

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

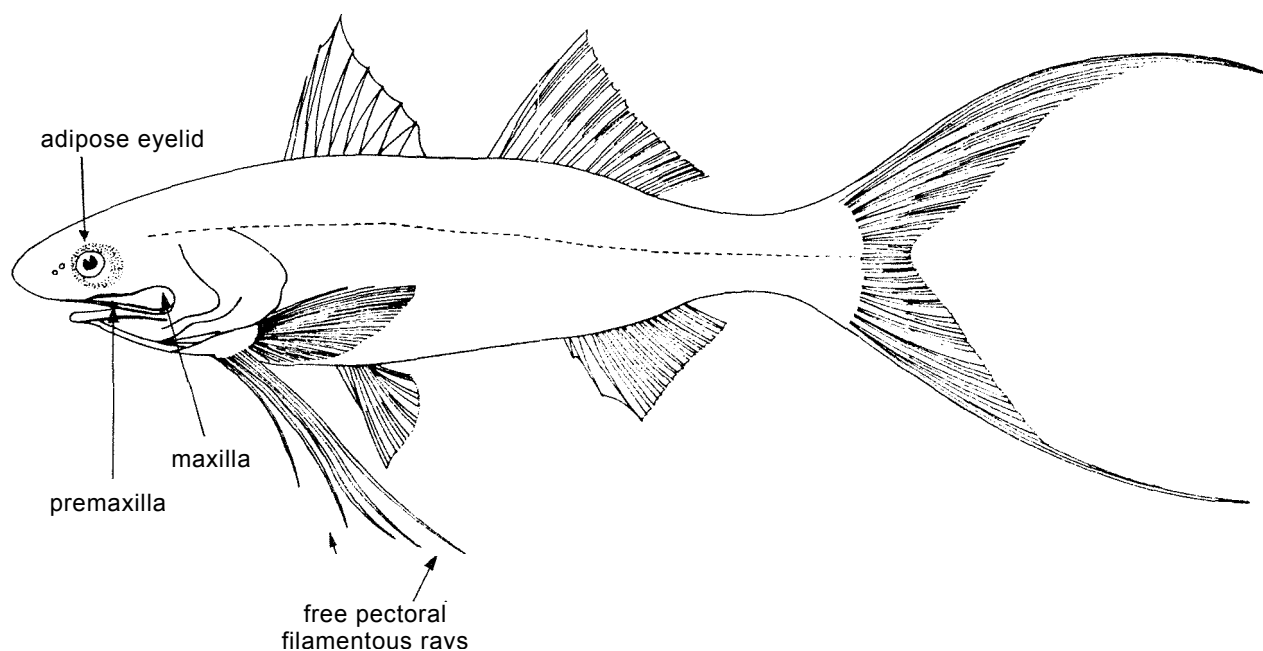
POLYNEMIDAE

Threadfins, tasselfishes

Medium-sized fishes with an oblong or more or less elongate and compressed body. Head scaly, with a conical snout, projecting beyond the large mouth; maxilla expanded posteriorly, reaching to well behind eye; mouth bordered by slightly protractile premaxillae; only small villiform teeth in jaws and palatines, sometimes on vomer; eyes with adipose tissue. Two widely separated dorsal fins, the 1st with 7 or 8 feeble spines; pectoral fins in 2 parts, the upper normal, the lower with 3 or more free filamentous rays; pelvic fins abdominal, lying a little behind bases of pectoral fins, anal fin with 2 or 3 spines followed by branched rays, lying below base of 2nd dorsal fin; caudal fin forked. Body covered with weakly ctenoid (rough) scales; lateral line extending onto caudal fin.

Colour: silvery, golden or light brown, sometimes with a dark blotch at the shoulder or dark longitudinal lines on body; fins yellowish or more or less dusky.

Medium to large-sized fishes living in shallow waters over sandy or muddy bottoms, some species entering river mouths. Feeds mainly on crustaceans and small fishes. The reported catch of threadfins from Fishing Area 51 totalled 1 751 tons in 1981 (all taken by India). Caught mainly with beach seines, gillnets, traps and bottom trawls. Flesh excellent.



SIMILAR FAMILIES OCCURRING IN THE AREA:

Triglidae (gurnards), Dactylopteridae (flying gurnards): also have some free pectoral fin rays, but head with strong bony armour; also, pectoral fins enormous in Dactylopteridae.

Other bony fishes with 2 dorsal fins: have normal pectoral fins without free rays in lower part of fin.

KEY TO GENERA OCCURRING IN THE AREA:

1a. Lower lip fully developed (Fig.1a); no external teeth; 5 or more free pectoral filaments Polynemus

1b. Lower lip restricted to corner of mouth (Fig.1b); teeth extending to outer edges of jaws; 4 free pectoral filaments Eleutheronema

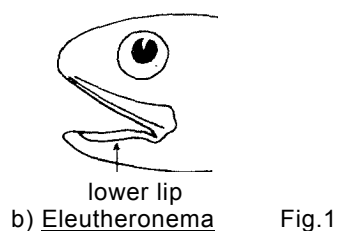
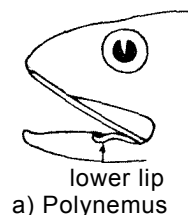


Fig.1

LIST OF SPECIES OCCURRING IN THE AREA:

Code numbers are given for those species for which Identification Sheets are included

<u>Eleutheronema tetradactylum</u> (Shaw, 1804)	POLYN Eleu 1
* <u>Polynemus astrolabi</u> (Sauvage, 1881)	
<u>Polynemus heptadactylus</u> Cuvier, 1829	POLYN Poly 4
<u>Polynemus indicus</u> Shaw, 1804	POLYN Poly 1
<u>Polynemus kuru</u> (Bleeker, 1853)	
<u>Polynemus microstoma</u> (Bleeker, 1851)	POLYN Poly 6
<u>Polynemus paradiseus</u> Linnaeus, 1758	POLYN Poly 5
<u>Polynemus plebeius</u> Broussonet, 1782	POLYN Poly 2
<u>Polynemus sexfilis</u> Valenciennes, 1831	POLYN Poly 7
<u>Polynemus sextarius</u> Schneider, 1801	POLYN Poly 3
<u>Polynemus xanthonemus</u> Valenciennes, 1831	

Prepared by A.G.K. Menon, Zoological Survey of India, Madras, India and M. Babu Rao, Freshwater Biological Station, Zoological Survey of India, Himayat Nagar, Hyderabad, India

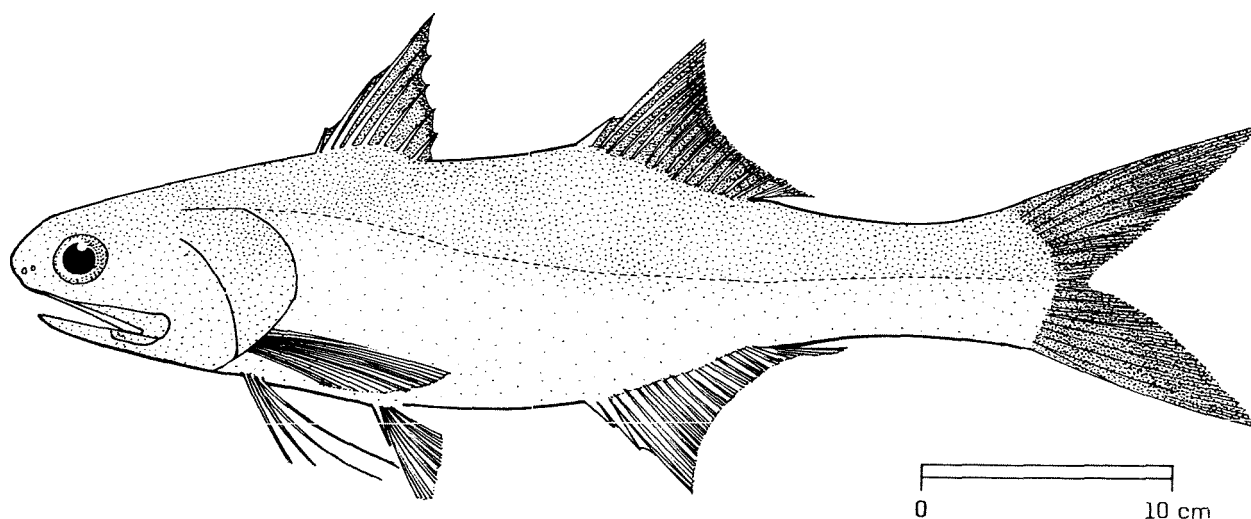
*Doubtful species

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: POLYNEMIDAE

FISHING AREA 51
(W. Indian Ocean)Eleutheronema tetradactylum (Shaw, 1804)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO: En Fourfingerthreadfin
Fr - Barbure mamall
Sp - Barbudo mamalf

NATIONAL:

DISTINCTIVE CHARACTERS:

The largest of the threadfins. Body more or less elongate and compressed. Snout projecting, mouth very large, with small teeth; lips absent, except for lower lip near corner of mouth; eyes large (eye diameter 4.5 to 5 times in head length). Pectoral fins in 2 parts, upper part with all rays unbranched, lower with 4 free filamentous rays of which the upper filament is the longest, reaching to pelvic fin base; caudal fin forked with lobes equal. Scales small, ctenoid (rough to touch).

Colour: body silvery green above, cream below; dorsal and caudal fins grey, dusky at edges, pelvic and anal fins orange, pectoral filamentous rays white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA :

All other polynemid species: lower lip well developed.

SIZE:

Maximum: 200 cm; common to 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, from the "Gulf" to the west coast of India and Sri Lanka. Elsewhere, from the east coast of India and the Andaman Islands to Pinang, Thailand, Malacca, China, Taiwan Island, the Philippines and north and west Australia.

Lives mainly over shallow muddy bottoms in coastal waters, also enters rivers.

Feeds mainly on small crustaceans and fishes.

PRESENT FISHING GROUNDS:

Caught in shallow coastal waters and lower reaches of larger rivers.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

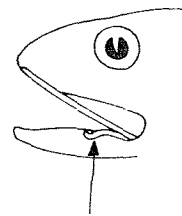
Caught mainly with beach seines, longlines, gillnets, traps and bottom trawls.

Marketed fresh, frozen and dried salted.



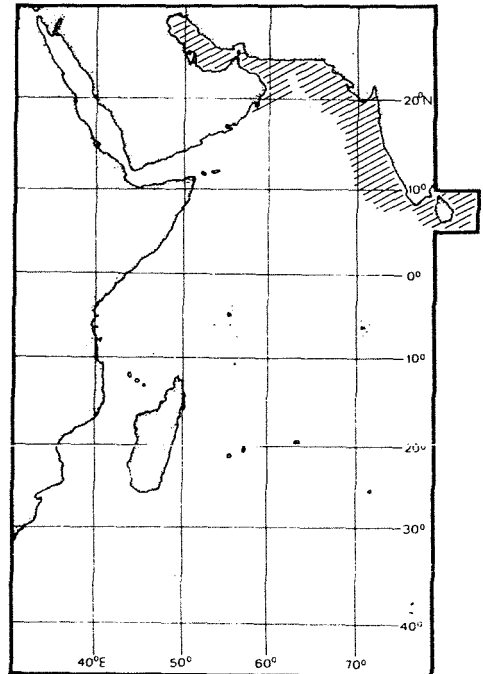
lower lip

Polynemus



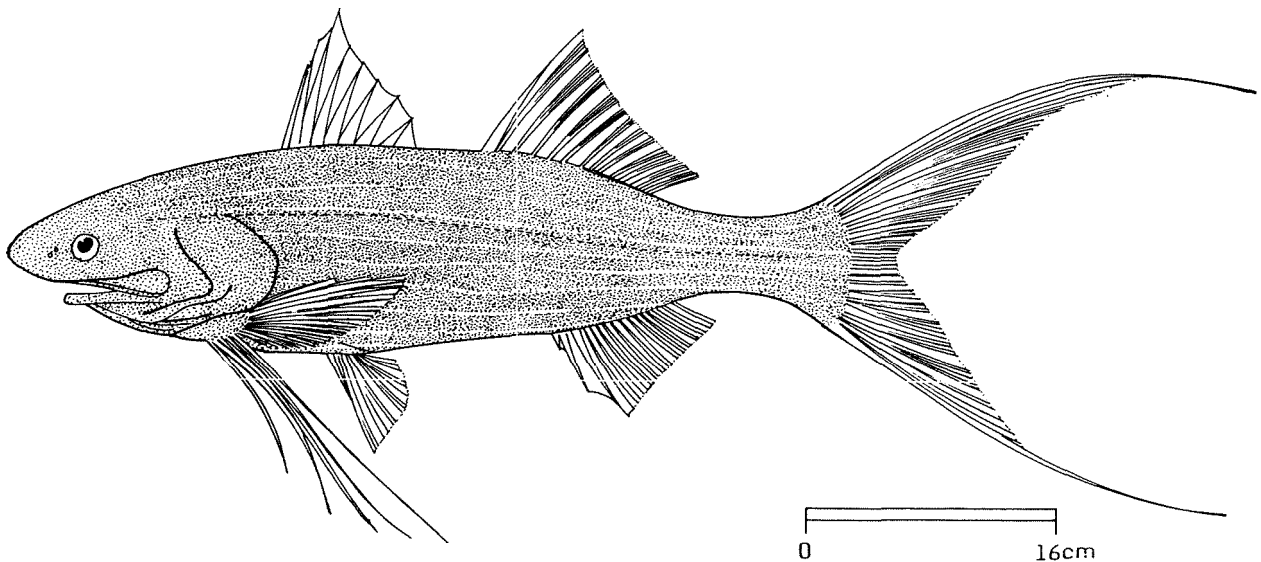
lower lip

Eleutheranema



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: POLYNEMIDAE

FISHING AREA 51
(W. Indian Ocean)*Polynemus indicus* Shaw, 1804OTHER SCIENTIFIC NAMES STILL IN USE: *Polydactylus indicus* (Shaw, 1804)

VERNACULAR NAMES:

FAO : En - Indian threadfin
 Fr - Barbure indien
 Sp - Barbudo indio

NATIONAL:

DISTINCTIVE CHARACTERS:

Body oblong and somewhat compressed. Snout projecting, mouth large, with small teeth; upper lip absent, lower lip well developed; eyes very small (eye diameter 7 times in head length), with adipose tissue. Pectoral fins in two parts, upper part with most rays unbranched, lower with 5 free filamentous rays, of which the upper is the longest, reaching nearly to anal fin origin; caudal fin deeply lunate, with lobes ending in filaments. Scales small, ctenoid (rough to touch).

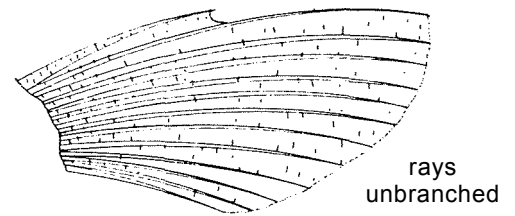
Colour: body purple/black, with faint dusky stripes; all fins yellow.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

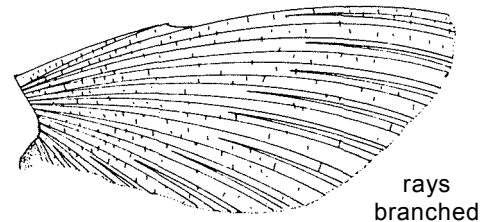
Polynemus plebeius: free pectoral filamentous rays shorter, the longest reaching only to end of pelvic fin; upper pectoral fin rays unbranched; eyes larger, eye diameter contained 3.8 to 4 times in head length (7 times in P. indicus); caudal fin lobes not prolonged into filaments.

P. microstoma: a distinctive black blotch at beginning of lateral line, above pectoral fin origin.

All other polynemid species: have 4, 6 or 7 free pectoral filamentous rays (5 in P. indicus).



P. plebeius



P. indicus

SIZE:

Maximum: 142 cm; common to 80 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found in the southern part of the area, from South Africa to Mozambique including Madagascar, Mauritius and Réunion Islands and in the northern part of the area along the west coast of India and Sri Lanka. Elsewhere, from the east coast of India to Burma, Pinang, Malacca, Australia and Society Islands.

Lives mainly over shallow muddy and sandy bottoms of the continental shelf, occasionally entering rivers, rare beyond depths of 60 m.

Feeds mainly on small bottom-living crustaceans, especially prawns and crabs, and small fishes.

PRESENT FISHING GROUNDS:

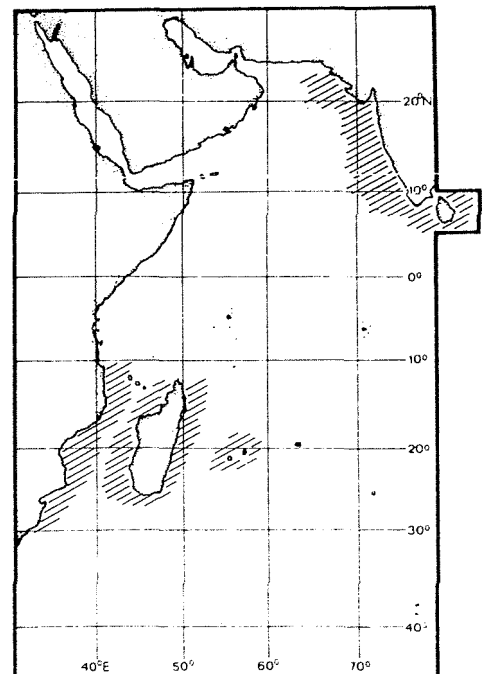
Shallow muddy and sandy parts of the continental shelf, throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

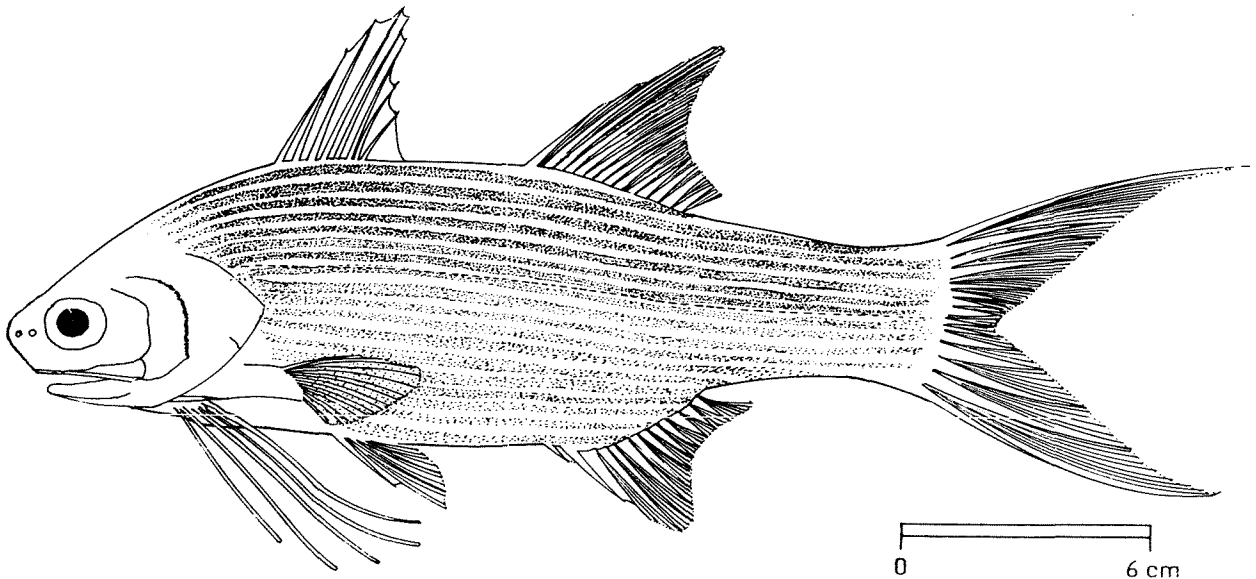
Caught mainly with beach seines, bottom driftnets, traps, longlines and bottom trawls.

Marketed fresh, frozen and dried salted.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: POLYNEMIDAE

FISHING AREA 51
(W. Indian Ocean)Polynemus plebeius Broussonet, 1782OTHER SCIENTIFIC NAMES STILL IN USE: Polydactylus plebeius (Broussonet, 1782)

VERNACULAR NAMES:

FAO : En - Striped threadfin (= Common threadfin, Areas 57/71)
 Fr - Barbure rayé
 Sp - Barbudo rayado

NATIONAL:

DISTINCTIVE CHARACTERS:

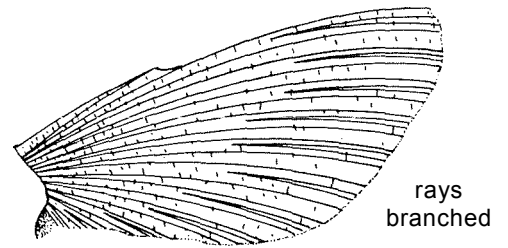
Body oblong and somewhat compressed. Snout projecting, mouth large, with small teeth; upper lip absent, lower lip well developed; eyes large (eye diameter 3.8 to 4.0 times in head length), with adipose tissue. Pectoral fins in two parts, upper part with all rays unbranched; lower part with 5 free filamentous rays, of which the upper 2 are the longest reaching to end of pelvic fin; caudal fin with lobes equal. Scales small, ctenoid (rough to touch).

Colour: body golden olive, with narrow dusky stripes; pectoral fins black, inner side of pelvic fins white, outer side grey, dorsal and caudal fins grey-edged.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Polynemus indicus and *P. microstoma*: also with 5 free pectoral filamentous rays but most of the upper pectoral fin rays are branched. Furthermore, longer free pectoral filamentous rays reach to anal fin origin in *P. indicus*, and a black blotch present at the beginning of the lateral line, above origin of pectoral fins in *P. microstoma*.

All other poynemid species: have 4, 6 or 7 free pectoral filamentous rays.



P. indicus, *P. microstoma*

SIZE:

Maximum: 45 cm; common to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, found off Natal (South Africa), Mozambique, Madagascar, Mauritius and in the northern part of the area from the Red Sea to Sri Lanka. Elsewhere, from the east coast of India to Pinang, Thailand, Japan, Taiwan Island, the Philippines, Australia, New Hebrides, Solomon, Samoa, Fiji, Taiti and Marquesas Islands.

Lives mainly over shallow muddy bottoms of the continental shelf.

Feeds mainly on small crustaceans (especially shrimps and tiny crabs), fishes and other bottom-living organisms.

PRESENT FISHING GROUNDS:

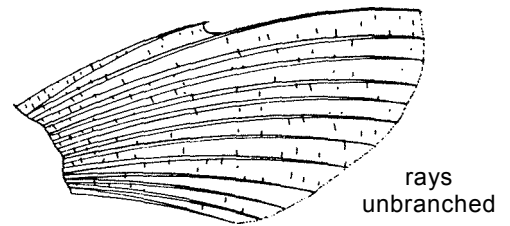
Caught in the shallow muddy bottoms of the continental shelf throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

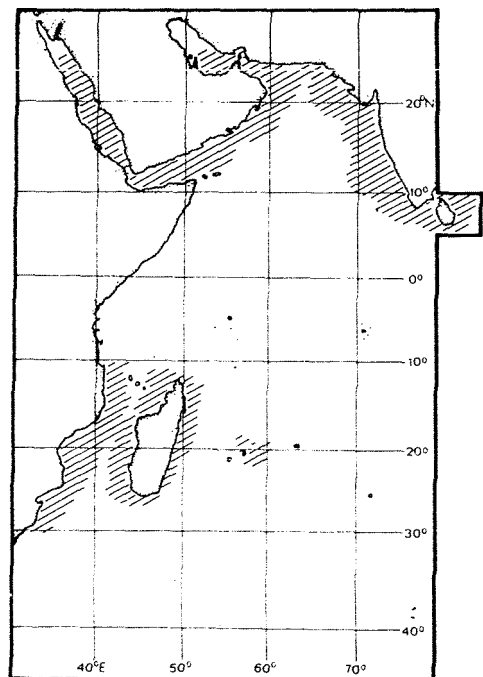
Separate statistics are not reported for this species.

Caught mainly with beach seines and bottom trawls.

Marketed fresh, frozen and dried salted.

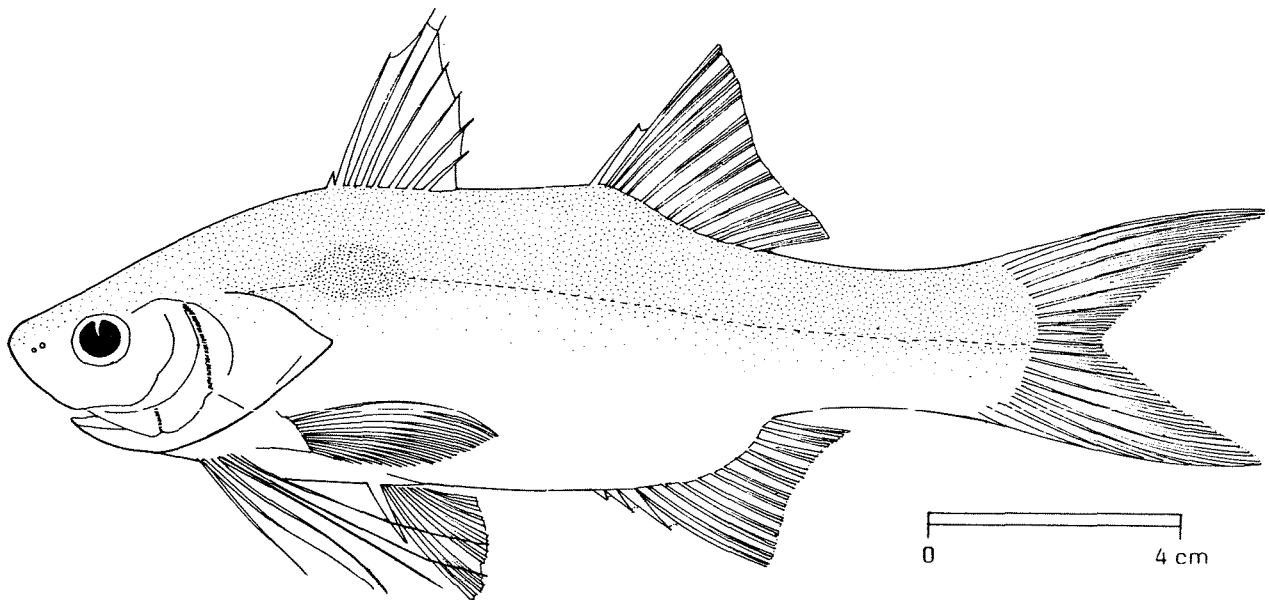


P. piebeius



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: POLYNEMIDAE

FISHING AREA 51
(W. Indian Ocean)*Potynemus sextarius* Bloch & Schneider, 1801OTHER SCIENTIFIC NAMES STILL IN USE: *Polydactylus sextarius* (Bloch & Schneider, 1801)

VERNACULAR NAMES:

FAO : En - blackspot threadfin
 Fr - Barbure tâche noire
 Sp - Barbudo de mancha

NATIONAL:

DISTINCTIVE CHARACTERS:

Body oblong and somewhat compressed. Snout projecting, mouth moderately large, with small teeth; upper lip absent, lower lip well developed; eyes large (eye diameter 3.0 to 3.8 times in head length), with adipose tissue. Pectoral fins in two parts, upper part with almost all rays branched, lower part with 6 free filamentous rays, of which the upper 2 are the longest reaching to tip of pelvic fin; caudal fin forked with lobes equal. Scales small, ctenoid (rough to touch).

Colour: golden olive above, silvery below; fins yellowish with black spots; inner side of gill cover pigmented with black; a large black blotch at beginning of lateral line.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Polynemus sexfilis: upper pectoral fin rays unbranched; pectoral fins black; no black blotch at the beginning of the lateral line.

All other polynemid species: have 4, 5 or 7 free pectoral filamentous rays (6 in P. sextarius).

SIZE:

Maximum: 30 cm; common to 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found in the southern part of the area, off Natal (South Africa), Mozambique, Madagascar, Mauritius and in the northern part of the area from the Red Sea to the west coast of India and Sri Lanka.

Lives over shallow sandy shores and estuaries.

Feeds mainly on small crustaceans (especially shrimps), fishes and bottom-living organisms.

PRESENT FISHING GROUNDS:

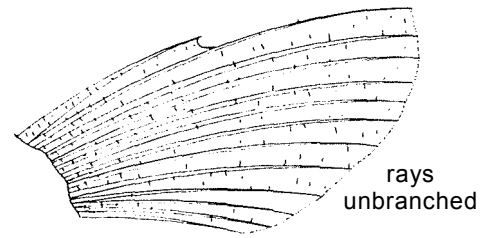
Caught over shallow sandy bottoms of the continental shelf throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

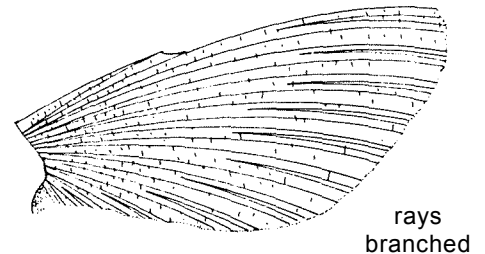
Separate statistics are not reported for this species.

Caught mainly with beach seines and bottom trawls.

Marketed fresh, frozen and dried salted.



P. sexfilis



P. sextarius

