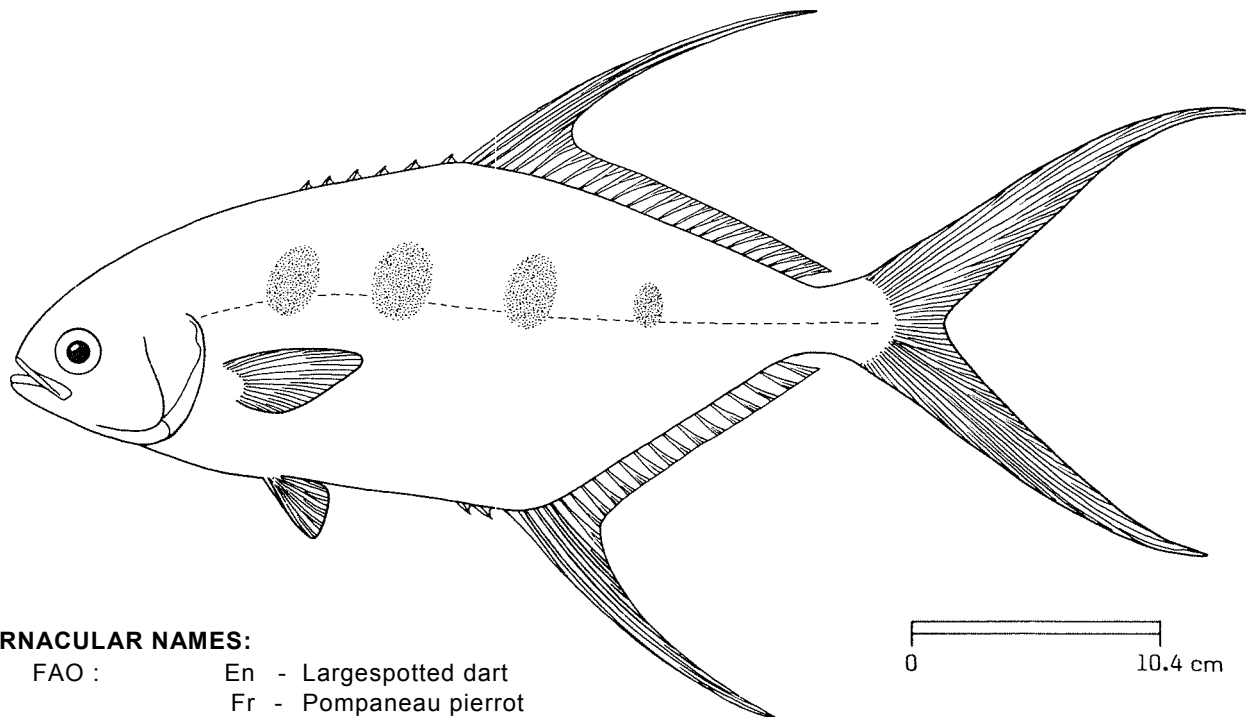


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Trachinotus russelii Cuvier, 1832OTHER SCIENTIFIC NAMES STILL IN USE: Trachinotus botla (Shaw, 1803) (= an invalid (nomen dubium) name)

VERNACULAR NAMES:

FAO : En - Largespotted dart
Fr - Pompaneau pierrot
Sp - Pámpano pastilla

NATIONAL:

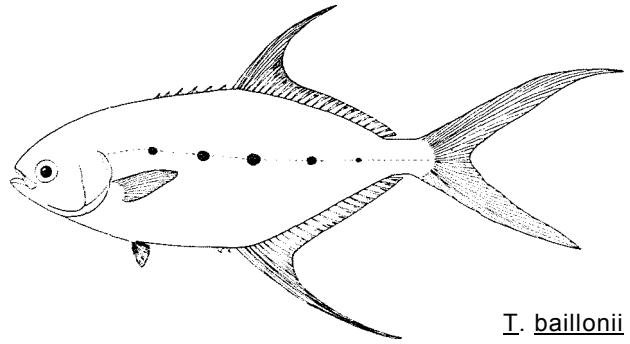
DISTINCTIVE CHARACTERS:

Body elongate to ovate and strongly compressed; dorsal and ventral profiles almost equally convex, snout blunt. Both jaws with bands of small villiform teeth; tongue without teeth; gillrakers (including rudiments) 6 to 9 upper and 11 to 15 lower on first gill arch; 2 separate dorsal fins, the first with 6 short spines, followed by 1 spine and 22 to 24 soft rays; anal fin with 2 detached spines, followed by 1 spine and 19 to 22 soft rays; dorsal fin lobe usually longer than anal fin lobe in specimens larger than about 25 cm fork length; pelvic fin relatively long, its length contained 1.5 to 1.7 times in pectoral fin length in specimens larger than about 25 cm fork length. Lateral line only slightly irregular, weakly convex above pectoral fin, becoming straight posteriorly. No scutes or caudal peduncle grooves. Vertebrae 10+14.

Colour: in life, adults bluish-black above, silvery below; sides with 1 to 5 relatively large plumbeous spots (spots absent on fish smaller than about 10 to 13 cm fork length, the number of spots generally increasing with age in a longitudinal row on or near lateral line; in adults, anterior 2 spots larger than eye diameter and at least two-thirds of spot above lateral line). Second dorsal and anal fins dusky to blue-black, the lobes usually darkest; caudal fin dusky with leading edges and most of lobes blue-black. Pectoral fin pale, upper two-thirds sometimes dark; pelvic fins white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

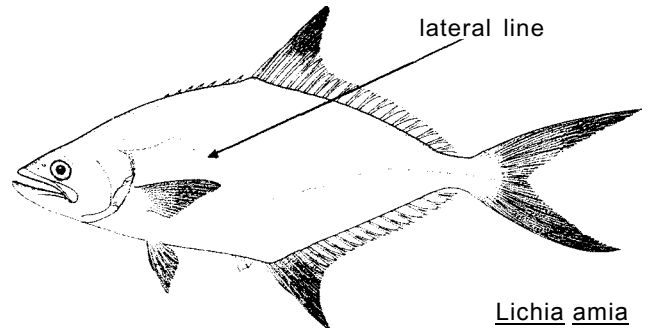
Trachinotus bailloni: in adults, all spots equal to, or smaller than eye diameter, and with about half of spot below lateral line (versus spots larger than eye diameter and at least two-thirds of spot above lateral line); lower limb gillrakers 15 to 19 (versus 11 to 15); and pelvic fins shorter, length contained 1.9 to 2.3 times in pectoral fin length in specimens larger than about 25 cm fork length (1.5 to 1.7 times in T. russelii).



T. bailloni

Other Trachinotus species: no spots in a longitudinal row on or near lateral line; and soft dorsal fin rays 18 to 20 (except 21 to 23 in T. africanus).

Lichia amia: lateral line very irregular and sinuous, describing a convex curve above and a concave curve behind the pectoral fin; no spots on lateral line.



Lichia amia

SIZE:

Maximum: largest specimen examined 48 cm fork length, 61 cm total length and 0.7 kg. South African angling record 2.3 kg.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean known from the Malagasy Republic (west coast) and along the African coast from South Africa to Kenya, and from Sri Lanka. Apparently replaced in Australia by the closely related Trachinotus velox Ogilby, the taxonomic status of which requires additional study.

Inhabits shallow coastal waters, often preferring the rough surf zone along sandy beaches.

Feeds mainly on crabs, mussels and worms.

PRESENT FISHING GROUNDS:

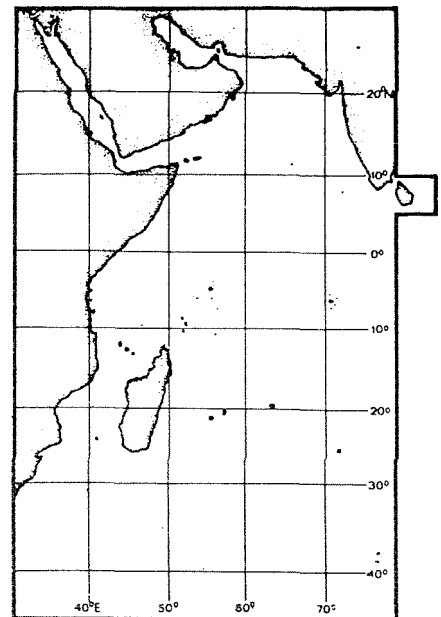
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

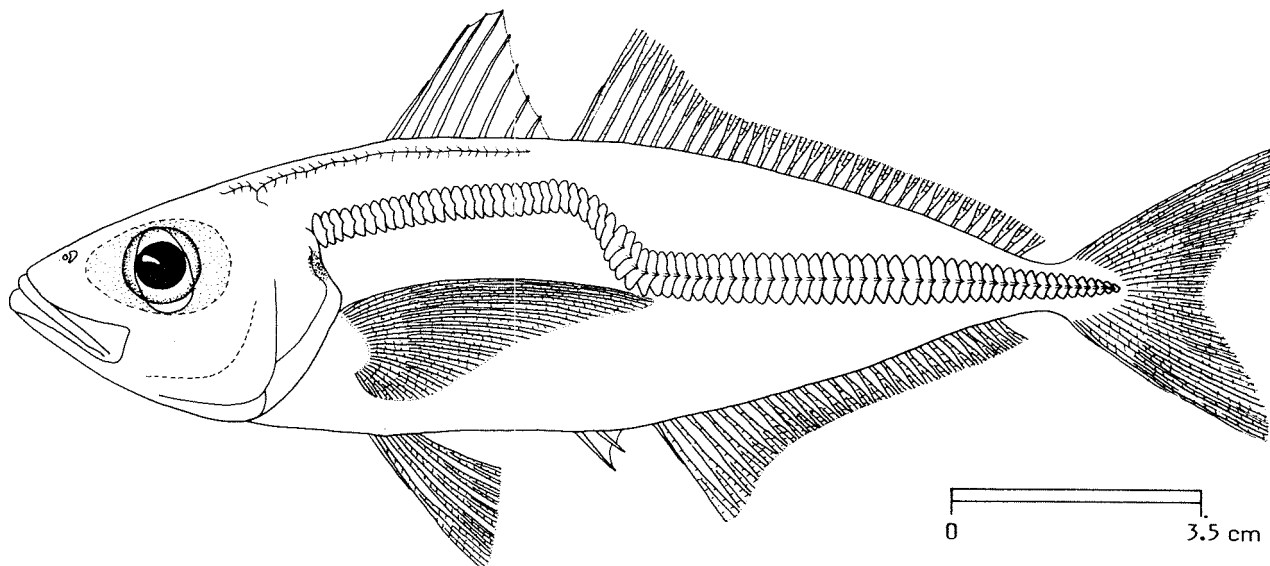
Caught with seines, gillnets, on hook and line and by spearing.

Marketed fresh and dried salted.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Trachurus delagoa Nekrasov, 1970OTHER SCIENTIFIC NAMES STILL IN USE: Trachurus margaretae Berry & Cohen, 1974 (Often misidentified as Trachurus capensis Castelnau, 1861)

VERNACULAR NAMES:

FAO : En - African scad
Fr - Chinchard galati
Sp - Jurel galati

NATIONAL:

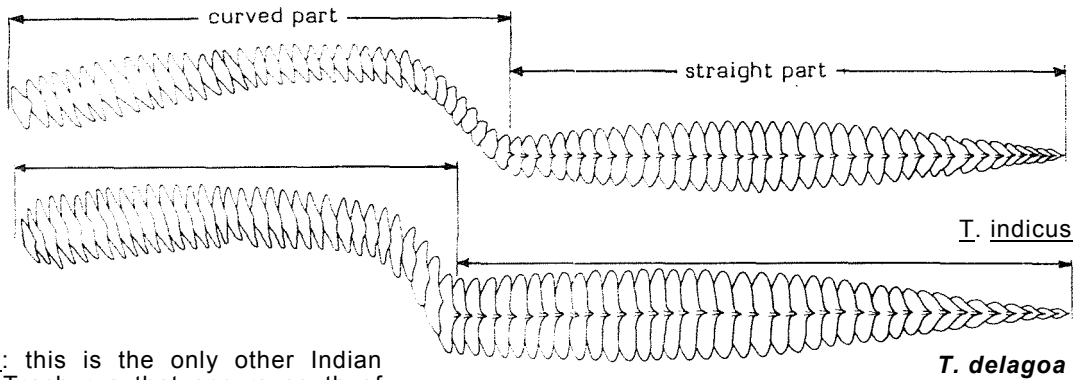
DISTINCTIVE CHARACTERS:

Body elongate and slightly compressed, with upper and lower profiles about equal. Eye moderate, with adipose eyelid well developed, usually covering most of eye except for a vertical oval centred on pupil; upper jaw moderately broad and extending to below anterior margin of eye; teeth small, in a single row in upper and lower jaws; gillrakers (including rudiments) 13 to 16 upper, 39 to 45 lower and 53 to 60 total. Shoulder girdle (cleithrum) margin with a small furrow at upper end, but no papillae present. Two separate dorsal fins, the first with 8 spines, followed by 1 spine and 28 to 32 soft rays; anal fin with 2 detached spines followed by 1 spine and 24 to 28 soft rays; pectoral fins about equal to or slightly longer than head length. Scales in curved as well as straight part of lateral line enlarged and scute-like (caution: in large Trachurus these scales may be obscured by an overgrowth of smaller scales); maximum height of scales in curved part 4.2 to 5.7% of fork length; maximum height of scutes in straight part 5.8 to 7.6% of fork length; scales and scutes in curved part of lateral line 28 to 34; straight part with 35 to 41 scutes; total scales and scutes in lateral line (excluding caudal scales) 68 to 74; lateral line scales or scutes in inflection area not conspicuously smaller than other scales in curved lateral line. Dorsal accessory lateral line terminating below 5th to 9th dorsal fin spine. Vertebrae 10+14.

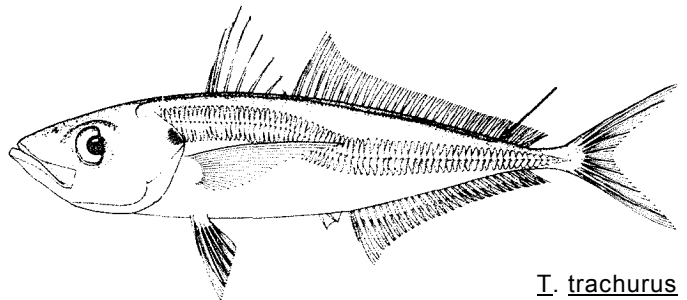
Colour: black opercular spot on edge near upper margin; body and head dark blue dorsally, sides and belly silvery; anal and pectoral fins pale yellow; caudal fin dark grey and pelvic fins white or hyaline.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA

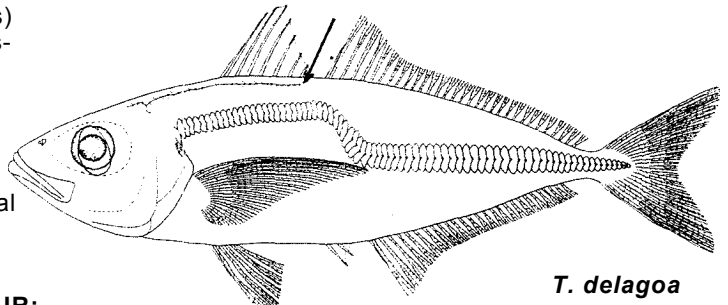
Trachurus indicus: scales or scutes in inflection area of lateral line not conspicuously smaller than other scales in curved lateral line; first lateral line scute more posteriorly positioned, below 7th to 11th soft dorsal fin ray (versus below 3rd to 6th ray) and scale/scutes in curved and straight parts of lateral line smaller, 2.4 to 4.2 and 3.3 to 5.4% of fork length, respectively (versus 4.2 to 5.7 and 5.8 to 7.6% of fork length, respectively in T. delagoa).



T. trachurus: this is the only other Indian Ocean species of Trachurus that occurs south of 20°S (although apparently not found in Fishing Area 51), and it occurs sympatrically with T. delagoa on the Agulhas Bank off South Africa. It is easily distinguished from both T. delagoa and T. indicus in having a much more posterior termination of the dorsal accessory lateral line (below the 16th to 30th dorsal fin ray) and in having 64 to 74 (versus 53 to 63) total gillrakers on the first gill arch.



Other species of Carangidae: scales in curved lateral line not scute-like or expanded dorso-ventrally (caution: in large Trachurus these scales may be obscured by an overgrowth of smaller scales) and dorsal accessory lateral line not extending posteriorly beyond the spinous dorsal fin origin.



SIZE:

Maximum: reported to attain 35 cm total length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Malagasy Republic, Walters Shoals (33°20'S, 43°50'E) and along the African coast from Sofala Bank off Mozambique southward to the Eastern Cape Province of South Africa.

Mainly a demersal species inhabiting sandy bottoms of the continental shelf from the coastline to about 400 m depth, but migrating vertically to surface waters at night.

Feeds primarily on small crustacea and fish.

PRESENT FISHERY GROUNDS:

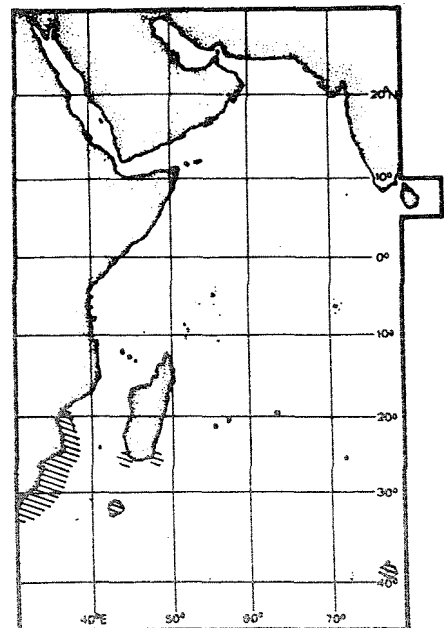
Trawlable bottoms throughout its range.

CATCHES, FISHERY GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls; also on hook and line.

Marketed mostly fresh.



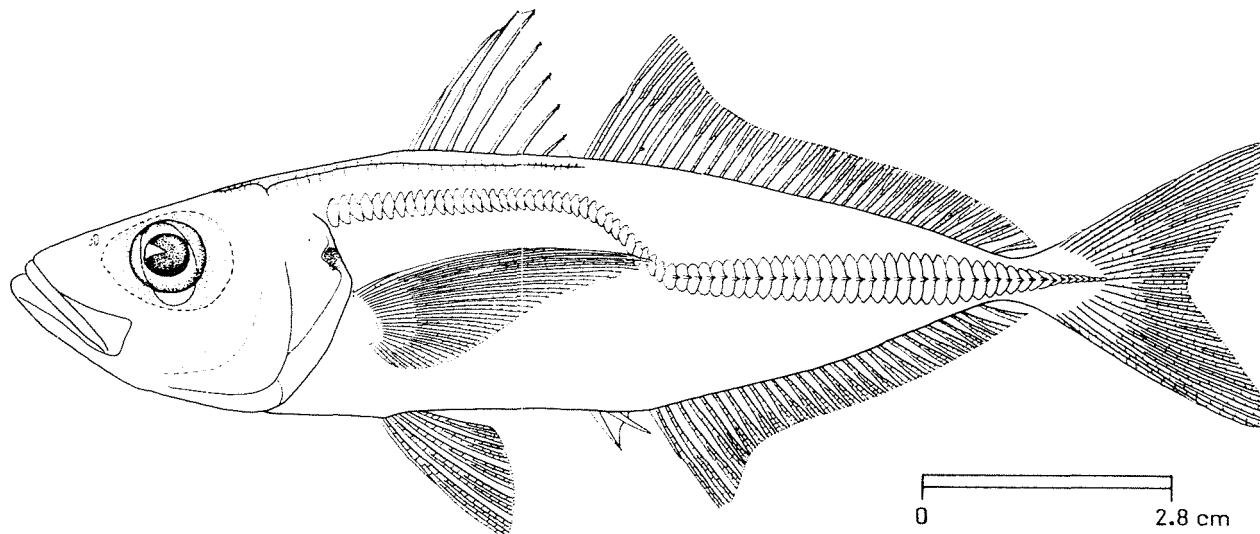
FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARANGIDAE

FISHING AREA 51
(W. Indian ocean)

<i>Trachurus indicus</i> Nekrasov, 1966

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO :	En - Arabian scad
	Fr - Chinchard d'Arabie
	Sp - Jurel arábigo

NATIONAL:

DISTINCTIVE CHARACTERS

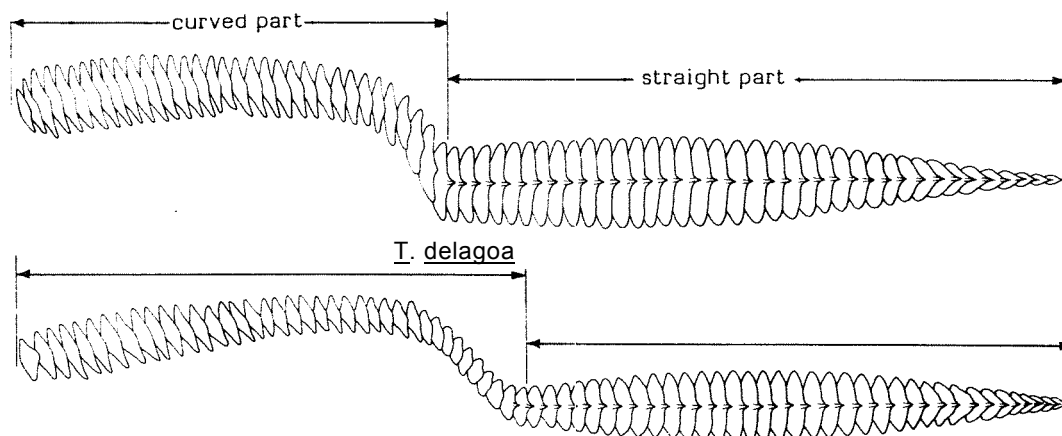
Body elongate and slightly compressed, with upper and lower profiles about equal. Eye moderate, with adipose eyelid well developed, usually covering most of eye except for a vertical oval centred on pupil; upper jaw moderately broad and extending to below anterior margin of eye; teeth small, in a single row in upper and lower jaws; gillrakers (including rudiments) 13 to 17 upper, 39 to 47 lower and 53 to 63 total. Shoulder girdle (cleithrum) margin with a small furrow at upper end, but no papillae present. Two separate dorsal fins, the first with 8 spines, followed by 1 spine and 28 to 35 soft rays; anal fin with 2 detached spines followed by 1 spine and 24 to 30 soft rays; pectoral fins about equal to or slightly longer than head length. Scales in curved as well as straight part of lateral line enlarged and scute-like (caution: in large Trachurus these scales may be obscured by an overgrowth of smaller scales); maximum height of scales in curved part 2.4 to 4.2% of fork length; maximum height of scutes in straight part 3.3 to 5.4% of fork length; scales and scutes in curved part of lateral line 33 to 41; straight part with 33 to 40 scutes; total scales and scutes in lateral line (excluding caudal scales) 71 to 79; lateral line scales or scutes in inflection area conspicuously smaller than other scales in curved lateral line. Dorsal accessory lateral line terminating below 5th to 9th dorsal fin spine. Vertebrae 10+14.

Colour: no distinctive markings except for black opercular spot on edge near upper margin; body and head dorsally dusky to nearly black or grey to bluish green; lower two-thirds of body and head usually paler, whitish to silvery.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Trachurus delagoa: scales or scutes in inflection point of lateral line conspicuously smaller than other scales in curved lateral line; first lateral line scute more anteriorly positioned, below 3rd to 6th soft dorsal fin ray (versus below 7th to 11th ray) and scale/scutes in curved and straight parts of lateral line larger 4.2 to 5.7 and 5.8 to 7.6% fork length, respectively (versus 2.4 to 4.2 and 3.3 to 5.4% fork length, respectively in T. indicus).

Other species of Carangidae: scales in curved lateral line not scute-like or expanded dorsoventrally (caution: in large Trachurus these scales may be obscured by an overgrowth of smaller scales) and dorsal accessory lateral line not extending posteriorly beyond the spinous dorsal fin origin.



SIZE :

T. indicus

Maximum reported: 35 cm total length, average 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found throughout the "Gulf", Pakistan, the Gulfs of Suez and Aden, southern Red Sea and continental shelves of Oman and Somalia. Also known from Saya de Malha Bank.

A demersal species, occurring in depths of 20 to 100 m. Reported not to occur in water colder than 20°C or where the oxygen saturation is below 30%. Sexual maturity is reached during the first year of life at about 11 cm total length.

Feeds primarily on small crustacea and fish fry.

PRESENT FISHING GROUNDS:

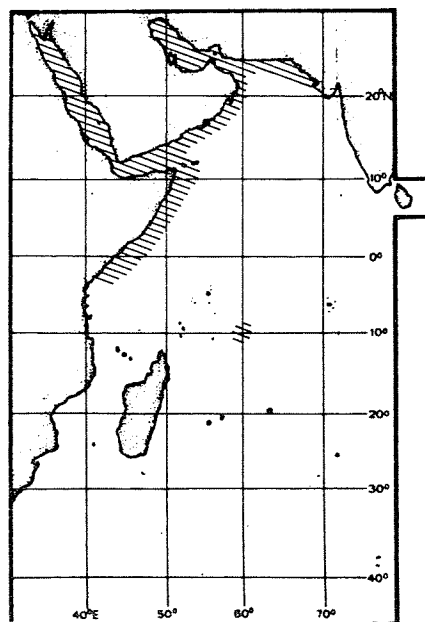
Coastal shelf waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls, handlines, gillnets and other artisanal gear.

Marketed mostly fresh.



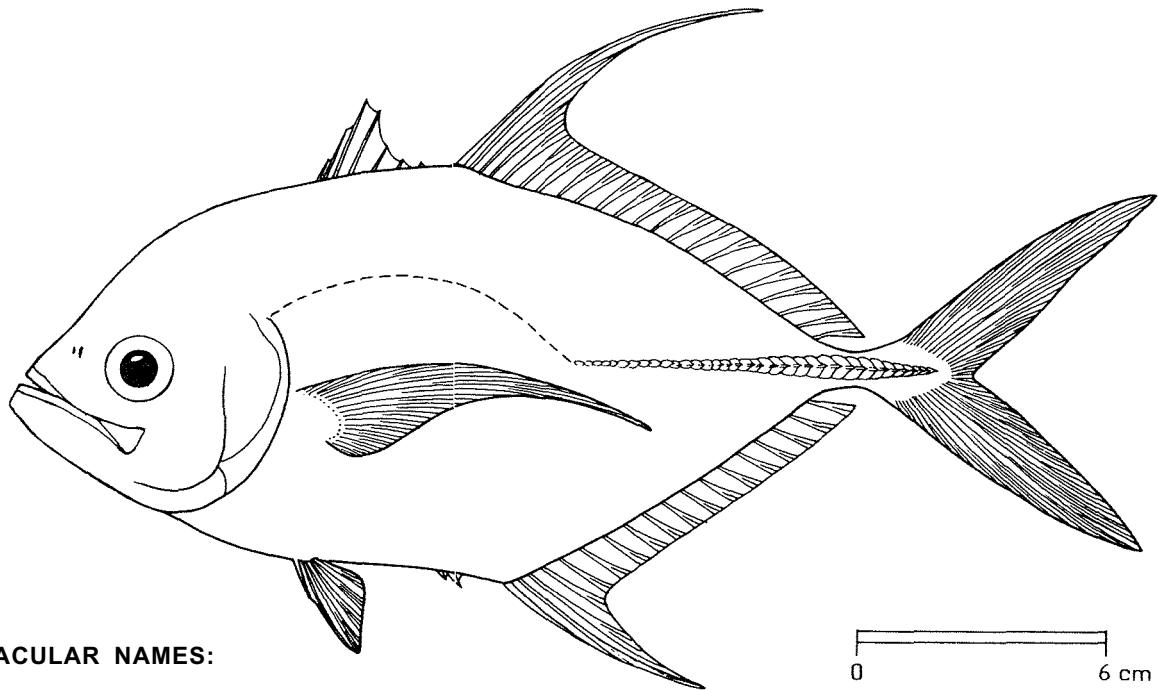
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)

<i>Ulua mentalis</i> (Cuvier, 1833)

OTHER SCIENTIFIC NAMES STILL IN USE: *Caranx mentalis* Cuvier, 1833
Caranx mandibularis Macleay, 1833
Ulua mandibularis Macleay, 1883)



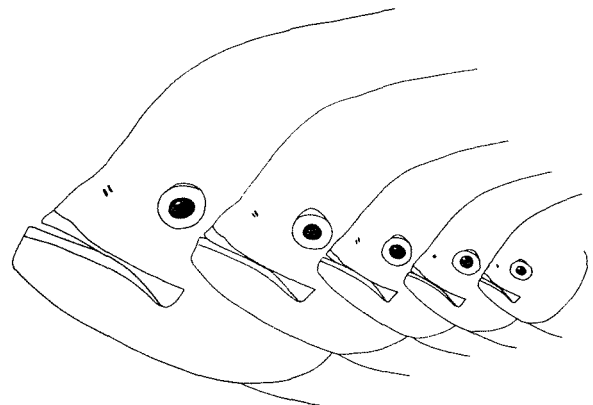
VERNACULAR NAMES:

FAO : En - Longrakered trevally
 Fr - Carangue démêloir
 Sp - Jurel peinero

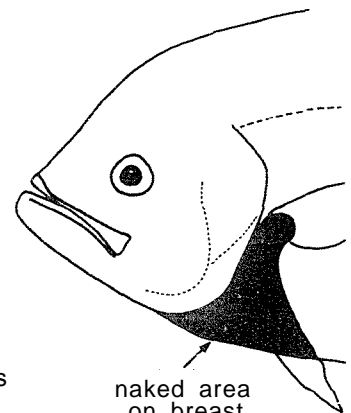
NATIONAL:

DISTINCTIVE CHARACTERS:

Body strongly compressed; dorsal profile more strongly convex than ventral profile, lower jaw becoming prominent in large adults, with the angle of "chin" projecting beyond upper jaw. Eye diameter smaller than snout length; both jaws with a very narrow band of small villiform teeth; gillrakers (including rudiments) 23 to 27 upper, 51 to 61 lower and 74 to 86 total on first gill arch; gillrakers extremely long, and project into mouth along side of tongue. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 21 or 22 soft rays; anal fin with 2 detached spines followed by 1 spine and 17 or 18 soft rays; lobe of second dorsal fin in young elongate, longer than head length becoming shorter than head in large adults. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 10th and 12th soft rays; chord of curved part of lateral line slightly longer to slightly shorter than straight part of lateral line, contained 0.8 to 1.2 times in straight part; straight part of lateral line with 0 to 5 scales followed by 26 to 38 scutes. Breast naked ventrally to behind pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fin. Vertebrae 10+14.



tongue gillrakers

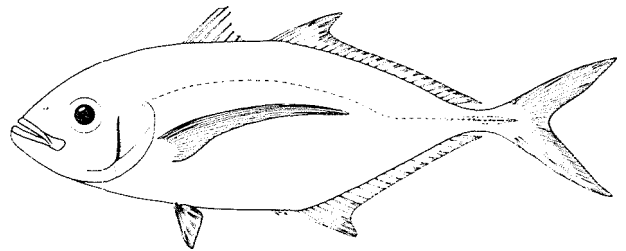
naked area
on breast

Colour: in life, head and body blue-green dorsally, silvery below; young without opercular spot, in adults dark area on shoulder at upper margin of opercle and a dusky mark on cheek at angle of jaws. Spinous dorsal and caudal fins dusky to black; second dorsal and anal fins pale green except leading edges and distal margins of fins dusky.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

This is the only strongly compressed, silvery coloured species of Carangidae with 51 to 61 gill-rakers on lower limb of first arch; large adults of U. mentalis are also distinctive in having a prominent lower jaw with the angle of the "chin" projecting beyond the upper jaw.

Carangoides plagiotaenia: superficially similar in having the lower jaw somewhat enlarged and projecting beyond upper jaw, but differs in having the breast completely scaled and the posterior margin of the preopercle outlined in black.



Carangoides plagiotaenia

SIZE:

Maximum: largest specimen examined 75.5 cm fork length, 85 cm total length and 6.4 kg. Common to about 60 cm total length, reported to attain 100 cm total length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean, along the African coast southward to Tanzania, northwest coast of Malagasy Republic, Red Sea, Gulf of Aden and Oman, the "Gulf" and Sri Lanka. Elsewhere in the Indo-West Pacific, known from the Gulf of Thailand, Taiwan, Indonesia, the Philippines, Papua New Guinea and Australia.

Inhabits shallow coastal waters.

Feeds on crustaceans and fishes.

PRESENT FISHING GROUNDS:

Warm coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with gillnets, traps, handlines and other types of artisanal gear.

Marketed fresh and dried salted.

