

## FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51  
(W. Indian Ocean)

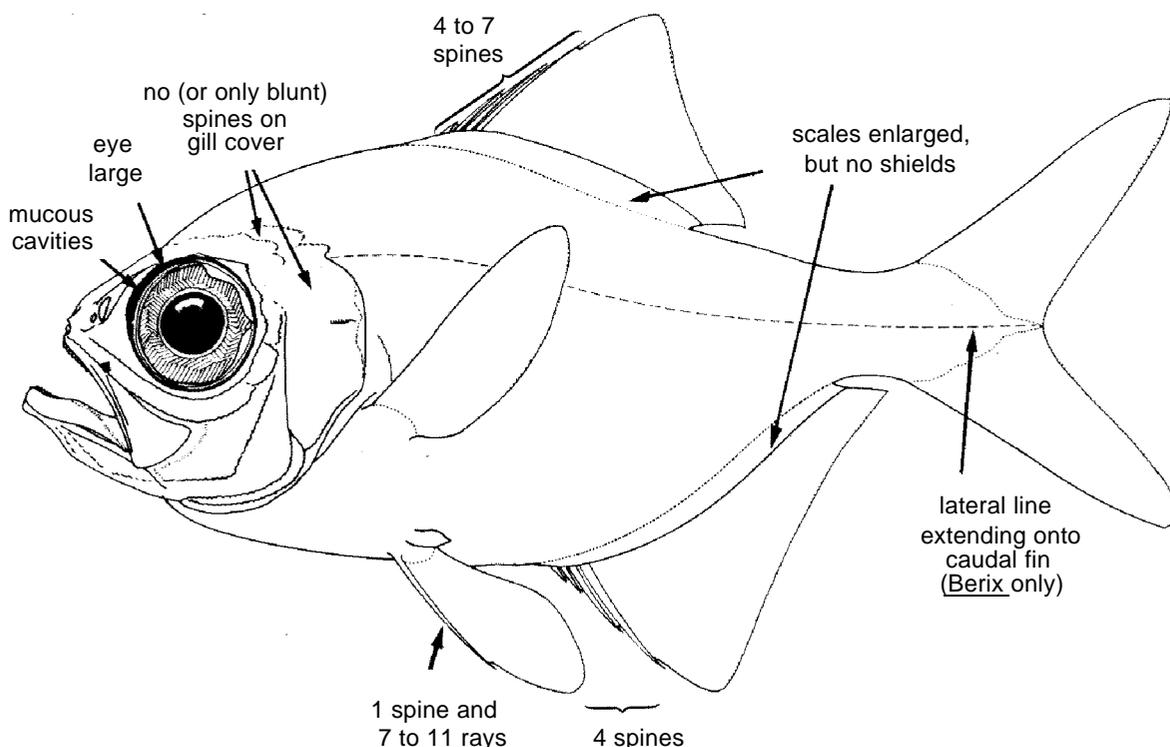
## BERYCIDAE

## Alfonsinos

Body ovate and compressed, caudal peduncle short. Eyes very large; extensive skin-covered cavities present in areas between upper and anterior margins of eyes containing a transparent, slimy liquid; opercular bones spineless, or with blunt spines; nostrils usually large; mouth large, oblique, the posterior end of maxilla wide, reaching a vertical line through hind margin of pupil; tip of lower jaw distinctly in advance of snout tip; bands of villiform teeth in both jaws; teeth also present on vomer and palatines (roof of mouth). Dorsal fin with 4 to 7 close-set spines increasing in length backwards, and 12 to 20 segmented rays, one or two rays of the anterior ones sometimes (but rarely) prolonged, particularly in small individuals; dorsal fin base equal to, or much shorter than that of anal fin; pectoral fins short and pointing steeply upward; pelvic fins with 1 spine and 7 to 11 soft rays; anal fin with 4 close-set spines and 11 to 30 segmented rays; caudal fin deeply forked, tips of fin lobes rounded or pointed, sometimes elongated. Lateral line almost straight; body scales ctenoid (rough to touch) or cycloid (smooth), fleshy disc on inner face of exposed area of scale present or absent; scales on bases of dorsal and anal fins slightly enlarged, but not forming shields; cheek and opercle scaled; an elongated fulcral scale on pelvic fin axil.

Colour: bright orange red on upper parts of body, head and basal parts of fins; sides of body pink on a silvery background. Iris entirely blood-red.

Medium-sized fishes (to about 70 cm in total length) inhabiting the upper slope and possibly, deep banks near the bottom, between 200 and 600 m depth. They are probably cosmopolitan in distribution. The fishes of the genus Beryx are relatively abundant in the Western Indian Ocean. Alfonsinos are mostly caught accidentally, but where abundant, they are more or less regularly fished and exploited commercially. In Fishing Area 51, they seem to be taken frequently, although only in moderate quantities, with bottom trawls and longlines. They are good foodfishes, occasionally consumed fresh, but more often reduced to fishmeal and oil.

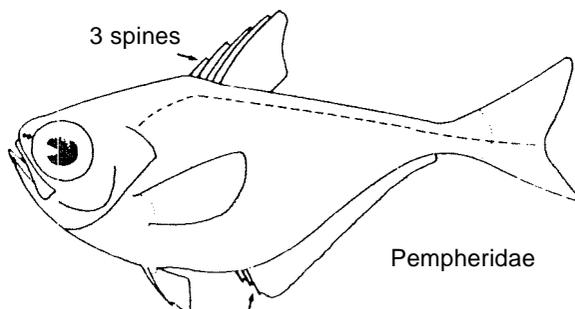
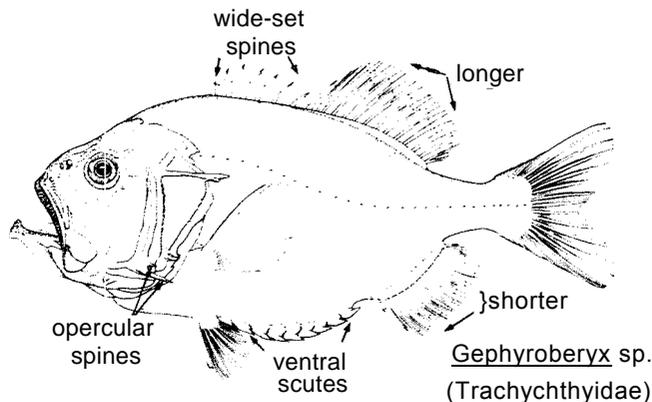


**SIMILAR FAMILIES OCCURRING IN THE AREA:**

The Berycidae are quite distinctive for the presence of 1 spine and 7 or more rays in the pelvic fins, and for the absence of bony shields on dorsal and anal fin bases. Two superficially similar families, the Pempheridae and Trachichthyidae, can be further distinguished as follows:

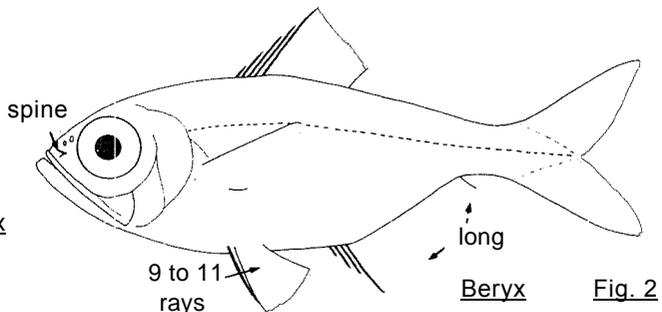
Pempheridae (sweepers): fin counts different; small size and dark colour; shore-dwelling fishes.

Trachichthyidae: stout opercular spines usually present; one large supramaxillary bone (two in Berycidae); spines in dorsal fin stout and wide-set; dorsal fin base much longer than anal fin base; usually strong ventral scutes present.

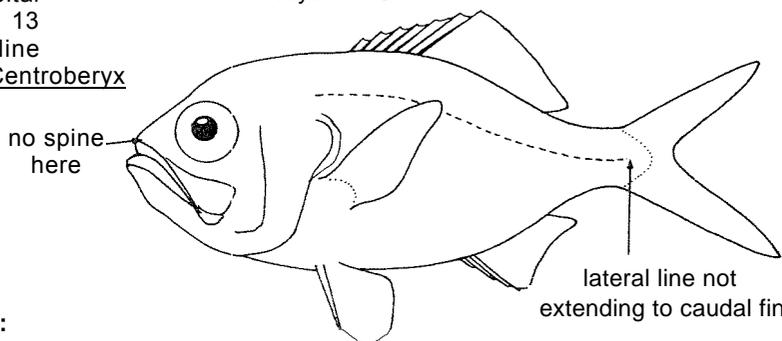


**KEY TO GENERA OCCURRING IN THE AREA: \***

1 a. A spine projecting backwards on anterior tip of first suborbital bone; pelvic fin rays 9 to 11; pectoral fin rays 15 to 18; anal fin rays 25 to 30; lateral line extending onto caudal fin (Fig. 1) ..... Beryx



1 b. No spine on anterior tip of first suborbital bone; pelvic fin rays 7; pectoral fin rays 13 or 14; anal fin rays 12 to 17; lateral line ending at base of caudal fin (Fig. 2) ..... Centroberyx



**LIST OF SPECIES OCCURRING IN THE AREA:**

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

- Beryx decadactylus Cuvier, 1829
- Beryx splendens Lowe, 1836
- Centroberyx sp.

- BER Ber 1
- BER Ber 2

Centroberyx Fig. 2

Prepared by T. Shimizu, 14-12 Komone 4, Itabashi-ku, Tokyo 173, Japan

Main species illustrations provided by author

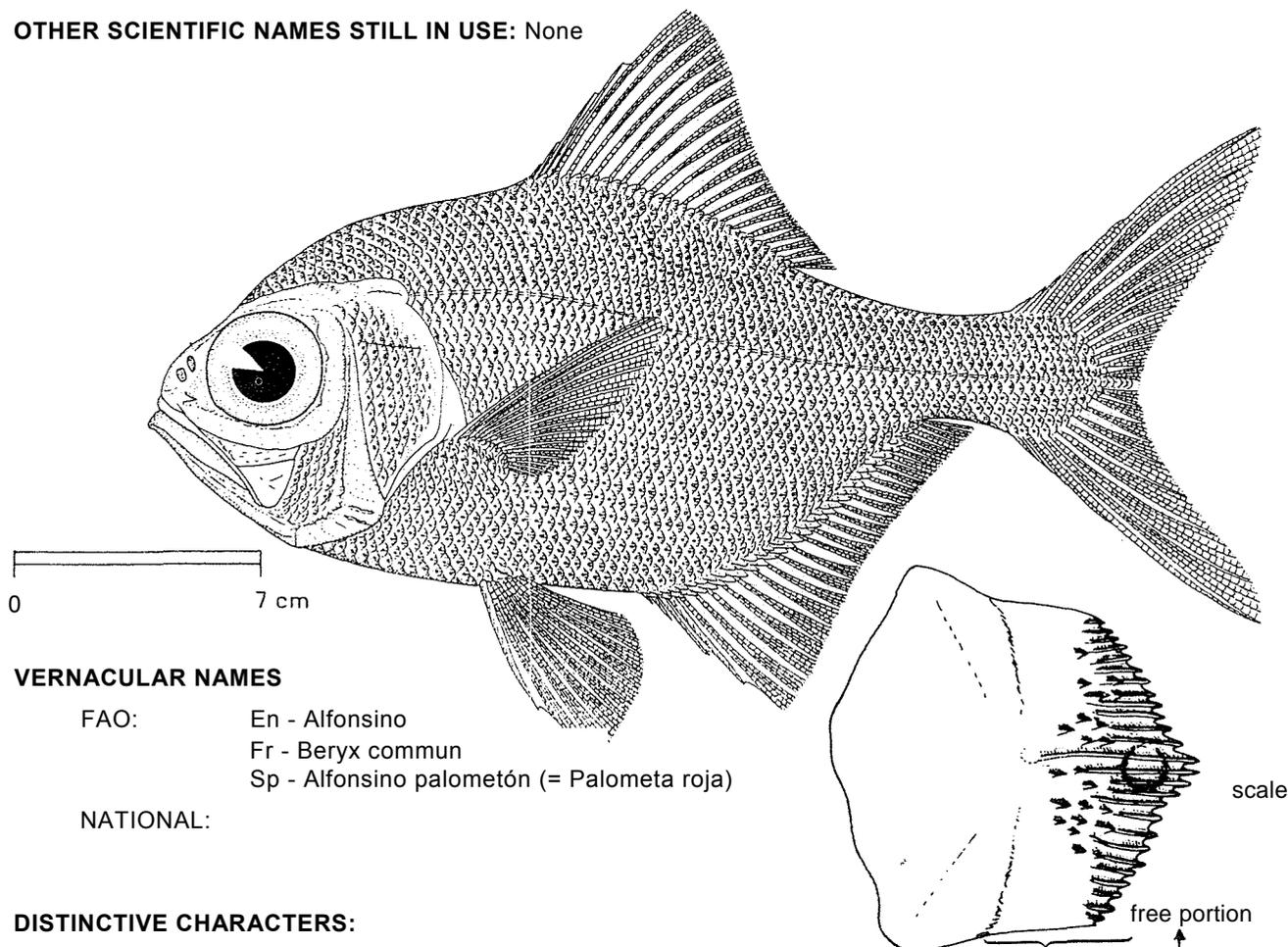
\*Taxonomic status uncertain

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: BERYCIDAE

FISHING AREA 51  
(W. Indian Ocean)*Beryx decadactylus* Cuvier, 1829

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES

FAO: En - Alfonsino  
Fr - Beryx commun  
Sp - Alfonsino palometón (= Palometa roja)

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body rather rhomboidal, very deep, strongly compressed, its greatest depth contained 1.9 to 2.25 times in standard length and very much greater than length of head. Head with large, skin-covered cavities on interorbital space of forehead and above upper margins of eyes, containing white, transparent, slimy liquid; cheeks covered with scales; upper profile slightly concave at forehead; a sharp, laterally directed spine on first suborbital bone, becoming stout and indistinct with growth; sometimes with an auxiliary spinule on anterior edge; eye very large, its diameter less than 2.5 times in length of head; mouth large, oblique; the lower jaw protruding when mouth is closed; posterior end of maxilla wide, reaching a vertical through posterior margin of pupil when mouth is closed; bands of villiform teeth in both jaws; lower margin of gill covers finely serrated; gillrakers fairly long, total 23 or 24 on first gill arch. Dorsal fin situated at middle of back, with 4 close-set spines increasing in length backwards and 16 to 20 soft rays; anal fin long, with 4 close-set spines and 25 to 29 soft rays, its origin under middle of dorsal fin base; pectoral fin rays 15 to 17; pelvic fins with 1 spine and 8 to 11 (usually 9) rays, their tips reaching beyond anal fin origin when appressed; pectoral and pelvic fins may be elongated in young fishes (to about 20 cm in total length). Scales ctenoid, with a small, elevated, pad-like fleshy disc under free part; lateral line scales 63 to 71 in total; 11 rows of scales in an oblique line Between base of first dorsal fin spine and lateral line, and 19 rows between base of first anal fin spine and lateral line; a fulcral scale present on pelvic fin axil; scales on dorsal and anal fin bases enlarged. Pyloric caeca about 100.

Colour: upper parts of head and body as well as basal parts of fins bright orange red; sides of body pink on a silvery background; iris uniform blood/red.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Beryx splendens: body more slender, its depth contained from 2.4 to 2.8 times in standard length, and only slightly greater than length of head (1.9 to 2.25 times in standard length and much greater than head length in B. decadactylus); anal fin origin at about end of dorsal fin base; dorsal fin with 13 to 15 soft rays (16 to 20 in B. decadactylus); pelvic fins not reaching to anal fin origin when appressed; gillrakers (total) 25 to 28 (23 or 24 in B. decadactylus); total number of pored lateral line scales 74 to 80 (63 to 71 in B. decadactylus); pyloric caeca about 30 (about 100 in B. decadactylus).

Centroberyx species: no spine on anterior tip of first suborbital bone; pelvic fin rays 7 (8 to 11 in B. decadactylus); lateral line ending at base of caudal fin.

### SIZE:

Maximum: to about 60 cm (about 40 cm standard length and 2.5 kg); common to about 35 cm, and 1 to 1.5 kg.

### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

May be expected to occur throughout the Western Indian Ocean, but possibly absent from the Red Sea and the "Gulf".

A bathypelagic fish, usually found on the shelves of sea mounts and over the continental slope, in depths of about 200 to 600 m. Spawning occurs in tropical rather than temperate waters.

Feeds on crustaceans, small fishes and cephalopods.

### PRESENT FISHING GROUNDS:

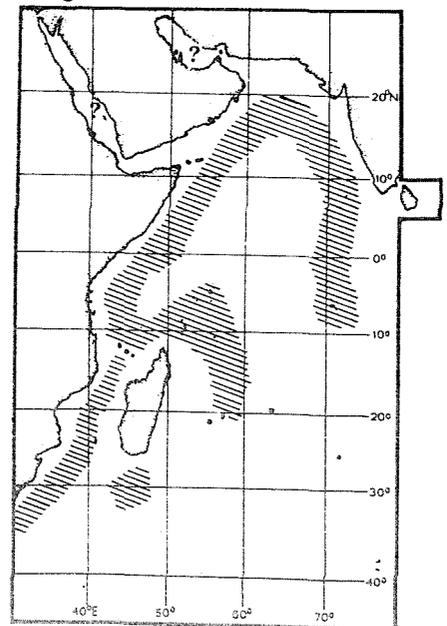
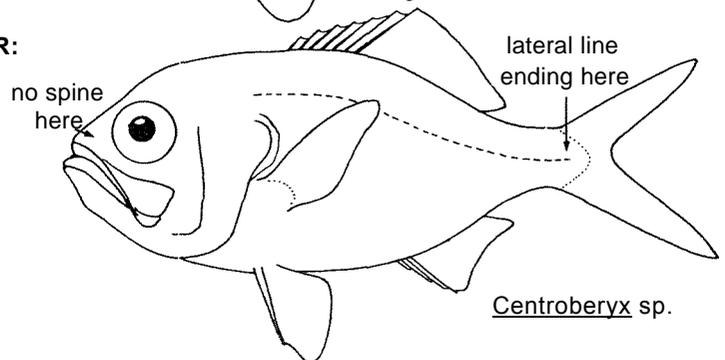
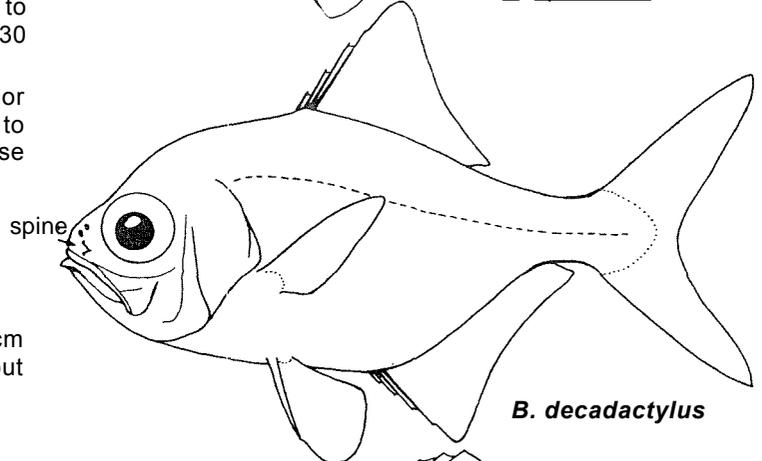
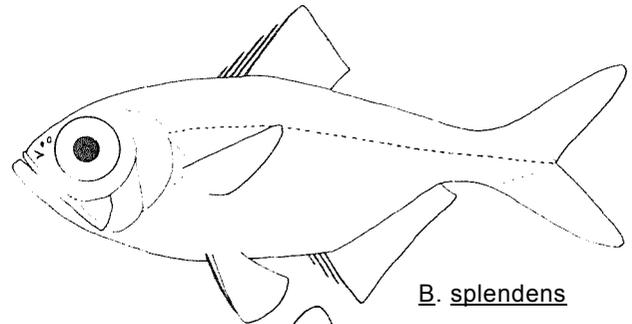
Mainly on Saya de Malha Bank, Kergelen Islands.

### CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught on longlines and with bottom trawls.

Marketed mostly fresh; flesh white, delicate and firm, but not as good as B. splendens; also the flesh volume is less than in B. splendens.

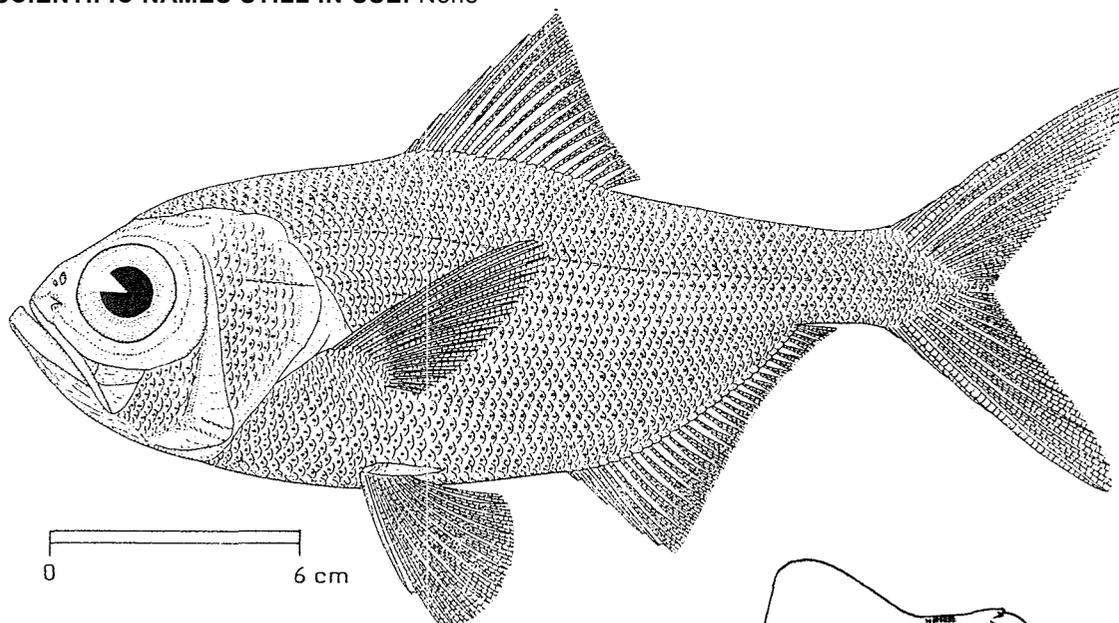


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: BERYCIDAE

FISHING AREA 51  
(W. Indian Ocean)*Beryx splendens* Lowe, 1830

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO :           En - Slender alfonsino  
                   Fr - Beryx long  
                   Sp - Alfonsino besugo (= Besugo americano)

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body moderately deep, ovate and compressed, its greatest depth contained 2.5 to 2.8 times in standard length and only insignificantly greater than length of head. Head with large, skin-covered cavities on interorbital space of forehead and above upper margins of eyes, containing white, transparent, slimy liquid; cheeks covered with scales; upper profile slightly concave at forehead; a sharp, laterally directed spine on first suborbital bone becoming indistinct with growth; eye large, about 2.5 times in head length; mouth large, oblique; the lower jaw protruding when mouth is closed; posterior end of maxilla wide, reaching to slightly behind a vertical line through middle of eye; bands of villiform teeth in both jaws; lower margin of gill covers finely serrated; gillrakers fairly long, total 25 to 28 on first gill arch. Dorsal fin situated at middle of back, with 4 close-set spines increasing in length backwards, and 13 to 15 soft rays; anal fin long with 13 of 4 close-set spines and 25 to 30 soft rays, its origin at about just before to behind a vertical line through end of dorsal fin base; pectoral fin rays 16 to 18; pelvic fins with 1 spine and 9 to 11 rays, their tips not reaching to anal fin origin when appressed. Scales ctenoid, with a small, elevated, pad-like, fleshy disc under free part. Lateral-line extending onto caudal fin; lateral line scales 74 to 80 in total; 9 rows of scales in an oblique line between base of first dorsal fin spine and lateral line; 19 rows between base of first anal fin spine and lateral line; a fulcra! scale present on pelvic fin axil; scales on dorsal and anal fin bases enlarged. Pyloric caeca about 30.

Colour: upper parts of head and body as well as basal parts of fins bright orange red; sides of body pink on a silvery background. Iris uniform blood red.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Beryx decadactylus: body distinctly deeper, its depth contained from 1.9 to 2.25 times in standard length and greatly superior to length of head (from 2.4 to 2.8 times in standard length and slightly greater than head length in B. splendens); anal fin origin below middle of base of dorsal fin; dorsal fin with 16 to 20 soft rays (13 to 15 in B. splendens); pelvic fins reaching beyond anal fin origin when appressed; gillrakers (total) 23 or 24 (25 to 28 in B. splendens); total number of pored lateral line scales 63 to 71 (74 to 80 in B. splendens); pyloric caeca about 100 (about 30 in B. splendens).

Centroberyx species: no spine on anterior tip of first suborbital bone; pelvic fin rays 7 (9 to 11 in B. splendens); lateral line ending at base of caudal fin.

### SIZE:

Maximum: to about 70 cm; common to about 40 cm.

### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

May be expected to occur throughout the Western Indian Ocean, but possibly absent from the Red Sea and the "Gulf".

A bathypelagic fish usually found on the shelves of sea mounts and over the continental slope, in depths from about 200 to 600 m.

Feeds on crustaceans, small fishes and cephalopods.

### PRESENT FISHING GROUNDS:

Mainly Saya de Malha Bank, Kerguelen Islands. The catches of this species are usually larger than those of B. decadactylus.

### CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught on longlines and with bottom trawls.

Marketed fresh; an excellent foodfish; fairly firm and very palatable; it also yields more flesh than B. decadactylus.

