CARAN Elag 1

1983

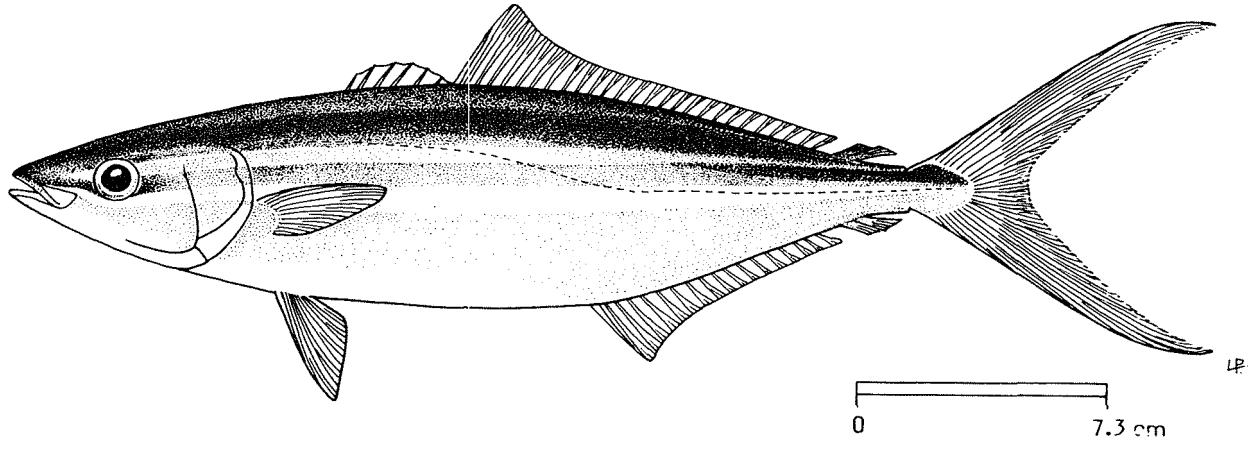
FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)

Elagatis bipinnulata (Quoy & Gaimard, 1824)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Rainbow runner
Fr - Comère saumon
Sp - Macarela salmón

NATIONAL:

DISTINCTIVE CHARACTERS:

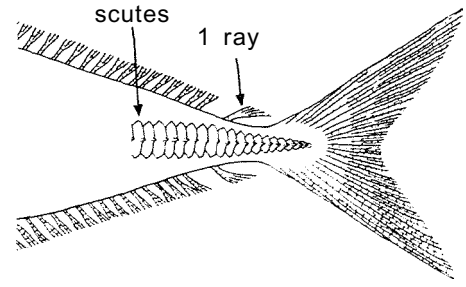
Body greatly elongate, almost fusiform. Head and snout pointed; mouth small, upper jaw ending distinctly before eye to below anterior margin of eye in young); teeth in jaws in villiform bands, minute teeth also on roof of mouth and on tongue. Dorsal fin with 6 spines, followed by 1 spine and 25 to 30 soft rays including a detached terminal 2-rayed finlet; anal fin with only 2 spines, the first slightly detached from rest of fin and covered by skin in fish of larger sizes, the second spine continuous with the following 18 to 22 soft rays, including a detached 2-rayed finlet; anal fin base relatively short contained about 1.5 times in second dorsal fin base; pectoral fins short, about 2 times in head length and about as long as pelvic fins; caudal fin deeply forked. Lateral line with a slight anterior arch. No scutes; caudal peduncle grooves present. Vertebrae 10+14.

Colour: dark olive-blue or green above and white below; 2 narrow light blue or bluish-white stripes along sides, with a broader olive or yellowish stripe between them; fins dark with an olive or yellow tint.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Decapterus species: terminal finlets in second dorsal and anal fins with a single ray (2 rays in E. bipinnulata); scutes present on straight posterior part of lateral line; anal fin longer (more than 1.5 times in second dorsal fin base).

All other carangid species: lack a detached, 2 rayed finlet in second dorsal and anal fins.



Decapterus

SIZE:

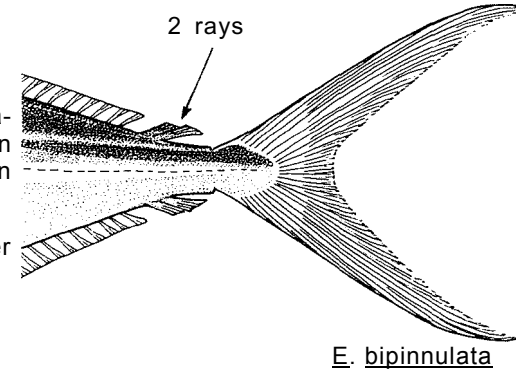
Maximum: 107 cm (possibly to 120 cm) fork length and 10.5 kg; common to 80 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Common throughout the Western Indian Ocean, except apparently rare or absent in the "Gulf". Elsewhere circumtropical in marine waters but in the Eastern Atlantic Ocean definitely known only from the Ivory Coast to Angola.

A pelagic species, usually found at or near the surface, over reefs or sometimes far offshore; may form sizeable schools.

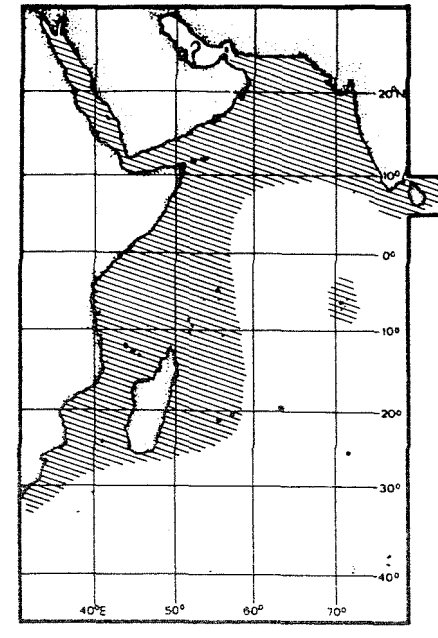
Feeds on invertebrates and small fishes.



E. bipinnulata

PRESENT FISHING GROUNDS:

Surface 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. An excellent sportsfish; also with gillnets and seines.

Marketed fresh and dried salted.

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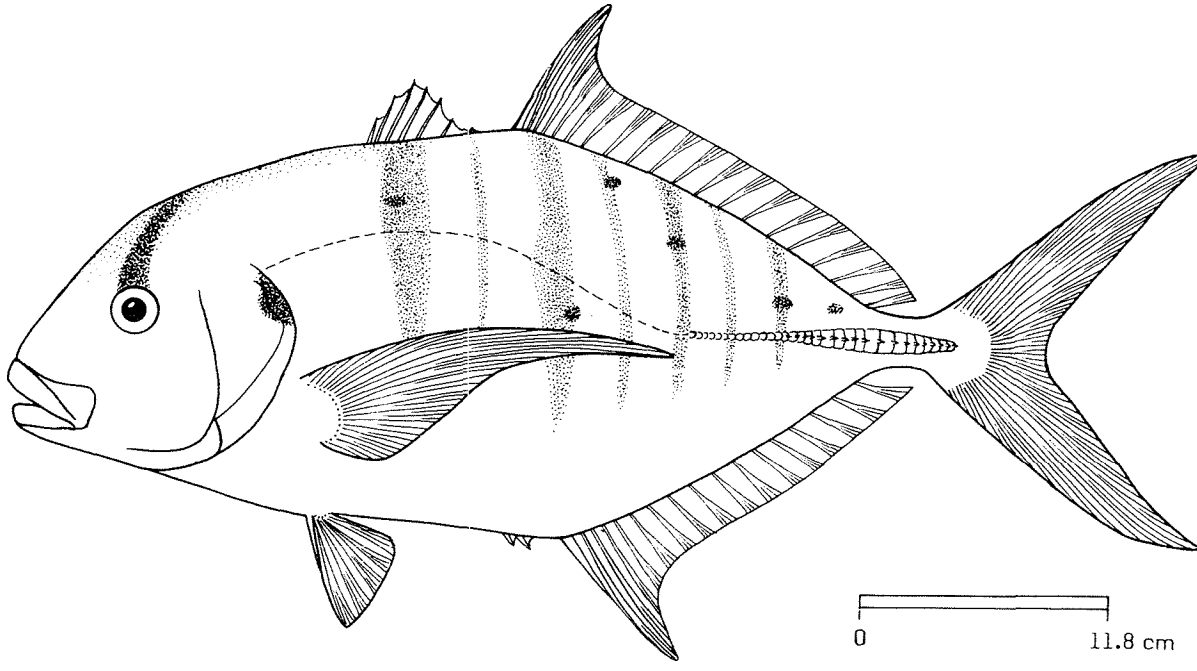
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)

Gnathanodon speciosus (Forsskål, 1775)

OTHER SCIENTIFIC NAMES STILL IN USE: Caranx speciosus (Forsskål, 1775)



VERNACULAR NAMES:

FAO : En - Golden trevally
Fr - Garangue royale jaune
Sp - Jurel dorado

NATIONAL :

DISTINCTIVE CHARACTERS

Body compressed, oblong; lips noticeably papillose and upper jaw strongly protactile. Eye diameter smaller than snout length; upper jaw without teeth; lower jaw with a few feeble teeth in young (smaller than 10 cm fork length), absent in adults; gillrakers (including rudiments 7 to 9 upper, 19 to 22 lower and 27 to 30 total on first gill arch. Two separate dorsal fins, the first with 7 spines, the second with 1 spine and 18 to 20 soft rays; anal fin with 2 detached spines followed by 1 spine and 15 to 17 soft rays; lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 9th to 14th soft rays; chord of curved part of lateral line lonqer to slightly shorter than straight part of lateral line, contained 0.75 to 1.3 times in straight part; straight part of lateral line with 17 to 24 scales followed by 17 to 26 scutes. Breast completely scaled. Vertebrae 10+14.

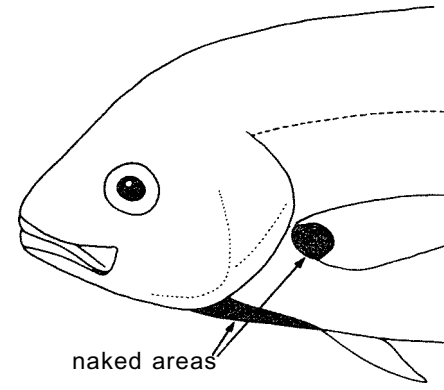
Colour: Juveniles and joung adults silvery to yellow with 17 to 11 black bands, usually alternating broad and narrow; the first band oblique through eye, the second crossing back to opercle. Upper margin of opercle black. All fins yellow tips of caudal fins lobes black. Black bands fade in large adults and are replaced by a few black patches or spots on sides. Dark opercular spot also fades with age and body becomes yellow-green dorsally, pale yellow below.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

This is the only species of Carangidae with poorly developed adipose eyelids, that has no teeth in jaws (young with a few feeble teeth ire lower jaw) and relatively fleshy lips.

Carangoides orthogrammus: large adults superficially similar in having relatively fleshy lips and jaws with minute bands of villiform teeth that can easily be overlooked, but differs in having the breast naked ventrally, more soft dorsal fin rays, 28 to 31 (versus 18 to 20), arid in lacking black bands or blotches on body.

Carangoides, Pseudocaranx and Caranx species: further differ in having 8 spines versus 7 in the spinous dorsal fin (caution: in genera with 8 spines the first spine is relatively small, closely applied to the second spine and may easily be missed).

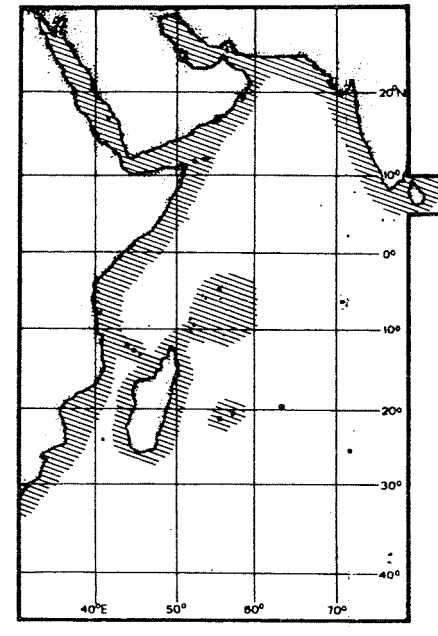


Carangoides orthogrammus

SIZE:

Maximum size not known but reported to attain 110 cm fork length. South African spearfishing record 14.8 kg.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:



Broadly distributed throughout the Indo-West Pacific, including Hawaii; also occurs in the Eastern Pacific Ocean from Peru to Baja California.

Found inshore, including rocky reefs, deep lagoons and seaward reefs. A bottom feeder that uses its highly protractile mouth to root in the sand and small crevices for crustaceans, molluscs and small fish.

Young display "piloting" habits with sharks and other large fish such as groups; their maneuverability protects them from their host, and the association probably affords them some protection from other predators.

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 gillnets and by spearing.

Marketed fresh and dried salted.

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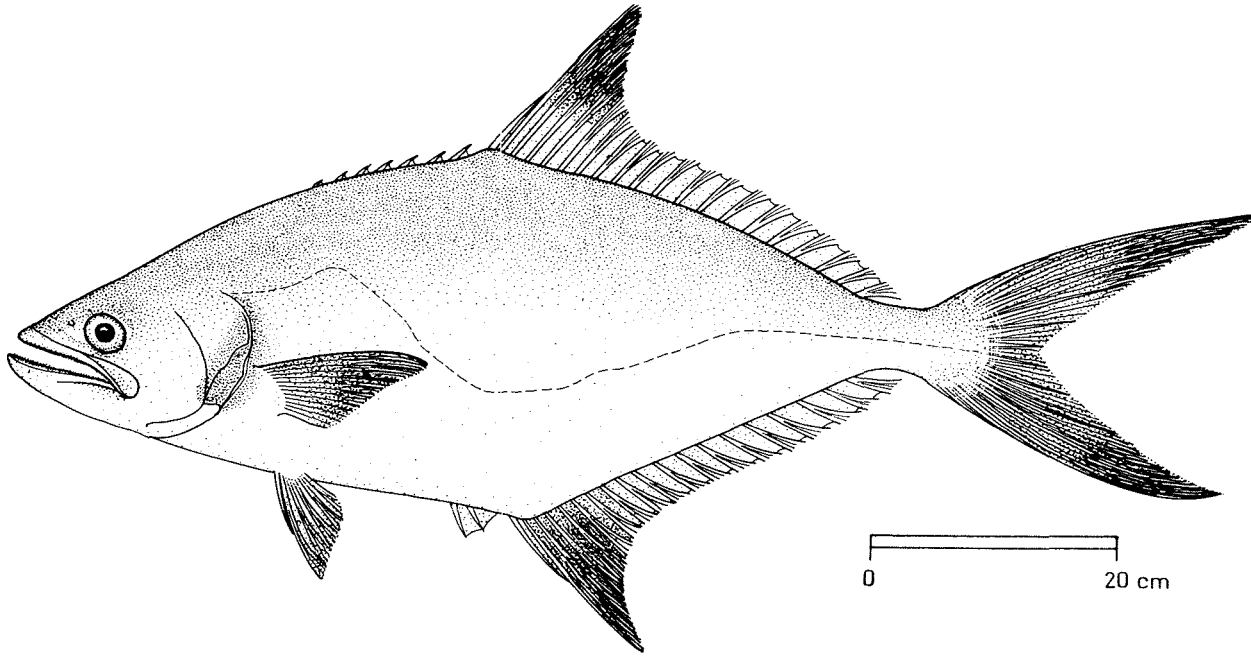
FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)

Lichia amia (Linnaeus, 1758)

OTHER SCIENTIFIC NAMES STILL IN USE: Hypacanthus amia (Linnaeus, 1758)



VERNACULAR NAMES:

FAO:
En - Leerfish
Fr - Liche
Sp - Palometón

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, moderately deep (its depth contained 2.7 to 3.4 times in fork length) and compressed, with upper and lower profiles similar; head profile nearly straight dorsally ending in an acute snout. Eye moderately small, its diameter contained 3.5 to 5.2 times in head length; upper jaw narrow and rounded at end, extending to below posterior margin of eye or beyond; a broad band of teeth, widest anteriorly, in both jaws; gillrakers (including rudiments) 2 to 5 upper, to 11 lower on first gill arch. Dorsal fin with 7 spines, connected by a membrane at their bases only, and followed by 1 spine and 19 to 21 soft rays; anal fin with 2 spines separated from rest of fin, followed by 1 spine and 17 to 21: soft rays; bases of anal and second dorsal fins about equal in length; pectoral fins short, contained 1.5 to 1.8 times in head length. Lateral line very irregular and sinuous, describing a convex curve above and a concave curve behind the pectoral fin. No scutes; scales small, oval-shaped to strongly lanceolate on breast and partially embedded. No caudal peduncle grooves. Vertebrae 10+14.

Colour: in life, adults brown dorsally, silvery white below the lateral line; fins pale brown, lobes of dorsal and anal fins black distally. Juveniles, to at least 12 cm fork length, with brownish-black bands on sides.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

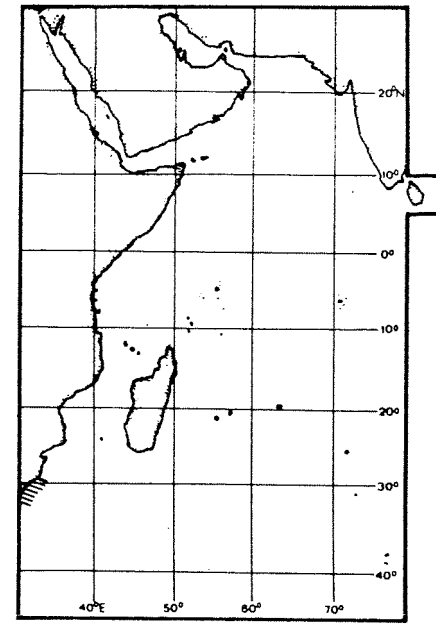
Other carangid species: lateral line not very irregular and sinuous, not describing a convex curve above and a concave curve behind the pectoral fin.

SIZE:

Maximum. reported to attain at least 180 cm total length; common to 100 cm total length. South African angling record 32 kg.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, along the African coast northward to Maputo, Mozambique. Also occurs in the Mediterranean Sea and in the Eastern Atlantic Ocean southward along the entire African coast.



An inshore or estuarine species found in surface waters to a depth of at least 50 m.

Feeds primarily on other fish; prefers live or moving bait, and may often be seen in pursuit of mullets on the surface. Reported to attain sexual maturity at about 55 cm total length.

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 on hook and line and by spearing.

Marketed mostly fresh.

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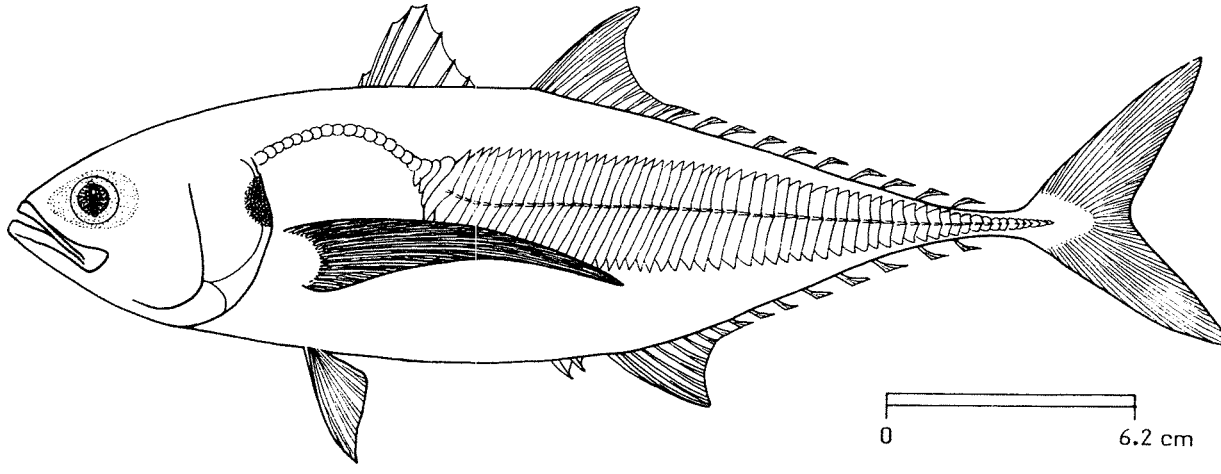
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)

Megalaspis cordyla (Linnaeus, 1758)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Torpedo scad
Fr - Comère torpille
Sp - Macarela torpedo

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, subcylindrical, a little compressed posteriorly, and with caudal peduncle strongly compressed with a marked medial keel; snout and lower jaw pointed. Eye moderate, with well developed adipose eyelid completely covering eye except for a vertical slit centred on pupil; upper jaw extending posteriorly to centre of eye; upper jaw with small villiform teeth, outer teeth moderately enlarged; lower jaw with a single row of small teeth, except a narrow band anteriorly; gillrakers (including rudiments) 8 to 11 upper, 18 to 22 lower and 26 to 32 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 18 to 20 soft rays, posterior 7 to 9 rays consisting of detached finlets; anal fin with 2 detached spires followed by 1 spine and 16 or 17 soft rays, posterior 8 to 10 rays consisting of detached finlets; spinous dorsal fin moderately high, longest spine height about equal to length of soft dorsal fin lobe. Lateral line strongly arched anteriorly, with junction of curved and straight parts below 4th or 5th spine of dorsal fin; chord of curved part of lateral line contained 3.6 to 4.7 times in straight part (to caudal base); scales in curved part of lateral line 21 to 28; straight part with 51 to 59 very large scutes. Breast naked ventrally and laterally in a triangular area for about one third distance to pectoral fin base. Vertebrae 10+14.

Colour: head and body bluish-grey to green dorsally, sides and belly silvery; large black opercular spot. Dorsal and anal fins pale to yellow, distally dusky; pectoral and pelvic fins pale, with upper half dusky. Caudal fin dark, especially leading and trailing edges of fin.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

No other species of Carangidae has the combination of lateral line with very large scutes and posterior soft dorsal and anal fin rays consisting of a series of detached finlets.

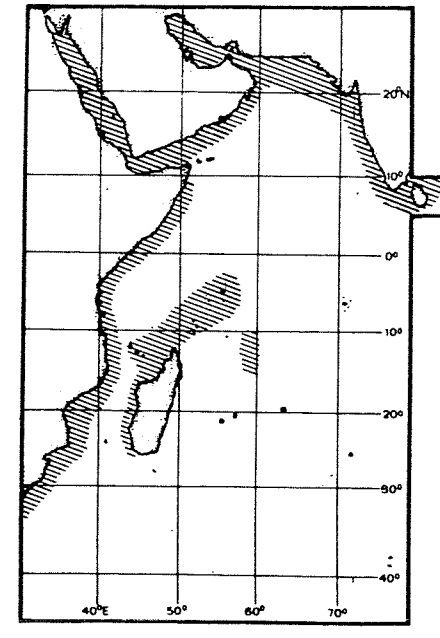
SIZE:

Maximum: reported maximum, 80 cm total length; commonly attains 30 to 40 cm total length and 3 to 4 kg.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Broadly distributed throughout the Western Indian Ocean. Elsewhere found in the Western Pacific Ocean from Japan to Australia. Records of the species from Hawaii appear to be erroneous.

A pelagic, schooling species; feeds primarily on other fish.



PRESENT FISHING GROUNDS:

Throughout its range; rather important commercially in Indian waters.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught on hook and line, with beach seines, trawls, purse seines and traps.

Marketed fresh and dried salted.

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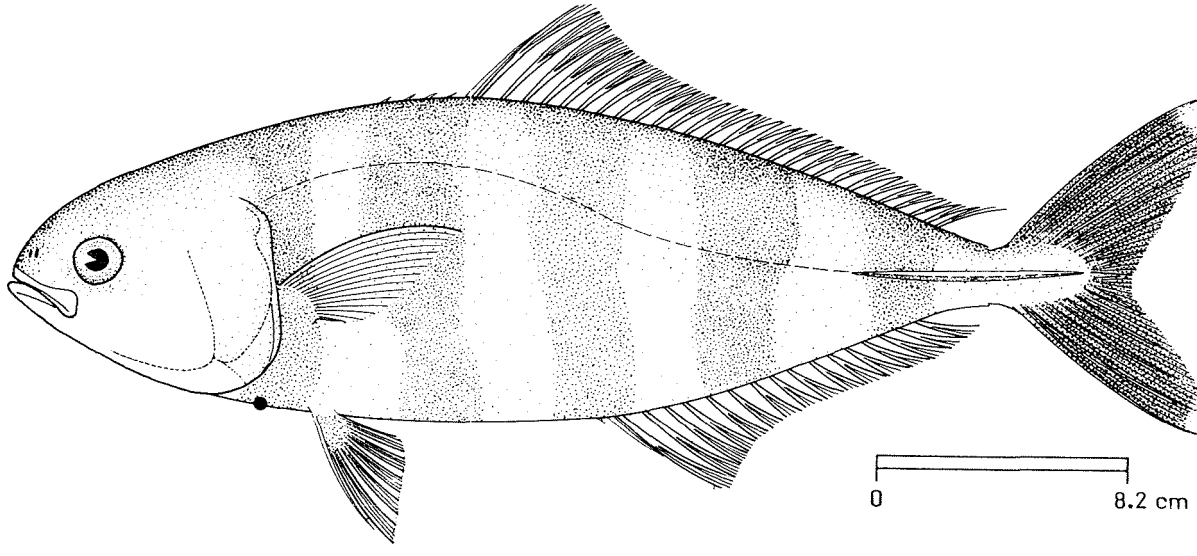
FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)

Naucrates ductor (Linnaeus, 1758)

OTHER SCIENTIFIC NAMES STILL IN USE: Naucrates indicus Lesson, 1830



VERNACULAR NAMES:

FAO:
En - Pilotfish
Fr - Poisson pilote
Sp - Pez piloto

NATIONAL:

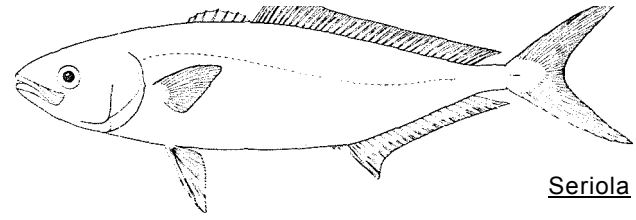
DISTINCTIVE CHARACTERS:

Body elongate, shallow and barely compressed, with nearly equal upper and lower profiles, but head profile tapering sharply above anterior half of upper jaw to produce a nearly blunt snout; upper jaw very narrow at end end extending to about below anterior mar in of eye; teeth minute, in a band in upper and lower jaws; gillrakers including rudiments 6 or 7 upper, 15 to 20 lower and 21 to 27 total on first gill arch. Dorsal fin with 4 or 5 spines (first spine may be minute and/or last spine may be reduced and embedded in fish larger than 20 cm fork length), followed by 1 spine and 25 to 29 soft rays; anal fin with 2 spines slightly separated from rest of fin (first spine may be reduced and embedded) followed by 1 spins: and 15 to 17 soft rays; second dorsal fin lobe short, contained 7.1 to 8.2 times in fork length; anal fin base short, contained 1.6 to 1.9 times in second dorsal fin base. No scutes; caudal peduncle with a well developed lateral, fleshy keel on each side and dorsal and ventral peduncle grooves. Vertebrae 10+15.

Colour: in live fish, 6 or 7 black bars against a light silvery background, but there also is a transient coloration (possibly aggressive display) with bars disappearing and most of fish silvery-white with 3 broad blue patches in tandem across back. In fresh or preserved fish, head dark, 5 or 6 dark broad body bars and a similar bar at end of caudal peduncle, bars 3 to 6 extending through soft dorsal' and anal fin membranes, and the bars persistent at all sizes; rest of body bluish (fresh) or light or dusky; white tips prominent on upper and lower caudal firi lobes and smaller white tips on second dorsal and anal fin lobes; most of fins dusky to dark.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Seriola species: more spines in first dorsal fin, usually 7 (rarely 6 with overgrowth in very large individuals); more anal fin rays, 18 to 22 (very rarely 17 in N. ductor).

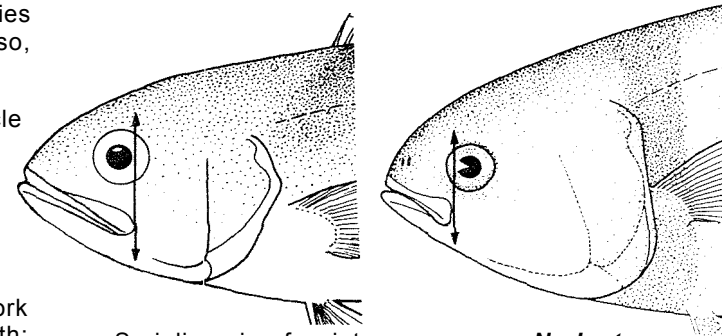


Seriola

Seriolina nigrofasciata: gillrakers mostly consisting of rudiments and upper jaw extending to below posterior margin of eye (versus only to below anterior margin of eye in N. ductor).

Elagatis bipinnulata: the only carangid species with terminal 2-rayed dorsal and anal finlets; also, no fleshy keel on caudal peduncle.

Other carangid genera: lack caudal peduncle grooves.



Seriolina nigrofasciata *N. ductor*

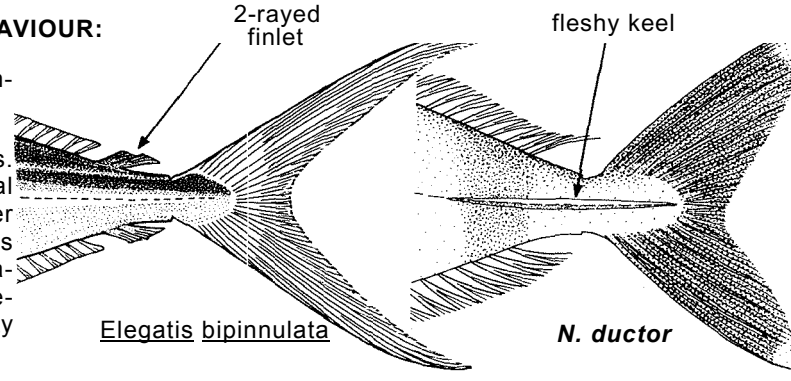
SIZE:

Maximum: 70 cm total length (63 cm fork length) reported; common to 35 cm fork length; weight 0.5 kg at 33 cm fork length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

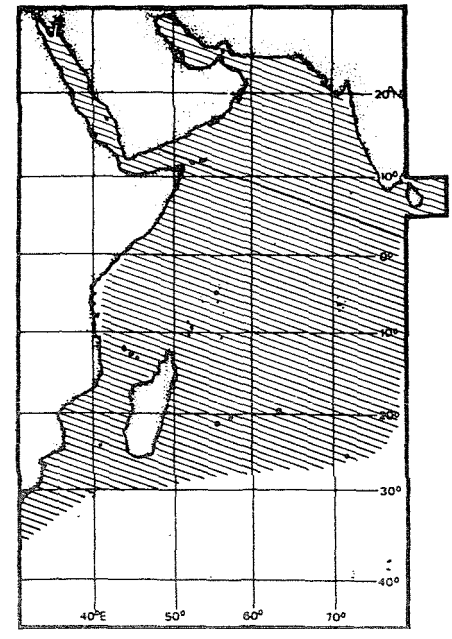
Circumtropical in marine waters. Common throughout the Western Indian Ocean.

Primarily pelagic in oceanic waters. This species has a semi-obligate commensal relationship with large sharks, rays and other fishes, turtles, ships and driftwood. Juveniles are frequently found in association with seaweeds and jellyfish; the larval forms are widespread in epipelagic oceanic waters. Maturity is reached by at least 23 cm fork length.



PRESENT FISHING GROUNDS:

Oceanic waters throughout its range.



CATCHES, FISHING GEAR AND FORMS OF UTILIZATION

Separate statistics are not reported for this species.

Caught with pelagic trawls.

Marketed fresh and dried salted.

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