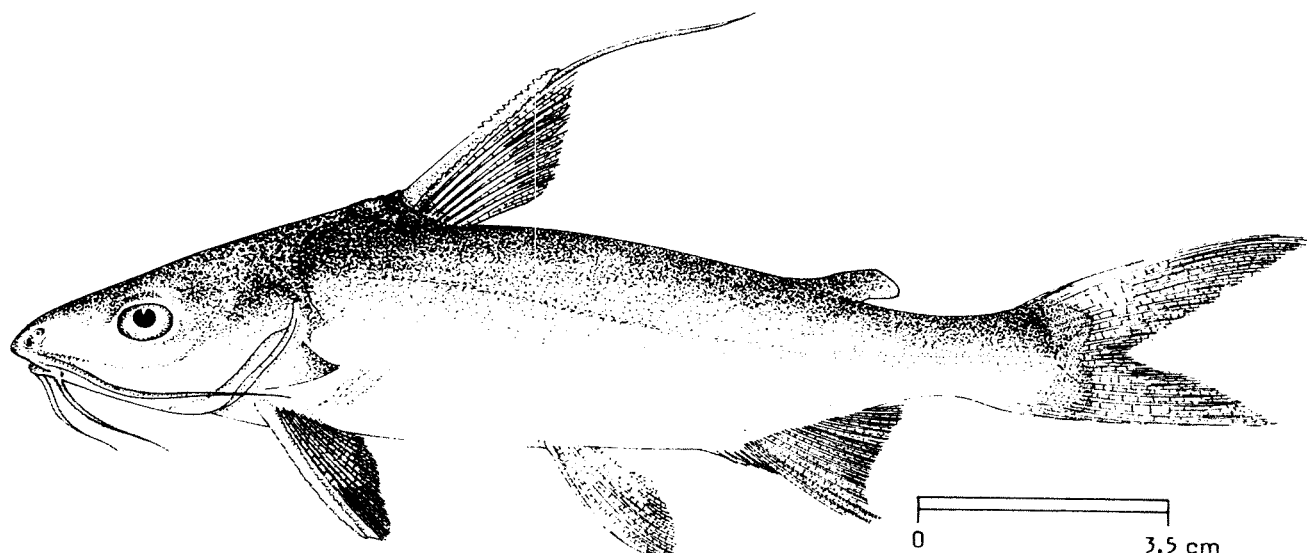


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ARIIDAE

FISHING AREA 51
(W. Indian Ocean)Arius arius Hamilton, 1822OTHER SCIENTIFIC NAMES STILL IN USE: Arius buchanani Day, 1878
Tachysurus arius (Hamilton, 1822)

VERNACULAR NAMES:

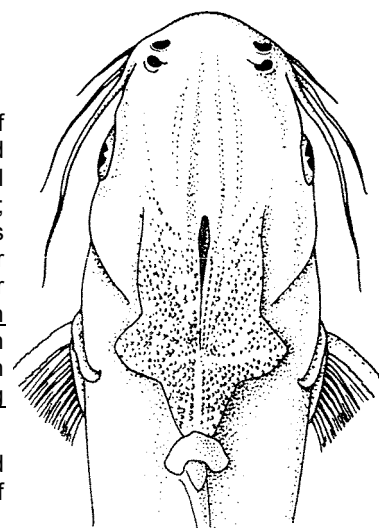
FAO : En - Threadfin sea catfish
Fr - Mâchoiron fouet
Sp - Bagre filamentoso

NATIONAL:

DISTINCTIVE CHARACTERS:

Dorsal profile of head as a steep slope to first dorsal fin base; 3 pairs of barbels around mouth, the maxillary pair extending to pectoral fins; head shield rugose and granulated from level of posterior margin of orbit; supraoccipital process as long as broad at base, with a median keel, its hind end concave; median longitudinal groove shallow, not reaching to supraoccipital process posteriorly; predorsal plate crescent shaped; premaxillary band of teeth in upper jaw 4 to 5 (usually 5) times as long as broad, mandibular band of teeth in lower jaw curved and narrowly interrupted; palate teeth (on roof of mouth) globular, in a single large irregularly ovate patch on each side, not fully formed, with an irregular, anteriorly concave inner edge. First: dorsal fin and pectoral fins each with a strong serrated spine, first dorsal fin ray usually prolonged as a long filament; total anal fin with 20 to 22 rays.

Colour: bluish dark to steel grey, the dorsal filament and fin tips tinged with black. Preserved material lighter on back and sides, posterior margin of pectorals and first dorsal fin black, adipose fin with a well defined black spot.



dorsal view of head

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

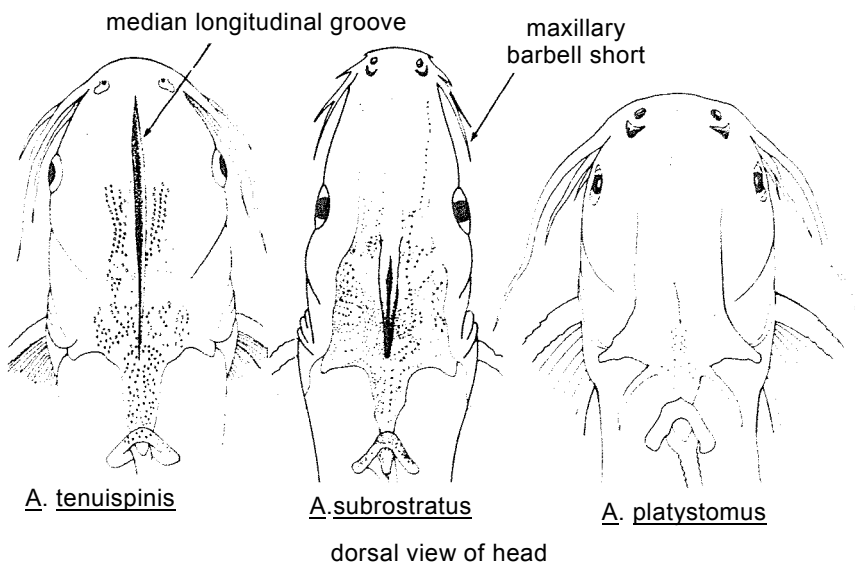
Arius jella: anal fin rays 17 or 18 (20 to 22 in A. arius)

A. maculatus: tooth patches on roof of mouth uniformly elliptical, with densely packed teeth.

A. tenuispinis: tooth patches elliptical, shoe-shaped, placed far back in buccal cavity; median longitudinal groove very long and deep, running onto supraoccipital process.

A. caelatus: teeth on roof of mouth villiform, in a single, roughly triangular patch on each side; anal fin rays 19 or 20.

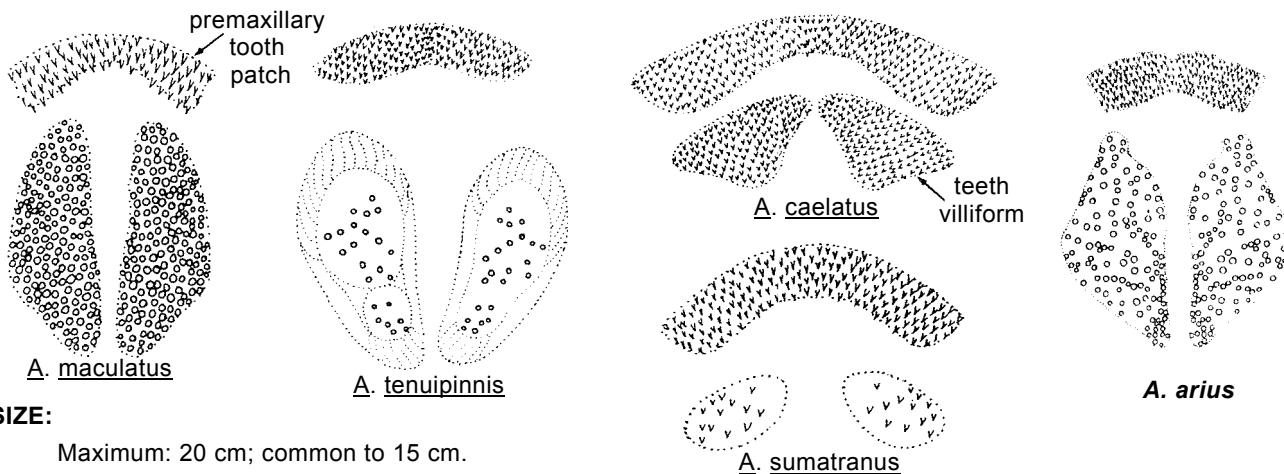
A. platystomus, A. subrostratus and A. sumatranus: teeth on roof of mouth in a small, oval patch on each side. Furthermore, head depressed, snout duck-bill shaped in A. platystomus; maxillary barbels very short, not extending beyond orbit in A. subrostratus.



Other Arius species known to occur in India and/or Pakistan: have more than one (2 or 3) tooth patches on roof of mouth.

Batrachoecephalus mino: maxillary barbels absent.

Osteogeneiosus militaris: only a pair of stiff, semiosseous maxillary barbels present.



SIZE:

Maximum: 20 cm; common to 15 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, along the west coast of India and Pakistan. Elsewhere along the eastern coast of India (most common in Lake Chilka, Orissa) and Burma.

Common in estuaries, tidal rivers and brackishwater lakes.

Feeds mainly on invertebrates.

PRESENT FISHING GROUNDS:

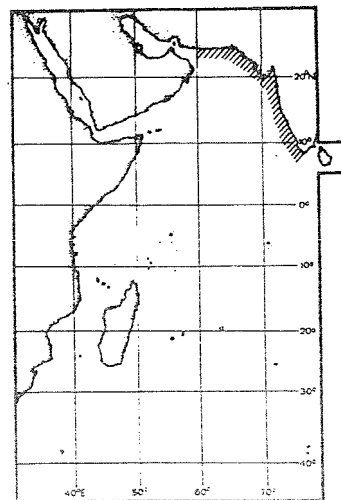
Mostly river mouths, estuaries and tidal lakes.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

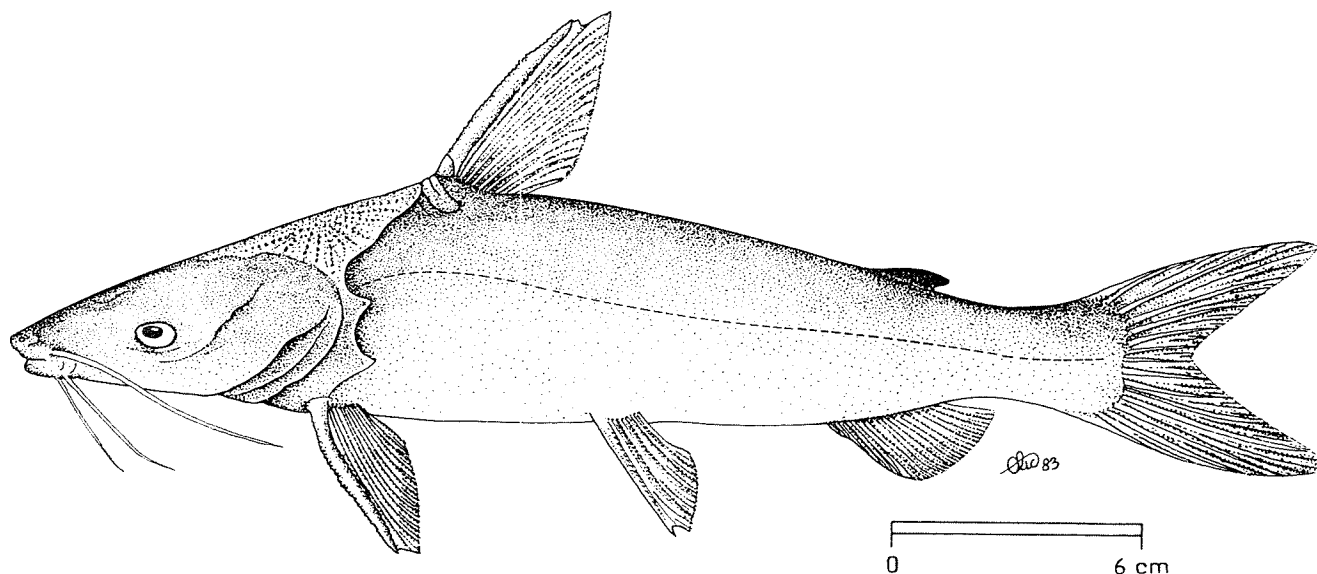
Caught mainly, with bagnets, dipnets and bamboo stake traps; also on hook and line.

Marketed mostly fresh.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ARIIDAE

FISHING AREA 51
(W. Indian Ocean)*Arius crossocheilus* Bleeker, 1846OTHER SCIENTIFIC NAMES STILL IN USE : *Tachysurus crossocheilus* (Bleeker, 1846)

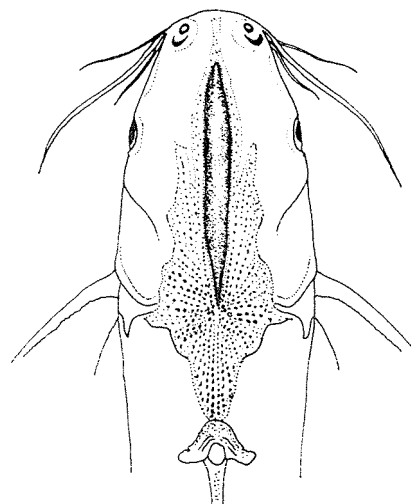
VERNACULAR NAMES:

FAO: En - Roughback sea catfish
Fr - Mâchoiron émeri
Sp - Bagre lija

NATIONAL:

DISTINCTIVE CHARACTERS:

Dorsal profile of head gently rising to first dorsal fin base; snout abruptly conical sharply differentiating from anterior of eye, 3 pairs of barbels around mouth, the maxillary pair extending to pectoral fin base; head shield rugose and granulated to posterior border of orbit; supraoccipital process longer than wide at base, with a median keel, its hind end rounded; median longitudinal groove long, deep, extending from near posterior nostrils to base of occiput, not reaching supraoccipital process; basal bone of dorsal fin rounded; premaxillary band of teeth in upper jaw 6 times as long as broad, mandibular band of teeth in lower jaw narrowly curved, and interrupted at middle; palate teeth globular and of irregular size, in 2 oval, discontinuous patches on each side, placed one below the other, anterior ones closely set and converging posteriorly. First dorsal and pectoral fins each with a strong spine; total anal fin rays 17 or 18.



dorsal view of head

Colour: in fresh specimens, dark grey on back, lighter on belly; adipose fin with a black tinge.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Arius dussumieri: tooth patches on each side of roof of mouth, also placed one below the other longitudinally, but posterior patch elliptical, nearly foot-shaped with molariform teeth; a preorbital protuberance of lateral ethmoid present (absent in A. crossocheilus); total anal fin rays 14 to 16 (17 or 18 in A. crossocheilus).

A. sagor and A. sona: tooth patches on roof of mouth placed side by side.

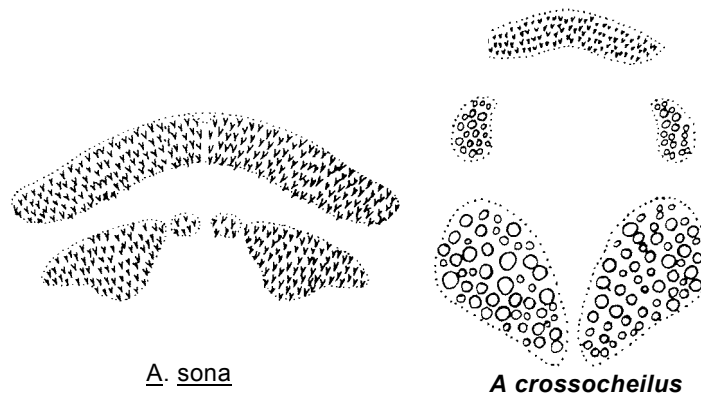
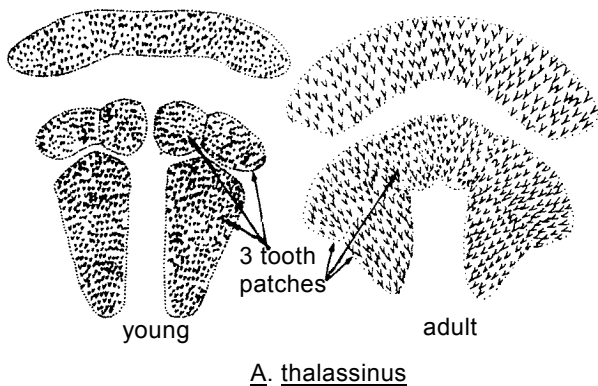
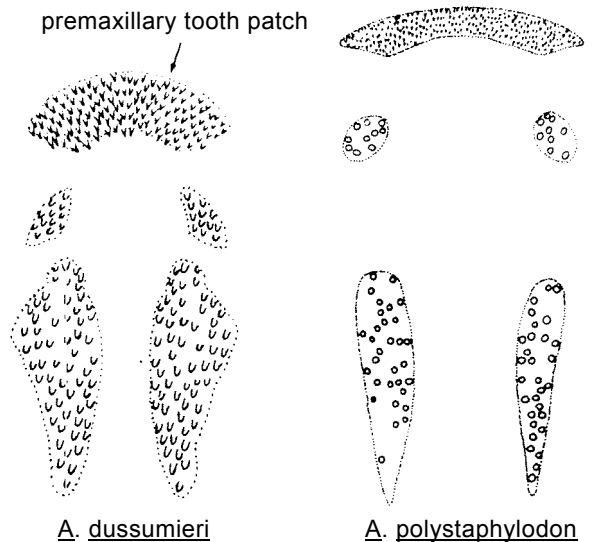
A. polystaphylodon: posterior tooth patch long, narrow, carrot-shaped; 15 to 17 anal fin rays; in the area, known to occur off East Africa only.

A. thalassinus: three tooth patches on roof of mouth, 7 posterior patch separated from two anterior ones in young individuals but all 3 patches fused in adults.

Other Arius species: only one tooth patch, on each side on roof of mouth.

Batrachocephalus mino: maxillary barbels absent.

Osteogeneiosus militaris: only a pair of stiff, semi-ossaceous maxillary barbels present.



premaxillary and palate (roof of mouth) tooth patches

SIZE:

Maximum: 40 cm; common between 10 to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, known to occur along the west coast of India and Pakistan. Elsewhere, along the east coast of India, Malaya, Sumatra, Java, Banka, Celebes and the Philippines.

A marine species, found in coastal waters, rarely entering tidal rivers and estuaries.

Feeds mainly on invertebrates.

PRESENT FISHING GROUNDS :

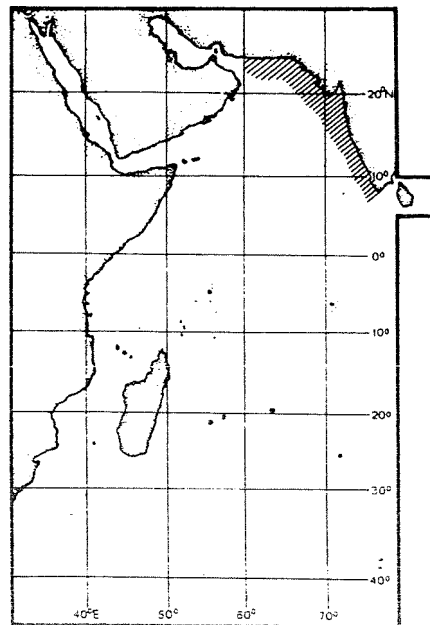
Coastal waters throughout the area down to 50 m depth, but nowhere abundant.

CATCHES, FISHING GEAR AND FORM OF UTILIZATION :

Separate statistics are not reported for this species.

Caught mainly with bottom trawls, bamboo stake traps and longlines.

Marketed mostly fresh and dried salted.



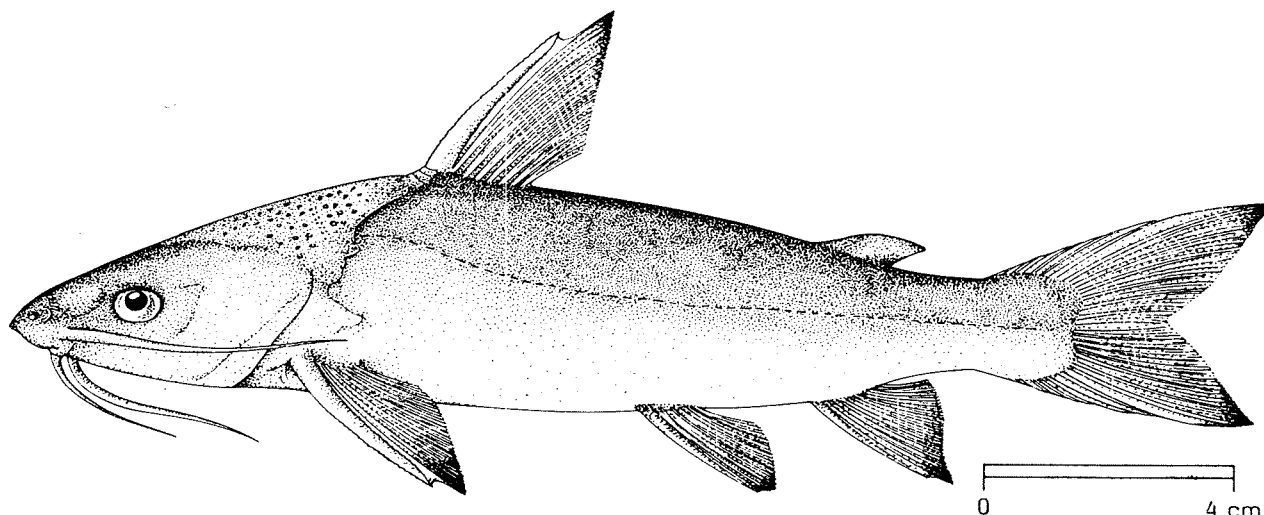
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ARIIDAE

FISHING AREA 51
(W. Indian Ocean)

Arius dussumieri Valenciennes, 1840

OTHER SCIENTIFIC NAMES STILL IN USE : Arius kirki Gunther, 1864
Tachysurus dussumieri (Valenciennes, 1840)



VERNACULAR NAMES:

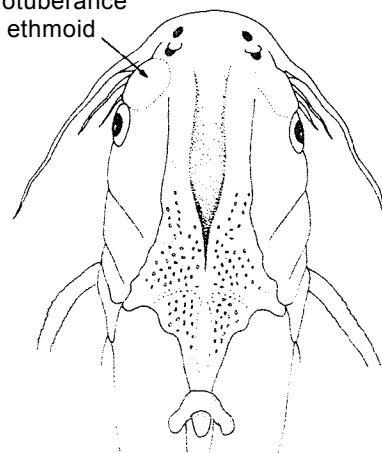
FAO : En - Blacktip sea catfish
Fr - Mâchoiron pointes noires
Sp - Bagre puntas neg-as

NATIONAL:

DISTINCTIVE CHARACTERS:

Dorsal profile of head sharply rising to first dorsal fin base; 3 pairs of barbels around mouth. the maxillary pair extending to middle of pectoral fin: preorbital protuberance of lateral ethmoid prominent, head shield not very granulated or rugose, except at occiput and occipital process; supraoccipital process short, strongly keeled, as long as broad at base, its hind end slightly emarginate; median longitudinal groove short, distinct in posterior half of head, reaching to supraoccipital process; predorsal plate V shaped; premaxillary band of teeth on upper jaw 8 times as long as broad. mandibular band of teeth on lower jaw curved and interrupted in middle; palate teeth conical, of uniform size, in 2 ovate, elongate separate patches on each side, placed one below the other, anterior patch small, posterior large, elliptical, foot-shaped, nearly 3 or 4 times as large as the anterior one and almost reaching buccal cavity. First dorsal and pectoral fins each with a strong spine; total anal fin rays 14 to 16.

Preorbital protuberance on lateral ethmoid



dorsal view of head

Colour: bluish-black on dorsal surface and sides, dull white below, fin tips edged with black.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA

Arius crossocheilus: posterior patch of teeth ovate, close-set and converging posteriorly; anal fin rays 17 or 18 (14 to 16 in A. dussumieri).

A. sagor and A. sona: tooth patches on roof of mouth placed side by side.

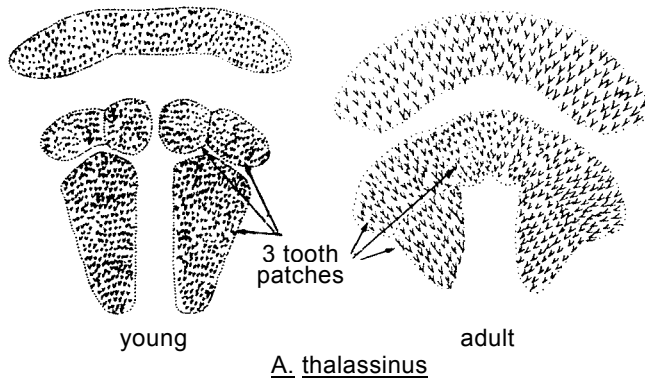
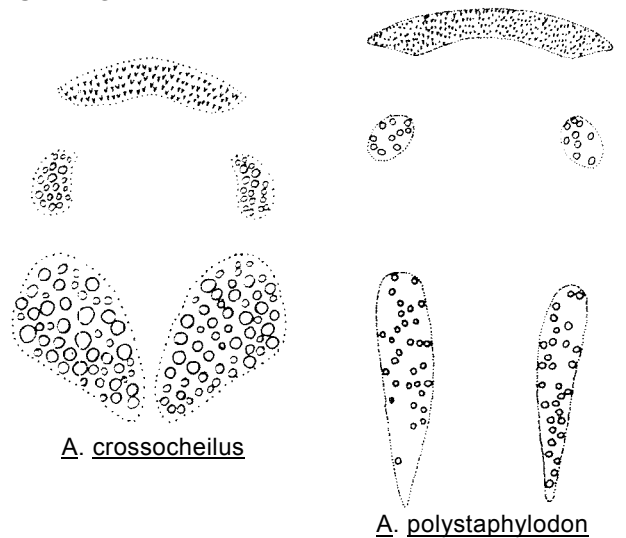
A. polystaphylodon: posterior tooth patch low, narrow, carrot-shaped; 15 to 17 anal fin rays; in the area known to occur off East Africa only.

A. thalassinus: three tooth patches on roof of mouth (posterior patch separated from 2 anterior ones in young individuals but all 3 patches fused in adults).

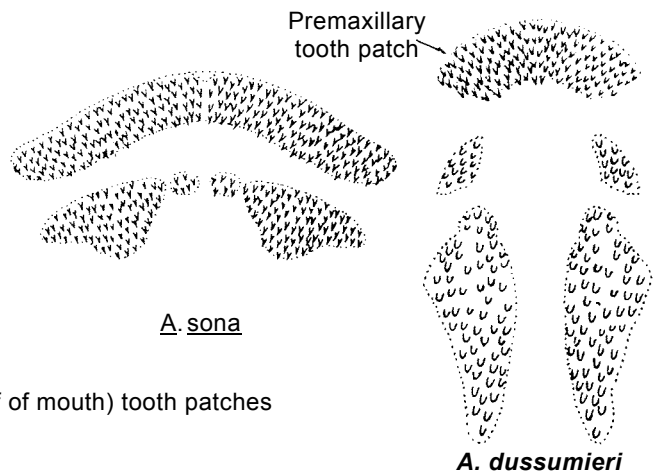
Other Arius species: only one tooth patch, on each side on roof of mouth.

Batrachocephalus mino: maxillary barbels absent.

Osteogeneiosus militaris: only a pair of stiff, semi-ossseous maxillary barbels present.



A. thalassinus



SIZE: premaxillary and palate (roof of mouth) tooth patches

Maximum: 31 cm; common between 18 and 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, known to occur along the west coast of India, Pakistan and Sri Lanka, but probably also occurring off East Africa. Elsewhere, along the east coast of India, Bangladesh and Burma.

Mostly marine, found along shores and deeper waters, down to 50 m depth.

Feeds mainly on invertebrates and small fishes.

PRESENT FISHING GROUNDS:

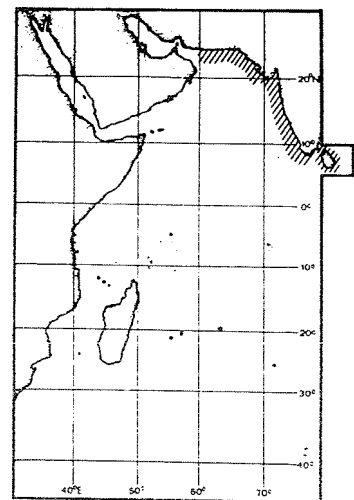
Coastal waters. Common along the west coast of India

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

Separate statistics are not reported for this species.

Caught mainly with bottom trawls, set bagnets, and longlines.

Marketed fresh and dried salted. Air bladder utilized for isinglass.

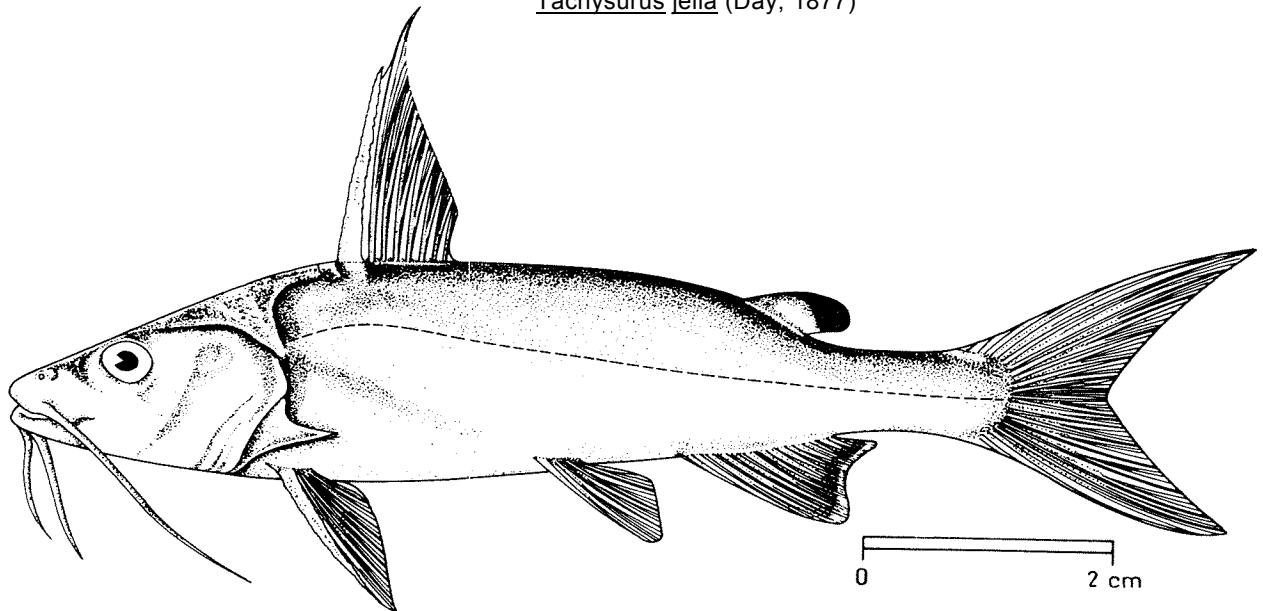


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ARIIDAE

FISHING AREA 51
(W. Indian Ocean)Arius jella Day, 1877

OTHER SCIENTIFIC NAMES STILL IN USE:

? Arius malabaricus Day, 1877
Tachysurus jella (Day, 1877)

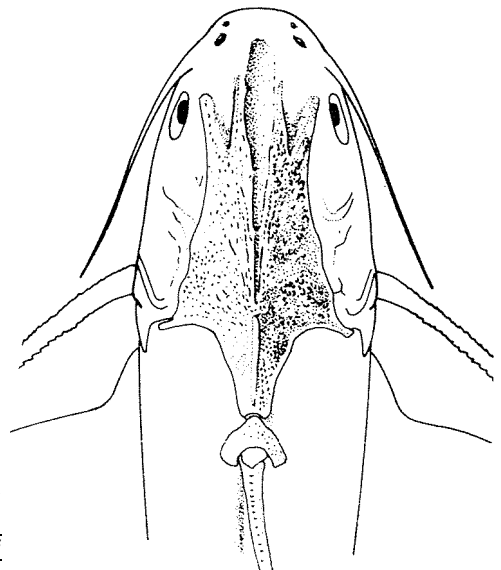
VERNACULAR NAMES:

FAO: En - Blackfin sea catfish
Fr - Mâchoiron aile noire
Sp - Bagre alinegro

NATIONAL:

DISTINCTIVE CHARACTERS:

Dorsal profile of head as a gentle slope to first dorsal fin base; 3 pairs of barbels around mouth, the maxillary pair as long as head, extending to pectoral fin base or slightly beyond; head shield sparsely granulated to posterior margin of orbit; supraoccipital process keeled, a little longer than broad, its hind end emarginate; median longitudinal groove narrow and deep posteriorly, reaching base of supraoccipital process; predorsal plate as a wide V; premaxillary band of teeth in upper jaw 4 to 6 times as long as broad, mandibular band of teeth in lower jaw deeply curved, narrowly interrupted; palate teeth globular, in a single large irregularly ovate patch, not fully formed, with loosely packed teeth, inner margins of patches not straight. First dorsal fin and pectoral fins each with a strong serrated spine, first dorsal fin ray prolonged into a long filament; total anal fin rays 17 or 18.



dorsal view of head

Colour: bluish-black above becoming whitish on sides and below; fins tinted grey, anal fin with a white outer edge and adipose fin with 2 black blotch.

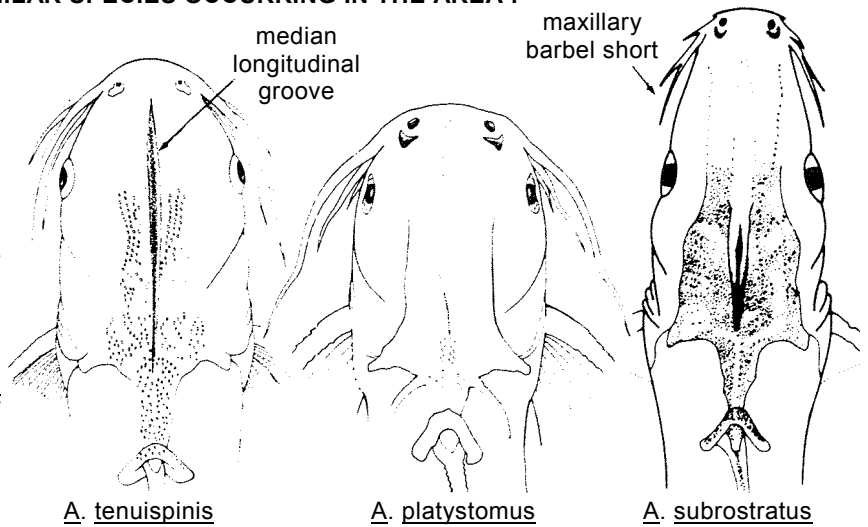
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA :

Arius arius and A. maculatus: more than 18 total anal fin rays (17 or 18 in A. sella).

A. tenuispinis: tooth patches elliptical, shoe-shaped, placed far back in buccal cavity; median longitudinal groove very long and deep, running onto supraoccipital process.

A. caelatus: teeth on roof of mouth villiform, in a single, roughly triangular patch on each side; anal fin rays 19 or 20.

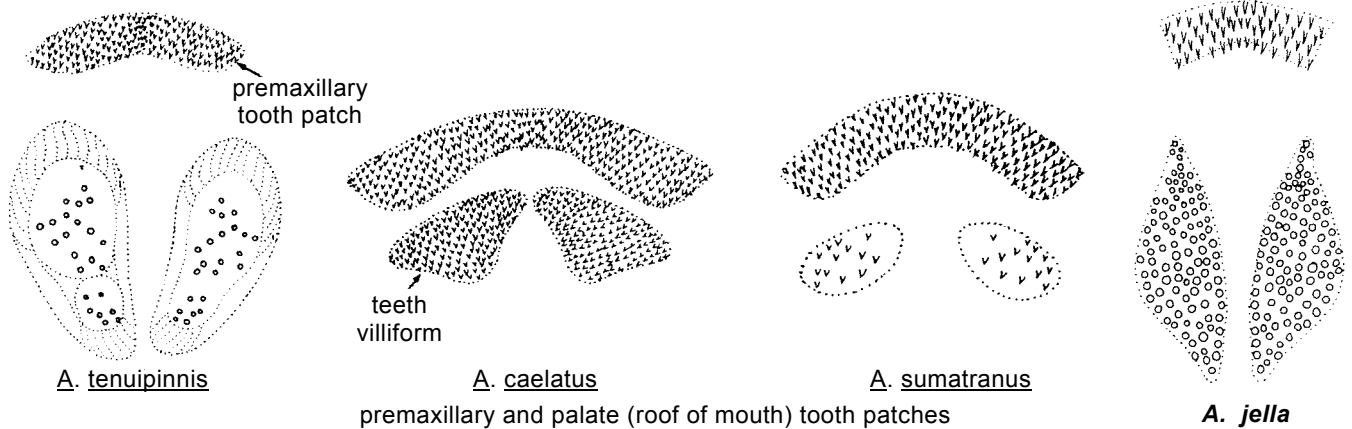
A. platystomus, A. subrostratus and A. sumatranus: teeth on roof of mouth in a small, oval patch on each side. Furthermore, head depressed, snout duck-bill shaped in A. platystomus; maxillary barbels very short, not extending beyond orbit in A. subrostratus.



Other Arius species known to occur in India and/or Pakistan: have more than one (2 or 3) tooth patches on roof of mouth.

Batrachocephalus mino: maxillary barbels absent

Osteogeniosus militaris: only a pair of stiff, semiosseous maxillary barbels present.



SIZE:

Maximum: 13 cm; common between 6 and 10 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, found along the west coast of India and Sri Lanka. Elsewhere, along the east coast of India.

Found in marine waters, as well as in estuaries and tidal rivers

Feed mainly on invertebrates.

PRESENT FISHING GROUND:

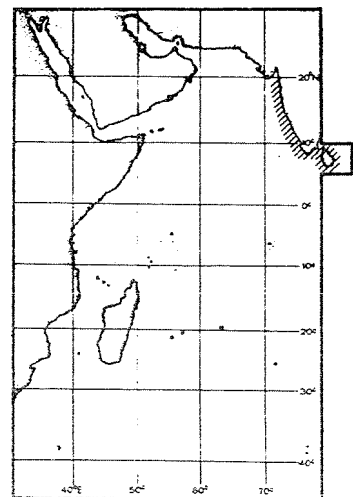
Mostly coastal marine waters and estuaries.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with stake traps, shore seines, set bagnets and on-hook and line,

Marketed mostly fresh.



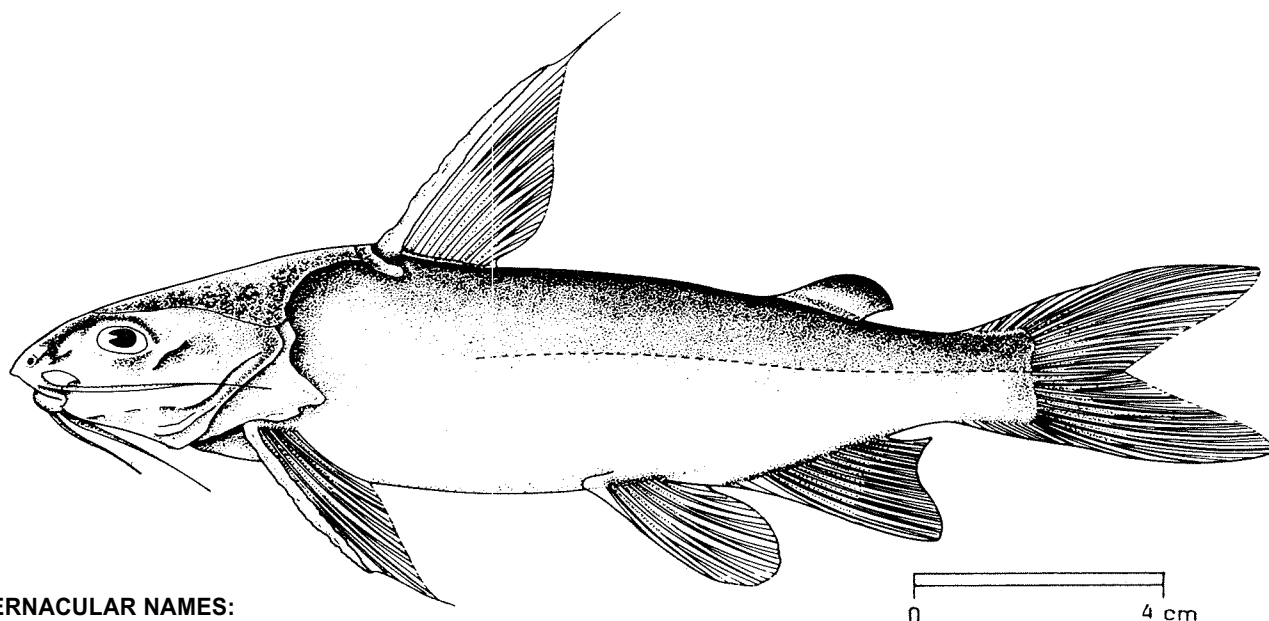
FAO SPECIES IDENTIFICATION SHEETS

FAMILY : ARIIDAE

FISHING AREA 51
(W. Indian Ocean)

Arius madagascariensis Vaillant, 1894

OTHER SCIENTIFIC NAMES STILL IN USE : *Tachysurus madagascariensis* (Vaillant, 1894)



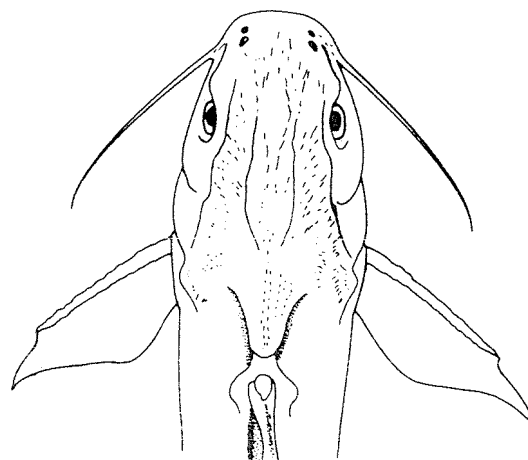
VERNACULAR NAMES:

- FAO En - Madagascar sea catfish
- Fr - Mâchoiron malgache
- Sp - Bagre malgache

NATIONAL:

DISTINCTIVE CHARACTERS:

Dorsal profile of head with a gentle slope up to first dorsal fin base; 3 pairs of barbels around mouth, the maxillary pair extending to pectoral fin base; head shield granulated behind orbit with a blunt conical protuberance above eye; supraoccipital process short, with a median keel, as long as broad at base, its hind end rounded; median longitudinal groove shallow, wide in the middle, tapering at the ends, not reaching to supraoccipital process, predorsal plate angular, cup-shaped; premaxillary band of teeth in upper jaw in a broad band, 5 times as long as broad, mandibular band of teeth in lower jaw slightly curved and medially interrupted; 2 large tooth patches on roof of mouth (one on each side) well separated from each other with concave inner margins, and rounded or globular teeth. First dorsal and pectoral fins each with a strong spine; dorsal and pectoral fin outermost ray prolonged, pectoral fin filament almost reaching pelvic fins in some specimens; pelvic fin also elongated, reaching anal fin in larger individuals; total anal fin rays 16.



dorsal view of head

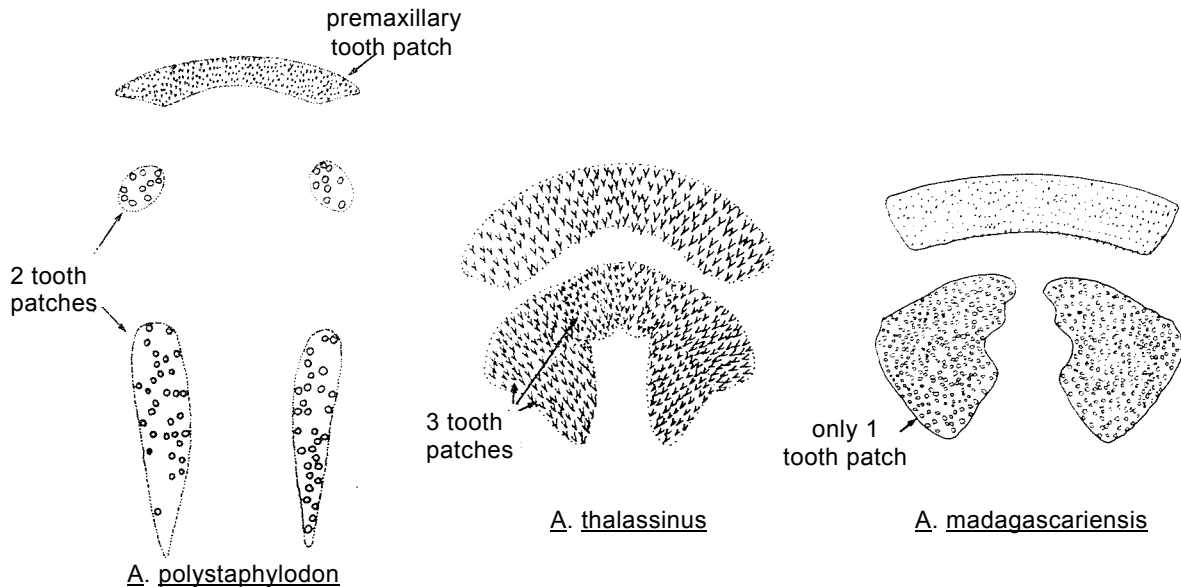
Colour: steel blue above, silvery on sides, rakish-yellow on belly; dorsal and caudal fins greyish.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

All other Arius species occurring in East Africa: either have more than 16 total anal fin rays or have more than one (2 or 3) tooth patches on each side of roof of mouth.

Batrachocephalus mino: only 1 or 2 pairs of minute, rudimentary mental barbels present; maxillary barbels absent.

Osteogeneiosus militaris: only a pair of stiff, semiosseous maxillary barbels present; mental barbels absent.



premaxillary and palate (roof of mouth) tooth patches

SIZE:

Maximum: 30 cm; common between 10 and 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, common in Madagascar and possibly occurring also along the east coast of Africa.

Found in freshwater, estuaries and river mouths.

Feeds mainly on invertebrates.

PRESENT FISH GROUNDS:

Shore waters and estuaries subject to tidal influence.

CATCHES, FISHING GEAR AND FORM OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with stake traps, shore seines and set bagnets, also on hook and line.

Mostly marketed fresh.

