

FAO SPECIES IDENTIFICATION SHEETS

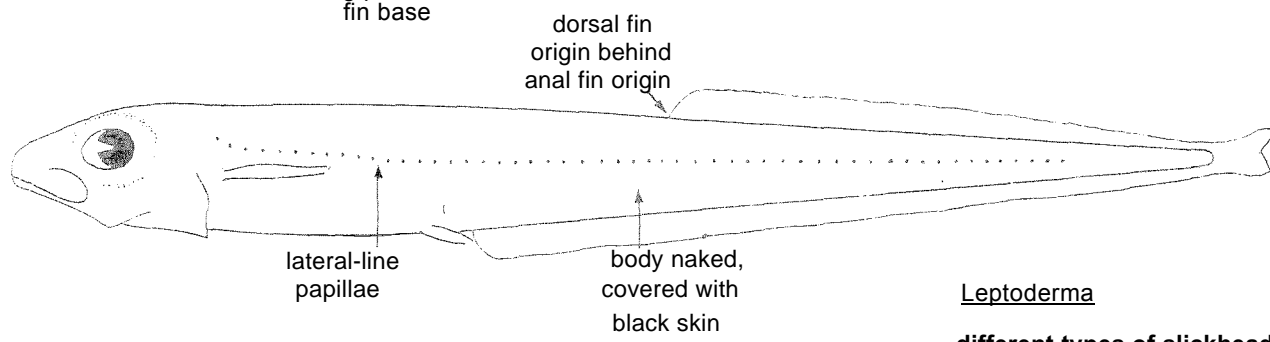
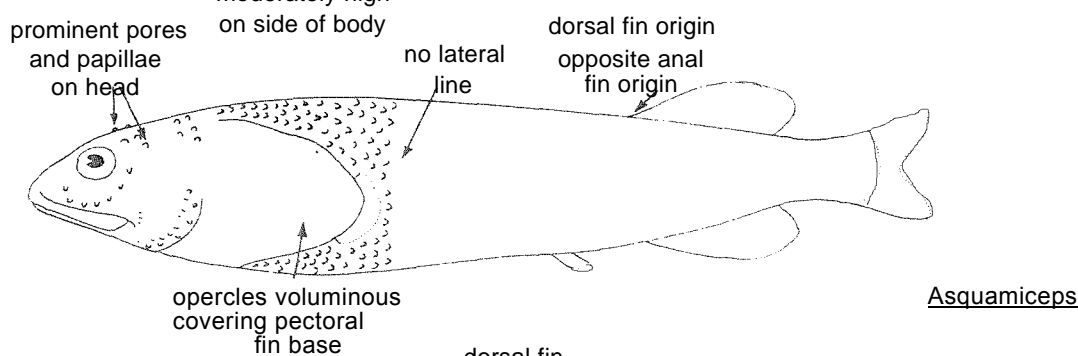
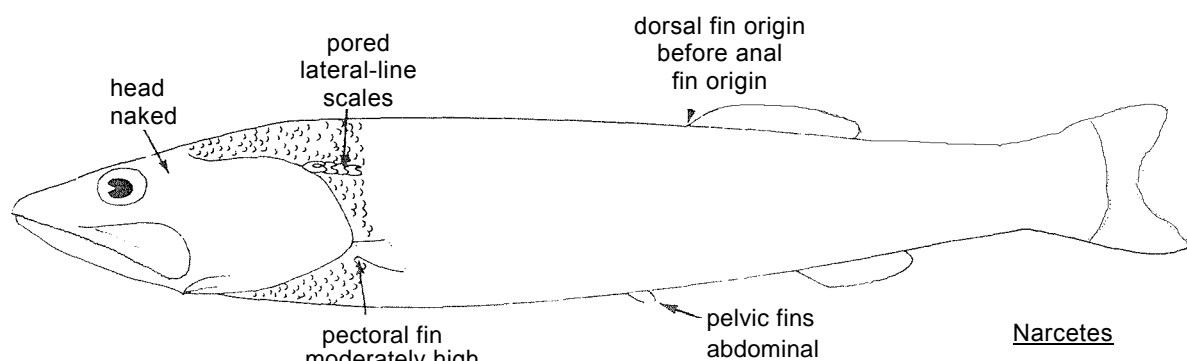
FISHING AREA 51
(W. Indian Ocean)

ALEPOCEPHALIDAE

(including Bath) laconidae and Bathyprionidae)

Slickheads

Body shape variable, from moderately deep to elongate and eel-like. Head she compressed and slightly rounded, to elongate and tube-like. Head without scales*; papillae and raised sensory pores frequently present on head and opercles; opercles frequently voluminous, sometimes covering pectoral fin bases; tongue present, but without teeth*; roof and floor of mouth usually with papillae; dentition of jaws and roof of mouth variable, but premaxilla and mandible usually toothed; no premaxillary tusks. Gillrakers moderate to long, with small tooth-like structures. No spinous finrays; single dorsal and anal fins variable in position, usually placed far back and frequently opposite each other; no adipose fin; pectoral fins, if present, moderately high on body; pelvic fins abdominal, outer ray sometimes with supporting splint bone. Lateral line present or absent, if present composed of pored scales, a pored tube supported b ring-like scales, or papillae. Scales on body present or absent, if present always cycloid smooth to touch), easily abraded. Naked forms usually with black integument and nodular photophores or papillae on body. No dark tube above pectoral fin.



different types of slickheads

* Exception - one species

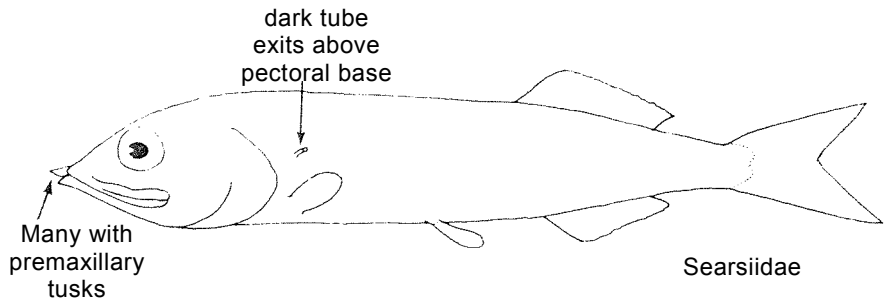
Colour: usually drab, predominantly brown to black, but one group of genera with bright blue skin on head and fin bases.

Deep-sea fishes, habitat variable from benthic to midwater, most numerous below 1 000 m. Distribution worldwide from tropics to high latitudes.

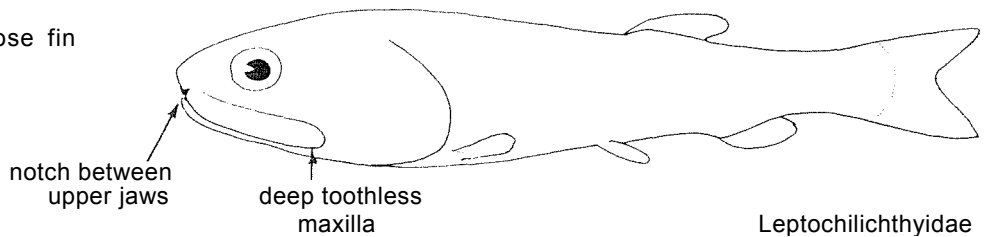
At present, slickheads have no economic importance in the Western Indian Ocean. Some species are known to congregate in commercial sized quantities in the North Atlantic, but the flesh, though mild, is of poor texture.

SIMILAR FAMILIES OCCURRING IN THE AREA

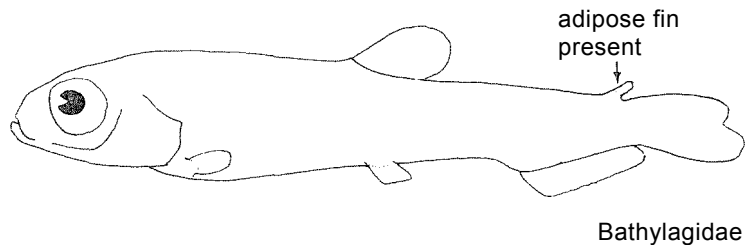
Searsiidae: luminous sack present at shoulder girdle which exits through a dark tube above the pectoral fin; many with prominent, anteriorly directed premaxillary tusks.



Leptochilichthyidae: tongue absent; a deep toothless maxilla and a distinct notch between upper jaws.



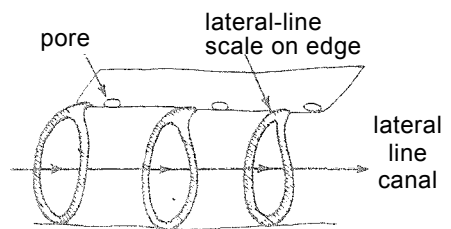
Bathylagidae: adipose fin present.



lateral-lira seal

KEY GENERA OCCURRING IN THE AREA

- 1a. Body completely scaleless (except for modified lateral-line scales in one genus)
- 2a. Lateral line in a tube supported by modified ring-like scales standing on edge (Fig.1); anal fin rays 18 to 22 Rouleina
- 2b. Lateral line, if present, without modified scales as above



3 a. Photophores present on body (Figs 2,3)

4 a. Photophores on raised stalks; ventral outline of upper jaw with obtuse angle at end of premaxilla (Fig. 2); anal fin rays 16 to 19 Photostylus

4 b. Photophores nodular, not on stalks; ventral outline of premaxilla and maxilla approximately straight (Fig. 3); anal fin rays 26 to 33 Xenodermichthys

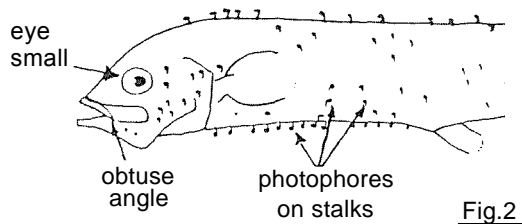


Fig.2

3 b. No photophores on body; dorsal fin origin distinctly behind anal fin origin; body tapers to a fine, almost stringy point (Fig. 4) Leptoderma

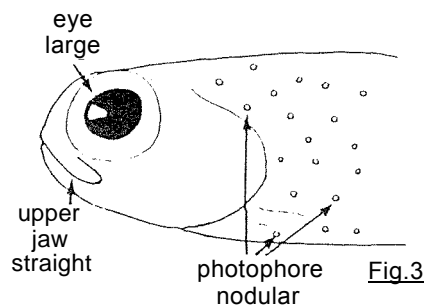


Fig.3

1 b. Body entirely or partly scaled

5 a. No teeth on maxilla or vomer (Fig. 5)

6 a. Dorsal fin origin usually above anal fin origin

7a. Area from gill cavity to pectoral fin base scaled; pectoral fins not fan-like (Fig. 6), upper rays longer than lower rays; pyloric caeca 12 to 28; 2 supramaxillae Alepocephalus

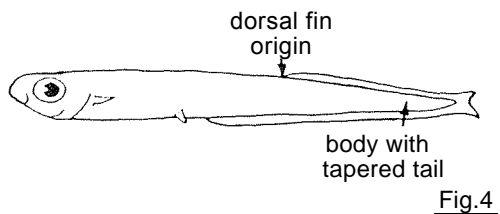


Fig.4

7 b. Area from gill cavity to pectoral fin base naked; pectoral fins fan-like (Fig. 7); pyloric caeca 3 to 11; 1 supramaxilla Asquamiceps

6 b. Dorsal fin origin usually behind anal fin origin

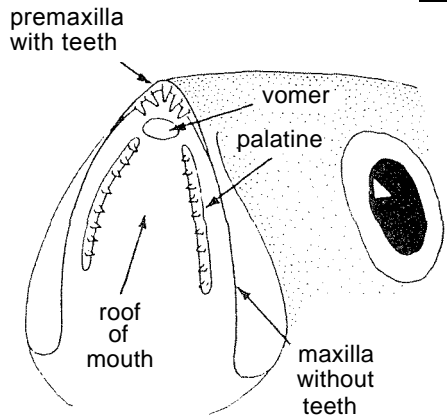


Fig. 5

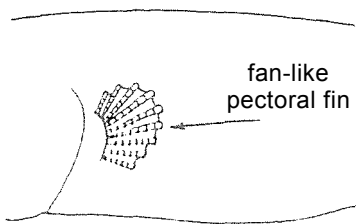


Fig.7

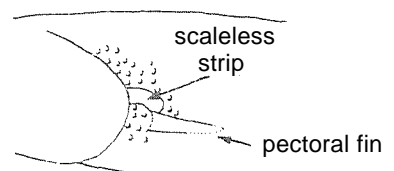


Fig.6

8a. Lower jaw ends under orbit (Fig. 8); palatines with teeth; peritoneum darkly pigmented; area from gill cavity to pectoral fin base with scaleless strip (Fig. 6) Conocara

8b. Lower jaw ends behind posterior margin of orbit (Fig. 9); no palatine teeth; peritoneum unpigmented or lightly pigmented; area from gill cavity to pectoral fin base fully scaled..... Einara

8c. Lower jaw ends in front of orbit (Fig. 10); area from gill cavity to pectoral fin base with scaleless strip (Fig. 5); snout tube-like; body elongate Aulastomatomorpha

5b. Teeth present or, maxilla and/or vomer

9 a. Lower jaw without teeth Herwigia

9 b. Lower jaw with teeth

10a. Dorsal fin origin approximately opposite anal fin origin; body moderately deep; pectoral fins well developed, often with produced rays; upper jaw without long fang-like teeth; a black wart-like spot near base of sixth dorsal finray, often abraded (Fig. 11) Talismania

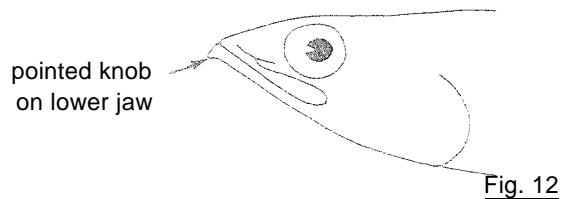
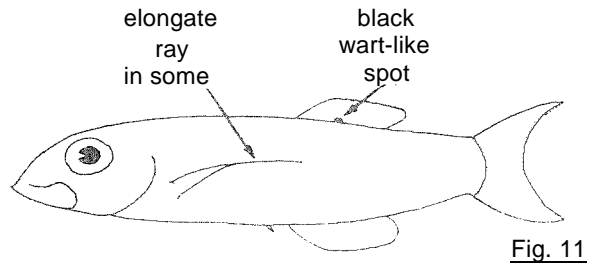
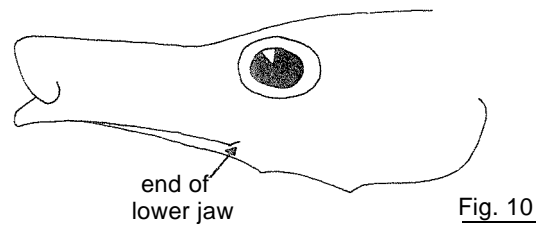
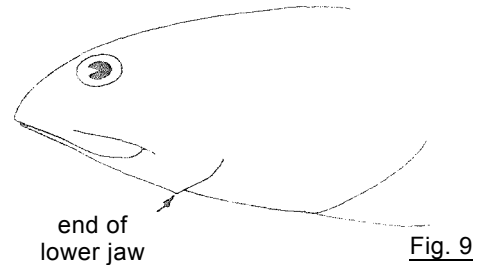
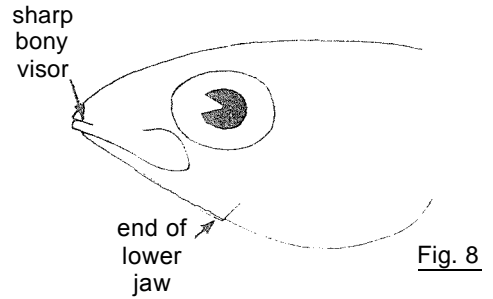
10 b. Dorsal fin origin before anal fin origin

11 a. Teeth near anterior tips of upper and lower jaws in more than one series Narcetes

11 b. Teeth near anterior tips of upper and lower jaws in single series

12 a. Lower jaw with a prominent pointed knob directed ventrally (Fig.12).. Bajacalifornia

12b. Lower jaw without a prominent knob



- 13 a. Upper jaw ends well behind posterior margin of orbit (Fig. 13) Bathylaco
- 13 b. Upper jaw ends approximately below posterior margin of orbit Bathyroctes

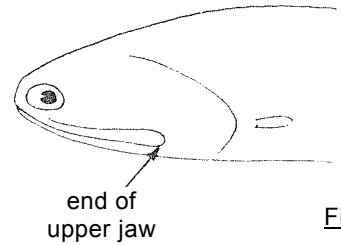


Fig. 13

LIST OF SPECIES OCCURRING IN THE AREA:

- Alepocephalus bicolor Alcock, 1891
- Alepocephalus blanfordii Alcock, 1892
- Alepocephalus spp.
- Asquamiceps caeruleus Markle, 1980
- Asquamiceps hjorti Koefoed, 1927)
- Aulastomatomorpha caeruleiceps Lloyd, 1906
- Aulastomatomorpha phospherops Alcock, 1890
- Bajacalifornia calcarata, (Weber, 1913)
- Bajacalifornia megalops (Lutken, 1898)
- Bajacalifornia sp. nov.
- Bathylaco nigricans Goode & Bean, 1896
- Bathylaco nielsenii Sazonov & Ivanov, 1980
- Bathyroctes elegans Sazonov & Ivanov, 1979
- Bathyroctes microlepis Günther, 1878
- Bathyroctes oligolepis (Krefft, 1970)
- Bathyroctes squamosus Alcock, 1890
- Conocara microlepis (Lloyd, 1909)
- Conocara murrayi Koefoed, 1927)
- Conocara nigra (Günther, 1878)
- Einara edentula (Alcock, 1892)
- Herwigia krefftii (Nielsen & Larsen, 1970)
- Leptoderma spp.
- Narcetes affinis Lloyd, 1906
- Narcetes erimelas Alcock, 1890
- Narcetes lloydi Fowler 1934
- Narcetes stomias (Gilbert, 1890)
- Photostylus pycnopterus Beebe, 1933
- Rouleina attrita (Vaillant, 1888)
- Rouleina danae Parr, 1951
- Rouleina güntheri (Alcock, 1892)
- Rouleina livida (Brauer, 1906)
- Rouleina maderensis Maul, 1948
- Rouleina squamilatera (Alcock, 1898)
- Talismania antillarum (Goode & Bean, 1896)
- Talismania longfilis (Brauer, 1902)
- Talismania mekistonema Sulak, 1975
- Xerodermichthys copei (Gill, 1884)

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FISHING AREA 51
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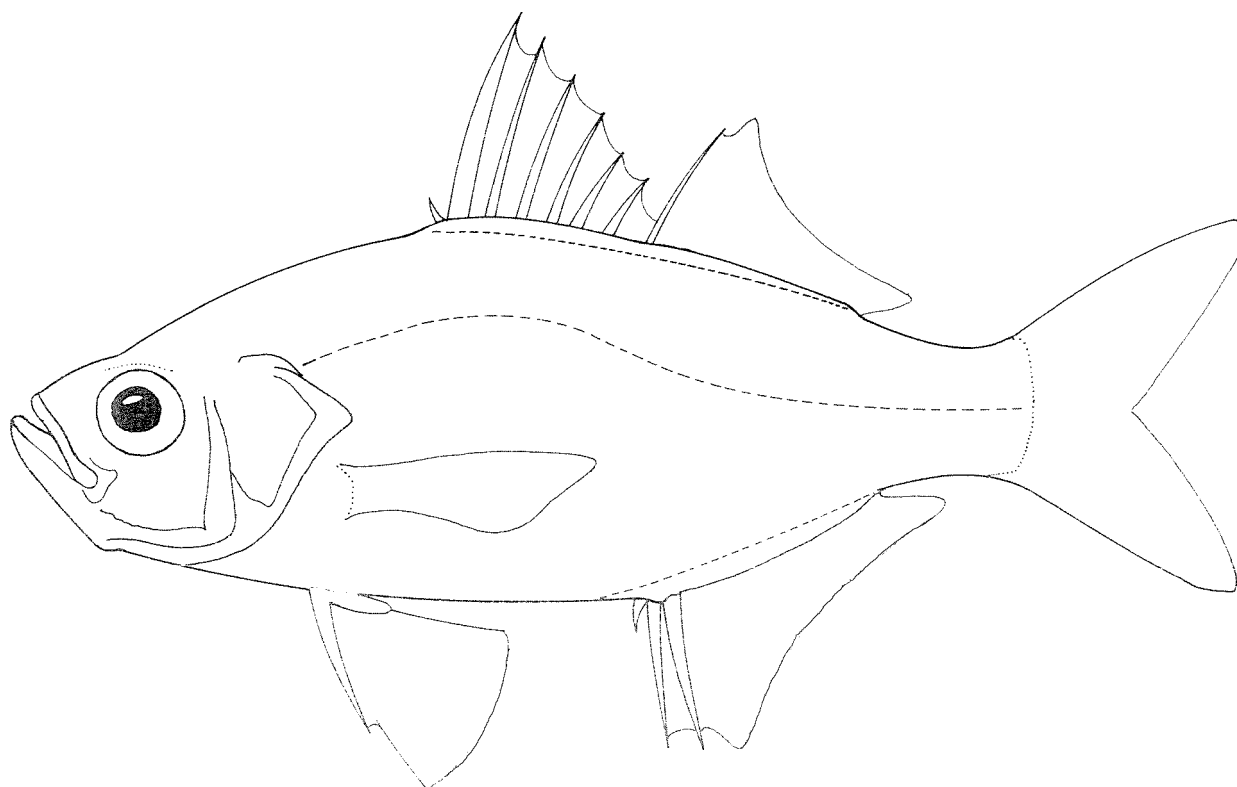
AMBASSIDAE

Perchlets

Body oblong or oblong ovate, strongly compressed, dorsal profile straight before dorsal fin insertion or concave above orbit. Mouth moderate, only slightly protractile, oblique to subvertical, jaws equal or lower longer; teeth small, conical, in bands on jaws, on roof of mouth (vomer and ectopterygoid) and sometimes on tongue; preopercle, interopercle antorbital and infraorbital bones often with ridges and serrate edges; opercle without a prominent spine. Dorsal fin deeply notched but continuous; with a short concealed procumbent spine and 6 to 8 strong spines in front, followed by 1 spine and 8 to 12 (usually 9 to 11) soft rays; pelvic fin insertion below or in advance of vertical through pectoral fin base, with 1 spine and 5 soft rays; pelvic fin axillary scale lacking; anal fin short, with 3 or 4 (usually 3) spines and 8 to 11 soft rays; caudal fin forked; pectoral fin rounded. Scales moderate to large, cycloid (smooth to touch), rather deciduous.

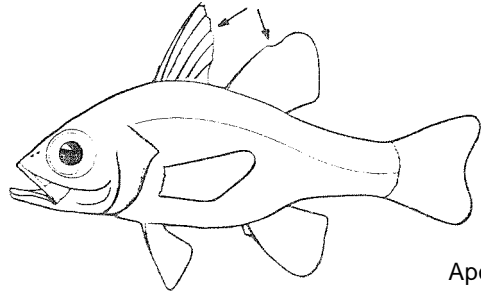
Colour: Ambassis species are translucent or semi-translucent, often silvery, some species with longitudinal stripes; fins are dusky or with pigmented blotches and bars.

Ambassid species usually occur in schools near river mouths although some species reside permanently in fresh waters. Locally fairly abundant, mainly used as bait. Separate statistics are not reported for this family in Fishing Area 51.



SIMILAR FAMILIES OCCURRING IN THE AREA:

Apogonidae: dorsal fin consisting of 2 completely separate parts.



Apogonidae

KEY TO GENERA OCCURRING IN THE:

Ambassis only.*

LIST OF SPECIES OCCURRING IN THE AREA:

Ambassis bleekeri (Maugé, 1983)

Ambassis gymnocephalus (Lecépède, 1801)

**Ambassis urotaenia Bleeker ?

Prepared by R.P. Vari, Division of Fishes, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, USA

Draft material revised by A. Maugé, Muséum National d'Histoire Naturelle, Paris, France

* A number of generic names have been used for species of Ambassis, but many generic limits are poorly defined and the family is badly in need of revision.

**The nominal species Ambassis urotaenia is questionably distinct from A. gymnocephalus. A more definitive statement awaits a revisionary study of the group.

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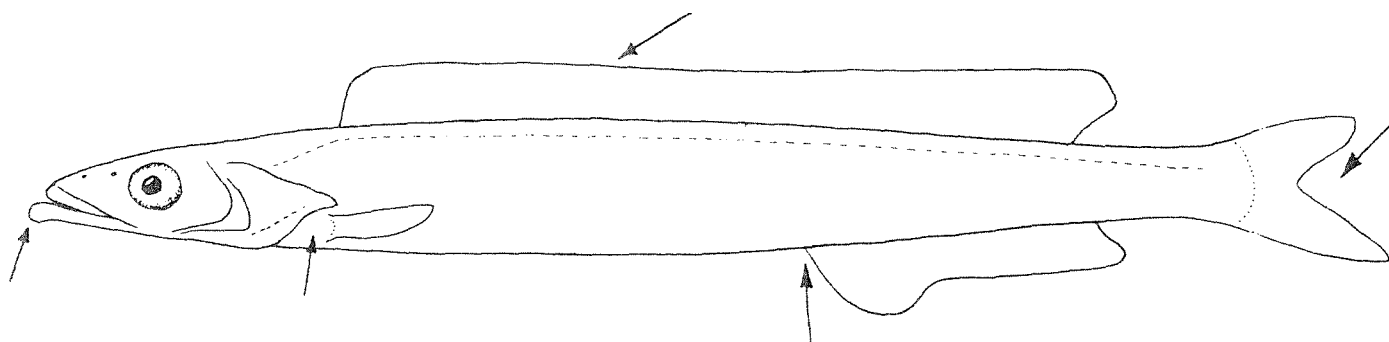
FISHING AREA 51
(W. Indian Ocean)

AMMODYTIDAE

Sandlances

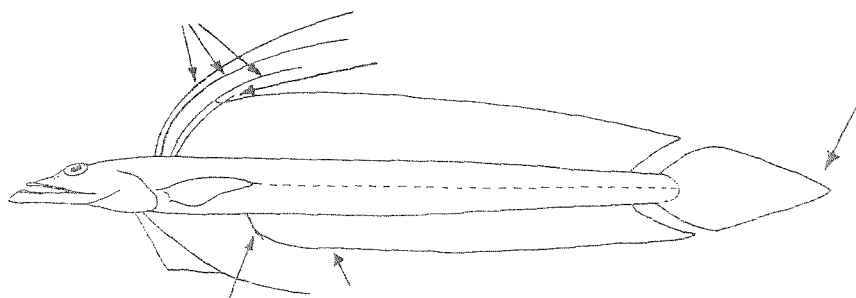
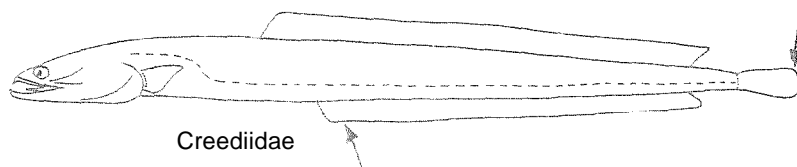
Small fishes with very elongate cylindrical bodies, with or without scales. Mouth large, terminal; lower jaw strongly projecting; upper jaw protrusile; no teeth. Dorsal fin continuous, with 41 to 54 rays and no spines; anal fin half the length of dorsal, also spineless; pelvic fins rudimentary or absent; caudal fin shallowly forked.

Sandlances occur in sandy areas of most seas, and are able to burrow rapidly head first. They are excellent bait and good eating, but too small to be of significant commercial importance.



SIMILAR FAMILIES OCCURRING IN THE AREA:

Trichonotidae and Creediidae. anal fin subequal to dorsal fin; anus anterior to middle of body; caudal fin rounded or pointed. Also, a few spines in dorsal and anal fins in Trichonotidae.

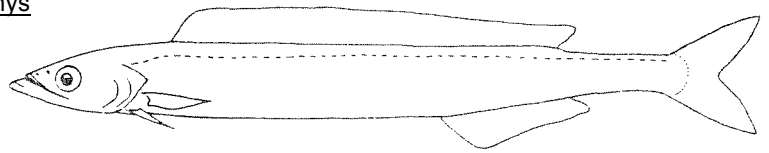
Trichonotidae (Taeniolabrus)

Creediidae

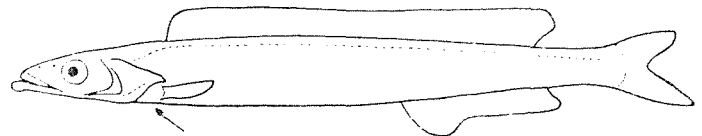
KEY TO GENERA OCCURRING IN THE AREA :

- 1a. Pelvic fins present; dorsal fin rays 41 to 45
Fig.1) Embolichthys
- 1b. Pelvic fins absent; dorsal fin rays 49 to 54
(Fig.2)

 - 2a. Body completely scaly; lateral-line tubes simple, without branches above and below (Fig.2) Bleekeria
 - 2b. Body mostly naked (only hind fifth with scales); lateral-line canal with pores above and below Gymnammodytes



Embolichthys Fig. 1



no pelvic fins Bleekeria Fig. 2

LIST OF SPECIES OCCURRING IN THE AREA :

- Bleekeria kallelepis Günther, 1862
- Bleekeria renniei Smith, 1957
- Embolichthys mitsukurii (Jordan & Evermann, 1902)
- Gymnammodytes capensis (Barnard, 1927)