CENTROL

1983

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

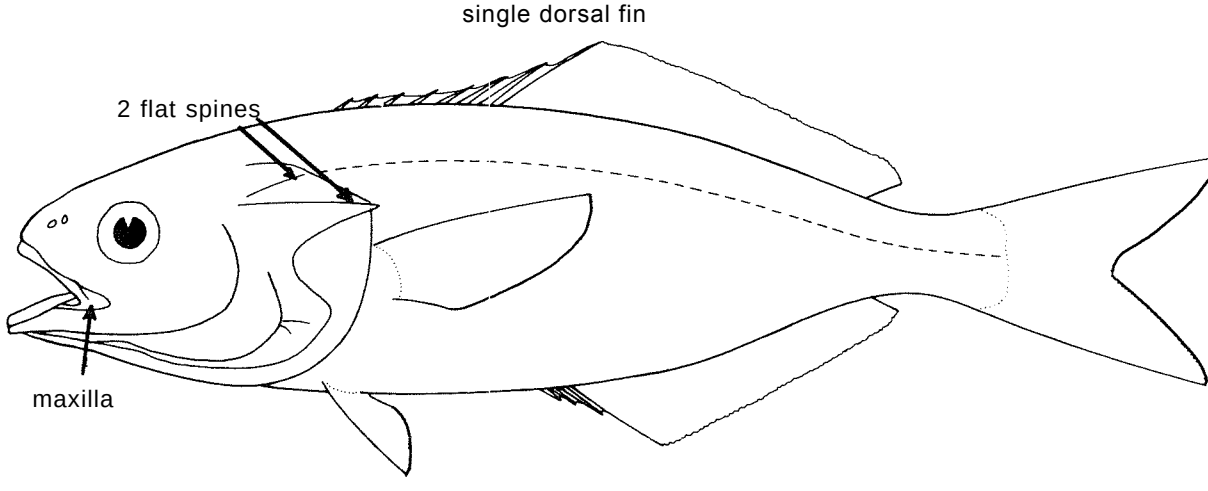
CENTROLOPHIDAE

Ruffs, barrelfishes and blackfishes

Slender to deep, usually somewhat compressed stromateoid fishes. Adipose tissue around or ahead of eyes not conspicuously developed except in Psenopsis; preopercular margin usually moderately denticulate, but spinulose in most young stages and in Schedophilus; opercle thin, with 2 flat, weak spines, the margin denticulate or smooth; 7 branchiostegal rays; mouth large, the maxilla extending at least to below eye; a nearly uniserial row of small, conical teeth in jaws; vomer, palatines (roof of mouth) and basibranchials toothless; pharyngeal sacs with irregularly shaped papillae in 10 or 20 longitudinal bands, with teeth seated directly on top of the bony base. A single continuous dorsal fin, its segmented rays preceded by 5 to 9 short, stout spines or 3 to 7 thin weak spines; anal fin with 3 spines, not separated from the segmented rays; pelvic fins attached to the abdomen by a thin membrane and folding into a broad shallow groove. Lateral line, when present, with tubed scales extending onto caudal peduncle. Scales cycloid (smooth) but with minute cteni in some species of Schedophilus, and usually easily detached; head conspicuously naked, usually covered with small pores.

Colour: generally dark green to grey, or brownish, with an indistinct vertical, or more usually horizontal, pattern of darker irregular stripes; eyes often golden.

Small to moderately large, epi-, mesopelagic, and demersal fishes, adults attaining 20 to 30 cm or more in length; the young associating with a variety of floating objects such as jellyfish or in schools under flotsam. They feed on crustaceans, salps and small fishes. Adults, sometimes in considerable numbers, are taken incidentally by trawling and on baited lines fished at, depth. Fisheries exist for Hyperoglyphe and Psenopsis in Japan, and these genera, particularly the latter, may have commercial potential in parts of the Indian Ocean.

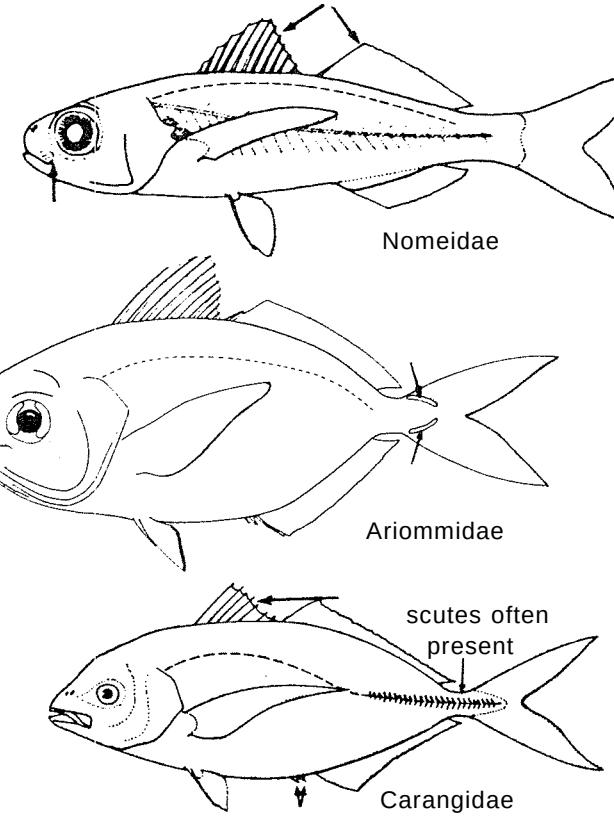


SIMILAR FAMILIES OCCURRING IN THE AREA:

Nomeidae: 2 dorsal fins, the first with about 10 long, slender spines; mouth small; teeth present on roof and floor of mouth.

Ariommidae: 2 dorsal fins, the first with about 10 long, slender spines; mouth small; caudal peduncle very narrow and not compressed, with 2 fleshy keels on each side at base of caudal fin.

Carangidae: 2 detached stout spines preceeding anal fin (sometimes imbedded in the skin); modified scales often present along posterior portion of lateral line forming scutes or keels on sides of caudal peduncle.



KEY TO GENERA OCCURRING IN THE AREA: *

1 a. Spines of dorsal fin weakly developed and all graduating to the soft dorsal rays (Figs 1,2)

2a. Weak denticulations on preopercular margin; origin of dorsal fin usually well behind insertion of pectoral fins (but over pectoral fin insertion in very small specimens); body elongate, maximum depth usually less than 30 percent of standard length (Fig. 1)

3a. Total elements (spines + soft rays) in anal fin 23 to 27; scales small, very deciduous, preopercle and cheek naked; scales along lateral line 160 to 230; vertebrae 25 (Fig. 1) ..... Centrolophus

3b. Total elements in anal fin 27 to 31; scales moderate in size, not especially deciduous, present on preopercle and cheek; scales in lateral line 100 to 130; vertebrae 50 to 60 ..... Icichthys

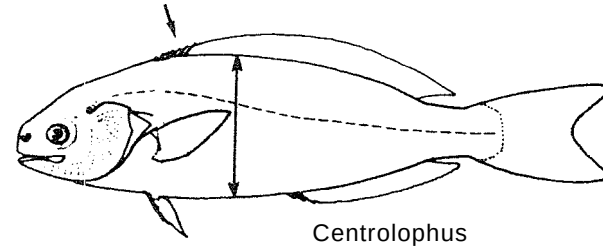


Fig.1

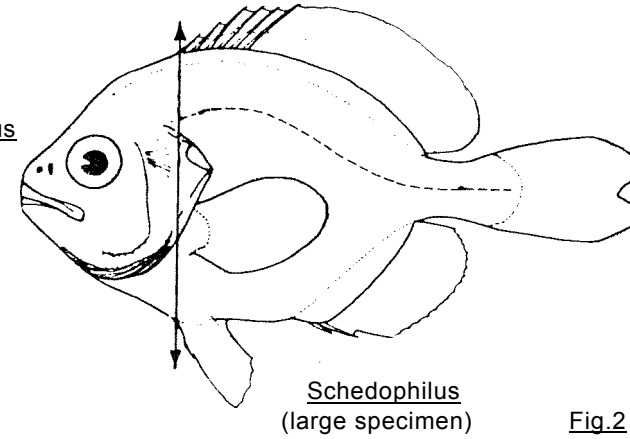
* Excluding Tubbia

2b. Nine to 15 small spines on preopercular margin; origin of dorsal fin usually before insertion of pectoral fins, but over pectoral fin insertion in very large specimens; body deep, maximum depth usually greater than 35 percent of standard length (Fig. 2) ..... Schedophilus

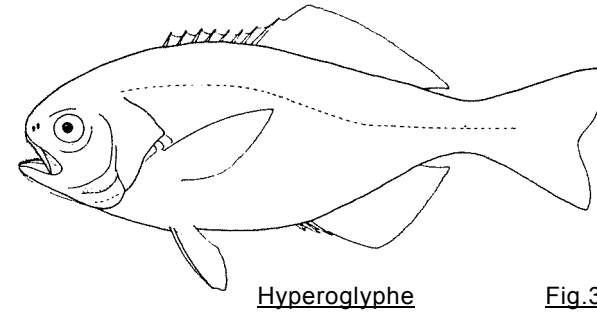
1b. Five to 9 short dorsal fin spines, shorter than, and usually not graduating (may graduate slightly in Psenopsis) to the dorsal fin rays (Figs 3,4)

4a. About 8 short dorsal spines, usually quite strong, not increasing in length posteriorly; dorsal fin rays 19 to 25; anal fin rays 14 to 21; insertion of pelvic fins under pectoral fin base; preopercular margin spinulose; adipose tissue around eye not well developed; sclerotic bones not well ossified; golden iris appearing as a complete ring; supramaxillary bone present; scales not especially deciduous; lateral line arched anteriorly, straightening out over anal fin (Fig. 3) ..... Hyperoglyphe

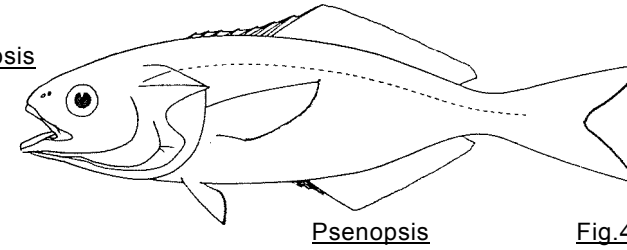
4b. Five to 7 dorsal spines, sometimes quite weak, increasing slightly in length posteriorly; dorsal fin rays 25 to 40, anal fin rays 18 to 30; insertion of pelvic fins before or just under insertion of pectorals; preopercular margin entire or finely denticulate; adipose tissue around and in front of eye well developed; sclerotic bones well ossified; golden iris appearing divided by a vertical bar; supramaxillary bone absent; scales very deciduous; lateral line following dorsal profile (Fig. 4) ..... Psenopsis



Schedophilus
(large specimen) Fig.2



Hyperoglyphe Fig.3



Psenopsis Fig.4

LIST OF SPECIES OCCURRING IN THE AREA:

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

Centrolophus maoricus Ogilby, 1893

Hyperoglyphe antarctica Carmichael, 1818

Icichthys (Pseudo icichthys) australis Haedrich, 1966

Psenopsis cyanea (Alcock, 1890) CENTROL Pseno 1
Psenopsis obscura Haedrich, 1967

Schedophilus huttoni (Waite, 1910)
Schedophilus maculatus Günther, 1860

Tubbia tasmanica Whitley, 1943 *

Prepared by R.L. Haedrich, Memorial University of Newfoundland, St. John's, Newfoundland, Canada

* The generic position of this rare, deep-water form is in doubt. One specimen has recently been reported from off South Africa, just outside the area

CENTROL Pseno 1

1983

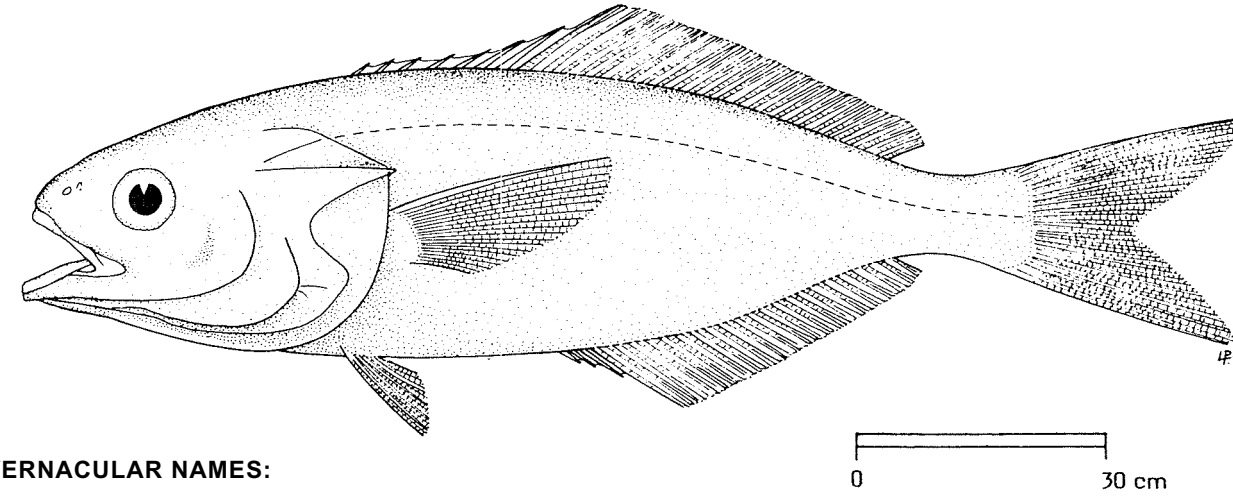
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CENTROLOPHIDAE

FISHING AREA 51
(W. Indian Ocean)

Psenopsis cyanea (Alcock, 1890

OTHER SCIENTIFIC NAMES STILL IN USE: Bathyseriola cyanea Alcock, 1890



VERNACULAR NAMES:

FAO : En - Indian ruff
Fr - Rouffe indien
Sp - Cojinoba del Océano Indico

NATIONAL:

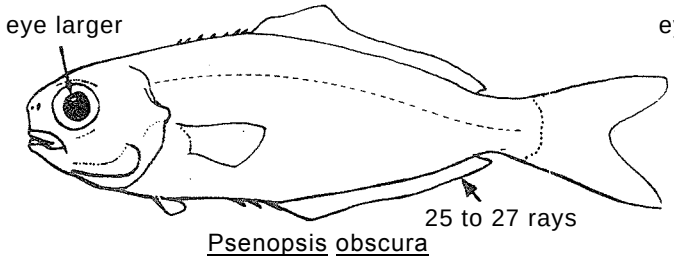
DISTINCTIVE CHARACTERS:

Body only moderately deep, compressed; caudal peduncle short and compressed, without keels or scutes; musculature soft. Snout long, about 1.5 tunes the eye diameter; mouth large; premaxilla not protractile; maxilla extending to below eye; supramaxilla absent; palate toothless; eye moderate, its diameter less than 25% of head length; opercle thin; a broad forward scoop on surface of opercle below the weak second opercular spine. A single dorsal originating over pectoral fin insertion, with 6 to 7 weak, short spines increasing slightly in length to the much longer 26 to 28 segmented rays; anal fin originating behind mid-body, with 3 or 4 weak spines and 21 to 23 segmented rays; pectoral fin rays 16 to 20; pelvic fins originating in front of pectoral fin insertions and folding into a prominent groove. Scales small, cycloid (smooth), very deciduous and extending onto bases of median fins; skin thin, subdermal canal system usually visible; lateral line high, following dorsal profile and extending onto caudal peduncle.

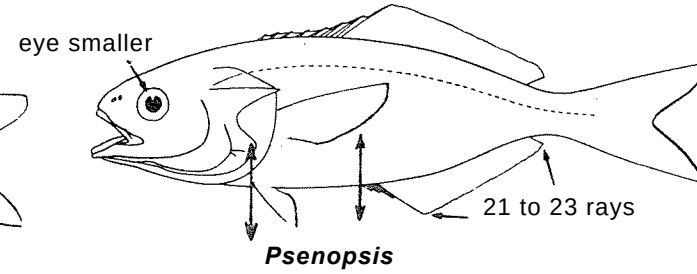
Colour: generally uniform brownish to violet, with a darker head and often with a spot on shoulder; opercles blackish and gill cavity dark. Inside of mouth lightly speckled.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Psenopsis obscura: slightly deeper-boded species with a larger eye (diameter over 25% of head); anal fin originating at about mid-body, with 25 to 27 rays (21 to 23 in P. cyanea).



Psenopsis obscura

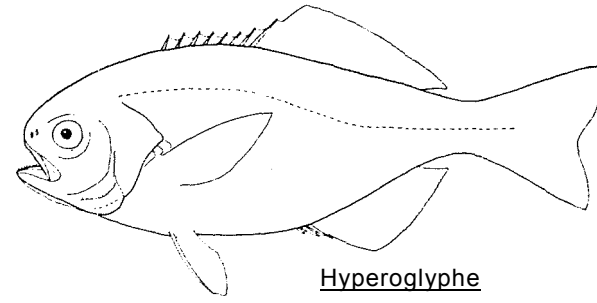


Psenopsis

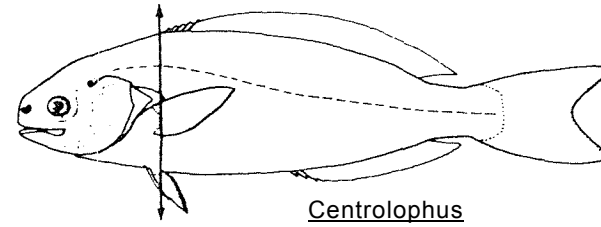
Hyperoglyphe species: about 8 short dorsal spines, usually quite strong, not increasing in length posteriorly; insertion of pelvic fins under pectoral fin bases; lateral line arched anteriorly.

Centrolophus, Icichthys and Schedophilus species: spines of dorsal fin weakly developed and all graduating to the soft rays.

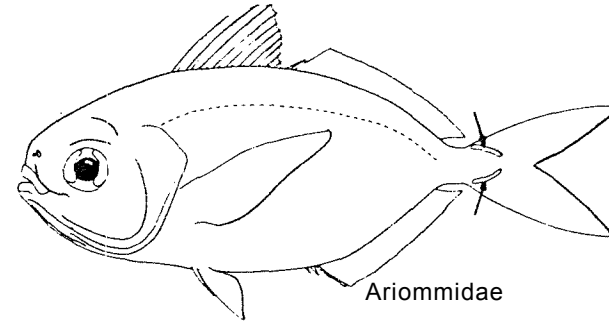
Species of Nomeidae and Ariommidae: largest dorsal fin spine longer than any of the segmented rays. Furthermore, 2 low fleshy keels on caudal peduncle and teeth present on palate and on basibranchials in Ariommidae.



Hyperoglyphe



Centrolophus



Ariommidae

SIZE:

Maximum: about 20 cm; common to 16 cm.

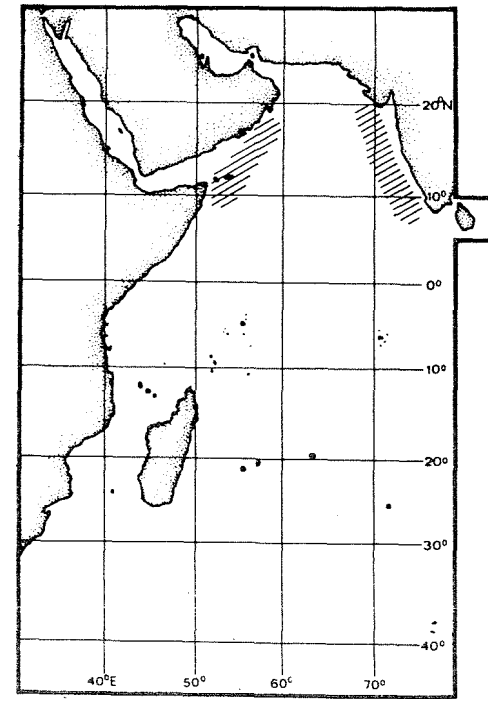
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Irregularly distributed off the east and west coasts of India. Also known from off Socotra and the mouth of the Gulf of Aden.

Occurs in rather deep water (between about 250 to 300 m), forming small schools.

PRESENT FISHING GROUNDS:

Especially off Quilon, Kerala, in 250 to 300 m; most abundant from November through April. The fishery is a potential one, not yet fully established.



CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Taken with bottom trawl in deep water.

Marketed fresh. The soft flesh does not keep well. Fine tasting.