal fin with 11 spines and 15 or 16 soft rays; anal fin with 3 spines and 8 soft rays; pectoral rays 17 to 19; caudal fin rounded. Pored lateral line scales 57 to 61; lateral scale series 96 to 110; scales on body ctenoid, except on belly.

Colour: head, body and fins covered with closely-set, pupil-sized, brown spots forming a pale network pattern; a large black blotch at base of last 4 dorsal spines extending onto fin at least half way to margin; no other black blotches at base of dorsal fin or on peduncle; outer surface of distal half of pectoral fin dusky, the entire inner surface of fin with a distinct pale network: pattern as on body; soft dorsal, caudal, anal and pectoral fins with narrow white edge.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

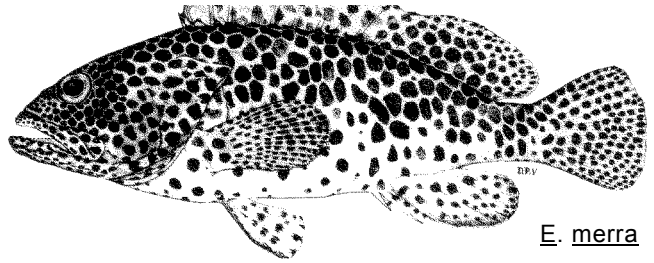
Epinephelus merra: pored lateral line scales 48 to 54 (57 to 61 in E. melanostigma); fins with dark spots much smaller than those on body; pectoral pale, with distinct, small dark spots all over the fin.

E. spilotoceps: 2 to 4 dark brown saddle-blotches on dorsal part of body; maxilla not reaching much past eye; lower gillrakers 14 to 17 (17 to 19 in E. melanostigma); caudal peduncle depth distinctly less than length of second anal spine.

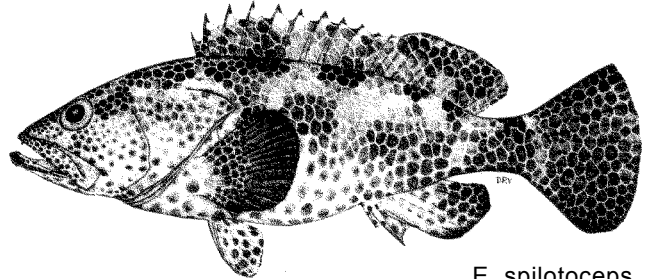
E. hexagonatus: 5 dark saddle-blotches on body, the first at origin of dorsal fin; fresh specimens with tiny white or silvery dots between the large dark brown spots; pectoral fins pale or dusky, without distinct markings.

E. areolatus: caudal fin truncate; pored lateral line scales 50 to 56.

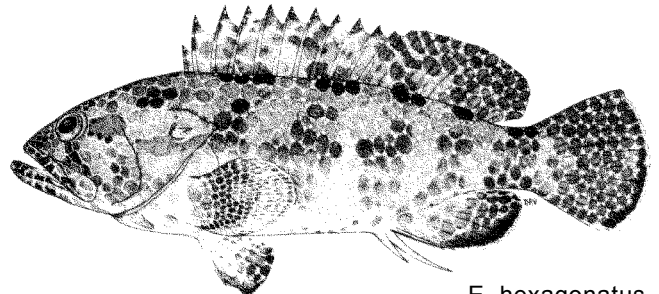
E. tauvina: pored lateral line scales 67 to 74; body scales cycloid, except for a small patch at end of pectoral fin; dark spots on head and body not forming a pale network pattern.



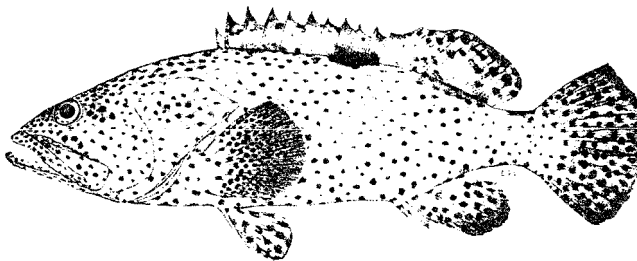
E. merra



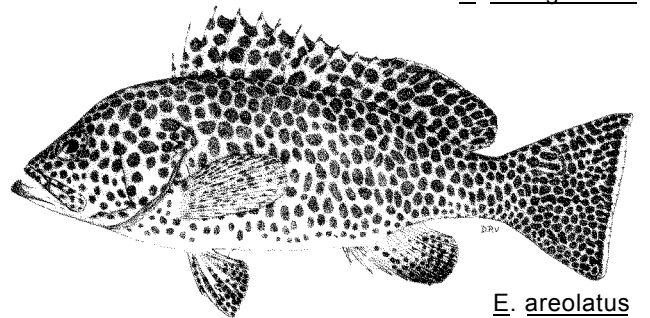
E. spilotoceps



E. hexagonatus



E. tauvina



E. areolatus

### SIZE:

Maximum: 30 cm.

### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean, recorded from South Africa, Mozambique and the Seychelles; not in the Red Sea. Also present in the Eastern Indian Ocean and the Western Central Pacific.

### PRESENT FISHING GROUNDS:

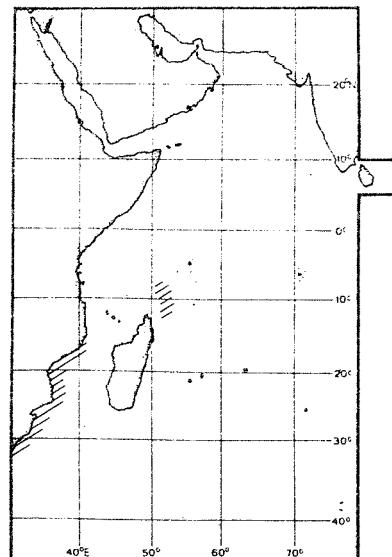
Coral reef areas in depths to 30 m. This species is probably too small to be of significant commercial importance, and it seems to be rare in the area.

### CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with hook and line and in traps.

Sold fresh and dried salted in local markets.



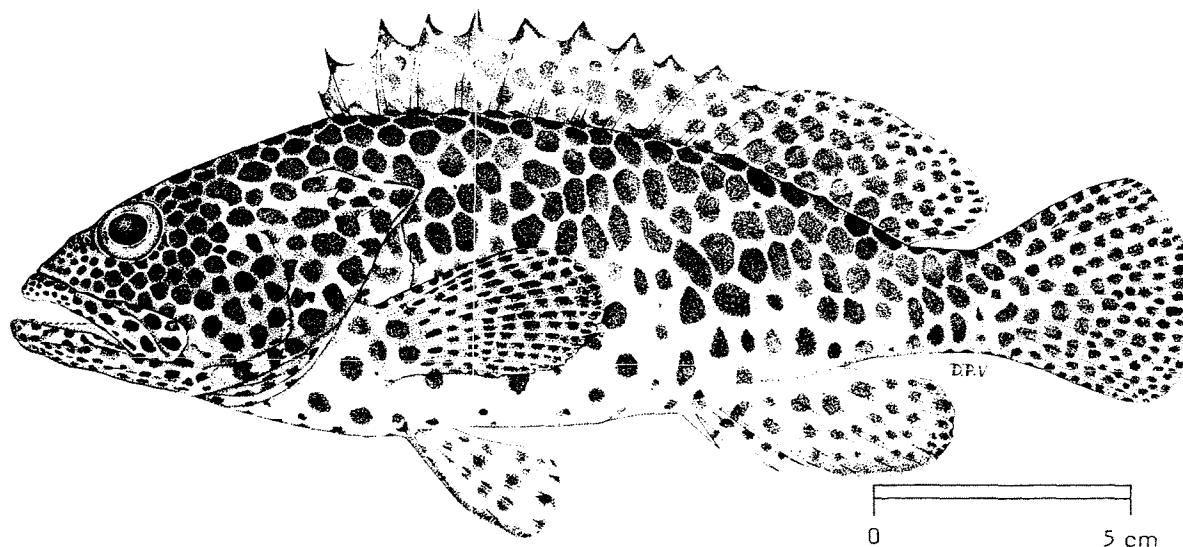
## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SERRANIDAE

FISHING AREA 51  
(W. Indian Ocean)

<i>Epinephelus merra</i> Bloch, 1793
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OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO :           En - Honeycomb grouper  
                   Fr - Mérou gâteau de cire  
                   Sp - Mero panal

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body depth contained 2.9 to 3.2 times in standard length; caudal peduncle depth less than second anal fin spine. Preopercle finely serrate; maxilla reaches past eye; midlateral part of lower jaw with 2 to 4 rows of teeth; lower gillrakers 15 to 17. Dorsal fin with 11 spines and 15 or 16 soft rays; anal fin with 3 spines and 8 soft rays; pectoral rays 16 to 18; caudal fin rounded. Pored lateral line scales 48 to 54; lateral scale series 100 to 114; scales on body ctenoid except for those on belly.

Colour: head and body with large closely-set, brown and dark brown spots, pale interspaces forming a network pattern; fins pale, with distinct, small, dark brown spots becoming smaller toward the margins; membrane behind tip of each dorsal spine with a small, white-edged, black spot; no dark blotches along base of dorsal fin.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

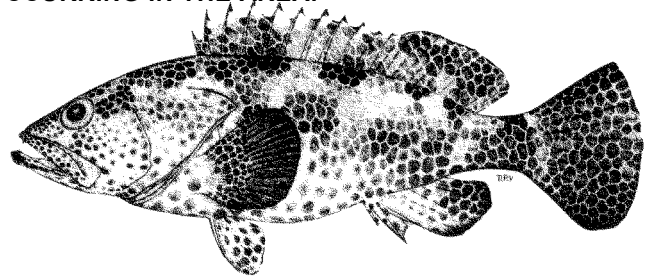
Epinephelus spilotoceps: pored lateral line scales 40 to 67 (48 to 54 in E. merra); 4 dark brown or black saddle-blotches on dorsal part of body; spots on median fins not much smaller or more distinct than those on body.

E. faveatus: pectoral fin dusky, with 1 or 2 blackish blotches at base; body scales mostly cycloid (smooth); dark spots on median fins as large as those on body.

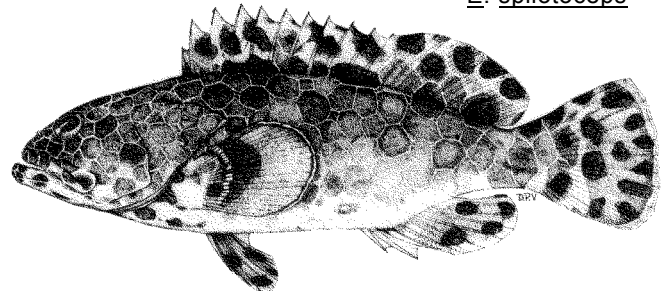
E. melanostigma: pored lateral line scales 58 to 61; caudal peduncle depth greater than or subequal to length of second anal fin spine; black blotch on body at base of last 4 dorsal spines.

E. areolatus: caudal fin truncate; preopercle with 3 to 7 enlarged serrae at the angle.

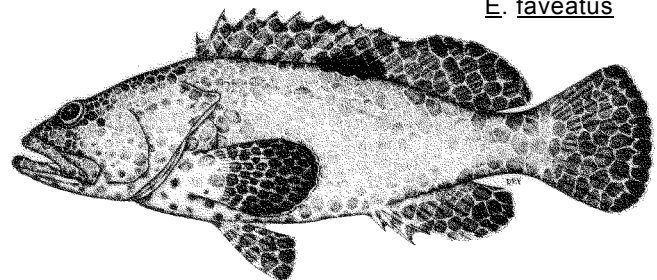
E. tauvina: dark spots on head and body poorly defined, not forming a pale network, darker at centre than at their edges: pored lateral line scales 67 to 74; lower gillrakers 18 to 20 (15 to 17 in E. merra).



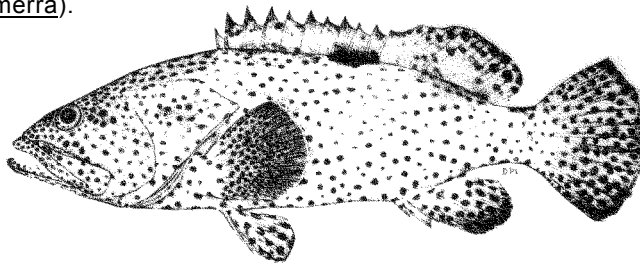
E. spilotoceps



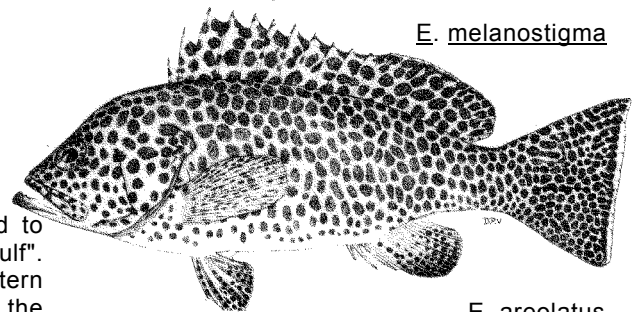
E. faveatus



E. melanostigma



E. tauvina



E. areolatus

### SIZE:

Maximum: 30 cm.

### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Widespread in the Western Indian Ocean, southward to Transkei (32°S) but absent from the Red Sea and the "Gulf". Also present in the Eastern Indian Ocean and the Western Central Pacific extending eastward to French Polynesia; in the Western Pacific it ranges from southern Japan to Queensland.

Common on small patch reefs in shallow lagoons or other protected waters.

### PRESENT FISHING GROUNDS:

Coral reef areas in depths less than 20 m. Although common in markets in areas where it is abundant, E. merra is probably too small to be of major commercial importance.

### CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with hook and line and in traps.

Sold fresh and dried salted in local markets.

