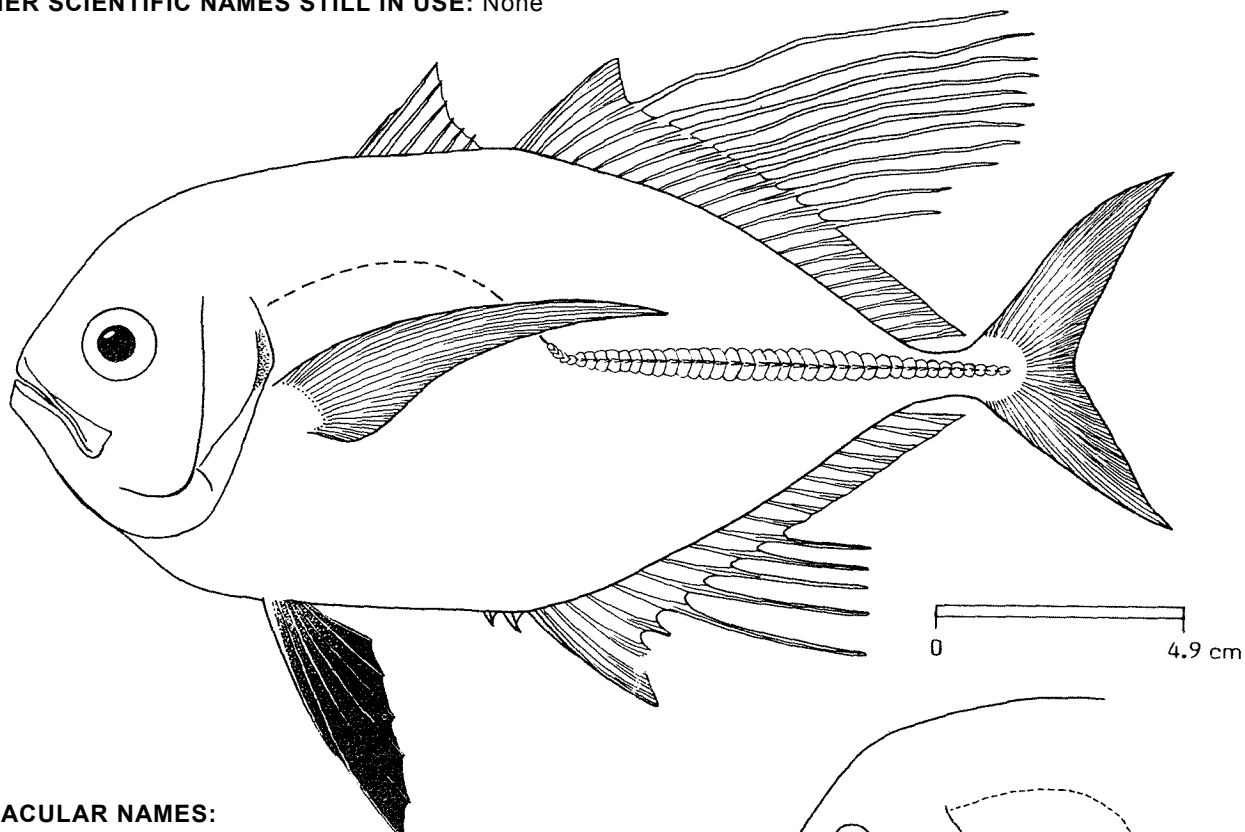


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)*Atropus atropus* (Schneider, 1801)*

OTHER SCIENTIFIC NAMES STILL IN USE: None



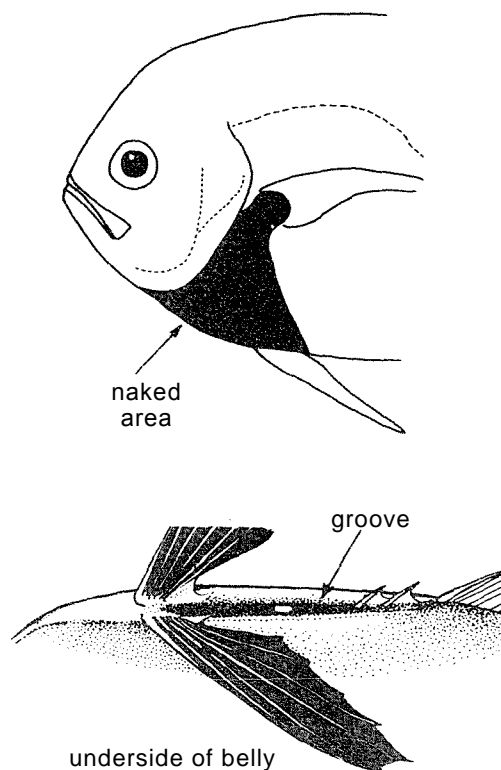
VERNACULAR NAMES:

FAO : En - Cleftbelly trevally
Fr - Pompano à quille noire
Sp - Pámpano de quilla

NATIONAL:

DISTINCTIVE CHARACTERS:

Body strongly compressed, almost ovate; nape strongly convex; belly with a deep median groove, accommodating pelvic fins, anus and anal-fin spines. Eye diameter slightly larger than snout length; upper jaw with a narrow band of small teeth, the band widest anteriorly; lower jaw with a single series of small teeth, except 2 or 3 irregular rows anteriorly; gillrakers (including rudiments) 8 to 11 upper, 19 to 22 lower and 29 to 34 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 19 to 22 soft rays; anal fin with 2 detached spines followed by 1 spine and 17 or 18 soft rays; lobe of second dorsal fin shorter than head length; dorsal fin sexually dimorphic, in mature males (only) 6 to 12 of the central rays produced into filaments of greatly varying lengths; pelvic fins conspicuously long, tip of appressed fin extending almost to anal fin origin. Lateral line anteriorly

This name has usually been misspelled "A. atropus"

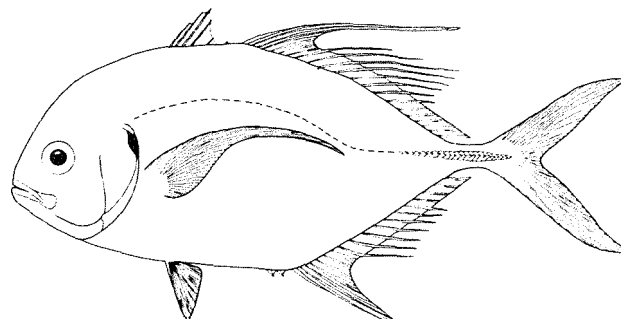
with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 6th and 7th soft rays; chord of curved part of lateral line contained 1.5 to 2.0 times in straight part; straight part of lateral line with 31 to 37 scutes. Breast naked ventrally to behind pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fin. Vertebrae 10+14.

Colour: in life, head and body bluish-green above, silvery below. Membranes of pelvic fins black, with the ray white basally; other fins pale. Young with indistinct dark bands and opercular spot, the latter prominent in adults.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Carangoides armatus and C. hedlandensis: superficially similar in having the central rays of the dorsal fin (and sometimes the anal fin) produced into elongate filaments in mature males, and (in young) black pelvic fins and belly with a slight median groove (never as well developed as in Atropus); both species differ in having the junction of the curved and straight parts of the lateral line more posteriorly positioned, below the 10th to 12th soft dorsal-fin ray (versus below the 6th or 7th ray in Atropus) and in having a smaller lateral line ratio, 0.7 to 0.9 (1.5 to 2.0 in Atropus).

Other species of Carangidae: belly without a deep median groove into which the conspicuously long and black pelvic fins fit when folded.



Carangoides armatus

SIZE:

Maximum: Largest specimen examined 23 cm fork length and 26.5 cm total length; probably does not exceed 30 cm total length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean restricted to coastal waters from the "Gulf" to Sri Lanka (literature records of the species from South Africa are erroneous). Elsewhere in the Indo-West Pacific known from the east coast of India, Gulf of Thailand, Taiwan Island, Okinawa and Indonesia.

Common in shallow coastal waters where it often swims near the surface.

Feeds primarily on shrimps, copepods, decapod crustaceans and small fish.

PRESENT FISHING GROUNDS:

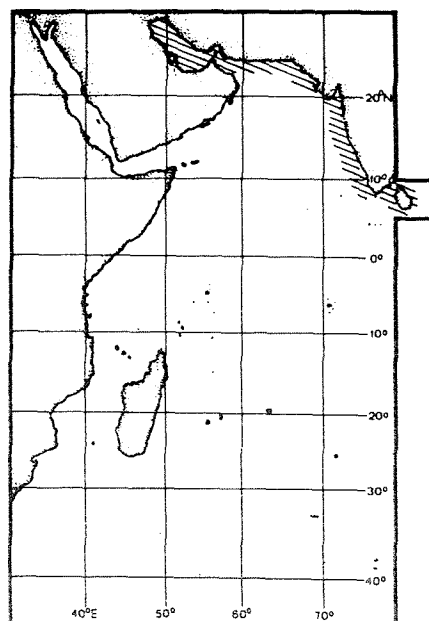
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

Separate statistics are not reported for this species.

Caught mainly with bottom trawls, traps and on hook and line

Marketed fresh and dried salted.



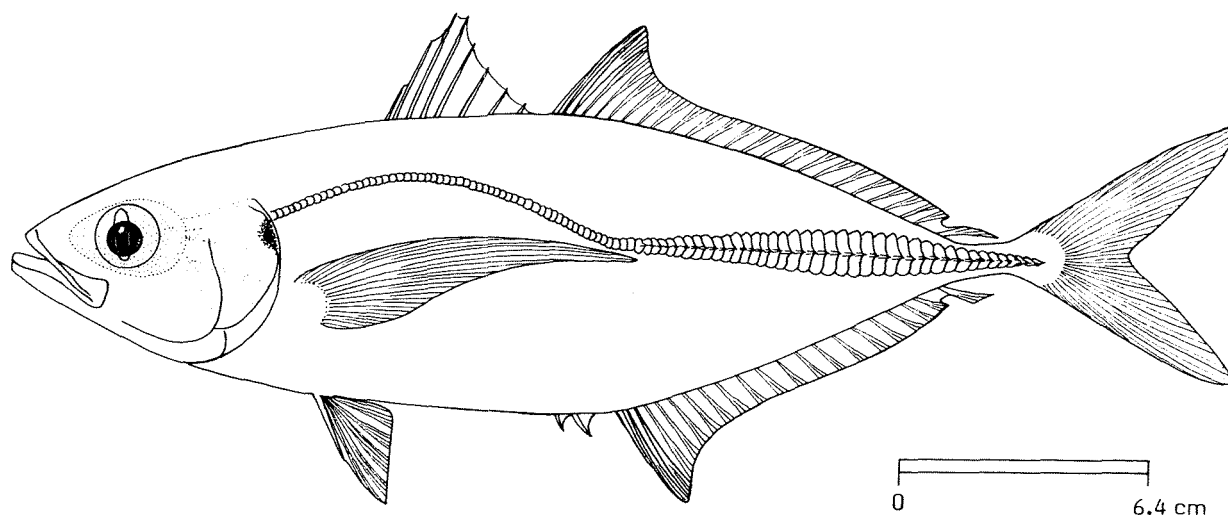
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Atule mate (Cuvier, 1633)

OTHER SCIENTIFIC NAMES STILL IN USE:

Caranx mate Cuvier, 1833
Caranx affinis Rüppell, 1836
Decapterus politus (Jenkins, 1904)
Decapterus lundini Jordan & Seale, 1906
Decapterus normani Bertin & Dollfus, 1948



VERNACULAR NAMES:

FAO : En - Yellowtail scad
 Fr - Selar queue jaune
 Sp - Jurel rabo amarillo

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate oval, moderately compressed, with dorsal and ventral profiles almost evenly convex; snout pointed. Eye moderate, diameter shorter than snout in adults, with adipose eyelid well developed and completely covering eye except for a vertical slit centred on pupil; upper jaw extending to below anterior third of eye; both jaws with a single series of small conspicuous teeth except in large specimens upper jaw with 2 or 3 rows of small canines anteriorly; gillrakers including rudiments 10 to 13 upper, 26 to 31 lower and 37 to 44 total on first gill arch. Shoulder girdle (cleithrum) margin smooth, without papillae. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 22 to 25 soft rays; anal fin with 2 detached spines followed by 1 spine and 18 to 21 soft rays; spinous dorsal fins moderately high, longest spine height about equal to length of soft dorsal-fin lobe; terminal dorsal and anal rays finlet-like in adults, about twice length of adjacent rays and a little more separated but joined by interradyal membrane; pectoral fin long and falcate, tip of appressed fin extending to junction of curved and straight parts of lateral line. Lateral line gently arched anteriorly, with junction of curved and straight parts below second dorsal fin below 6th to 8th soft rays; chord of curved part of lateral line contained 1.0 to 1.4 times in straight part (to caudal base); scales in curved part of lateral line 39 to 57; straight part with 0 to 10 scales and 36 to 49 scutes; total scales and scutes in lateral line (extending caudal scales) 92 to 103. Vertebrae 10 + 14.

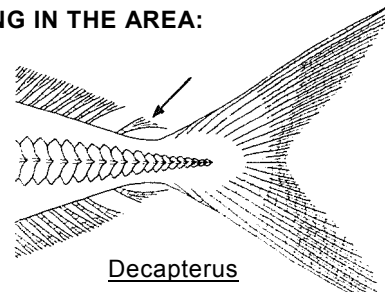
Colour: in life, bright olive-green dorsally, yellowish-greens laterally and whitish ventrally; dorsolaterally 9 or 10 faint, grey bars, wider than pale interspaces. A black spot, slightly smaller than eye, on upper margin of opercle and adjacent area of shoulder. Dorsal and caudal fins dusky greenish-yellow; anal fin pale yellow; pectoral and pelvic fins hyaline to whitish.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

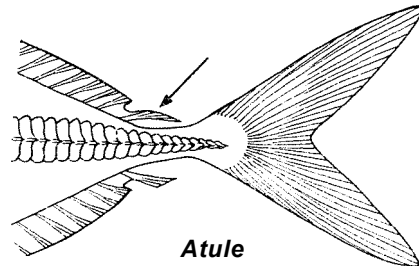
Decapterus species: shoulder girdle (cleithrum) margin with 2 papillae, the lower papilla the larger; and a distinctly detached terminal finlet in dorsal and anal fins (terminal dorsal and anal rays finlet-like in Atule but joined to penultimate ray at least partially by interradiation membrane).

Alepes species: fleshy adipose eyelid well developed on posterior half of eye only (completely covering eye except for a vertical slit centred on pupil in Atule mate); junction of curved and straight parts of lateral line more anteriorly positioned, below second dorsal fin between origin and 3rd ray; and upper jaw with a single row of numerous, small tomblike teeth (in large adults, upper jaw with 2 or 3 rows of small canines anteriorly in Atule mate).

Selar crumenophthalmus: shoulder girdle margin with a deep furrow, a large papilla immediately above it and a smaller papilla near upper edge; and pectoral fins shorter than head (pectoral fins of adults much longer than head in Atule mate).



Decapterus

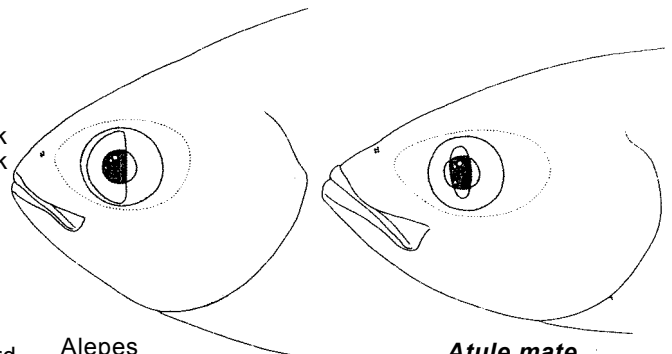


Atule

posterior part of body

SIZE:

Maximum: Largest specimen examined 28 cm fork length, 30 cm total length; common to about 26 cm fork length.



Alepes

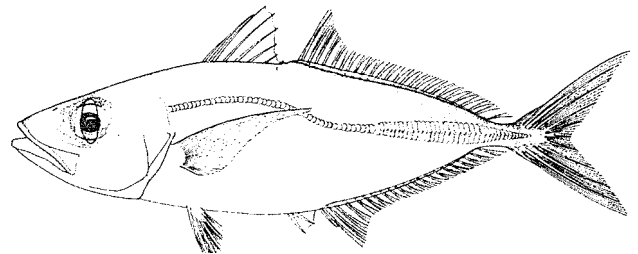
Atule mate

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

broadly distributed throughout the region, eastward to the Hawaiian Islands.

Occurs in schools at depths to about 50 m.

Feeds primarily on crustaceans and cephalopods.



Selar crumenophthalmus

PRESENT FISHING GROUNDS:

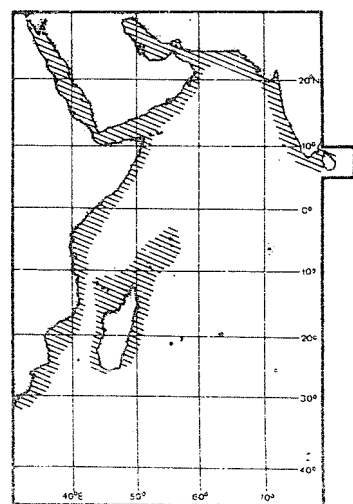
Inshore waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly on hook and line, and with various types of artisanal gear.

Marketed fresh and dried salted.

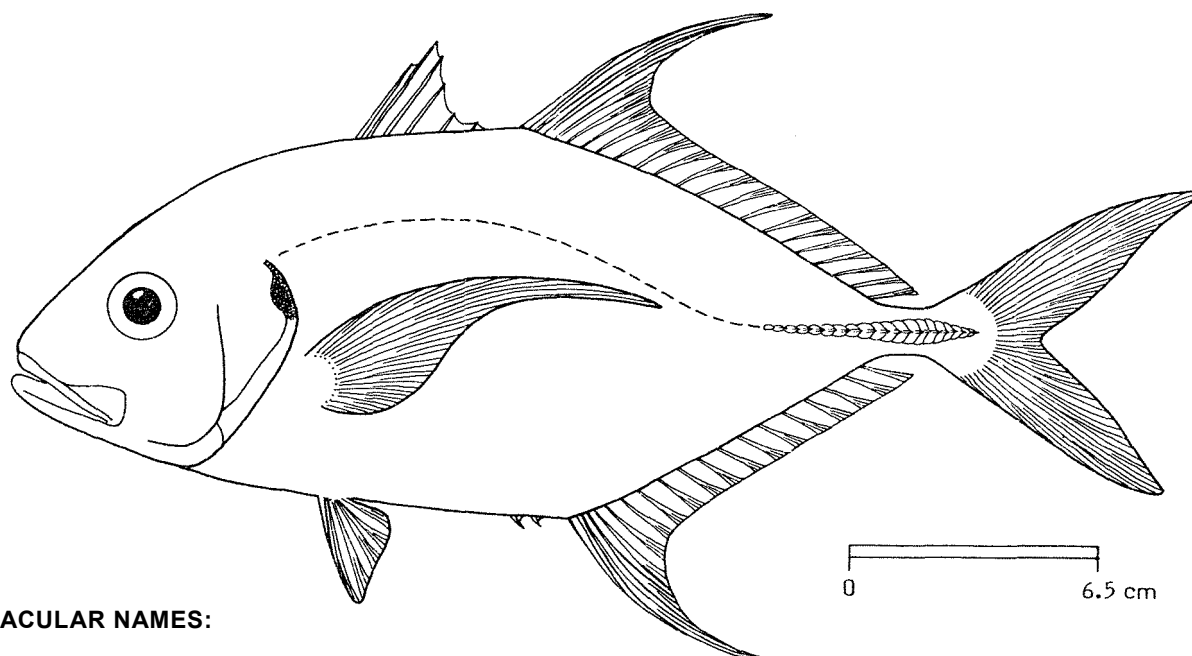


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides chrysophrys (Cuvier, 1833)

OTHER SCIENTIFIC NAMES STILL IN USE :

Caranx chrysophrys Cuvier, 1833Carangoides chrysophryoides, Bleeker, 1851Caranx typus Gilchrist & Thompson, 1917

VERNACULAR NAMES:

FAO : En - Longnose trevally
Fr - Carangue tapir
Sp - Jurel tapir

NATIONAL:

DISTINCTIVE CHARACTERS:

Body subovate in juveniles, oblong in adults and compressed; nape only slightly elevated, dorsal profile of snout gently sloped, then abruptly vertical just above mouth cleft. Eye diameter smaller than snout length; both jaws with bands of villiform teeth, the bands widest anteriorly and in large specimens some outer teeth conical; vomerine tooth patch ovate, without a posteromedian extension; gillrakers (including rudiments) 5 to 9 upper, 15 to 18 lower and 22 to 26 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 18 to 20 soft rays; anal fin with 2 detached spines followed by 1 spine and 14 to 17 soft rays; lobe of second dorsal fin falcate but usually shorter than head length, height of fin lobe becoming shorter with age. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 12th to 14th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.5 to 0.6 times in straight part; straight part of lateral line with 20 to 37 weak scutes and 32 to 42 total elements (including anterior scales). Breast naked ventrally to distinctly behind origin of pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fin. Vertebrae 10+14.

Colour: in life, generally silvery with head and body greenish above, silvery with yellow-green reflections below; a small black blotch on upper edge of opercle. Dorsal and anal fins ranging in colour from whitish to pale yellow to dusky; interradial membranes of soft anal-fin rays often with a white spot basally. Caudal and pectoral fins pale to dusky yellow. Large adults sometimes very dark, head and fins blackish; these fish perhaps exhibiting nuptial or spawning coloration.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

No other Carangoides species has a snout profile that is gently sloped, then abruptly vertical just above mouth cleft.

Carangoides caeruleopinnatus and C. uii: soft dorsal fin rays 20 to 23, usually 22 or 23 (18 to 20 in C. chrysophrys); and anal fin rays 16 to 20, usually 18 or 19 (versus 14 to 17).

C. armatus, C. malabaricus and C. talamparoides: more gillrakers on lower limb of first arch, 19 to 27, total 27 to 38 (versus 15 to 18 and 22 to 26, respectively); and C. malabaricus and C. talamparoides also differ in having small area naked of scales anteriorly just above pectoral fin base.

C. hedlandensis: eye diameter about equal to or larger than snout length; adults with interorbital "bump"; and in mature males, central rays of dorsal and anal fins elongate.

SIZE:

Maximum: Largest specimen examined 38.5 cm fork length, 44 cm total length; reported to attain 60 cm total length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Broadly distributed, primarily in coastal waters, throughout the Indian and Western Pacific Oceans, including Japan and Australia.

Inhabits coastal waters to at least 60 cm depth. Juveniles occur in inshore areas, including estuaries.

PRESENT FISHING GROUNDS:

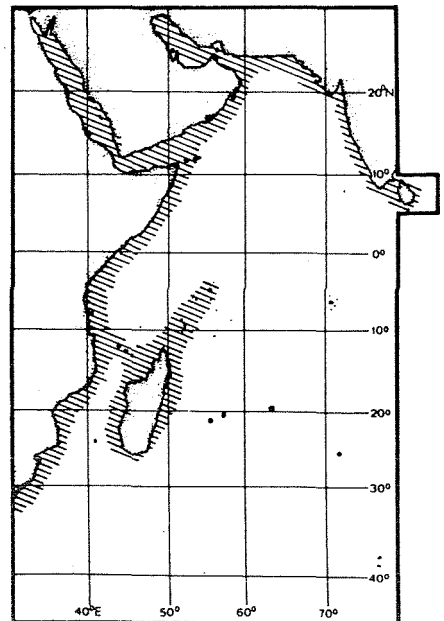
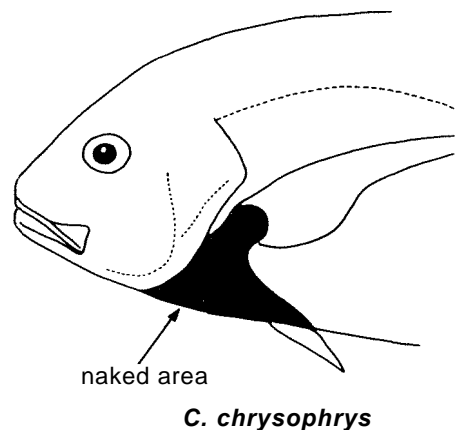
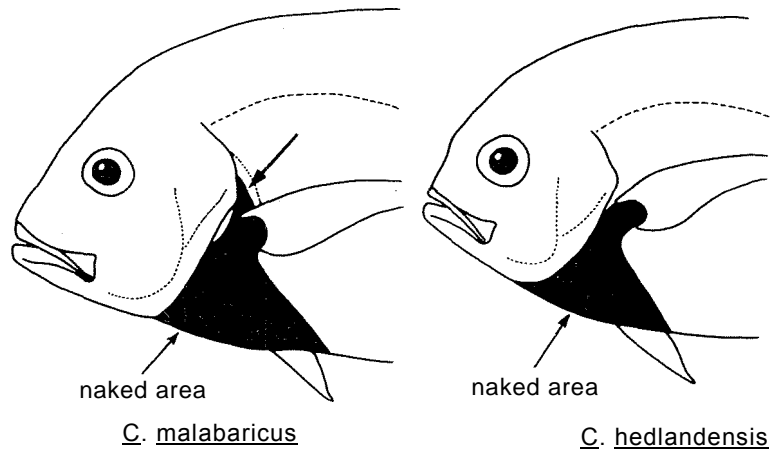
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught on hook and line; also with gillnets and traps

Marketed fresh and dried salted.

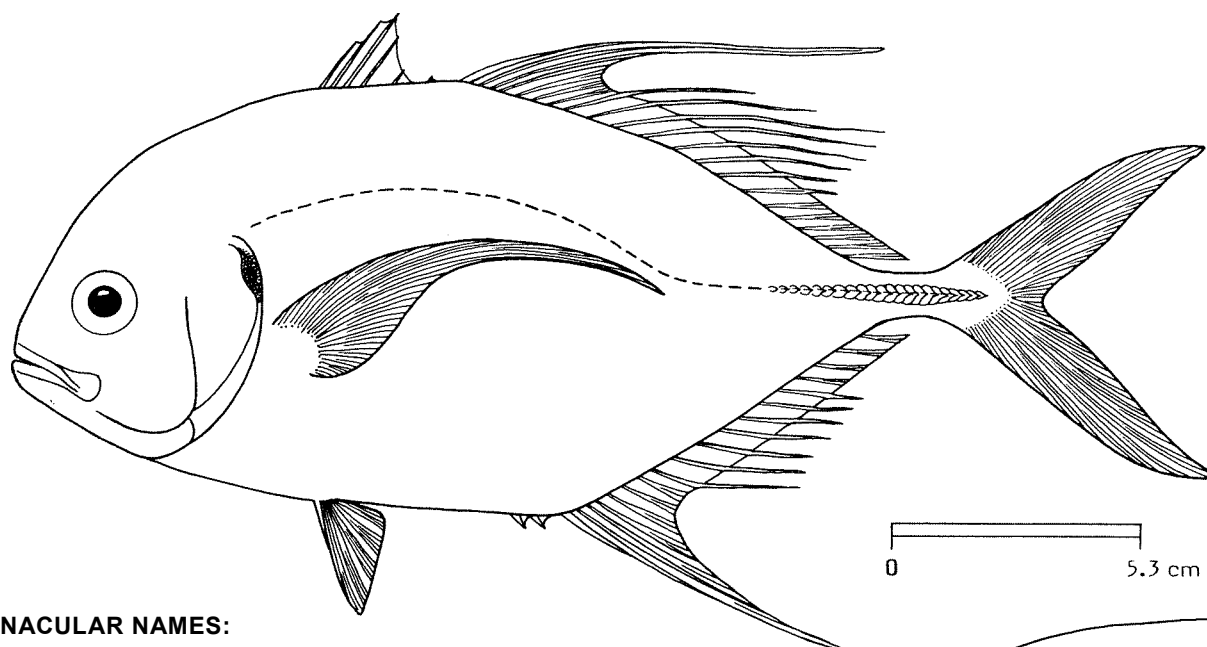


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides armatus (Rüppell, 1830)

OTHER SCIENTIFIC NAMES STILL IN USE:

Caranx armatus (Rüppell, 1830)
Carangoides ciliaris of authors
Caranx schlegelii Wakiya, 1924

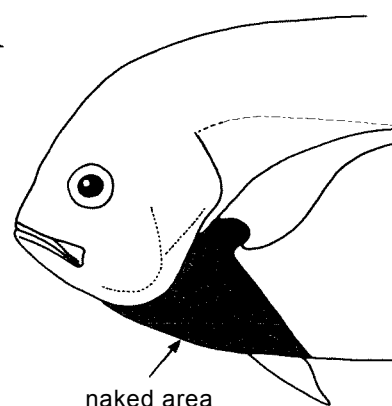
VERNACULAR NAMES:

FAO : En - Longfin trevally
Fr - Carangue sap-sap
Sp - Jurel sap-sap

NATIONAL:

DISTINCTIVE CHARACTERS:

Body strongly compressed and deep. Head profile very steep in adults but relatively straight from snout to nape; eye diameter about equal to or smaller than snout length; both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch wedge-shaped without a posteromedian extension; gillrakers (including rudiments) 10 to 15 upper, 20 to 24 lower and 31 to 37 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 19 to 22 soft rays; anal fin with 2 detached spines followed by 1 spine and 16 to 18 soft rays; lobe of second dorsal fin elongate and filamentous, longer than head length; dorsal fin sexually dimorphic, in mature males (only larger than 21 cm fork length, 3 to 12 of the central rays produced into filaments of greatly varying lengths). Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 10th to 12th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.7 to 0.9 times in straight part; straight part of lateral line with 11 to 24 weak scutes and 25 to 43 total elements (including anterior scales). Breast naked ventrally to behind origin of pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fin. Vertebrae 10 +14.



Colour: bluish-grey above, silvery below; blackish blotch on upper margin of opercle. Spinous dorsal fin blackish; second dorsal and anal fins pale to dusky, leading edge of lobes dusky to blackish. Caudal fin grey with leading and trailing edges black; pelvic fins generally black in specimens smaller than 10 cm fork length, but becoming paler with increasing size until at 20 cm pale or only slightly dusky.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Carangoides hedlandensis: fewer lower limb gillrakers on first arch 14 to 17, total 20 to 27 (20 to 24 and 31 to 37, respectively, in C. armatus); and adults with a distinct break "bump", in profile in the interorbital region.

C. caeruleopinnatus, C. uii and C. chrysophrys: fewer lower limb gillrakers on first arch 15 to 18, total 21 to 26; and central soft dorsal and anal fin rays not elongated in mature males.

Atropus atropos: belly with a deep median groove into which conspicuously long and black pelvic fins fit when folded; junction of curved and straight parts of lateral line more anteriorly positioned, below 6th or 7th soft dorsal fin ray (versus below 10th to 12th ray in C. armatus); and lateral line ratio larger, 1.5 to 2.0 (versus 0.7 to 0.9).

Ulua mentalis: more lower limb gillrakers on first arch, 51 to 61 (20 to 24 in C. armatus); and in large adults lower jaw with angle of "chin" projecting beyond the upper jaw.

SIZE:

Maximum: Largest specimen examined 50 cm fork length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean along the African coast from Durban (South Africa) northward to the Gulf of Oman, the west coast of Malagasy Republic, Red Sea, southern India and Sri Lanka. Elsewhere, reliably reported from the Gulf of Thailand, Hong Kong, Thailand, Okinawa and Japan.

Inhabits rocky and coral coastlines as well as shallow bays; small groups of adults often swim along the edges of reefs. Juveniles may occur in estuarine areas. Sexual maturity is attained at 21 or 22 cm fork length.

PRESENT FISHING GROUNDS:

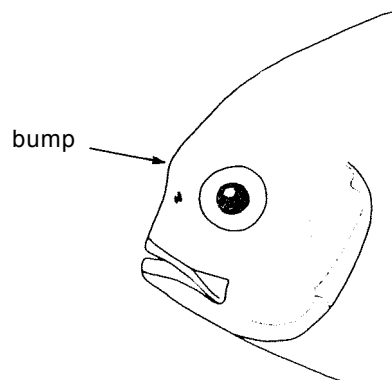
Inshore reef areas throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

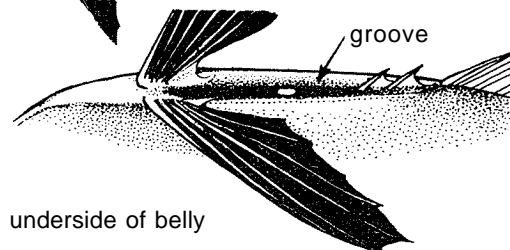
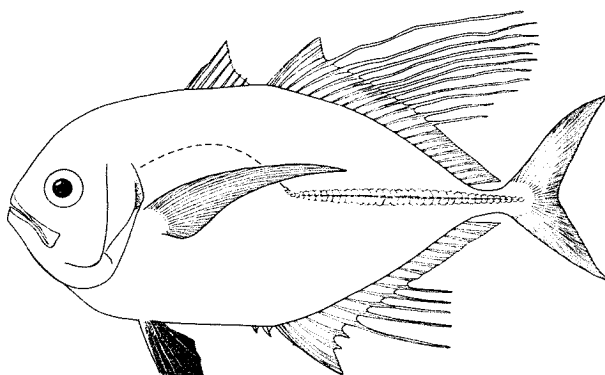
Separate statistics are not reported for this species.

Caught on hook and line; also by spears.

Marketed fresh and dried salted.

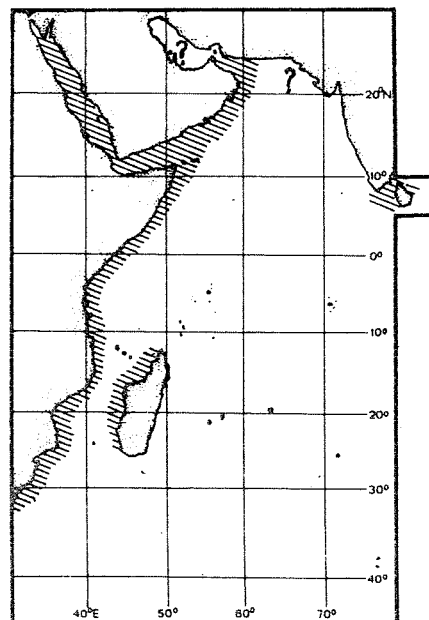


C. hedlandensis (adult)



underside of belly

Atropus atropos

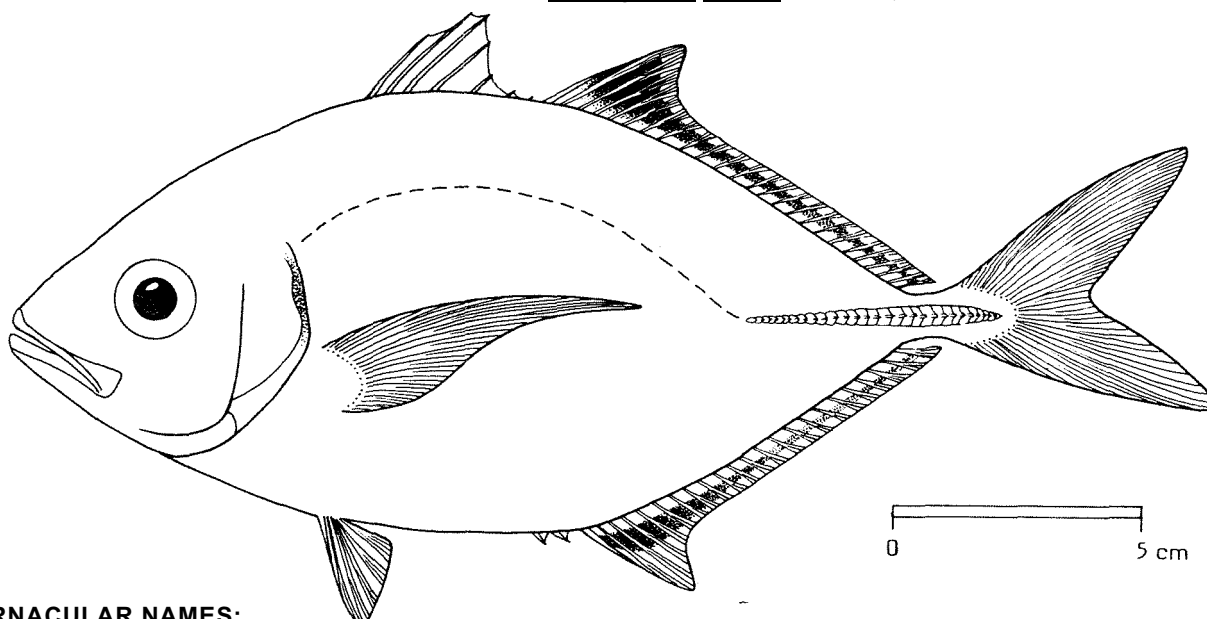


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides equula (Temminck & Schlegel, 1844)

OTHER SCIENTIFIC NAMES STILL IN USE : Caranx equula Temminck & Schlegel, 1844
Kaiwarinus equula (Temminck & Schlegel, 1844)
Caranx dasson Jordan & Snyder, 1907
Carangoides acutus Kotthaus, 1974



VERNACULAR NAMES:

FAO : En - Whitefin trevally
 Fr - Carangue aile blanche
 Sp - Jurel aliblanco

NATIONAL:

DISTINCTIVE CHARACTERS:

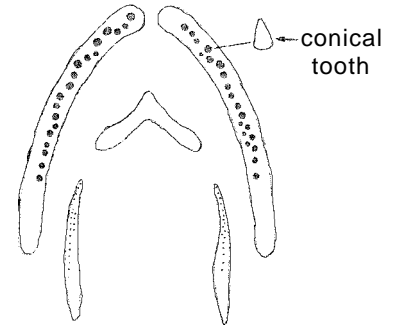
Body compressed, almost rhomboidal; dorsal and ventral profiles about equally convex, dorsal profile of snout and nape almost straight. Eye diameter slightly smaller than snout length; both jaws with narrow bands of small teeth, the outer teeth slightly larger; vomerine tooth patch anchor-shaped, with a distinct posteromedian extension; gillrakers (including rudiments) 7 to 10 upper, 18 to 23 lower and 27 to 32 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 23 to 25 soft rays; anal fin with 2 detached spines followed by 1 spine and 21 to 24 soft rays; spinous dorsal fin moderately high, longest spine height about equal to length of soft dorsal fin lobe. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 12th and 15th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.52 to 0.79 times in straight part; straight part of lateral line with 0 to 6 scales followed by 22 to 32 scutes. Breast completely scaled or with a very small naked area anteroventrally. Vertebrae 10+14.

Colour: in life, head and body bluish-grey to green dorsally, silvery white below; young with 5 to 7 dark bands on sides. Second dorsal and anal fins with a submarginal black to brown band, white distally. Caudal fin dusky yellow; pectoral and pelvic fins pale yellowish to white

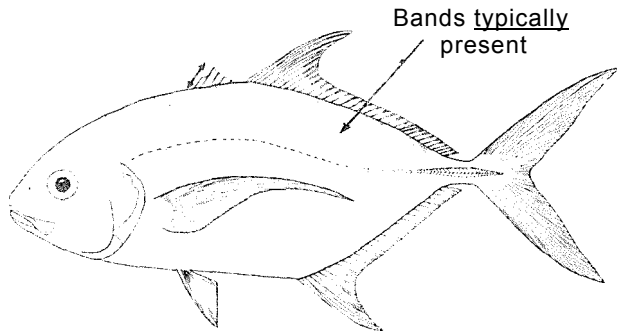
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Pseudocaranx dentex: second dorsal and anal fins without a submarginal, black band; total gillrakers on first arch 31 to 39 (versus 27 to 32 in C. equula), and both jaws with a single series of short, conical teeth, upper jaw sometimes with an inner row of conical teeth anteriorly.

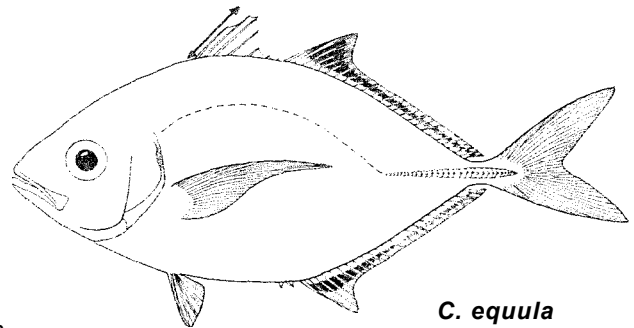
Other Carangoides species: height of spinous dorsal fin distinctly shorter than length of dorsal fin lobe and vomerine tooth patch not anchor-shaped, with a long posteromedian extension (except for C. praeustus which has a distinctive colour pattern and more gillrakers on first arch, 32 to 36).



ventral view of teeth in upper jaw
Pseudocaranx



C. ferdau



C. equula

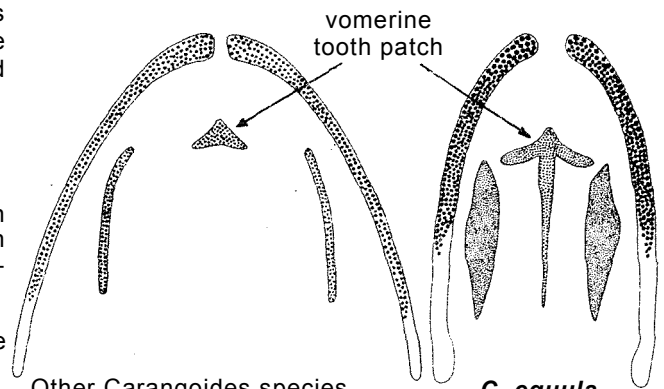
SIZE :

Maximum: Largest specimen examined 34.5 cm fork length, 37.5 cm total length. Remarks: fish from Hawaii and Easter Islands (for which the name C. dasson is available) have more slender bodies and larger eyes than do those from other localities but share all the diagnostic features of C. equula and are here considered to be conspecific.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean known only from South Africa, off Somalia and the Gulf of Oman. Elsewhere, in the Indo-West Pacific known from Okinawa, Japan, Australia, Hawaii and Easter Islands.

A benthic species largely restricted to shelf/slope habitats at depths of 100 to 200 m.



Other Carangoides species

C. equula

root of mouth

PRESENT FISHING GROUNDS:

Deep shelf and upper slope waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Taken mainly with bottom trawls.

Marketed fresh and dried salted.

