

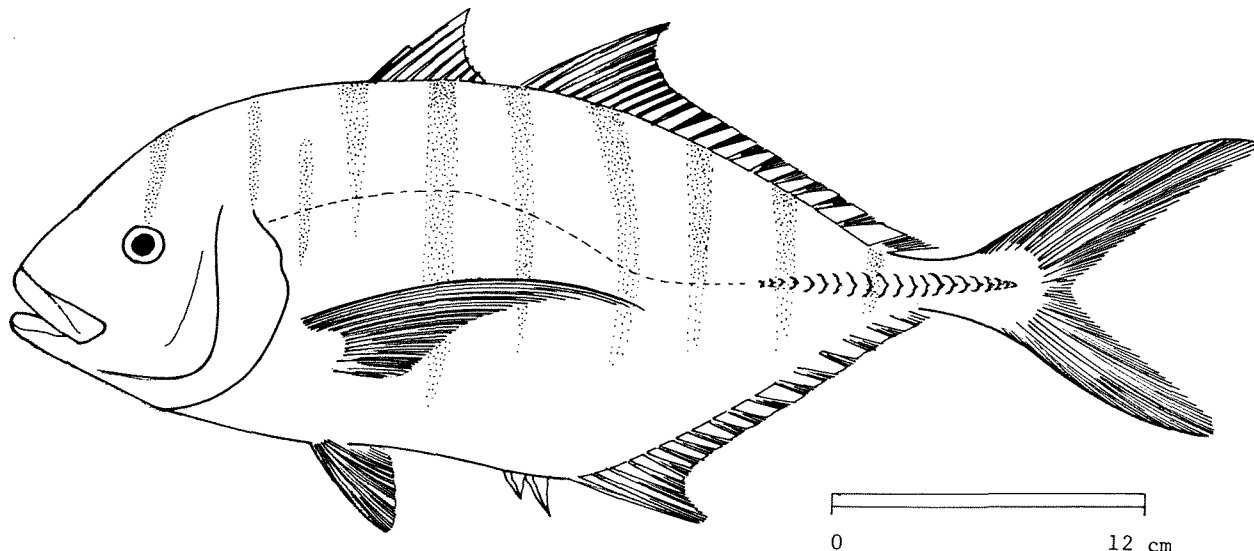
## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

<i>Gnathanodon speciosus</i> (Forsskål, 1775)
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SYNONYMS STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Golden toothless trevally  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

A deep-bodied, compressed carangid. Head profile steep, with slight indentation in front of eye. Eye small, its diameter 4.5 to 5.6 times in head length. Upper jaw reaching to below front margin of eye, or front margin of pupil in young. No teeth in jaws in fish longer than 8 cm; lips papillose; no teeth on vomer and palatines (roof of mouth); tongue rough, with fine denticles. Gill rakers 20 on lower limb of 1st arch. 1st dorsal fin with a forward-pointing spine (not visible in adults) and 7 to 8 spines; 2nd dorsal fin with 1 spine and 18 to 21 soft rays. Anal and dorsal fin bases approximately equal. Pectoral fins falcate, longer than head length. Anal fin with 2 detached spines, followed by 1 spine and 16 soft rays. Breast scaled. Lateral line moderately curved, becoming straight under 8th soft dorsal fin ray; curved part slightly longer than straight part; 17 to 25 feeble scutes.

Colour: fish of 30 cm. in length are yellow with dark vertical bars; larger fish are paler with black patches and faint cross-bars on sides.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Selaroides leptolepis*: minute teeth in lower jaw and no dark vertical bars on body but a distinctive yellow band; also, gill rakers 26 (20 in *Gnathanodon*).

All other carangid species: have at least some small teeth in upper jaw; also, scutes absent in some genera (*Nauerates*, *Trachinotus*, etc.), or finlets present behind dorsal and anal fins (*Secapterus*, etc.).

SIZE:

Maximum: 100 cm; common: 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

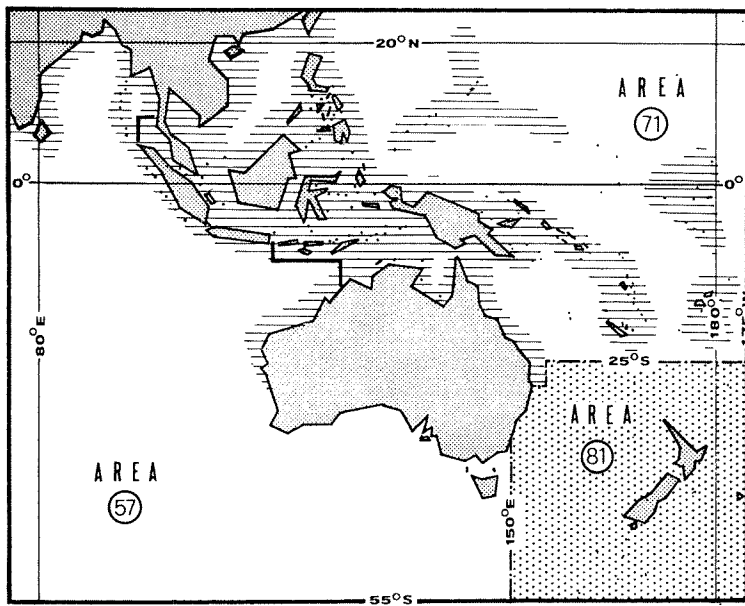
Throughout most warm coastal waters of area.

Inhabits shallow coastal waters and coral and rocky reefs.

Feeds on crustaceans and fishes.

PRESENT FISHING GROUNDS:

Coastal waters throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total reported catch of miscellaneous unspecified carangids in 1972 was:

area 57 (Eastern Indian ocean): 1 400 tons (India only)  
area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
Malaysia: 4 900 tons)

Caught mainly with gill nets and traps.

Marketed mostly fresh; also dried-salted.

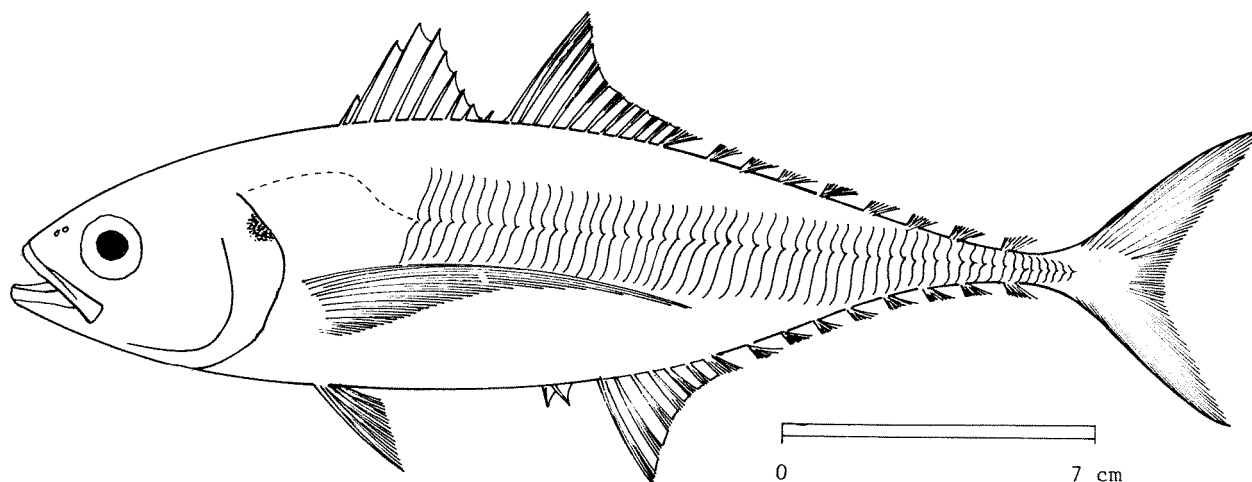
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

*Megalaspis cordyla* (Linnaeus, 1758)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

FAO: En - Hardtail scad  
Fr -  
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

*An elongate, fusiform, slightly compressed carangid, its depth 3.8 to 4.0 times in standard length. Teeth present in jaws and on vomer and palatines (roof of mouth) and tongue, those in upper jaw in a band, those in lower jaw in a single series. 1st dorsal fin with 8 to 9 spines; 2nd dorsal fin with 1 spine and 10 soft rays and 8 to 9 finlets. Anal fin with 2 detached spines, followed by 1 spine, 10 soft rays and 6 to 8 finlets. Lateral line strongly curved anteriorly, becoming straight below the 6th to 7th spines of 1st dorsal fin. 53 to 58 tall, strong, pungent, keeled scutes; height of largest scute twice eye diameter. Caudal peduncle hard and strong.*

Colour: blue/green above, silvery white below; a black spot on posterior edge of operculum; dorsal, pectoral and caudal fins dusky grey.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Elagatis* and *Decapterus* species: a single finlet only behind soft dorsal and anal fins.

*Scomberoides* species: scutes absent on posterior part of body.

Other carangid genera: lack finlets, body often deep, caudal peduncle not so slender.

Scombridae and Gempylidae: no scutes on hind part of lateral line, but keels usually present on each side of caudal peduncle; also, first 2 anal spines not separate from rest of fin and base of 1st dorsal fin longer than that of 2nd.

SIZE:

Maximum: 40 cm; common: 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

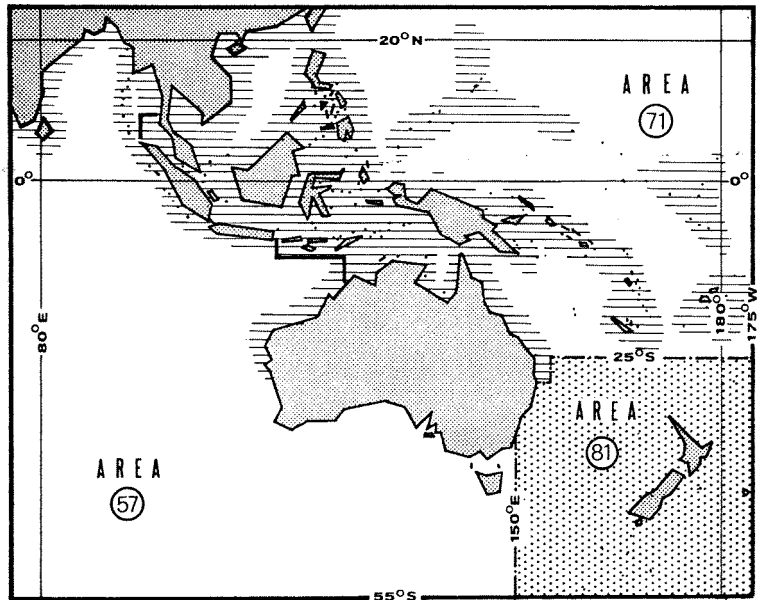
Throughout most warm coastal waters of area.

Inhabits coastal waters down to 60 m.

Feeds on small crustaceans and fishes.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total reported catch of miscellaneous unspecified carangids in 1972 was:

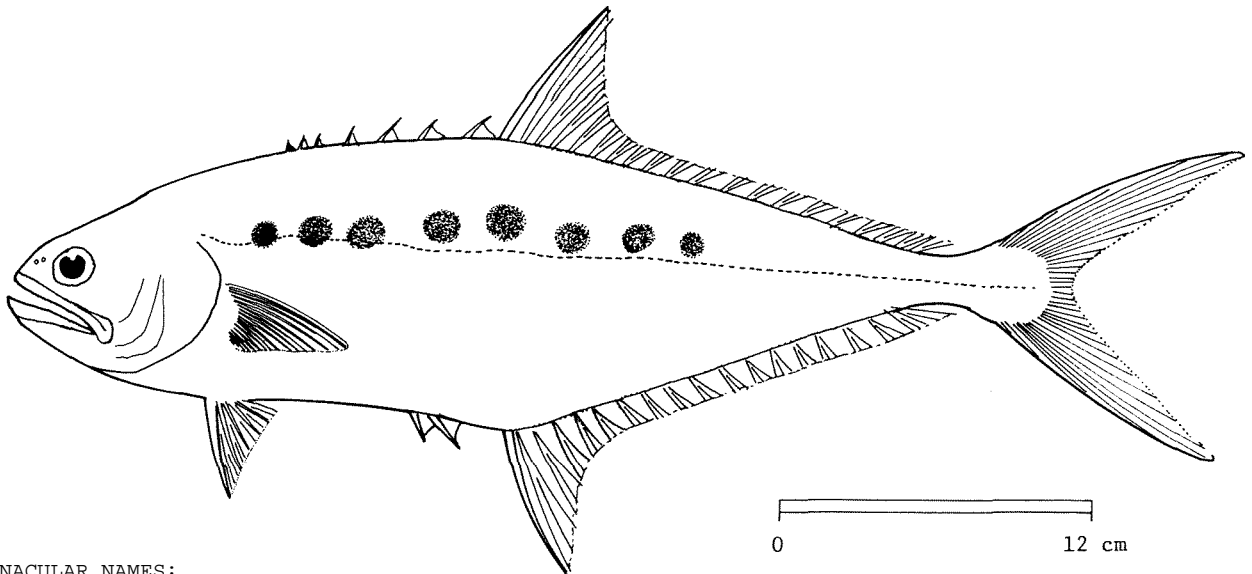
area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
Malaysia: 4 900 tons)

Caught mainly with bottom trawls, purse seines and traps.

Marketed mostly fresh.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Scomberoides commersonianus* Lacepède, 1802SYNONYMS STILL IN USE: *Chorinemus lysan* (not of Forsskål): Day, 1878; Weber & de Beaufort, 1931

## VERNACULAR NAMES:

FAO: En - Talang queenfish  
Fr -  
Sp -

## NATIONAL:

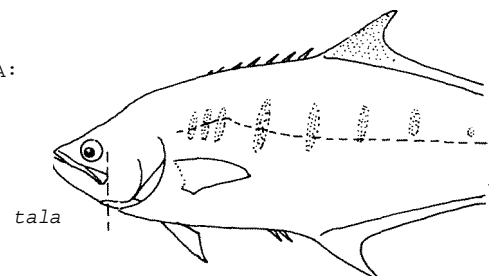
## DISTINCTIVE CHARACTERS:

A compressed, elongate carangid, with a blunt snout and a depression over eye. Eye diameter 4.5 to 6.0 times in head length and about equal to snout. Upper jaw reaching well beyond eye. Upper jaw with an outer row of conical teeth and an inner band of villiform teeth; lower jaw with 2 rows of conical teeth separated by a groove; minute teeth on tongue, vomer and palatines (roof of mouth). Gill rakers 7 to 12 on lower limb of 1st arch. 1st dorsal fin with 1 forward-pointing spine (becoming embedded with age) and 6 to 7 normal spines; 2nd dorsal fin with 1 spine and 19 to 21 soft rays. Dorsal and anal fin bases approximately equal in length; dorsal and anal fins with 7 to 8 rays, finlet-like but not fully separated. Pectoral fins short, not falcate. Anal fin with 2 detached spines, followed by 1 spine and 16 to 19 soft rays. Scales small and lanceolate, partly embedded; breast scaled. Lateral line slightly wavy anteriorly, straight over most of its length; no scutes present.

Colour: dusky green above, silvery or golden yellow below; 5 to 8 round blotches on sides; soft dorsal fin evenly dusky, not abruptly pigmented distally.

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

*Scomberoides tala*: oval blotches on side of body and upper jaw reaching only a little beyond vertical from posterior margin of eye.



*Scomberoides lysan*: lower gill rakers 15 to 20 (7 to 12 in *S. cormersonianus*), a double row of black spots on side of body, upper jaw only just reaching vertical from posterior margin of eye, scales lanceolate and tip of 2nd dorsal fin sharply pigmented.

*Scomberoides tol*: lower gill rakers 17 to 20, upper jaw not reaching to below hind margin of eye, scales needle-like and tip of 2nd dorsal fin sharply pigmented.

*Trachinotus* species: body deep, soft dorsal and anal fins strongly falcate; also, posterior dorsal and anal fin rays not resembling finlets and head profile steep.

Other carangid genera: either anal fin base much shorter than soft dorsal fin base (*Elagatis*, *Seriola*, etc.) or scutes present on posterior part of lateral line (*Caranx*, *Decapterus*, etc.).

Scomberidae, Gempylidae: first 2 anal spines not detached from rest of fin, dorsal and anal finlets distinctly separated from each other and base of 1st dorsal fin longer than that of 2nd.

Rachycentridae: first 2 anal spines not detached from rest of fin.

SIZE:

Maximum: 100 cm; common: 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most warm coastal waters of area.

Restricted to neritic waters near continental shelf.

Feeds on crustaceans and fishes.

PRESENT FISHING GROUNDS:

Throughout its range.

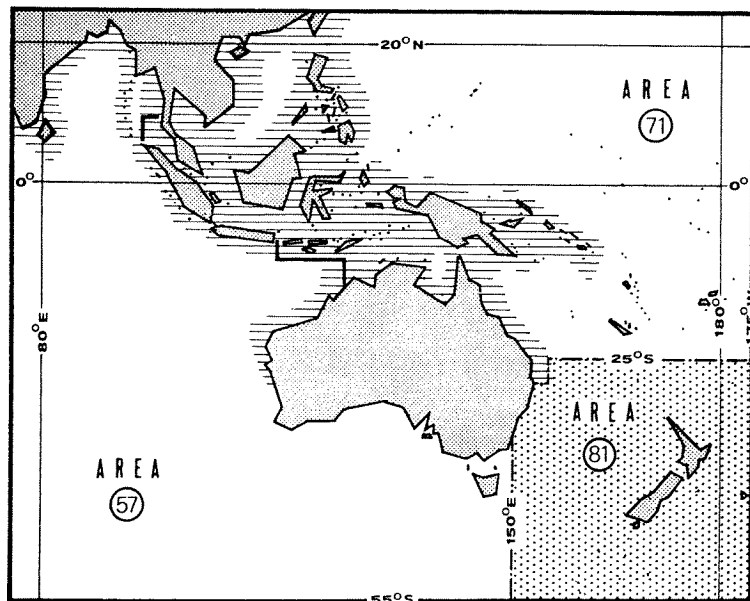
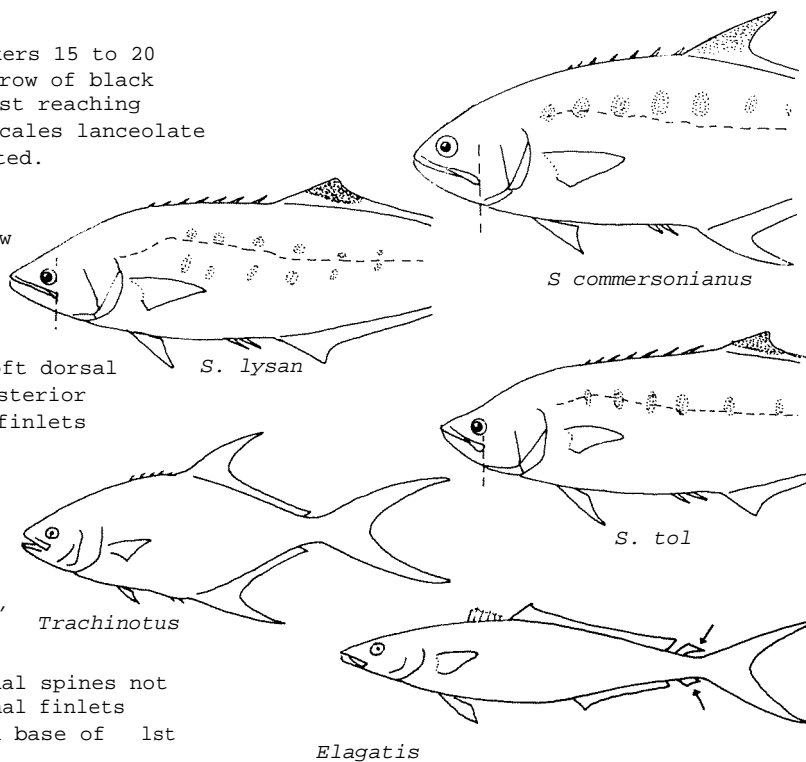
CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total reported catch of miscellaneous unspecified carangids in 1972 was:

area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
 area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
 Malaysia: 4 900 tons)

Caught mainly with gill nets and traps.

Marketed mostly fresh; also dried-salted.



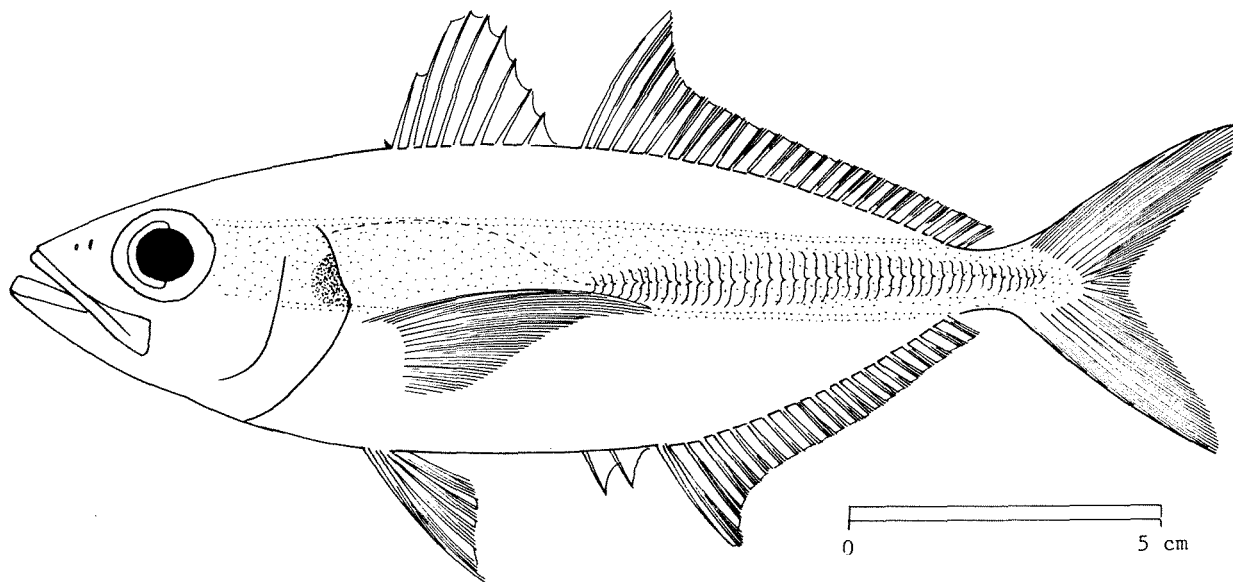
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

*Selar boops* (Valenciennes, 1833)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

FAO: En - Oxeye scad  
Fr -  
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

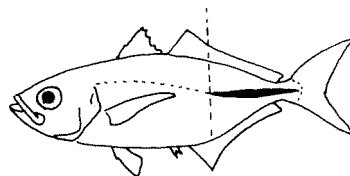
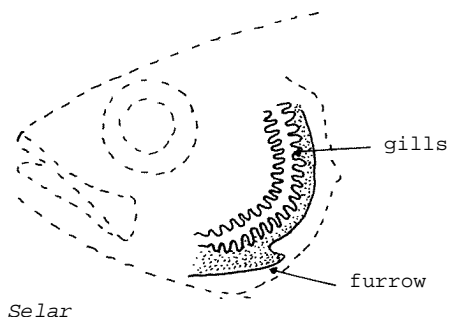
*An oblong, moderately compressed carangid. Eye large, its diameter 3 times or less in head length. A deep furrow on lower margin of gill opening. Teeth in a single series in each jaw preceded by a band anteriorly; vomer and palatines (roof of mouth) toothed. Gill rakers about 23 on lower limb of 1st arch. 1st dorsal fin with 1 forward-pointing spine (not always visible) and 8 normal spines; 2nd dorsal fin with 1 spine and 24 to 25 soft rays. Dorsal and anal fin bases equal. Pectoral fins falcate. Anal fin with 2 detached spines, followed by 1 spine and 20 to 21 soft rays. Lateral line moderately curved anteriorly, becoming straight before origin of soft dorsal fin; 44 to 46 scutes, beginning below origin of soft dorsal fin; largest scute 4 times in body depth.*

Colour: blue/green above with a broad golden band; silvery or golden yellow below; black spot on edge of gill cover; dorsal, anal and caudal fins with a dusky fringe and white tips anteriorly to dorsal and anal fins.

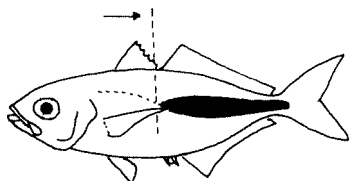
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Selar crumenophthalmus*: 32 to 38 scutes (44 to 46 in *S. boops*), beginning below middle of soft dorsal fin, the largest about 9 to 10 times in body depth (about 4 times in *S. boops*).

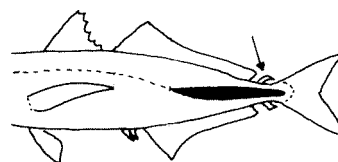
Other carangid genera: lack deep furrow on lower margin of gill opening; also, scutes sometimes absent (*Scomberoides*, etc.), or finlets present behind dorsal and anal fins (*Decapterus*, *Megalaspis*) or body much deeper (some *Caranx*, *Carangoides*, etc.)



*Selar crumenophthalmus*



*Selar boops*



*Decapterus*

SIZE:

Maximum: 25 cm; common: 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

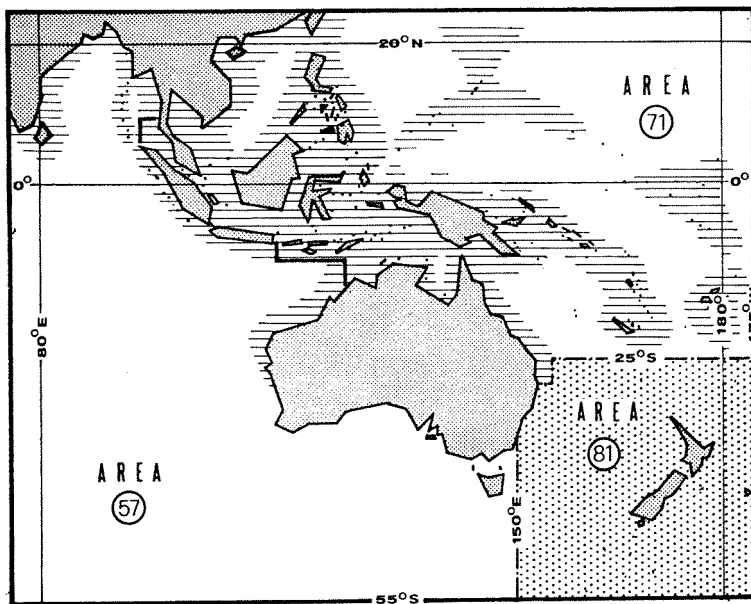
Throughout most warm coastal waters of area.

Inhabits coastal areas and coral and rocky reefs.

Feeds on invertebrates and fishes.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The Philippines report a statistical category "*Decapterus* and *Selar*" species (1972: 340 000 tons). The total reported catch of miscellaneous unspecified carangids in 1972 was:

area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
 area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
 Malaysia: 4 900 tons)

Caught mainly with bottom trawls and traps.

Marketed mostly fresh.

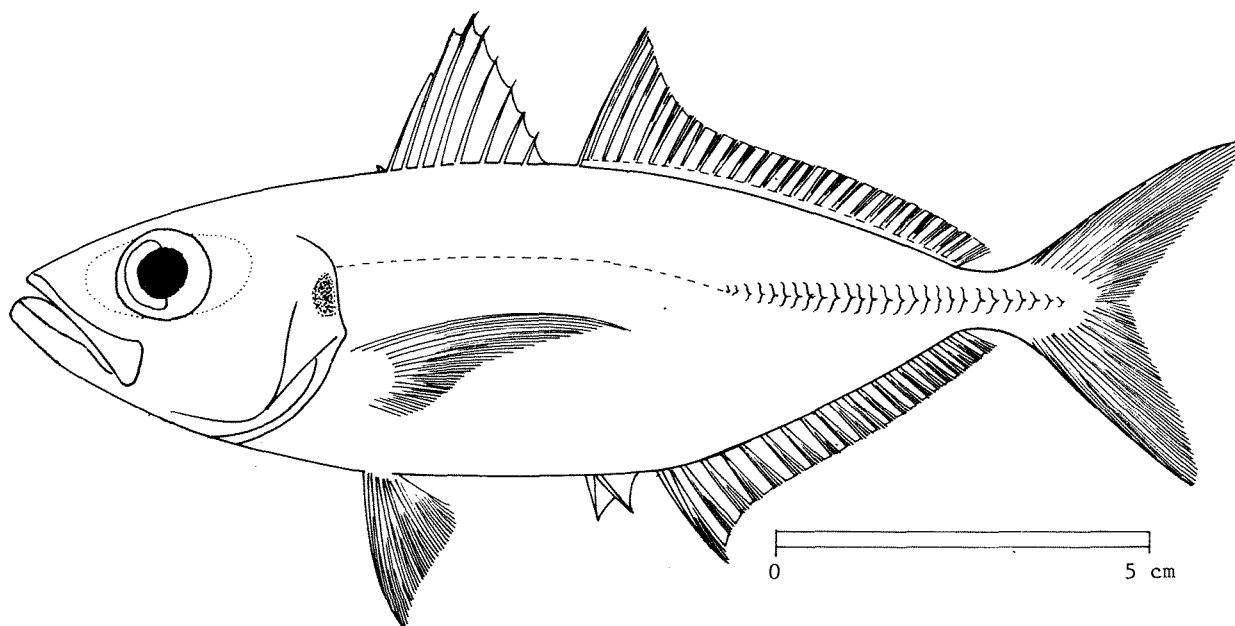
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

*Selar crumenophthalmus* (Bloch, 1793)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

- FAO: En - Bigeye scad
- Fr -
- Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

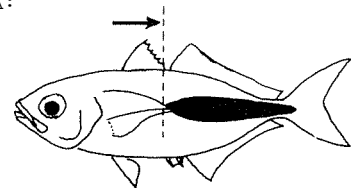
*An oblong, moderately compressed carangid. Eye large, its diameter 3 times or less in head length. A deep furrow on lower margin of gill opening. Teeth in both jaws in a single series; vomer and palatines (roof of mouth) toothed. Gill rakers 23 to 27 on lower limb of 1st arch. 1st dorsal fin with 1 forward-pointing spine (not always visible) and 8 normal spines; 2nd dorsal fin with 1 spine and 24 to 26 soft rays. Dorsal and anal fin bases equal. Pectoral fins falcate. Anal fin with 2 detached spines, followed by 1 spine and 21 to 23 soft rays. Lateral Line slightly curved anteriorly, becoming straight below middle of soft dorsal fin; 32 to 38 scutes, beginning below middle of soft dorsal fin; Largest scute 9 to 10 times in body depth.*

Colour: green/blue on back, silvery white below; gill cover with a dark brown spot; fins pale.

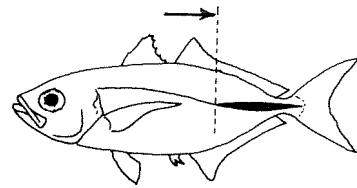
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Selar hoops*: 44 to 46 scutes (32 to 38 in *S. crumenophthalmus*), beginning below origin of soft dorsal fin, the largest about 4 times in body depth (about 9 to 10 times in *S. crumenophthalmus*).

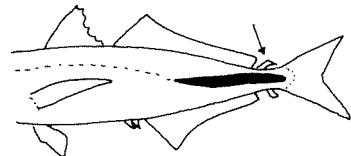
Other carangid genera: lack deep furrow on lower margin of gill opening; also, scutes sometimes absent (*Scomberoides*, etc.), or finlets present behind dorsal and anal fins (*Deeapterus*, *Megalaspis*) or body much deeper (some *Caranx*, *Carangoides*, etc.).



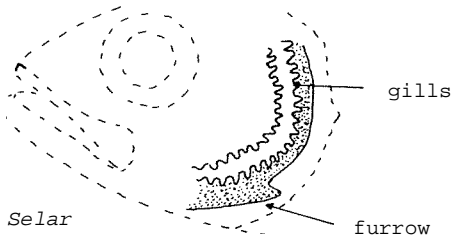
*Selar hoops*



*Selar crumenophthalmus*



*Deeapterus*



*Selar*

gills

furrow

SIZE:

Maximum: 30 cm; common: 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

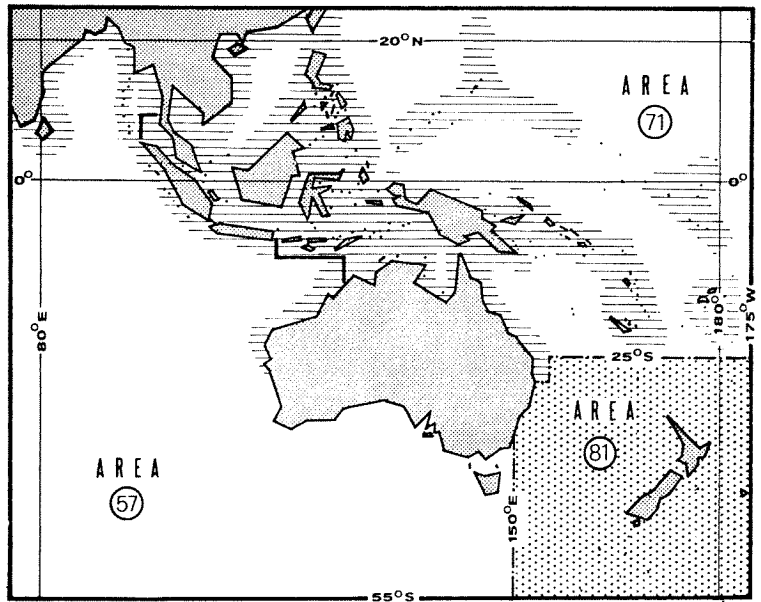
Throughout most warm coastal waters of area.

Inhabits coastal areas down to 80 m.

Feeds on crustaceans and fishes.

PRESENT FISHING GROUNDS:

Coastal waters throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The Philippines report a statistical category "*Deeapterus and Selar*" species (1972: 340 000 tons). The total reported catch of miscellaneous unspecified carangids in 1972 was:

area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
 area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
 Malaysia: 4 900 tons)

Caught mainly with bottom trawls and traps.

Marketed mostly fresh.

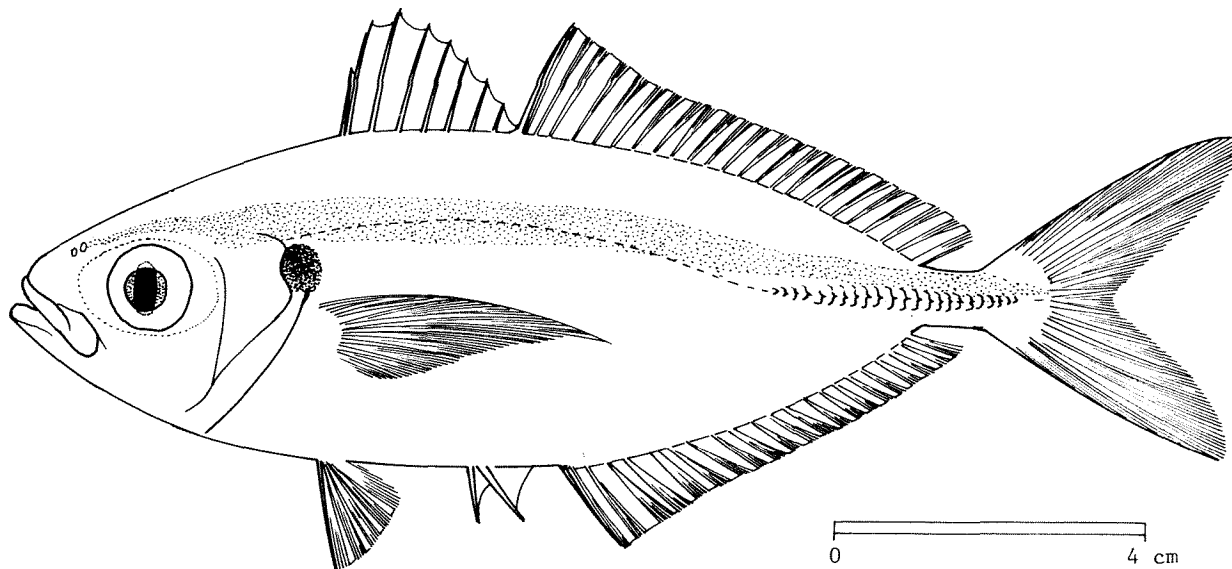
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

*Selaroides leptolepis* Valenciennes, 1833

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

FAO: En - Yellowstripe trevally  
Fr -  
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

An oblong, compressed carangid, with upper and lower profiles equally convex. Eye large, its diameter 3.2 to 3.5 times in head length. Upper jaw reaching to below front border of eye. No teeth in upper jaw or on vomer and palatines (roof of mouth); minute teeth in a single series in lower jaw and some rudimentary teeth on tongue. Gill rakers 26 on lower limb of 1st arch. 1st dorsal fin with 8 spines; 2nd dorsal fin with 1 spine and 25 soft rays. Dorsal and anal fin bases nearly equal. Pectoral fins falcate. Anal fin with 2 detached spines, followed by 1 spine and 20 soft rays. Breast covered by small but conspicuous scales. Lateral line scarcely arched, becoming straight below 16th soft dorsal fin ray; straight portion 1/3 of lateral line; 25 to 34 weak scutes.

Colour: a golden yellow lateral band from eye to caudal fin; back green and blue, lower sides silvery; a dusky spot on operculum; fins yellowish.

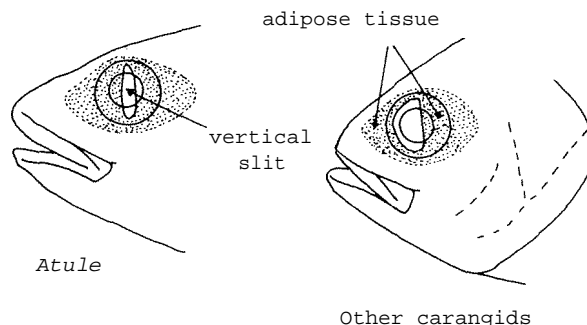
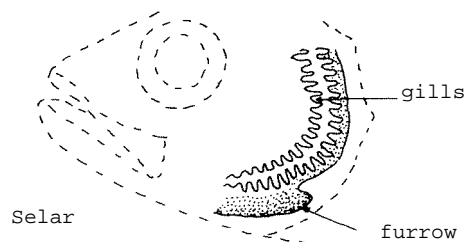
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Selar* species: lower margin of gill opening with a deep furrow; also, teeth present in upper jaw.

*Atule* mate: only carangid species with adipose tissue of eye covering all but a vertical slit; also, teeth present in upper jaw.

*Gnathanodon*: teeth absent also in lower jaw; also, dark vertical bars on body and 20 gill rakers (26 in *Selaroides*).

Other carangid genera: teeth present in both jaws; also, scutes absent in some genera (*Naucrates*, *Traehinotus*. etc.) or finlets present behind dorsal and anal fins (*Decapterus*, etc.).



SIZE:

Maximum: 20 cm; common: 15 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

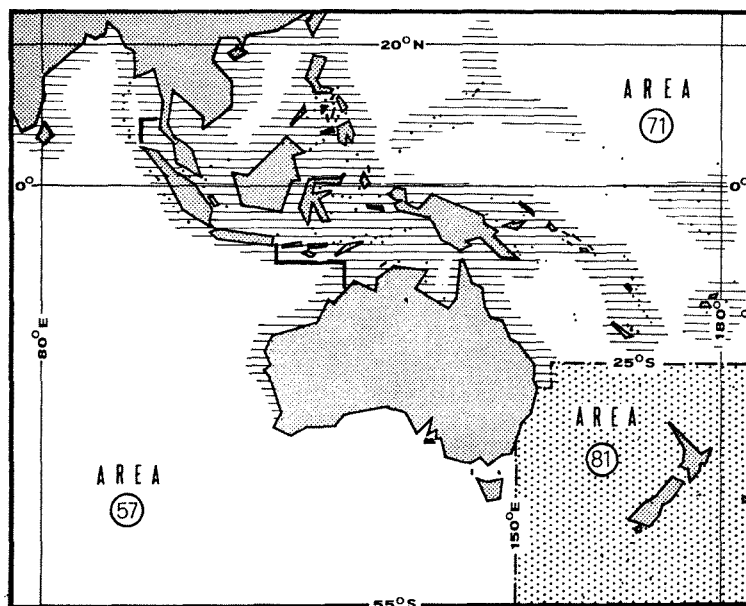
Throughout most warm coastal waters of area.

Inhabits shallow coastal areas.

Feeds on crustaceans and presumably also on small fishes.

PRESENT FISHING GROUNDS:

Coastal waters throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics for this species are reported only by Malaysia (1972: 6 400 tons). The total reported catch of miscellaneous unspecified carangids in 1972 was:

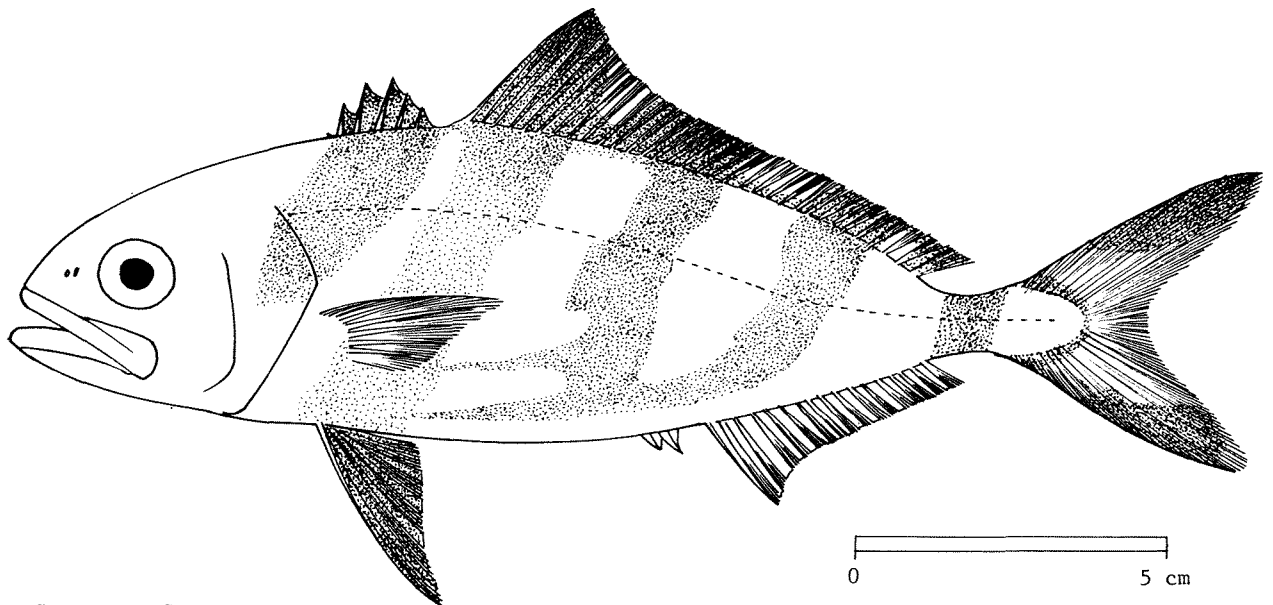
area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
 area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
 Malaysia: 4 900 tons)

Caught mainly with purse seines; also with traps.

Marketed mostly fresh; also dried-salted.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING ARIAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Seriolina nigrofasciata* (Rüppell, 1828)SYNONYMS STILL IN USE: *lonichthys nigrofasciata* (Rüppell, 1828)

## VERNACULAR NAMES:

FAO: En - Black-banded trevally  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

An oblong, moderately compressed carangid. Head profile steep in front of eye, becoming convex above eye. Eye diameter 4.0 times in head length (smaller in adults), approximately equal to snout length. Upper jaw reaching beyond vertical from posterior margin of pupil. Bands of villiform teeth in jaws; villiform teeth on vomer and palatines (roof of mouth) and tongue. Gill rakers not normal, reduced to small knobs; 5 knobs on lower limb of 1st arch. 1st dorsal fin with 1 forward-pointing spine (not always visible) and 5 to 7 normal spines; 2nd dorsal fin with 1 spine and 31 to 34 soft rays. Anal fin base about half length of dorsal fin base. Pectoral fins shorter than length of head, not falcate. Anal fin with 2 detached spines, followed by 1 spine and about 16 soft rays. Breast scaled. Lateral line rising slightly above pectoral fin then dropping in a straight line to caudal peduncle; no scutes in adults.

Colour: ground colour dusky olive brown or dusky grey above and silvery grey below; 6 dusky black oblique bands inclining forward on body and head, disappearing with age; fins brown; tips of dorsal and anal fins white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA

*Seriola* species: gill rakers normal and snout long (about twice eye diameter; equal to or less than eye diameter in *Seriolina*).

Other carangid genera: gill rakers normal, or scutes present on posterior part of lateral line (*Caranx*, *Carangoides*, etc.), or detached finlets present behind dorsal and anal fins (*Elagatis*, etc.) or only 4 to 5 dorsal spines, not connected by membrane (*Plaucrates*).

SIZE:

Maximum: 60 cm; common: 40 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

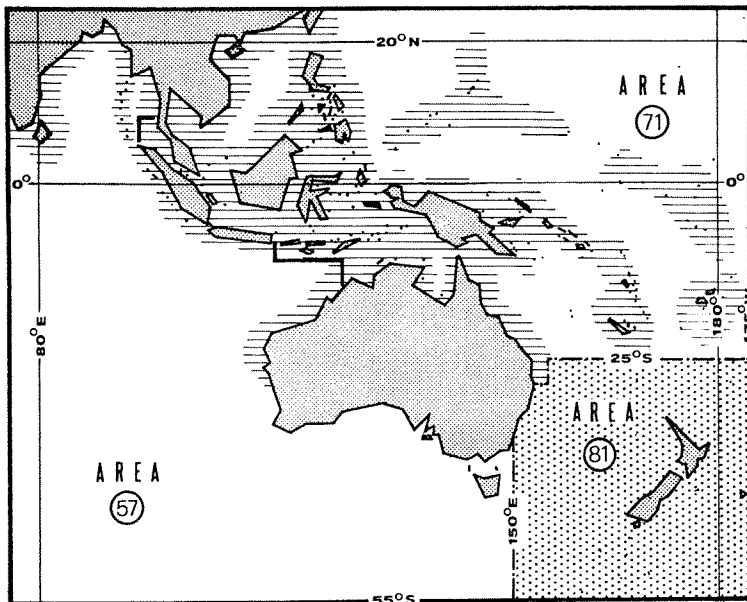
Throughout most warm coastal waters of area.

Inhabits coastal areas.

Feeds on crustaceans and fishes.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total reported catch of miscellaneous unspecified carangids in 1972 was:

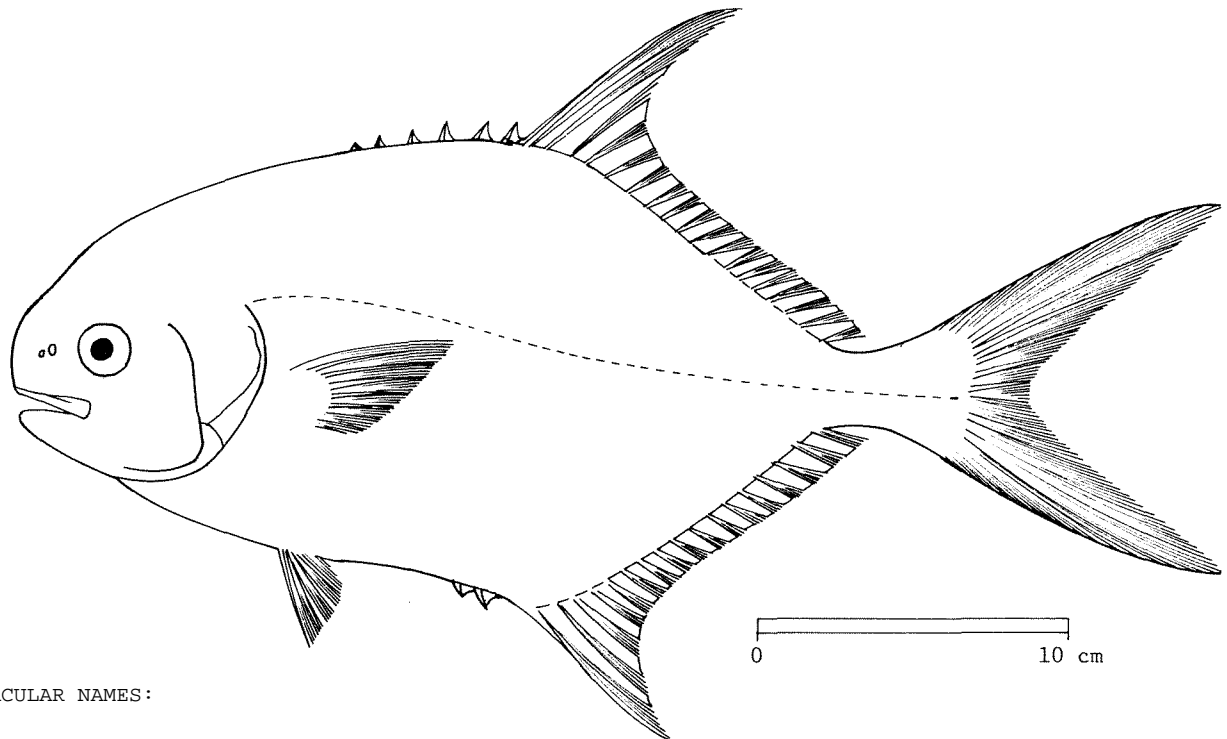
area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
Malaysia: 4 900 tons)

Caught mainly with bottom trawls, bottom longlines and traps.

Marketed mostly fresh.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Trachinotus blochii* (Lacepède, 1802)SYNONYMS STILL IN USE: *Trachinotus falcatus* (non Linnaeus): Klausewitz & Nielsen, 1965  
*Trachinotus ovatus* (non Linnaeus): Günther, 1860

## VERNACULAR NAMES:

FAO: En - Snubnose pompano  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

A deep-bodied, compressed carangid, its depth about twice in standard length. Head profile smoothly rounded, snout blunt. Eye diameter 3.2 to 4.0 times in head length. Upper jaw reaching to below front edge of eye or pupil. Jaw teeth small, villiform, absent in adults; villiform teeth on vomer and palatines (roof of mouth). Gill rakers 8 to 9 on lower limb of 1st arch. 1st dorsal fin with 1 forward-pointing spine (not visible in adults) and 6 normal spines; 2nd dorsal fin with 1 spine and 18 to 20 soft rays. Soft dorsal and anal fin bases more or less equal. Pectoral fin short, not falcate, less than length of head. Anal fin with 2 detached spines, followed by 1 spine and 16 to 17 soft rays. Dorsal, anal and caudal fins become increasingly falcate with age. Scales on breast, head almost naked. Curved portion of lateral line short, only about 1/3 length of lateral line; no scutes present.

Colour: market specimens golden yellow; in life back blue, sides silver, the two colours separated by a vague stripe of orange/pink; dorsal lobe and base of fin dusky, the rest yellow; anal fin yellow, its lobe orange/red.

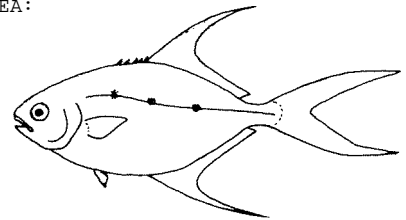
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Trachinotus botla* (*T. russelii* of authors): 11 to 14 gill rakers and 20 to 21 soft anal fin rays (8 to 9 and 16 to 17 in *T. blochii*); also, 3 to 4 large dark blotches on sides of body.

*Trachinotus bailloni*: 16 gill rakers and 22 to 24 soft anal fin rays; also, 2 to 5 small black spots along lateral line.

*Scomberoides* species (*Chorinemus* of authors): body much more elongate, lobes of soft dorsal and anal fins not strongly falcate and scales elongate or needle-like.

Other carangid genera: either anal fin base much shorter than soft dorsal fin base (*Elagatis*, *Seriola*, etc.) or scutes present on posterior part of lateral line (*Caranx*, *Carangoides*, etc.).



*Trachinotus bailloni*



*Scomberoides*

SIZE:

Maximum: 80 cm; common: 40 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

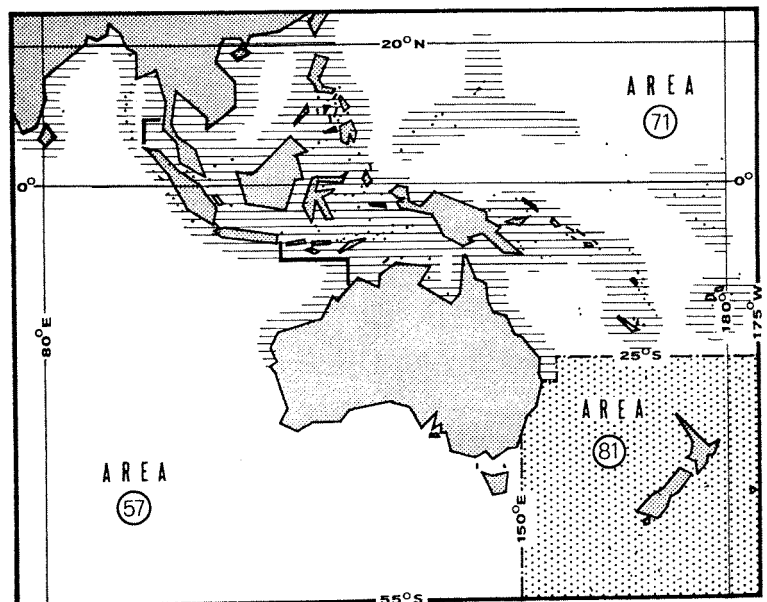
Throughout most warm coastal waters of area.

Inhabits shallow coastal areas and coral and rocky reefs.

Feeds on crustaceans.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCFES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total reported catch of miscellaneous unspecified carangids in 1972 was:

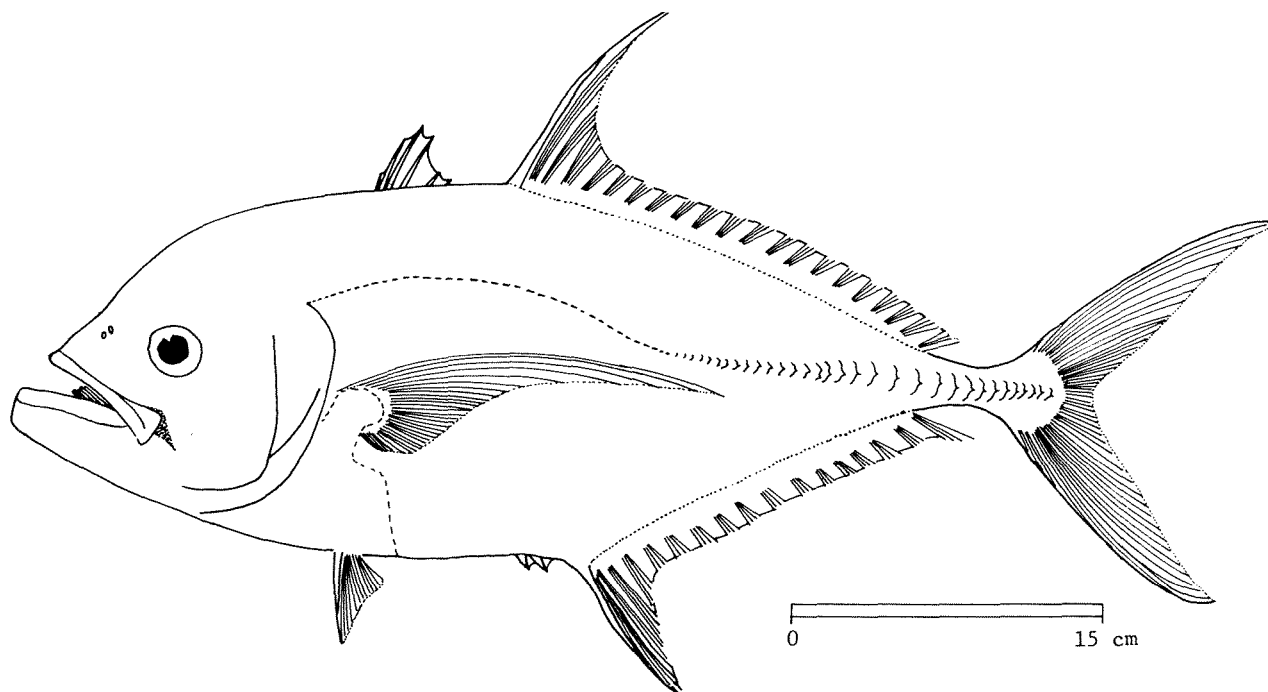
area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
Malaysia: 4 900 tons)

Caught mainly with gill nets and traps.

Marketed mostly fresh.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Ulua mentalis* Ehrenberg in Valenciennes, 1833SYNONYMS STILL IN USE: *Ulua mandibularis* (Macleay, 1883)

## VERNACULAR NAMES:

FAO: En - Cale-cale trevally  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

A deep-bodied, strongly compressed carangid. Head profile strongly arched above eye, especially in large adults. Lower jaw deep, increasingly projecting beyond upper jaw in larger fishes. Upper jaw reaching to below middle of eye, sometimes only to pupil. A single row of minute teeth in jaws: fine teeth on vomer and palatines (roof of mouth), none on tongue. Gill rakers numerous and extremely long and feathery, projecting into mouth alongside tongue; 50 to 59 gill rakers on lower limb of 1st arch. 1st dorsal fin with 6 to 8 spines; 2nd dorsal fin with 1 spine and 20 to 21 soft rays. Dorsal fin base a little longer than anal fin base; soft dorsal and anal fins elevated anteriorly. Pectoral fins falcate, extending to middle of anal fin base. Anal fin with 2 detached spines, followed by 1 spine and 17 to 18 soft rays. Breast naked from behind base of pelvic fins to pectoral fins. Lateral line moderately arched, joining straight portion under 8th to 11th soft dorsal fin rays curved anterior portion slightly shorter than straight portion; 29 to 33 scutes present.

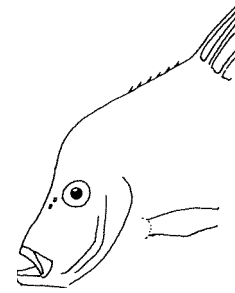
Colour: blue/green above, silvery white below; a black patch behind corner of mouth; lower jaw white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

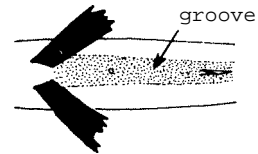
*Aleetis* species: gill rakers shorter and fewer and head profile very steep; also, anterior soft dorsal and anal fin rays filamentous and scales embedded in skin.

*Caranx* and *Carangoides* species: gill rakers shorter and fewer; also, lower jaw less heavy, not projecting in large adults.

Other carangid species: gill rakers shorter and fewer; also, either scutes not present (*Traehinotus*, ect.) or body slender, or distinct groove along belly (*Atropus*) or dorsal and anal finlets present (*Decapterus*, *Megalaspis*).



*Aleetis*



*Atropus*

SIZE:

Maximum: 100 cm; common: 60 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

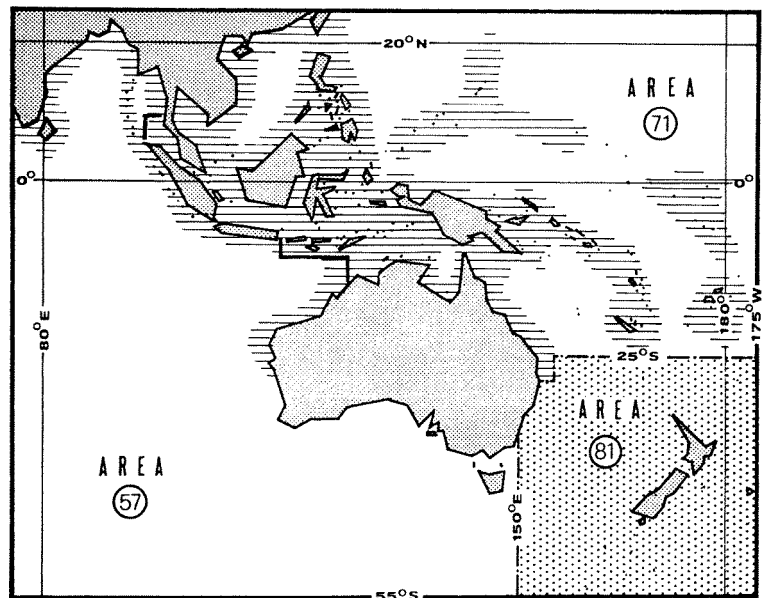
Throughout most warm coastal waters of area.

Inhabits shallow coastal areas.

Feeds on crustaceans and fishes.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total reported catch of miscellaneous unspecified carangids in 1972 was:

area 57 (Eastern Indian Ocean): 1 400 tons (India only)  
area 71 (Western Central Pacific): 31 700 tons (Philippines: 26 800 tons;  
Malaysia: 4 900 tons)

Caught mainly with gill nets and traps.

Marketed mostly fresh; also dried-salted.