

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

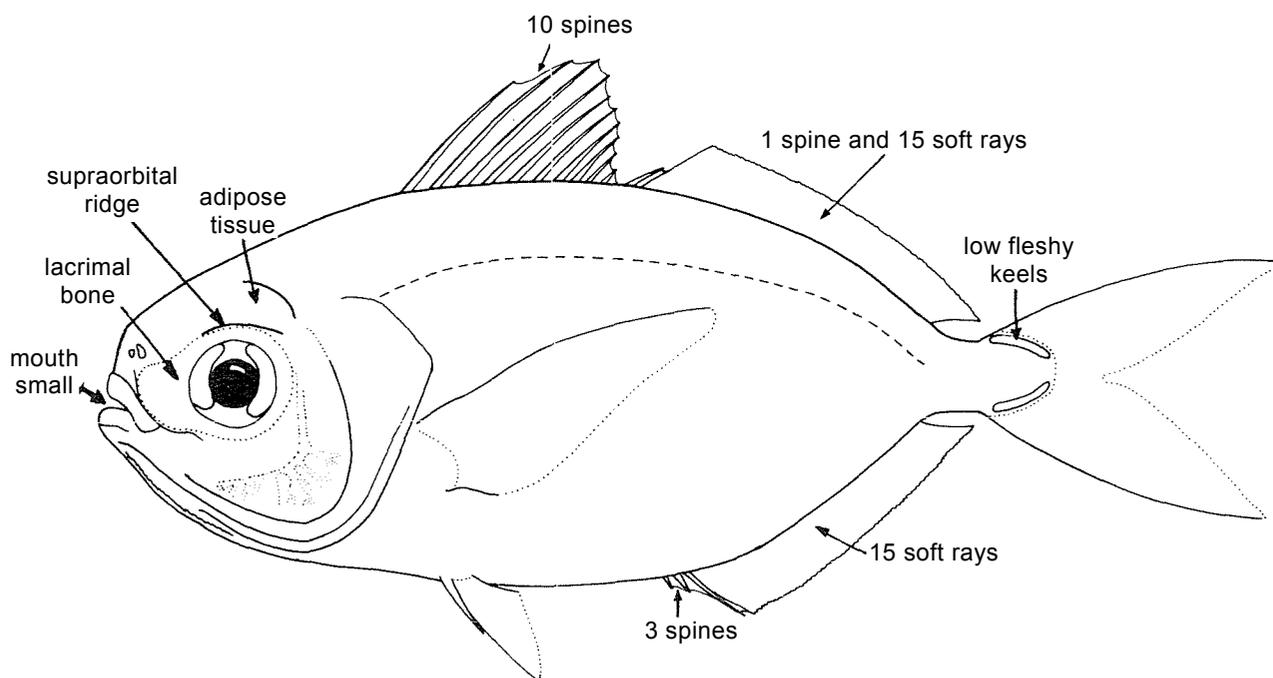
ARIOMMIDAE

Ariommas

Body either deep and compressed or elongate and rounded, caudal peduncle short and slender, not compressed, and with two very low fleshy lateral keels on each side (not always clearly visible); musculature firm and oily. Head fairly large, snout blunt; eyes large, with a prominent supraorbital ridge, centrally located and surrounded by thick adipose tissue extending forward over the lacrimal and around the small nostrils; mouth terminal and small, maxilla barely reaching anterior border of eye; premaxilla not protractile; lacrimal bone covering upper jaw when mouth is closed; teeth minute, uniserial and flattened, pointed or with three cusps; gill-rakers slender and numerous, usually about 20 to 30 on first arch; opercles thin. Two dorsal fins, the first originating over the pectoral fin base and with about 10 slender spines folding into a deep groove, the second with 1 spine and about 15 shorter segmented rays; anal fin similar to second dorsal, but its origin slightly more posterior, with 3 weak spines and about 15 segmented rays; pectoral fins becoming increasingly elongate with growth in deep-bodied species; pelvic fins inserting under posterior end of pectoral fin base, attached to the abdomen with a membrane and folding into a long pronounced groove; caudal fin stiff and deeply forked. Lateral line high, following dorsal profile and not extending onto caudal peduncle, a branch of the lateral line arching forward over the eye in a conspicuous bony tract; scales large, cycloid, (smooth) thin and very easily shed; no scales on bases of median fins; snout naked, but scales extending forward on nape to over the eyes.

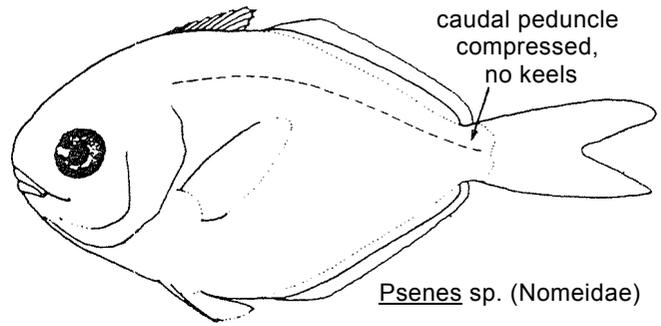
Colour: deep-bodied Indian species quite silvery, with a bluish tinge on the back.

Small to medium-sized fishes (usually up to about 30 cm in length), although there are a few records of elongate species up to 80 cm. They occur in schools over muddy bottoms in moderately deep water on the continental shelf. They appear to feed on pelagic animals. Trawling is the primary means of capture. These are fine food fishes.

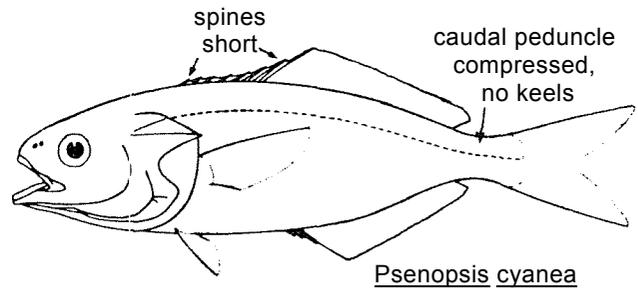


SIMILAR FAMILIES OCCURRING IN THE AREA:

Species of Nomeidae (especially Psenes): peduncle somewhat deep (greater than 5% of standard length) and compressed, without keels; usually more than 16 rays in the second dorsal and anal fins (15 in Ariommidae); teeth present on palate and often on tongue.



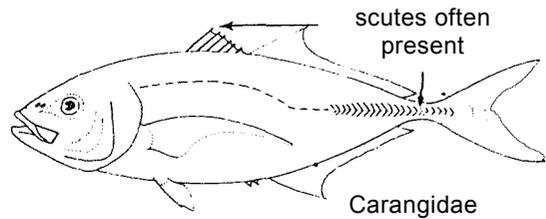
Species of Centrolophidae (Psenopsis): first dorsal fin spines much shorter than second dorsal rays; caudal peduncle deep and compressed, without keels; mouth large, maxilla reaching to under eye.



Similar species of Carangidae: first dorsal fin spines shorter than second dorsal rays; two detached spines ahead of anal fin; often with modified scales or scutes forming a keel on caudal peduncle; mouth large, maxilla reaching to under eye.

GENERA OCCURRING IN THE AREA

A single genus, Ariomma.



LIST OF SPECIES OCCURRING IN THE AREA :

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

Ariomma indica (Day, 1870)

ARIOM Ariom 1

Ariomma brevimanus (Klunzinger, 1884)*

Prepared by R.L. Haedrich, Memorial University of Newfoundland, Canada

* Only a single very large specimen of this elongate species has ever been recorded (Red Sea)

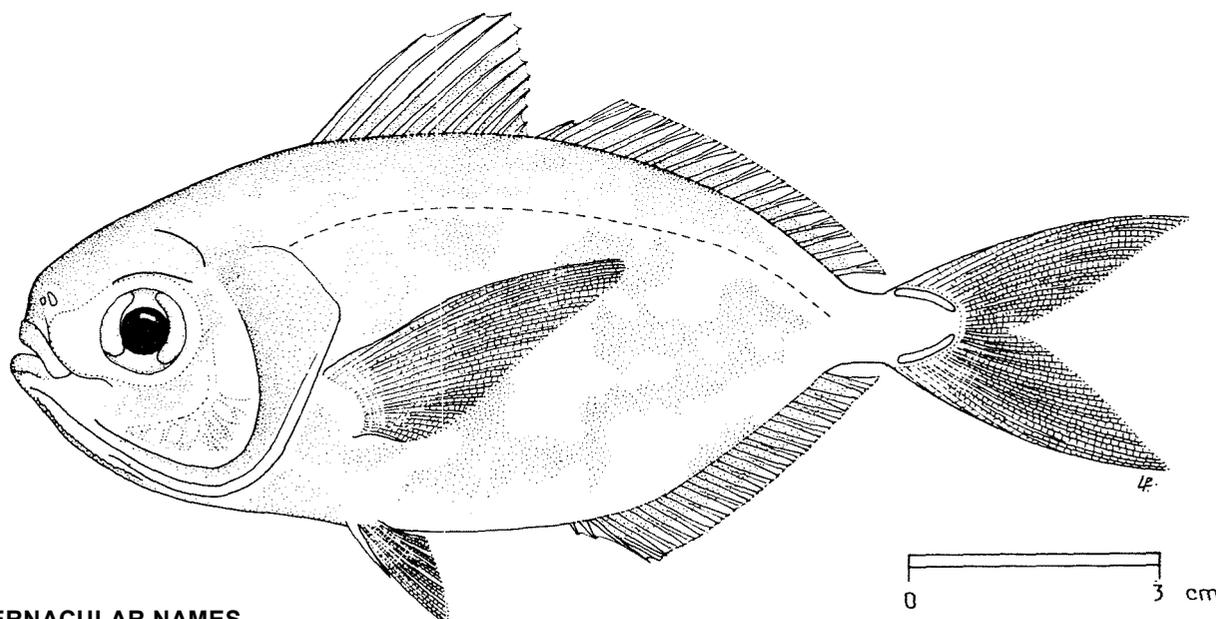
FAO SPECIES IDENTIFICATION SHEETS

FAMILY : ARIOMMIDAE

FISHING AREA 51
(W. Indian Ocean)

<i>Ariomma indica</i> (Day, 1870)

OTHER SCIENTIFIC NAMES STILL IN USE:

Psenes indicus Day, 1870*Psenes africanus* Gilchrist & van Bonde, 1923*Psenes extraneus* Herre, 1950*Cubiceps dollfusi* Chabanaud, 1930

VERNACULAR NAMES

FAO: En - Indian ariomma (= Indian driftfish, Fishing Areas 57/71)
Fr - Ariomme indienne
Sp - Arioma indica

NATIONAL:

DISTINCTIVE CHARACTERS:

Body moderately deep, compressed but thick; caudal peduncle short, not compressed, almost square in cross-section and with two very low and ill-defined fleshy keels at base of caudal fin; musculature firm. Snout blunt and rounded; eyes large, surrounded by thick adipose tissue, supraorbital ridge prominent; mouth small, maxilla not extending to below eye; premaxilla not protractile; supramaxilla absent; palate toothless; teeth of lower jaw simple anteriorly, with 3 cusps posteriorly; lacrimal bone covering upper jaw when mouth is closed; opercles thin; gill-rakers slender, about 23 on first arch; gill filaments long, at least twice the length of the rakers. First dorsal fin originating a little before or over pectoral fin insertion, with 10 to 12 long slender spines, the longest almost twice the length of any ray in the second dorsal; second dorsal originating behind mid-body, with 14 or 15 short branched rays; anal fin similar to second dorsal, with 3 spines and 14 or 15 rays; pectoral fins elongate, becoming particularly so with growth; pelvic fins originating under posterior end of pectoral fin base and folding into a prominent abdominal groove. Scales small, cycloid, easily shed, not extending onto bases of median fins; lateral line high, following dorsal profile and not extending onto caudal peduncle; scales with branched tubes; a branch of the lateral line arches forward over the eye in a bony tract.

Colour: quite silvery with a bluish tinge on back; may have a few darker and variable blotches on sides; inside of opercle black; eye with 2 golden crescents separated by a vertical dark region almost the width of the lens; large specimens may be uniformly dark.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Psenopsis canea and P. obscura (Centrolophidae): more slender and darker in colour, with more than 20 soft rays in the second dorsal and anal fins; spines of first dorsal shorter than the rays which follow; caudal peduncle compressed, lacking keels.

Psenes species (Nomeidae): caudal peduncle compressed and without keels, usually more than 15 rays in second dorsal and anal fins; palate with small teeth on vomer and palatines.

Apolectus niger (Carangidae): a single dorsal fin, pelvic fins on throat (juveniles) or absent (adults); caudal peduncle with scute-like scales; scales extending onto median fins.

Other species of Carangidae: dorsal fin spines shorter than dorsal rays; two strong anal spines, separated from the rest of the fin by a gap.

SIZE:

Maximum: about 25 cm; common to 18 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Continental shelf and upper slope along the coasts of East Africa, the Gulf of Suez, Aden, the "Gulf", and India. Eastward to Indonesia, the Philippines, and southern Japan, but not known from Australia or New Guinea. The form from Mozambique may have a larger eye and be darker in colour than the Indian form.

Occurs in small shoals over muddy bottoms to depths of 300 m. In India, it is most abundant on the shelf at about 60 m depth, rarely shallower than 20 m, while off Mozambique, most individuals occur at 200 to 300 m depth. Appears to be pelagic at night and demersal during the day, often associated with fishes of the genera Saurida, Gerres, Trichiurus, Decapterus, Nemipterus and Lutjanus. May migrate seasonally. Spawns at intervals in both spring and fall off the Indian coast a little earlier off Mozambique; males somewhat smaller than females, which are usually mature at a length of about 13.5 cm; the mean fecundity of Indian specimens is 79 500 eggs.

Feeds mostly on zooplankton.

PRESENT FISHING GROUNDS:

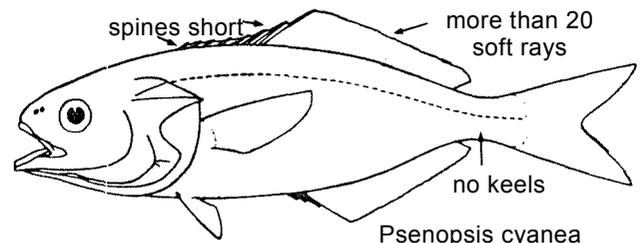
Occurs in deep water all around the coast from Mozambique to Sri Lanka, but most abundant in the southern Gulf of Mannar, to the northwest of Cochin, and on the Sofala Bank (summer) and Delagoa Bank (winter). In Kenya, Ungawana Bay is an important fishing ground. Juveniles are abundant north of the Laccadive Islands.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

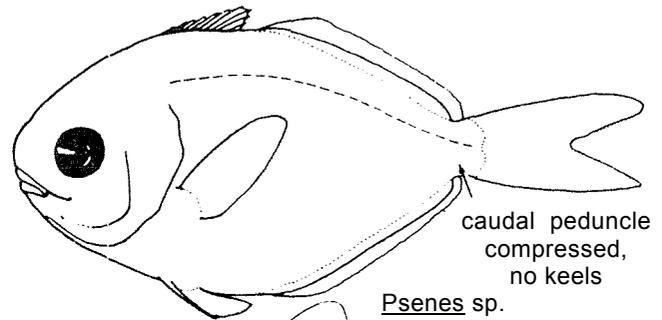
Separate statistics are not reported for this species.

Taken as a by-catch in deep-sea trawling. At times it amounts to as much as 35 or even 60% by weight of fishes from deep-sea trawls off Mozambique (especially Delagoa Bank). An annual yield near 9 000 t is calculated to be possible in this area.

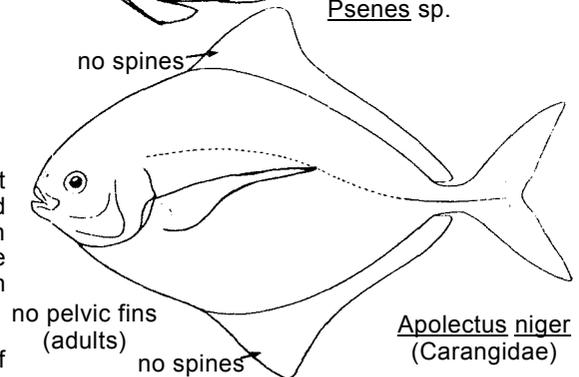
Marketed fresh and dried salted.



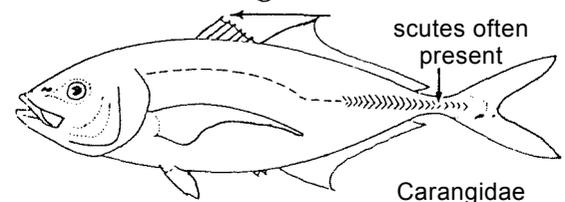
Psenopsis cyanea



Psenes sp.



Apolectus niger
(Carangidae)



Carangidae

