

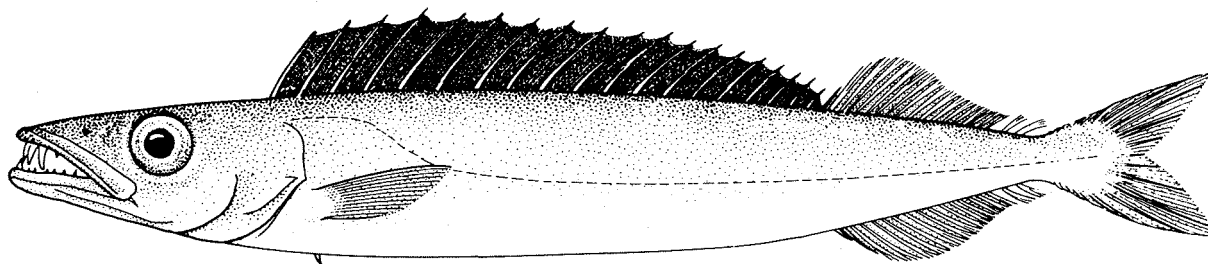
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: GEMPYLIDAE

FISHING AREA 51
(W. Indian Ocean)

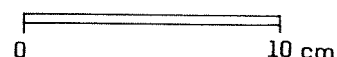
Promethichthys prometheus (Cuvier, 1832)
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OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO: En - Promethean escolar
Fr - Escalier clair
Sp - Escolar prometeo



NATIONAL:

DISTINCTIVE CHARACTERS:

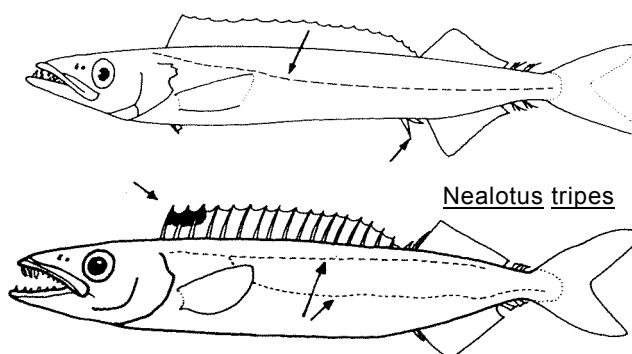
Body moderately elongate and extremely compressed. Snout rather short, twice as long as eye diameter; 4 to 6 fangs in upper jaw near tip of snout (3 unmovable and remaining depressible) and canine-like, strong uniserial lateral teeth in both jaws; small teeth on palatines (roof of mouth); eye large, contained about 4.2 times in head length. First dorsal fin moderately elevated, its middle part highest, with 18 or 19 spines; second dorsal fin about as high as first, with 1 small spine and 18 to 20 soft rays, followed by 2 finlets; anal fin similar to second dorsal in shape and size, with 16 to 18 soft rays preceded by 2 minute spines and followed by 2 finlets; pectoral fins short, a little longer than snout, with about 15 rays; pelvic fins reduced to a spine and sometimes a rudimental soft ray, becoming shorter with growth; caudal fin rather small and weakly forked; no keels on caudal peduncle. Lateral line single, starting from upper margin of opercle, curving down abruptly from below about 4th dorsal fin spine to below 7th spine thereafter running almost straight along middle of body to near caudal fin base. Scales thin, cycloid (smooth) and easily shed. Intermuscular bones visible through skin.

Colour: body dark brown with violet reflections, fading to dull brown after death; first dorsal fin membrane black, other fins blackish brown.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

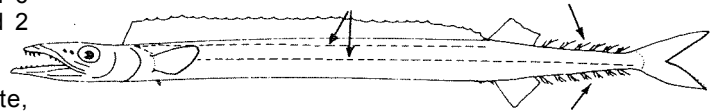
Nealotus tripes (the most similar species): 2 free, dagger-shaped spines in front of anal fin, (the second often embedded); lateral line oblique but fairly straight.

Rexea prometheoides: 2 lateral lines and a large black blotch on anterior part of dorsal fin.



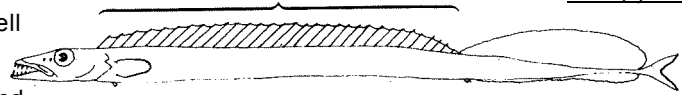
Nealotus tripes
Rexea prometheoides

Gempylus serpens: body extremely elongate, 5 or 6 dorsal and 6 or 7 anal finlets (2 in P. prrometeus) and 2 lateral lines.



Gempylus

Diplospinus multistriatus: body extremely elongate, first dorsal fin long-based, with 28 to 32 spines, no dorsal and anal finlets.

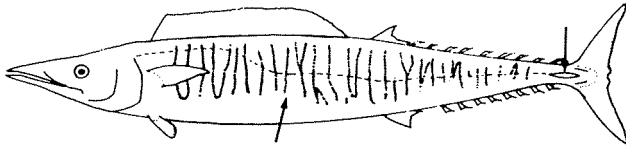


Diplospinus

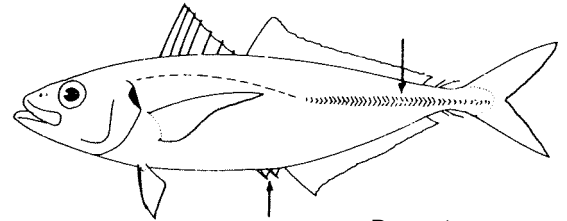
Other species of Gempylidae: pelvic fins well developed, with one spine and 5 soft rays.

Slender scombroid species (Scomberomorus and Acanthocybium): keels present on caudal peduncle and remarkable markings on body.

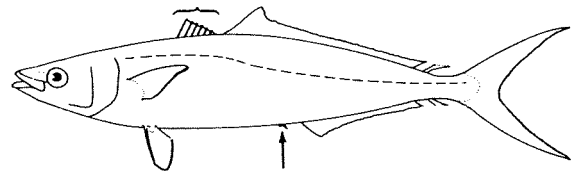
Slender carangid species (Elagatis, Decapterus and Megalaspis): 2 detached spines in front of anal fin, and first dorsal fin base shorter than second (finlets excluded); also scutes on lateral line (Decapterus and Megalaspis).



Acanthocybium



Decapterus



Elagatis

SIZE:

Maximum: 60 cm standard length; common to 40 cm standard length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, known from the northern part of Mozambique Channel and off Kerala (India); also recorded from Kenya. Elsewhere, distributed in tropical and temperate waters of the Eastern Indian Ocean, Western Central Pacific and Atlantic oceans.

Meso-, bathy- or benthopelagic, from about 100 to 750 m depth.

Feeds on a wide variety of fishes, crustaceans and cephalopods.

PRESENT FISHING GROUNDS:

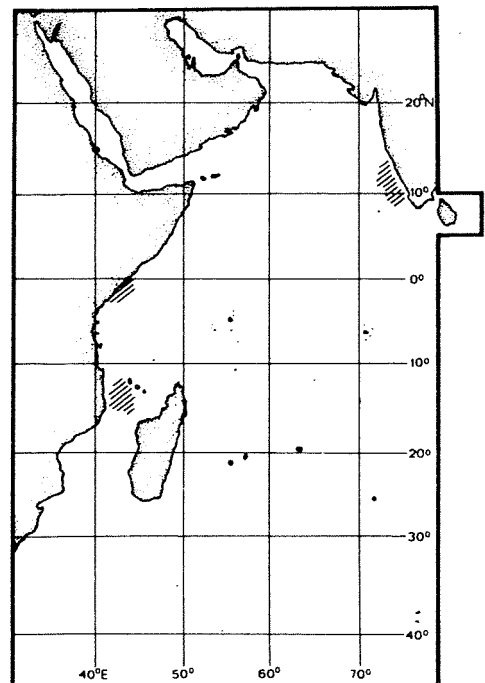
Incidentally caught on the continental shelf and slope.

CATCHES, FISHING CHAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

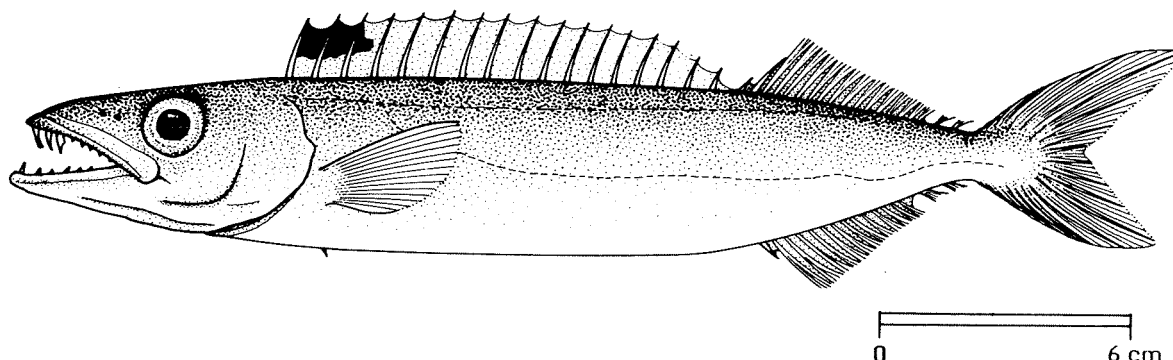
Caught with bottom trawls and bottom longliners; occasionally caught with setnets.

Marketed mostly fresh or iced; made into fish cakes; also dried salted.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: GEMPYLIDAE

FISHING AREA 51
(W. Indian Ocean)Rexea prometheoides (Bleeker, 1856)OTHER SCIENTIFIC NAMES STILL IN USE : Rexea solandri: (non Cuvier) Matsubara & Iwai, 1952

VERNACULAR NAMES:

FAO : En - Royal escolar
 Fr - Escolier royal
 Sp - Escolar real

NATIONAL:

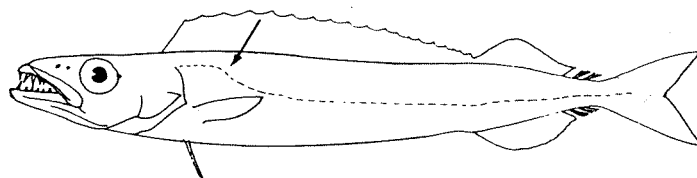
DISTINCTIVE CHARACTERS:

Body moderately elongate and remarkably compressed. Interorbital region flattened and shallowly concave; conical, widely-spaced teeth in both jaws, with usually 5 or 6 fangs at front of upper jaw (usually 3 immovable and remaining depressible) and a pair of canine-like teeth at front of lower jaw; palatine teeth (on roof of mouth) absent; eye large, contained about 4.4 times in head length. First dorsal fin rather low, with 16 to 18 spines, second dorsal fin about as high as first, with 1 or 2 small spines and 14 to 16 soft rays, followed by 2 finlets; anal fin a little smaller than second dorsal fin, with 1 small spine and 13 to 16 soft rays followed by 2 finlets; pectoral fins round and short, a little longer than lower jaw, with 13 or 14 rays; pelvic fins absent or minute, represented by a spine only; caudal fin forked, its upper lobe longer. Lateral line originating above upper angle of gill opening, bifurcating below 5th dorsal spine or before it, the upper branch ending below middle of second dorsal fin base, the lower one slightly undulating along posterior part of body. Scales small, thin, cycloid (smooth) and easily shed.

Colour: back and upper side bluish brown, lower side and belly pale, with a strong silvery luster; becoming uniformly brown or dark brown in formaline; a large black blotch present on anterior part of first dorsal fin.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Promethichthys prometheus: lateral line single and no black blotch on anterior part of dorsal fin.

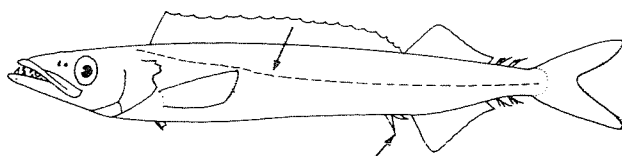
Promethichthys prometheus

Nealotus tries: 2 free, dagger-shaped spines in front of anal fin; lateral line single and almost straight.

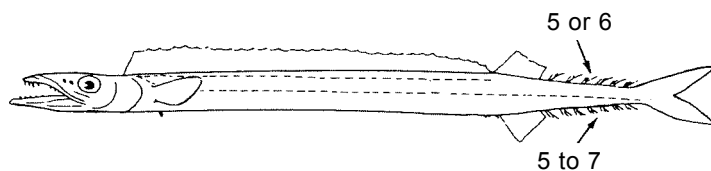
Gempylus serpens: body extremely elongate, 5 or 6 dorsal and 5 to 7 anal finlets (2 in R. prometheoides).

Diplospinus multistriatus: body extremely elongate, first dorsal fin long-based, with 28 to 32 spines; dorsal and anal finlets absent.

Other species of Gempylidae: pelvic fins well developed, with 1 spine and 5 soft rays.



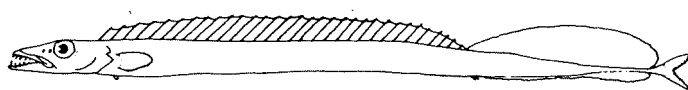
Nealotus tries



Gempylus serpens

SIZE:

Maximum: 40 cm standard length; common to 30 cm standard length.



Diplospinus multistriatus

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, known from the southern entrance of the Mozambique Channel to Kenya, Tanzania and India. Elsewhere, distributed in the Eastern Indian Ocean and in the Western Pacific from Japan to the northern coasts of New South Wales, Australia.

Mesopelagic, closer to the coast than any other gempylid.

Feeds on a wide variety of fishes, crustaceans and cephalopods.

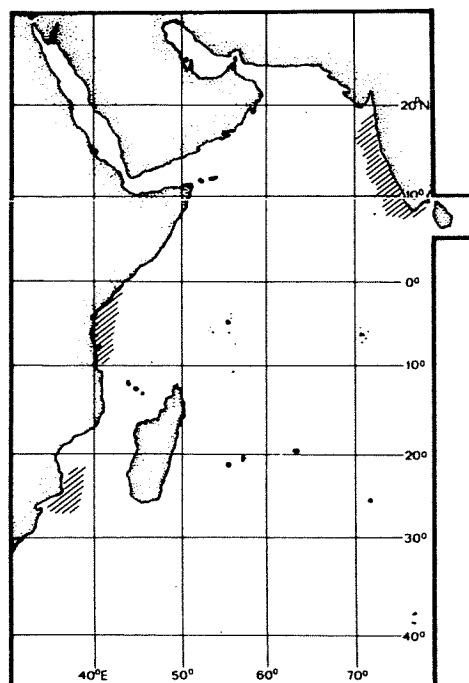
PRESENT FISHING GROUNDS:

No special fishery; taken by bottom trawls along with other fishes on the continental shelf and slope.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

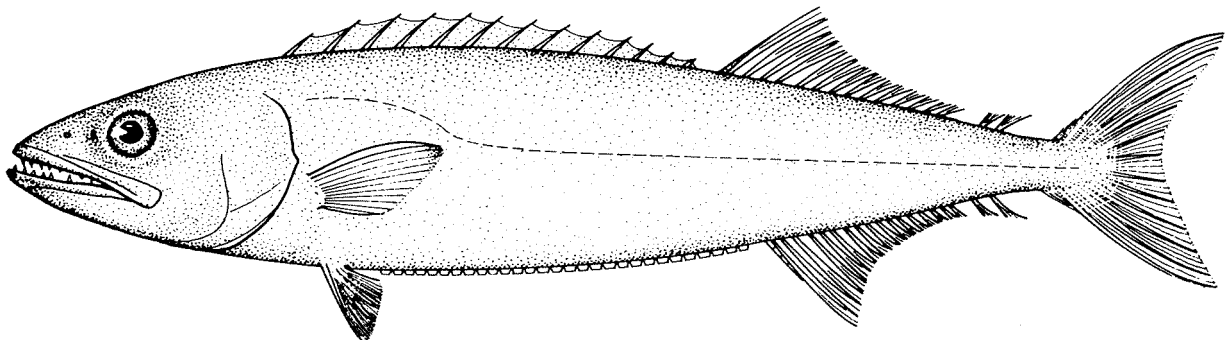
Separate statistics are not reported for this species. Caught with bottom trawls.

Marketed mostly fresh or iced.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: GEMPYLIDAE

FISHING AREA 51
(W. Indian Ocean)Ruvettus pretiosus Cocco, 1829OTHER SCIENTIFIC NAMES STILL IN USE: Ruvettus tydemani Weber, 1913
Ruvettus whakari Griffin, 1927

VERNACULAR NAMES:

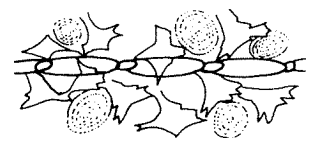
FAO: En - Oilfish
Fr - Rouvet
Sp - Escolar clavo (=Escolar)

NATIONAL:

DISTINCTIVE CHARACTERS:

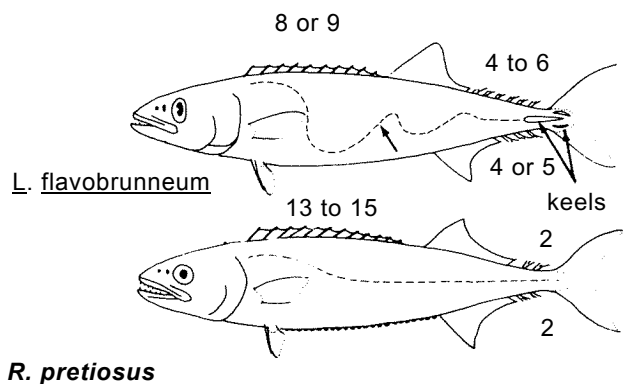
Body moderately elongate and slightly compressed, belly keeled with dermal processes between pelvic fins and anus. A single series of strong teeth in both jaws, with canine-like teeth in front; strong teeth also present on vomer and palatines (roof of mouth); eye fairly large and round. First dorsal fin low, with 13 to 15 spines, second dorsal fin rather high, with 15 to 18 soft rays followed by 2 finlets; anal fin with 15 to 18 soft rays followed by 2 finlets; pectoral fins a little longer than half of head length, with about 15 soft rays; pelvic fins well developed, with 1 spine and 5 soft rays; caudal fin broad and forked; no keels on caudal peduncle. Lateral line single, often obscure due to peculiar bony tubercles and small scales covering lateral line canal. Scales cycloid (smooth), interspersed with rows of sharp bony tubercles.

Colour: body uniformly violet or purplish brown when alive, fading to dull brown after death; tips of pectoral and pelvic fins black; margins of second dorsal and anal fins white in young.

lateral line canal
covered with bony
tubercles and scales

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Lepidocybium flavobrunneum: 8 or 9 dorsal fin spines 13 to 15 in Ruvettus pretiosus); no scaly keel on belly; scales not interspersed with tubercles; lateral line very markedly sinuous, keels present on caudal peduncle and 4 to 6 dorsal and 4 or 5 anal finlets (2 dorsal and anal in Ruvettus pretiosus).



Other gempylid species: no scaly keel on belly; body smooth, scales not interspersed with spinous, bony tubercles.

Acanthocybium, Scomberomorus, Sarda and other similar scombroid fishes: keels present on caudal peduncle; also, back blue or blue-grey, with bars, spots or other dark markings; 7 or 8 dorsal and anal finlets (2 in R. pretiosus).

Carangid species with dorsal and anal finlets: 2 detached spines in front of anal fin; base of first dorsal fin shorter than that of second (finlets excluded); also, scutes present along lateral line in Decapterus and Megalaspis or only 1 dorsal and 1 anal finlets in Elagatis and Decapterus.

SIZE:

Maximum: 300 cm standard length; common to 150 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Widely distributed in tropical and temperate seas of the world.

Benthopelagic, mostly over the continental shelf, sometimes oceanic, down to depths of 200 m or more (reported even from 800 m depth).

Feeds on a wide variety of fishes, crustaceans and cephalopods.

PRESENT FISHING GROUNDS:

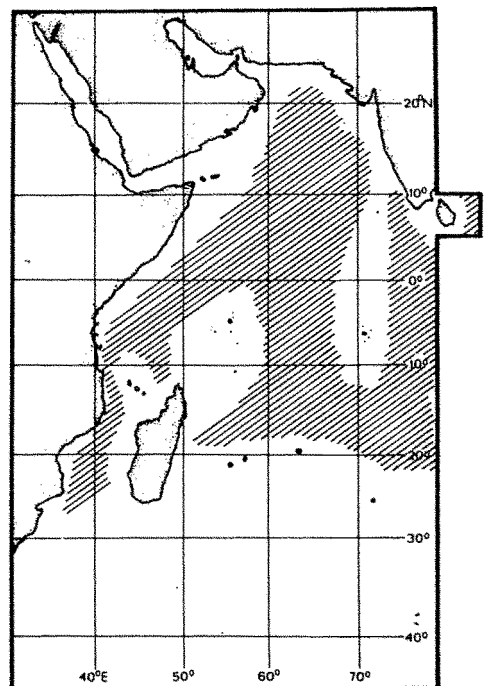
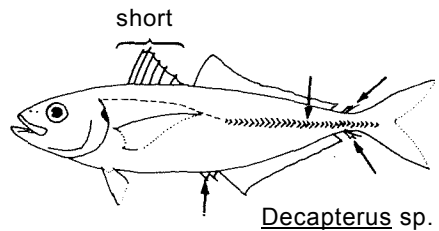
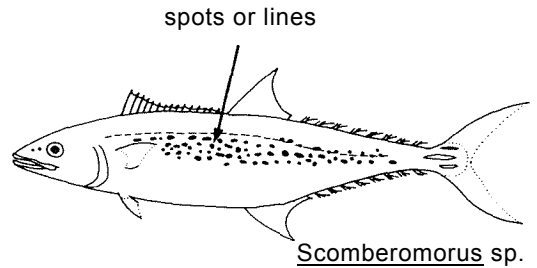
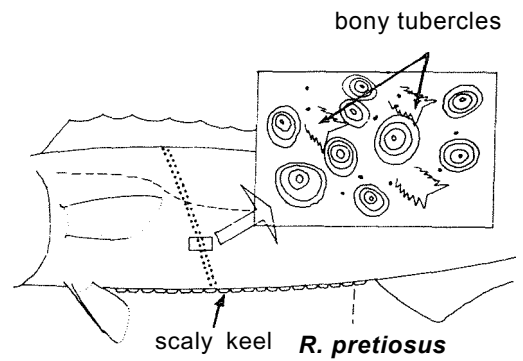
No special fishery, but appearing as by-catch in the tuna longline fishery; caught usually at depths from 80 to 200 m.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

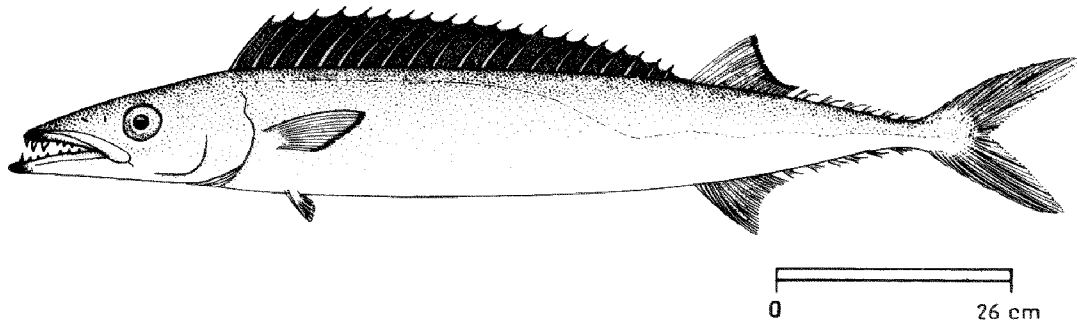
Caught mainly with longlines.

Marketed mostly frozen, prepared as fish cake in Japan. Flesh very oily, with purgative properties.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: GEMPYLIDAE

FISHING AREA 51
(W. Indian Ocean)Thysites atun (Euphrasen, 1791)OTHER SCIENTIFIC NAMES STILL IN USE: Leionura atun (Euphrasen, 1791)
Leionura atun dentatus (Bloch & Schneider, 1801)

VERNACULAR NAMES:

FAO: En - Snoek
Fr - Escolier
Sp - Sierra

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate and fairly compressed. Mouth large; lower jaw well projecting beyond upper jaw; a single row of sharp flat teeth in both jaws with 3 enlarged fangs at front of upper jaw; small uniserial teeth on palatines (roof of mouth); eye rather small, contained about 6 times in head length. First dorsal fin rather high and long, with 19 to 21 spines; second dorsal fin also high, with 11 to 13 soft rays followed by 5 to 7 finlets; anal fin a little smaller than the second dorsal, with 1 spine and 10 to 22 soft rays, followed by 5 to 7 finlets; pectoral fins a little longer than snout, with 13 to 15 soft rays; pelvic fins small, but well developed, with 1 spine and 5 soft rays; caudal fin fairly large and forked. No caudal keels. Lateral line single, running close to upper profile below most of first dorsal fin, curving down from below about 16th spine to end of first dorsal fin, thereafter running in slight undulations along midline of body to near caudal fin base. Scales thin, cycloid (smooth) and easily shed. Intermuscular bones visible through skin.

Colour: body steel blue brown above, silvery below; tip of both jaws black; first dorsal fin membrane black; margin of second dorsal and pectoral fins black; pelvic fins pale; becoming uniformly dark brown in formalin.

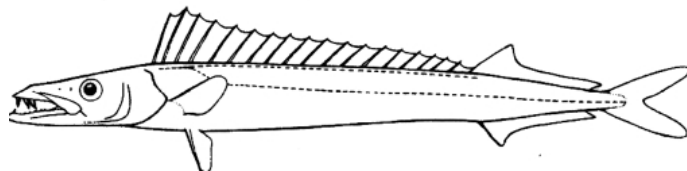
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Thyrsitoides marleyi: no dorsal and anal finlets; lateral line bifurcated below 4th to 5th dorsal fin spine.

Other gempylids with well developed pelvic fins (Lepidocybium, Ruvettus and Neopinnula): body deeper and semifusiform; dorsal fin spines less than 18 (19 to 21 in T. atun).

Remaining gempylids: pelvic fins reduced to 1 small spine with no or only minute several soft rays.

Slender scombroid species (Scomberomorus and Acanthocybium): keels present on caudal peduncle, and dark markings on body.



Thyrsitoides marleyi

SIZE:

Maximum: about 150 cm standard length; common to 100 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

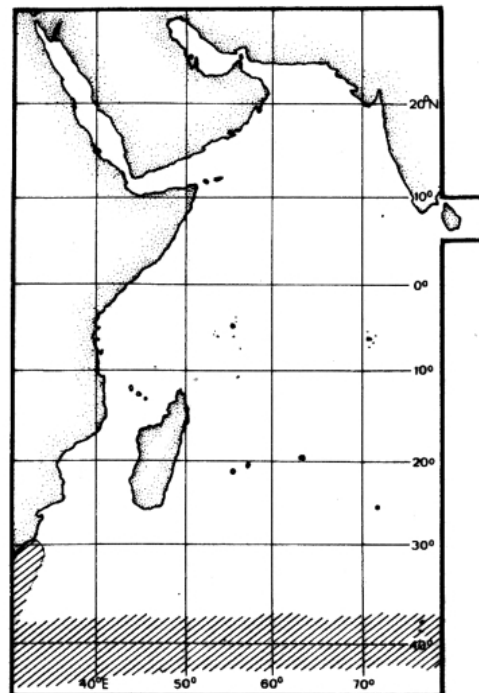
In the area, known from South Africa. Elsewhere, discontinuous distribution in temperate waters of the Southern Hemisphere.

Pelagic in coastal waters or in the vicinity of islands; preferred temperature range 13° to 18°C.

Feeds on euphausiids, crustaceans, cephalopods and on fishes (mainly sardines, anchovies, jacks and even juveniles of its own species).

PRESENT FISHING GROUNDS:

Within the area, continental shelf of South Africa, but no special fishery. An important commercial fish in southern Australia, Tasmania, New Zealand, Chile and Argentina.



CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

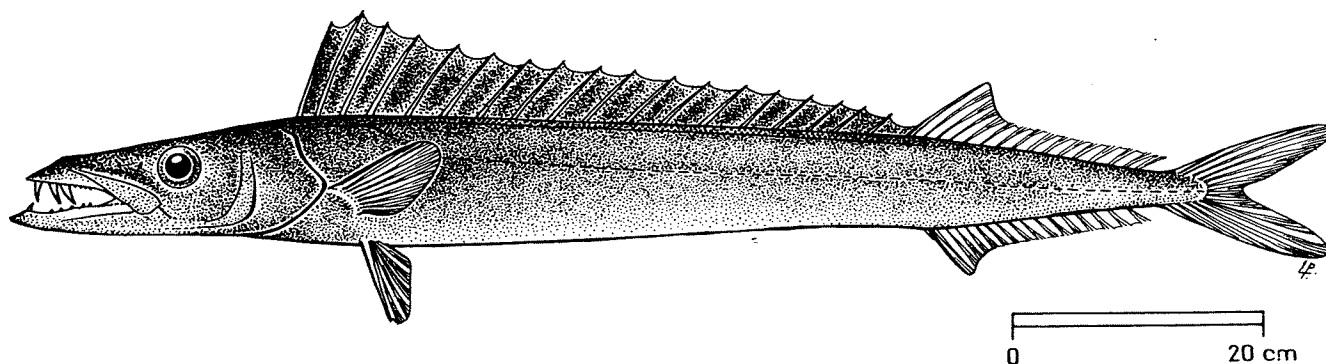
Separate statistics are not reported for this species.

Mostly caught by trolling and handline; sometimes caught with trawls.

Marketed fresh (for fillets or steaks), sometimes canned and smoked, taste excellent; head and remains after filleting used as rock lobster baits.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: GEMPYLIDAE

FISHING AREA 51
(W. Indian Ocean)Thyrsitoides marleyi Fowler, 1929OTHER SCIENTIFIC NAMES STILL IN USE: Mimasea taeniosoma Kamohara, 1936

VERNACULAR NAMES:

FAO : En - Slender snoek
 Fr - Escolier gracile
 Sp - Sierra grácil

NATIONAL:

DISTINCTIVE CHARACTERS:

Body extremely elongate and considerably compressed. Snout sharply conical, lower jaw sharply pointed and considerably projecting beyond upper jaw; 3 fangs anteriorly in each side of upper jaw, usually 3 fangs depressible and remaining immovable; a pair of slightly enlarged teeth anteriorly in lower jaw; lateral teeth in jaws conical, those in lower jaw much larger and more widely spaced than those in upper jaw; vomer toothless, small teeth present on palatines (roof of mouth); eye rather small, contained about 7 times in head length. First dorsal fin rather high and long based, with 18 spines, second dorsal fin about as high as first, with about 16 soft rays; anal fin a little smaller than second dorsal fin, with 1 spine and about 16 soft rays; pectoral fins a little shorter than snout, with a small spine and 13 or 14 soft rays; pelvic fins well developed, about as long as pectoral fins with 1 spine and 5 soft rays; caudal fin fairly large and forked. Lateral line originating above upper angle of gill opening, bifurcating below 4th dorsal spine or slightly behind it, the upper branch running along first dorsal fin base and terminating below end of first dorsal fin, the lower line abruptly curved backward and downward from bifurcation, running along middle of body to base of middle caudal ray. Scales small and thin.

Colour: fresh specimens are dark brown with slight metallic reflections, sometimes slightly paler on belly; black markings on first dorsal fin, other fins brown without any markings; pale brown in formaline.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

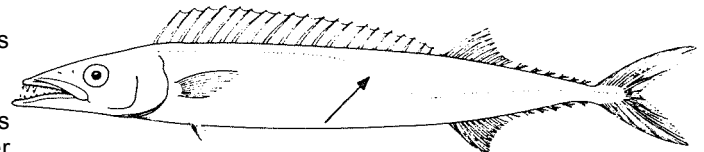
Thyrsites atun: several dorsal and anal finlets (finlets absent in T. marleyi); lateral line single.

Other gempylids with well developed pelvic fins (Lepidocybium, Ruvettus and Neopinnula); body deeper and semifusiform; dorsal fin spines less than 18.

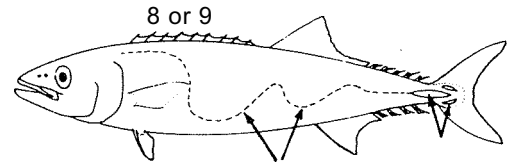
Remaining gempylids: pelvic fins reduced to 1 small spine with no or minute several soft fin rays.

Slender scombroids (Scomberomorus and Acanthocybium): keels present on caudal peduncle and dark markings on body.

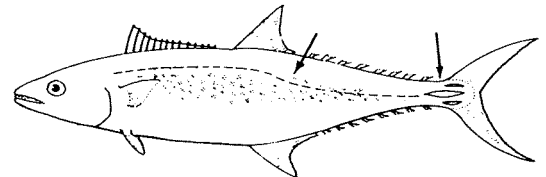
Slender carangids (Elegatis, Decapterus and Megalaspis): 2 detached spines in front of anal fin, and first dorsal fin base shorter than second (finlets excluded); also scutes on lateral line (Decapterus and Megalaspis) and 1 dorsal and anal finlets (Elegatis and Decapterus).



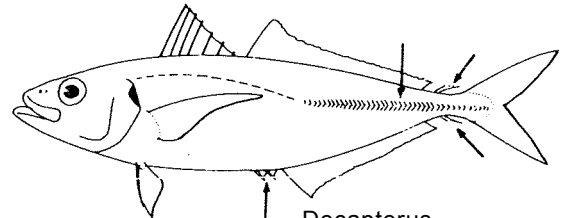
Thyrsites atun



Lepidocybium



Scomberomorus



Decapterus

SIZE:

Maximum: 150 cm standard length; common to 100 cm standard length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, known from Natal, South Africa, in the Mozambique Channel, off Kenya, Seychelles and India. Elsewhere, distributed in tropical and temperate waters of the Western Pacific and the Indian Oceans.

Meso- and bathypelagic, known to depths of 400 m or more; often comes near surface at night.

Feeds on a variety of fishes, crustaceans and cephalopods.

PRESENT FISHING GROUNDS:

No special fishery; sometimes caught with other fishes by deep water bottom trawls.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught sometimes by trawls, handlines and long-lines.

Sometimes marketed fresh or iced.

