

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

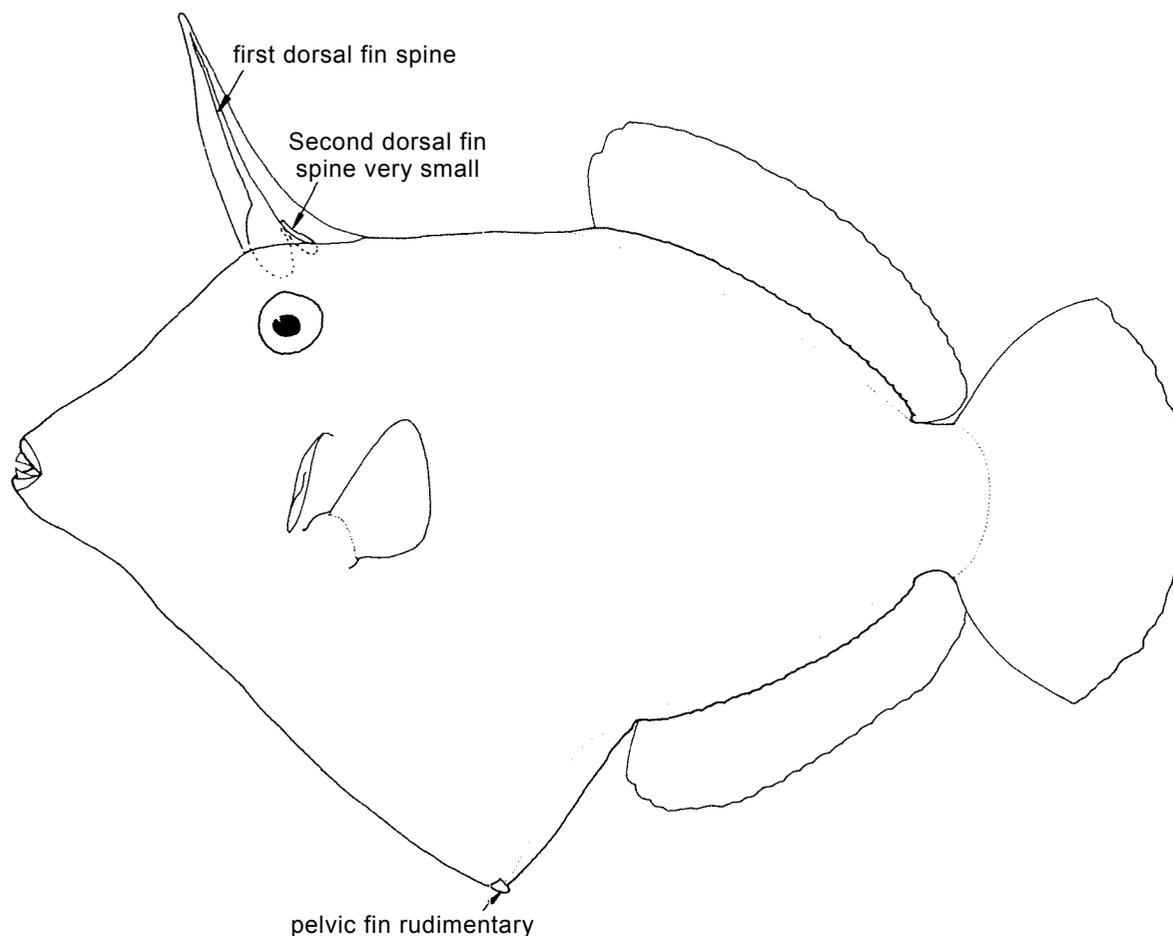
MONACANTHIDAE

Filefishes, leatherjackets

Small or medium-sized fishes (up to 100 cm in length), usually with deep, highly compressed bodies covered by smooth to rough shagreen-like skin consisting of minute to small scales armed with 1 to many fine spinules. Mouth small, generally terminal, non-protractile; teeth pointed and not fused together; gill opening a short vertical to oblique slit in front of or above pectoral fin base. Two dorsal fin spines (1 in *Brachaluteres*), the first large and usually armed with downward-curving barbs (obsolete in old individuals, the second spine very small and capable of locking the first in an upright position); all fin rays except those of the caudal unbranched; pelvic fins rudimentary, represented by a series of 3 or fewer pairs of enlarged scales encasing the posterior end of the pelvis which projects through the skin, or a single scale anterior to the posterior end of the pelvis disappearing with age, or entirely absent. Pelvis generally capable of vertical movement giving rise to a ventral flap. Caudal peduncle sometimes armed with prominent spines, elongate bristles or a dense patch of fine bristles.

Colour: variable, often drab brown, grey or greenish with darker markings, or very colourful with vivid patterns.

Filefishes range in depth from 0 to about; 170 m. They are primarily benthic, dwelling around coral and rocky reefs or on sand and mud bottoms and seagrass beds. They feed on a large variety of benthic invertebrates, including sponges, and sometimes on algae and plants, with their small mouths typically armed with moderate-sized nipping teeth. Only large individuals of some filefish species are eaten, but many are collected as a trash fish in commercial bottom trawls.



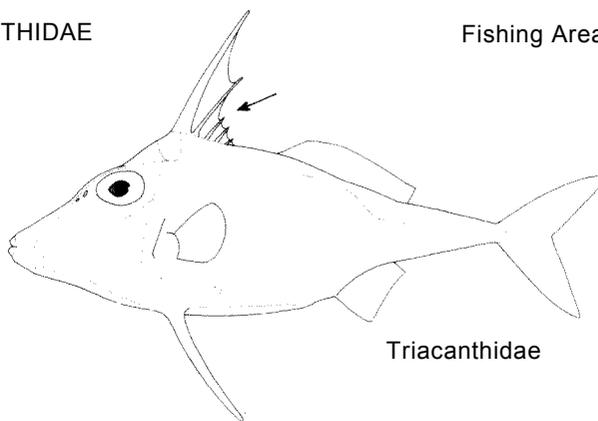
SIMILAR FAMILIES OCCURRING IN THE AREA:

Triacanthidae and Triacanthodidae: dorsal fin spines 2 to 6; a strong pair of pelvic fin spines.

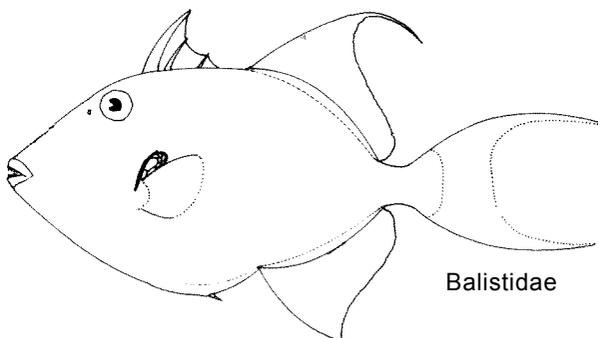
Balistidae: 3 dorsal-fin spines; no large, obvious pelvic-fin spines; teeth usually incisor-like and more massive, 8 in an outer series in each jaw; scales larger, rectilinear and easily recognized as individual units, without numerous upright spinules and tough, but not shagreen-like.

Ostraciidae: no spiny dorsal fin; no pelvic fin of any kind; teeth more conical; scales in the form of enlarged, exceptionally thick, usually hexagonal plates sutured together to form a box-like encasement of the body.

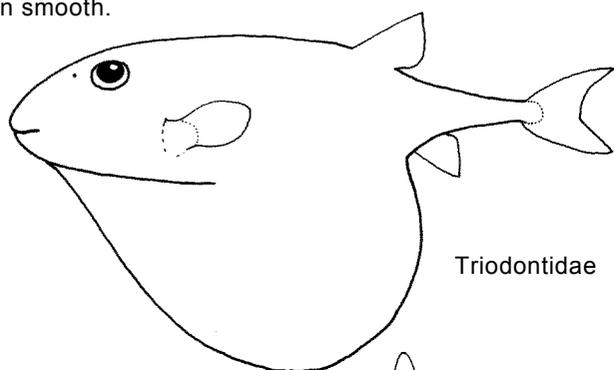
Tetraodontidae, Diodontidae, Triodontidae, Molidae: no obvious spiny dorsal fin; no pelvic fin of any kind; teeth incorporated into, or indistinguishably fused with, the jaw bones to form a parrot-like beak, with or without a division in the midline into 2 equal halves in each jaw; skin either rough with scales modified as prickles and long quill-like spines or scales absent and the skin smooth.



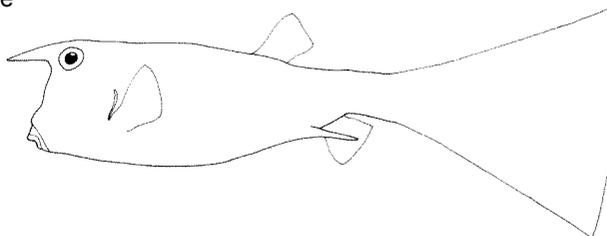
Triacanthidae



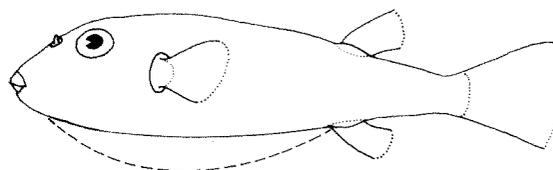
Balistidae



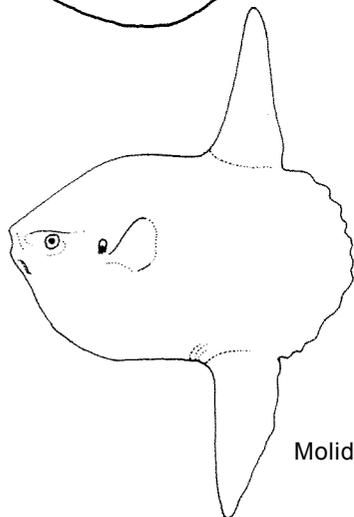
Triodontidae



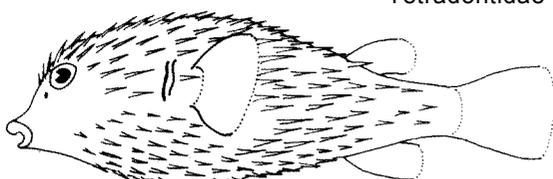
Ostraciidae



Tetraodontidae



Molidae



Diodontidae

KEY TO GENERA OCCURRING IN THE AREA:

- 1a. No fleshy barbel on lower jaw
- 2a. First dorsal spine fully erectile, usually capable of being locked in position by a second very small spine (Fig.1)

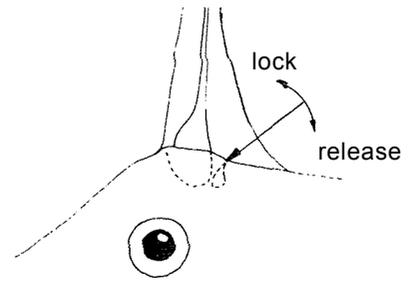
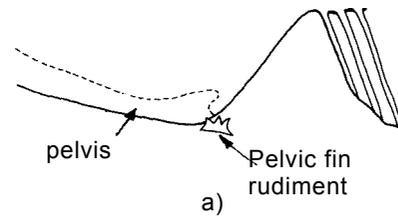


Fig.1

- 3a. Snout not produced into a tube
- 4a. Second dorsal and anal fins each with 39 or less rays

- 5a. Pelvic fin rudiment located at posterior end of pelvis (Fig.2)



- 6a. Pelvic fin rudiment not movably articulated with pelvis (Fig.2a)

- 7a. Second dorsal fin rays 26 to 29; anal fin rays 22 to 25; adults with a tooth-brush-like patch of bristles of several long spines on middle of side (Fig.3) Amanses

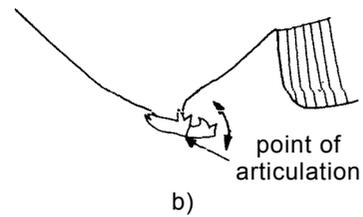
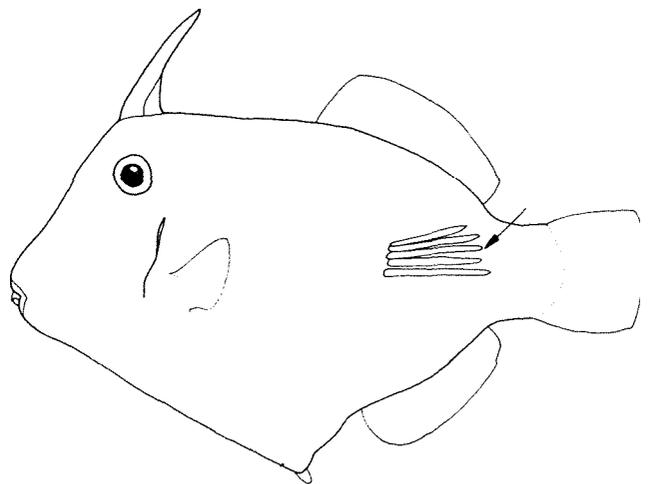


Fig.2

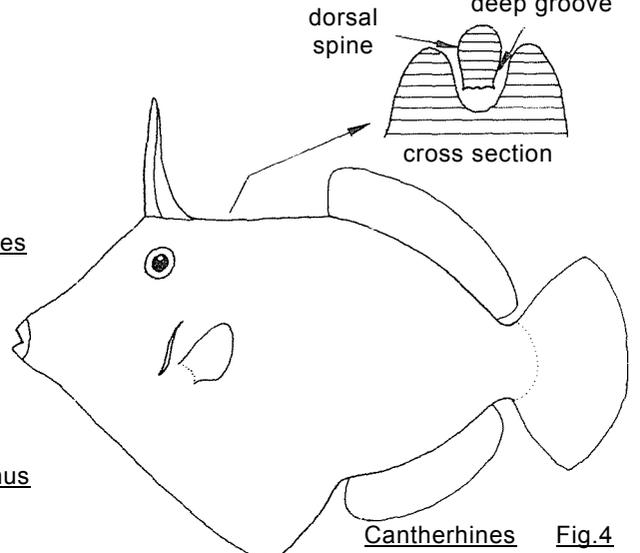
- 7b. Second dorsal fin rays 31 to 38; anal fin rays 28 to 36; no bristles or spines on middle of side although 2 pairs of spines may be present on each side of caudal peduncle



Amanses

Fig.3

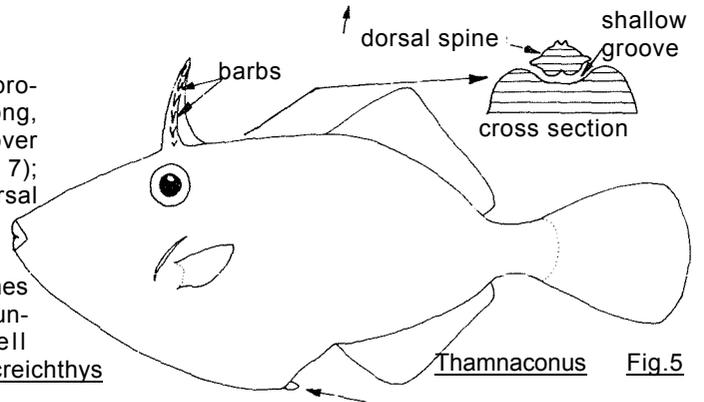
8a. Pelvic fin rudiment not prominently projecting rearwards of ventral flap; first dorsal spine armed with a row of very small to minute posteriorly directed barbs along each posterolateral edge, the spine received into a deep groove in back when depressed (Fig. 4); 2 pairs of spines on each side of caudal peduncle in C. dumerili only Cantherhines



8b. Pelvic fin rudiment projecting prominently rearward of ventral flap; first dorsal fin spine armed with a row of small to large, laterally-directed barbs along each lateral edge, the spine received into a shallow groove in back when depressed (Fig.5) or spinal groove absent; no caudal peduncular spines Thamnaconus

6b. Pelvic fin rudiment movably articulated with pelvis (Fig.2b)

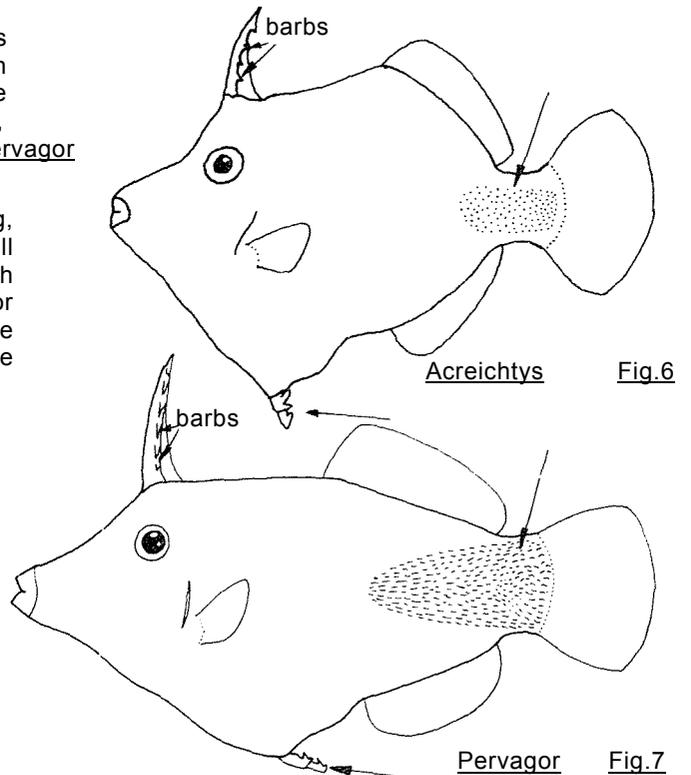
9a. Pelvic fin rudiment large, armed with prominent barbs; first dorsal fin spine strong, armed with large barbs and originating over centre to anterior half of eye (Figs 6 and 7); no produced fin rays in either second dorsal or caudal fins



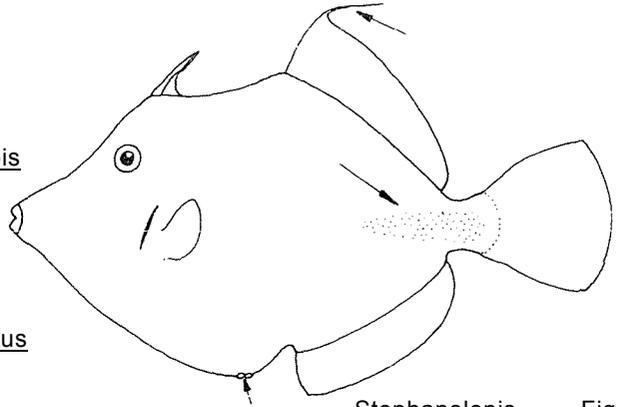
10a. Caudal peduncle length 1.1 to 1.6 times in its depth; bristles on caudal peduncle of adult male usually in a well defined patch (Fig.6) Acreichtys

10b. Caudal peduncle length 1.9 to 2.5 times in its depth; adult male generally with all scales on side of caudal peduncle developing short recurved bristles, decreasing in size anteriorly (Fig.7). Pervagor

9b. Pelvic fin rudiment slender and tapering, either elongate or short, armed with small barbs; first dorsal spine slender, armed with small barbs and originating over posterior half of eye; adult males usually with some rays produced into filaments either in the caudal or second dorsal fins (Figs 8 and 9)

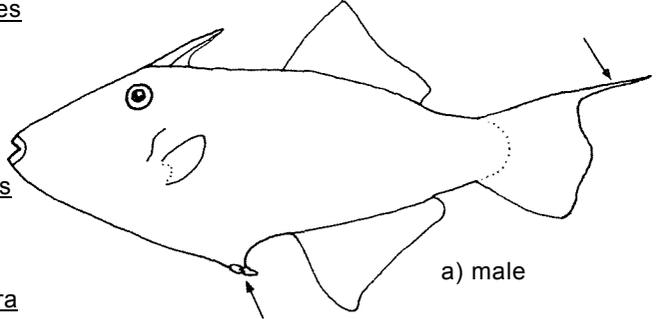


11a. Margin of pelvic flap usually convex, the pelvic fin rudiment generally not extending prominently rearward of this flap; adult male with an elongate patch of bristles on posterior part of body (Fig.8) Stephanolepis



Stephanolepis Fig.8

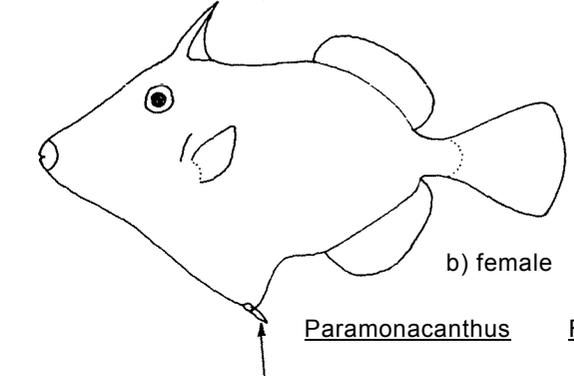
11b. Margin of pelvic flap usually concave, the pelvic fin rudiment generally projecting prominently rearward of this flap; no bristles on posterior part of body (Fig.9) Paramonacanthus



a) male

Paramonacanthus Fig.9

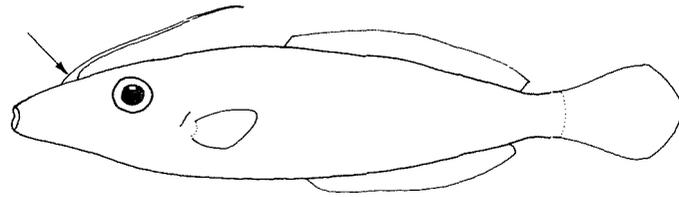
5b. No pelvic fin rudiment; body circular in profile, belly inflatable (Fig.10) Brachaluteres



b) female

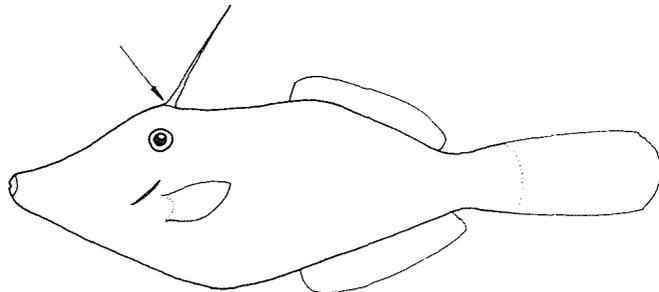
4b. Second dorsal and anal fins each with 43 or more rays

12a. First dorsal spine originates well in advance of eye (Fig.11)..... Pseudalutarius

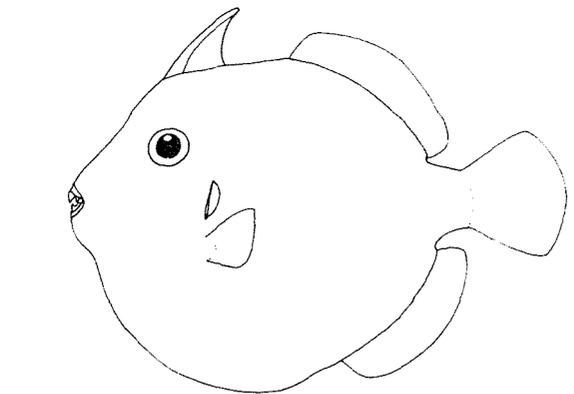


Pseudalutarius Fig.11

12b. First dorsal spine originates over eye (Fig.12) Alutera



Alutera Fig.12

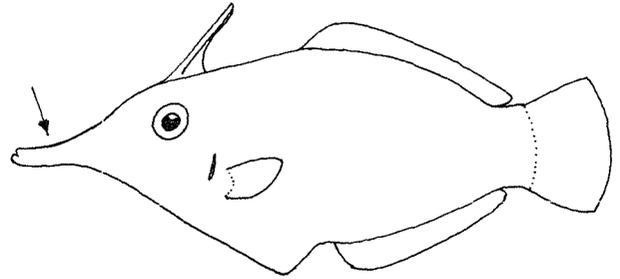


Brachaluteres Fig.10

3b. Snout produced into a tube, turning upward at mouth (Fig.13)..... Oxymonacanthus

2b First dorsal spine not fully erectile, enveloped in a loose flap of skin attached to back (Fig.14) Paraluteres

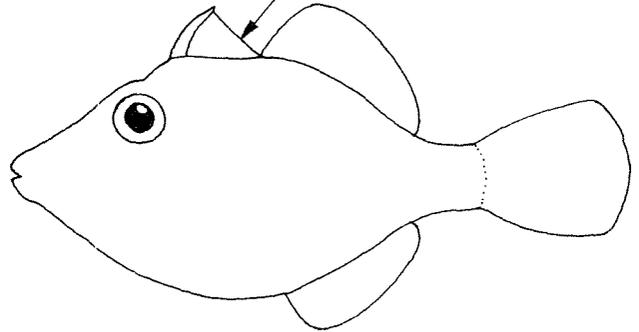
1b. A fleshy barbel on lower jaw (Fig.15) Anacanthus



Oxymonacanthus Fig.13



Anacanthus Fig.15



Paraluteres Fig.14

LIST OF SPECIES OCCURRING IN THE AREA:

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

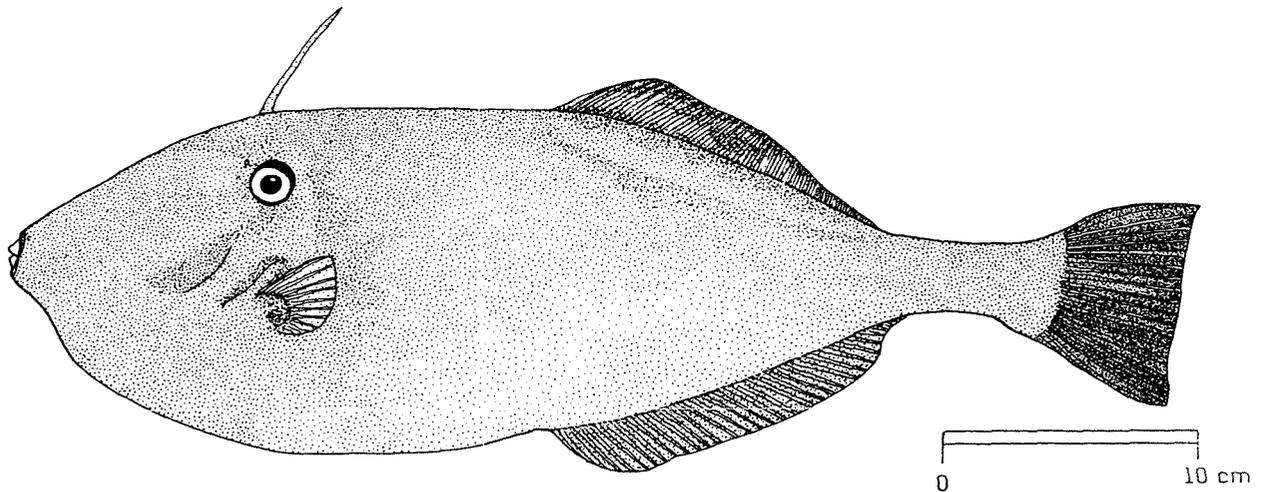
- Acreichthys tomentosus (Linnaeus, 1758)
- Alutera monoceros (Linnaeus, 1758) MONA Alut 1
- Alutera scripta (Osbeck, 1765)
- Amanses scopas (Cuvier, 1829)
- Anacanthus barbatus Gray, 1831
- Brachaluteres fahaga Clark & Gohar, 1953
- Cantherhines dumerili (Hollard, 1854) MONA Canth 2
- Cantherhines fronticinctus (Günther, 1866) MONA Canth 3
- Cantherhines pardalis (Rüppell, 1835) MONA Canth 4
- Oxymonacanthus halli Marshall, 1952
- Oxymonacanthus longirostris (Bloch & Schneider, 1801)
- Paraluteres arqat Clark & Gohar, 1953
- Paraluteres prionurus (Bleeker, 1851)
- Paramonacanthus barnardi Fraser-Brunner, 1941
- Paramonacanthus cingalensis (Fraser-Brunner, 1941)
- Paramonacanthus japonicus Tilesius, 1809)
- Pervagor melanocephalus (Bleeker, 1853) Pervagor species
- Pseudalutarius nasicornis (Temminck & Schlegel, 1850)
- Stephanolepis auratus (Castelnau, 1861)
- Stephanolepis diaspros Fraser-Brunner, 1940 MONA Steph 2
- Stephanolepis ocheticus Fraser-Brunner, 1940
- Stephanolepis rectifrons Fraser-Brunner, 1940
- Thamnaconus arenaceus (Barnard, 1927)
- Thamnaconus erythraeensis Bouchot & Maugé, 1978
- Thamnaconus fajardoii Smith, 1953 MONA Tham 1
- Thamnaconus melanoproctes (Boulenger, 1889)
- Thamnaconus modestoides (Barnard, 1927) MONA Tham 2

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FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MONACANTHIDAE

FISHING AREA 51
(W. Indian Ocean)*Alutera monoceros* (Linnaeus, 1758)OTHER SCIENTIFIC NAMES STILL IN USE: *Aluterus monoceros* (mis-spelling)

VERNACULAR NAMES:

FAO : En - Unicorn leatherjacket
 Fr - Bourse loulou
 Sp - Lija barbuda

NATIONAL:

DISTINCTIVE CHARACTERS:

Body moderately deep and compressed, with smooth leathery skin. Snout profile straight to concave. First dorsal spine long and feeble, usually broken in capture, the second spine minute; second dorsal fin with 46 to 51 rays, anal fin with 47 to 52 rays; pelvic fin rudiment minute, platelike, located anterior to rear end of pelvis, often lost or inconspicuous with age; caudal fin shorter than snout.

Colour: uniform light grey to sandy or with darker blotches and spots; fins yellowish with caudal more dusky.

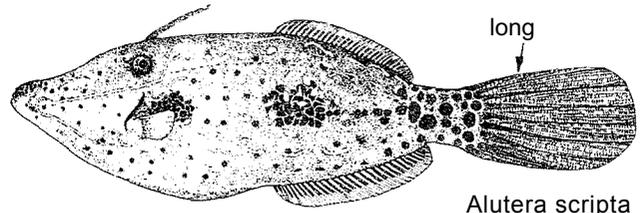
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Alutera scripta: caudal fin longer than snout; longitudinal blue lines and spots on sides.

Pseudalutarius nasicornis: first dorsal spine located well in front of eye.

Anacanthus barbatus: barbet on lower jaw.

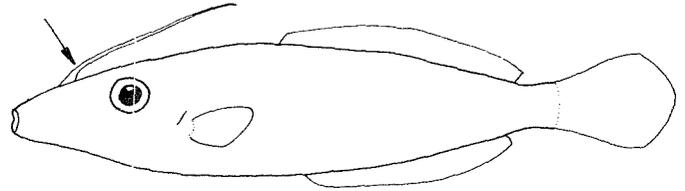
Other species of Monacanthidae: dorsal and anal fin rays both less than 40 in number.



Alutera scripta

SIZE:

Maximum: 55 cm; common to 40 cm.



Pseudalutarius nasicornis

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found in all tropical and temperate coastal waters of the world.

Found on the continental shelf down to depths of 50 m.

Feeds on bottom-living organisms.



Anacanthus barbatus

PRESENT FISHING GROUNDS:

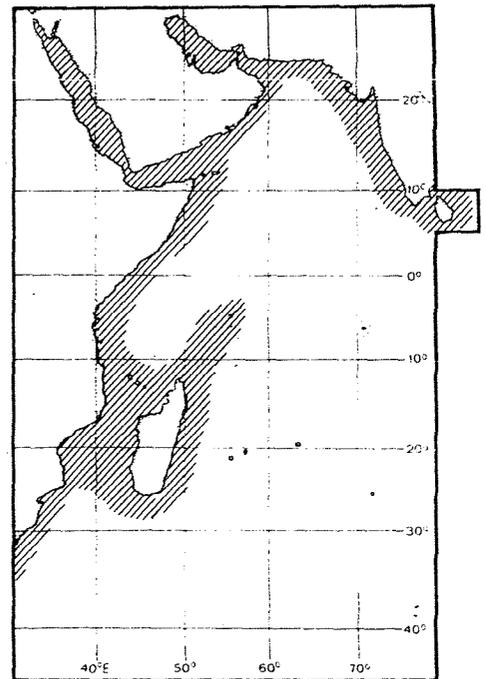
Caught throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

Marketed fresh.

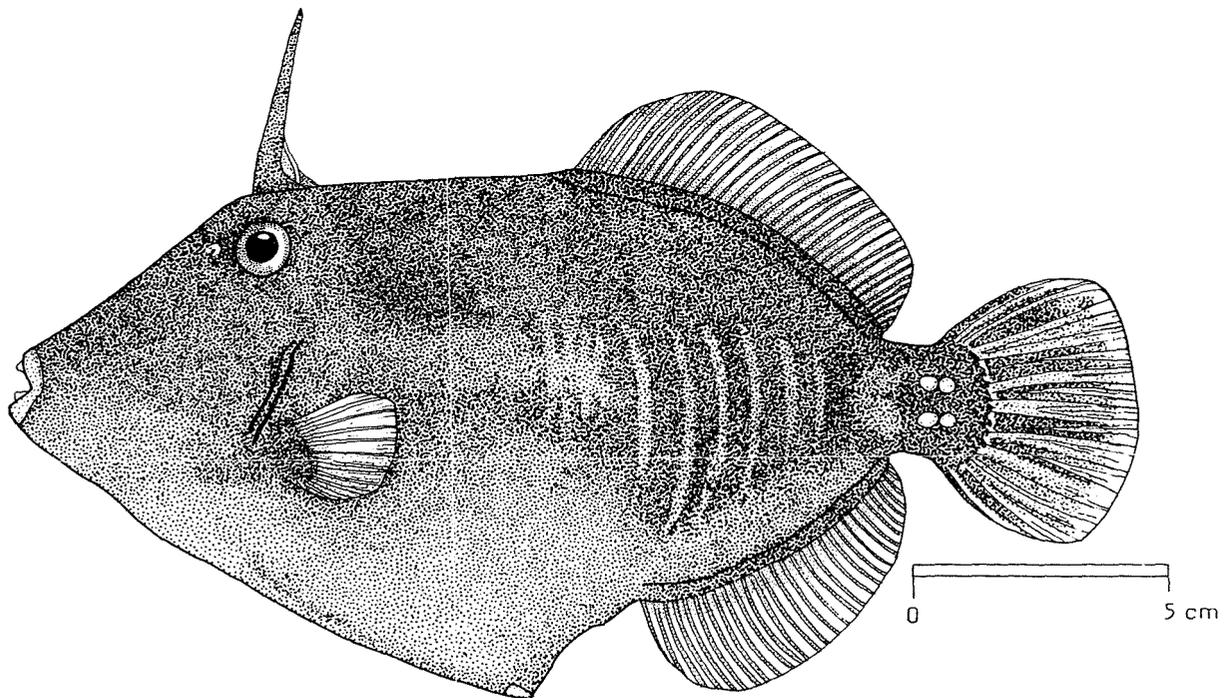


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MONACANTHIDAE

FISHING AREA 51
(W. Indian Ocean)Cantherhines dumerili (Hollard, 1854)

OTHER SCIENTIFIC NAMES STILL IN USE: None



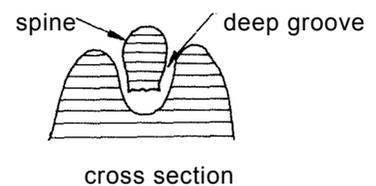
VERNACULAR NAMES:

FAO : En - Whitespotted filefish
Fr - Bourse à taches blanches
Sp - Cachúa blanca nieves

NATIONAL:

DISTINCTIVE CHARACTERS:

Body deep and compressed. Snout profile: concave to straight. First dorsal spine originating over anterior half of eye, armed with dorsal very small posteriorly directed barbs along each posterolateral edge, received into a deep groove in back when depressed; second dorsal fin rays 34 to 39; anal fin rays 28 to 35; pectoral fin rays 14 or 15; pelvic fin rudiment non-mobile, and not prominently projecting rearward of ventral flap. Caudal peduncle armed with 2 pairs of spines on each side, small in juvenile and adult female, enlarged and recurved forward in adult male.

Cantherhines

Colour: greyish brown with about 12 vertical darker bands on posterior half of body (large specimens generally overall blackish brown); lips whitish; bases of caudal peduncle spines in adult males 1 yellow; dorsal, anal and pectoral fins pale yellowish; caudal fin orange; iris orange-yellow with white ring around eye; juvenile with numerous white spots on head and body.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Other Cantherhines species, Amanses scopas and Thamnaconus species. no spines on caudal peduncle.

Other genera of Monacanthidae: no deep groove in back for receiving depressed first dorsal spine.

SIZE:

Maximum: 38 cm; common to 25 crri.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of the area, but not recorded from the "Gulf" and the coasts of Pakistan, India and Sri Lanka. Also known from other parts of the Indian and Pacific Oceans.

Favours shallow coastal coral reefs.

Feeds on bottom-living organisms.

PRESENT FISHING GROUNDS:

Taken incidentally throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly by handlines and traps.

