

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

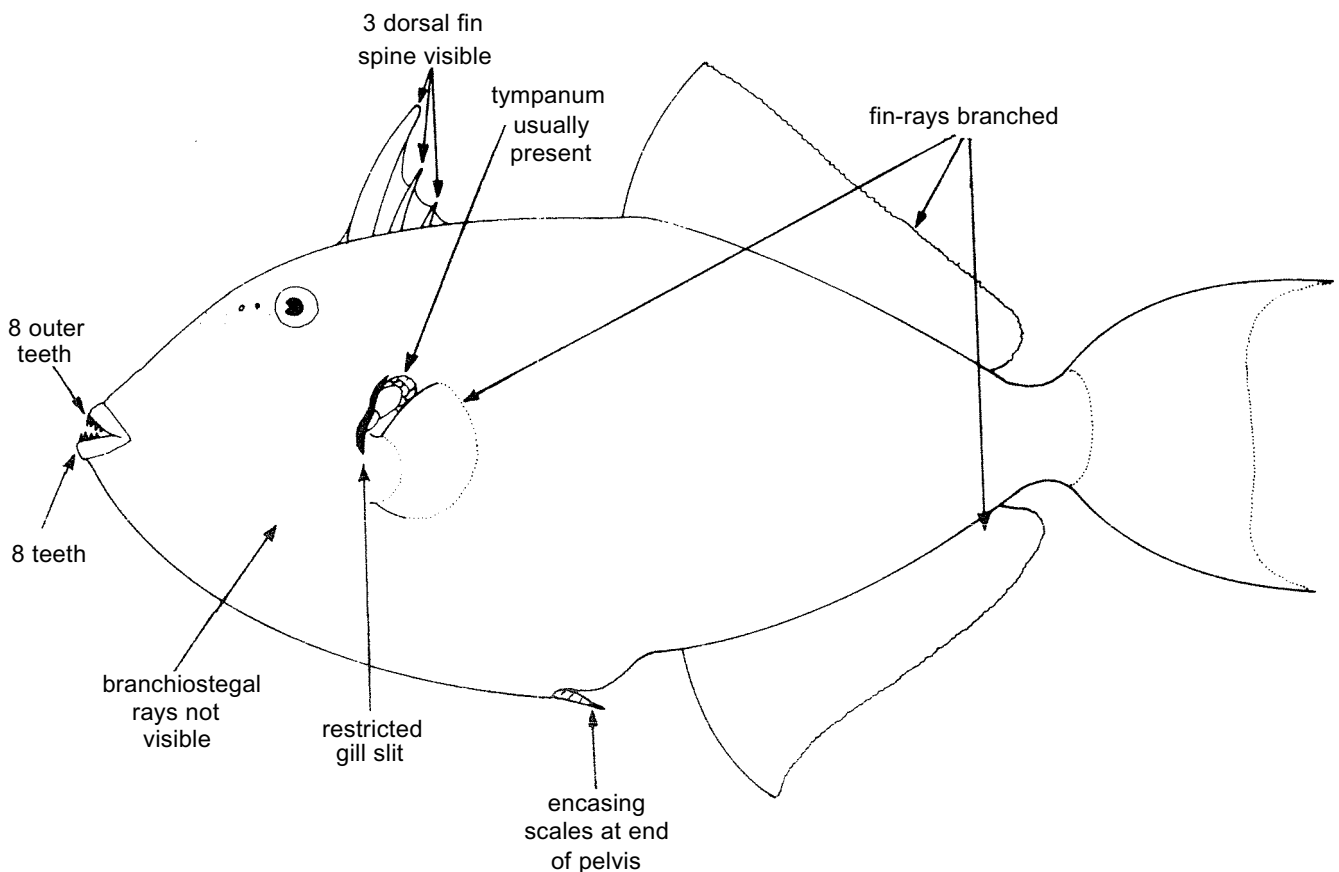
BALISTIDAE

(excluding the Monacanthidae = Aluteridae of some authors)

Triggerfishes and durgons

Small or medium-sized fishes, usually up to 60 cm in length, with deep, moderately compressed bodies encased with very thick, tough skin with large rectilinear scale plates easily discernible as individual units; scales above pectoral fin base usually enlarged and slightly separated, forming a flexible tympanum. Gill opening a relatively short vertical to oblique slit in front of the pectoral fin base, branchiostegal rays hidden beneath the skin; mouth small and usually more or less terminal; teeth heavy, 8 in an outer series in the upper jaw and 8 in the lower jaw. Three dorsal fin spines, the second spine more than one-half the length of the first; the first spine capable of being locked in an upright position of erection by the second; most dorsal, anal and pectoral fin rays branched; pelvic fins and spines rudimentary or absent, represented by a series of 4 pairs of enlarged scales encasing the end of pelvis. Lateral line inconspicuous.

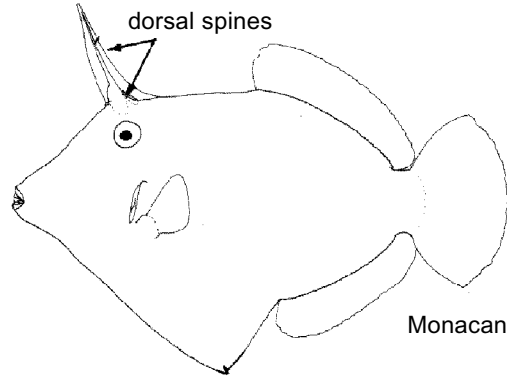
Colour: variable, sometimes black or drab brown, grey or greenish, but often with strikingly marked and vivid patterns.



Triggerfishes are usually solitary, ranging in depth from the coastline to about 90 m, with some species being primarily pelagic in open water and others primarily benthic around rocky and coral reefs. They feed on bottom invertebrates, often hard-shelled species, or zooplankton, with their small mouths typically armed with large and relative heavy incisor-like teeth. Highly valued as food in many handline fisheries, and also taken as bycatch in commercial bottom trawls; on rare occasions the flesh has been considered toxic.

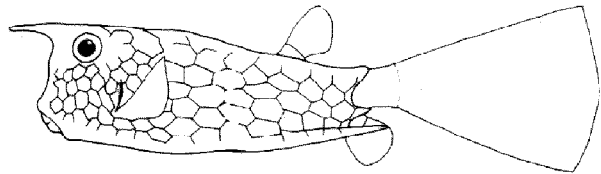
SIMILAR FAMILIES OCCURRING IN THE AREA:

Monacanthidae: two dorsal fin spines, only the first of which is especially large and prominent; body more laterally compressed; fewer and less massive teeth in jaws; scales shagreen-like, with the individual basal plates small and not readily distinguishable from one another to the unaided eye.



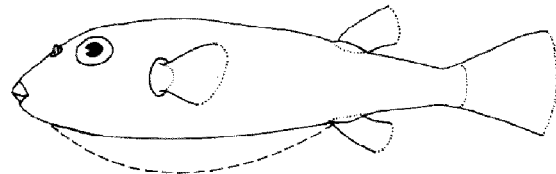
Monacanthidae

Ostraciidae: no spiny dorsal fin; 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.



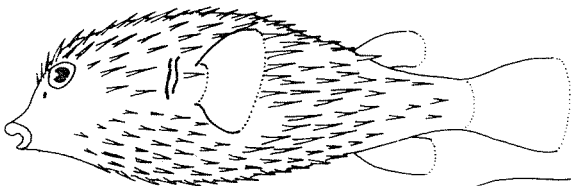
Ostraciidae

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 two equal halves in each jaw; skin either rough with scales modified as prickles and long quill-like spines or scales sometimes absent and the skin smooth.

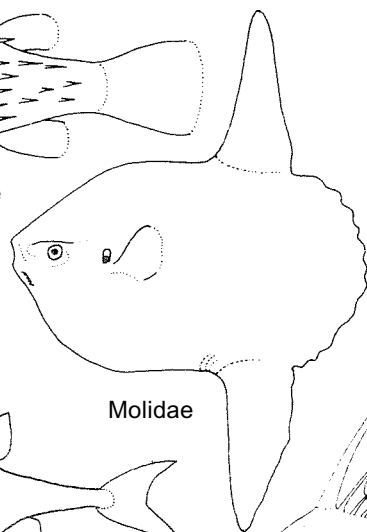


Tetraodontidae

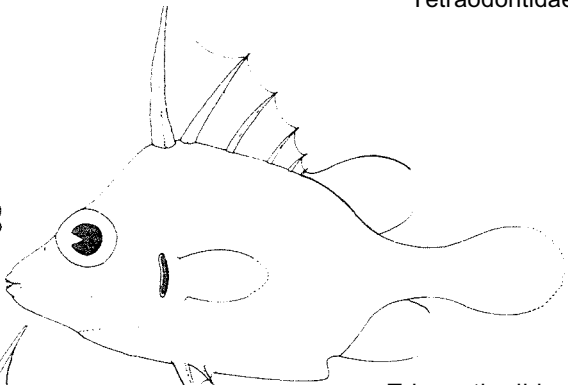
Triacanthidae and Triacanthodidae: dorsal fin spines 2 to 6; a strong pair of pelvic fin spines (rudimentary or absent in Balistidae).



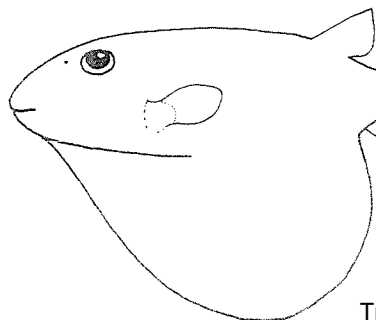
Diodontidae



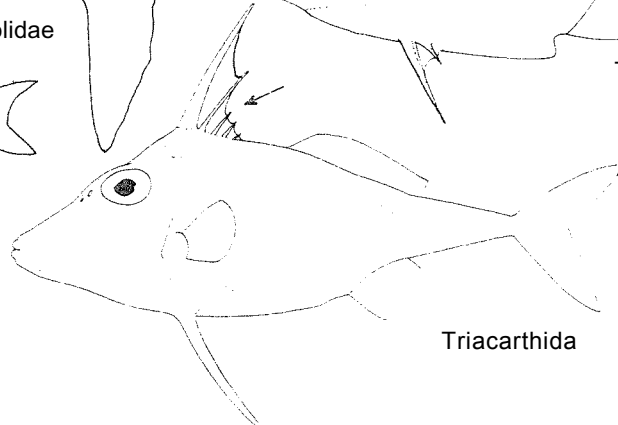
Molidae



Triacanthodidae



Triodontidae



Triacanthida

KEY TO GENERA OCCURRING IN THE AREA:

1a. Scales above pectoral fin base and just behind gill slit much enlarged and partially separated, forming a flexible tympanum (Fig.1)

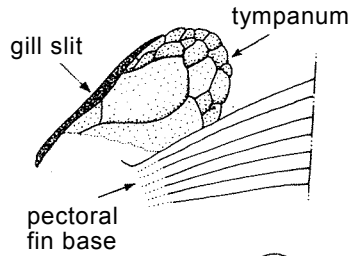


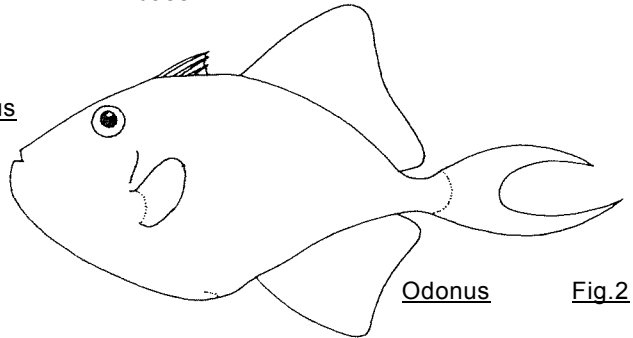
Fig.1

2a. Cheels scaòy

3a. Teeth normally red (Fig.2)Odonus

3b. Teeth never red

4a. A prominent groove on snout before eye



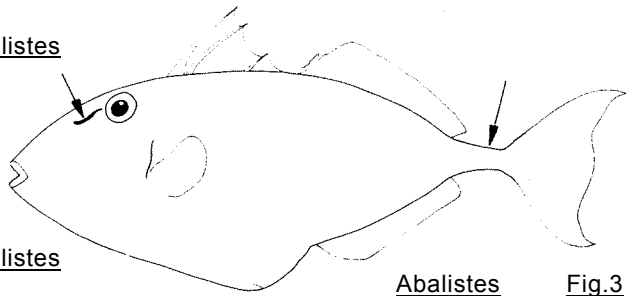
Odonus

Fig.2

5a. Caudal peduncle distinctly depressed (Fig.3) Abalistes

5b. Caudal peduncle not depressed

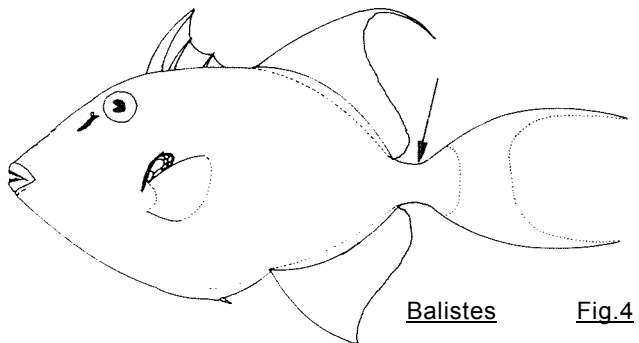
6a. Scales on posterior part of body without keels forming longitudinal ridges (Fig.4) ... Balistes



Abalistes

Fig.3

6b. Scales on posterior part of body with keels a. the centre forming longitudinal ridges, relatively low in juveniles and females, high in adult males (Figs 5,6)



Balistes

Fig.4

7a. Upper and lower profiles of head prominently convex, giving the body a distinctive ovoid shape (Fig.5) Melichthys

7b. Upper and lower profiles of head not prominently convex, either concave, straight or slightly convex

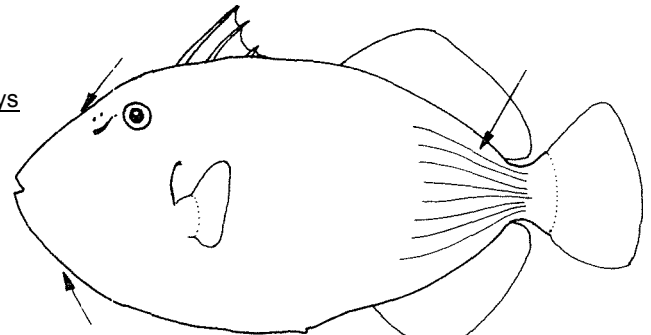
8a. Longitudinal scale ridges extend only a short distance forward of caudal peduncle (Fig.6) Balistoides

8b. Longitudinal scale ridges extend to at least middle of body (Fig.7) Sufflamen

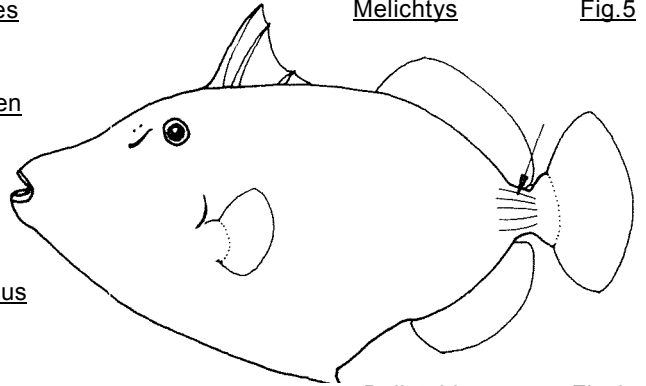
4b. No groove on snout before eye

9a. Third dorsal spine minute (Fig.8) Rhinecanthus

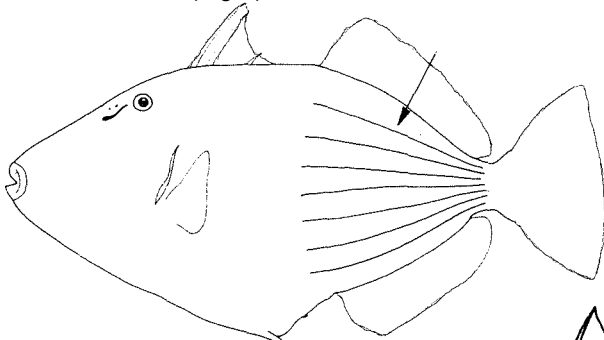
9b. Third dorsal spine moderate (Fig.9) Balistapus



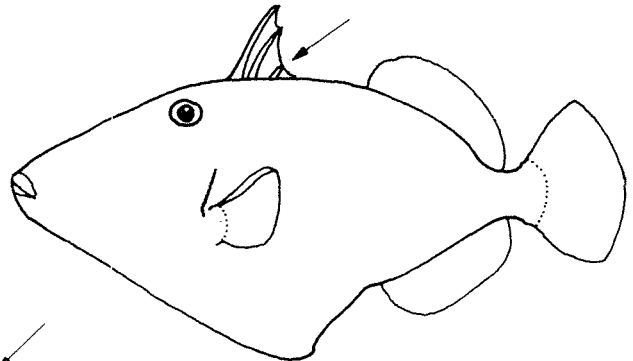
Melichthys Fig.5



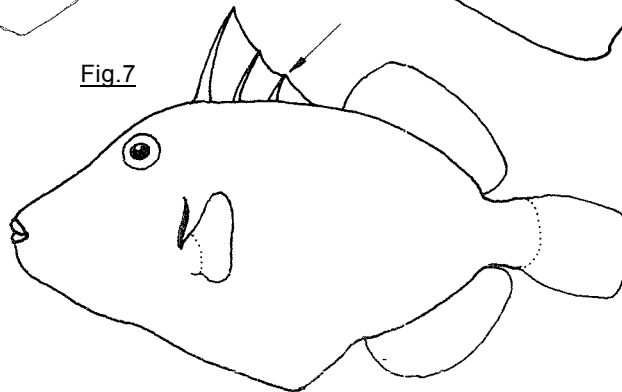
Balistoides Fig.6



Sufflamen Fig.7

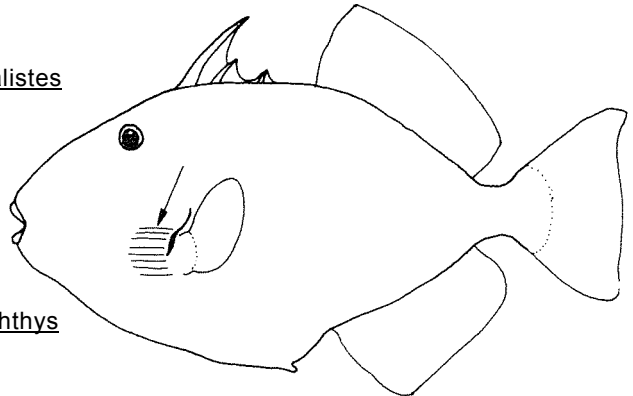


Rhinecanthus Fig.8

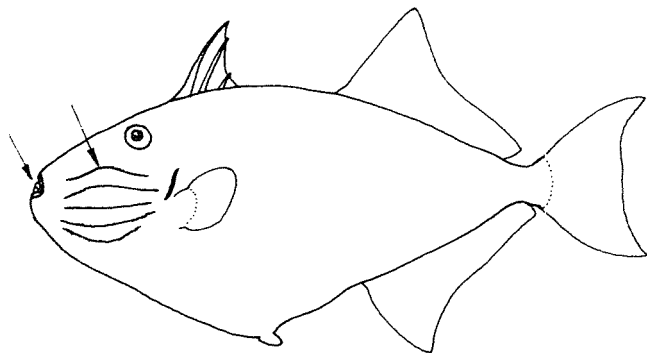


Balistapus Fig.9

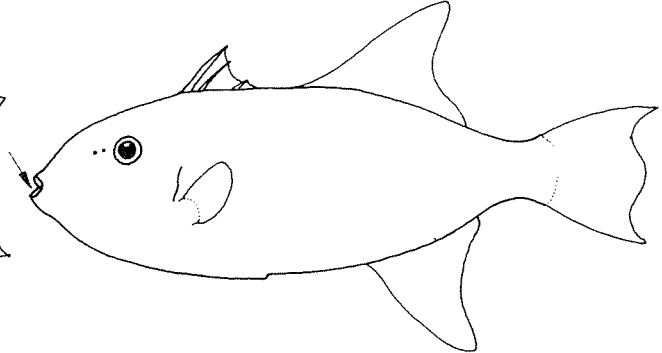
- 2b. Cheeks naked anteriorly, with small scales in separate elevated rows behind (Fig.10).. Pseudobalistes
- 1b. Scales above pectoral-fin base and just behind gill slit not enlarged and not especially well separated, not forming a tympanum
 - 10a. Cheek with prominent naked longitudinal grooves; mouth slightly, but distinctly supraterminal (Fig.11) Xanthichthys
 - 10b. Cheek evenly scaled, without naked grooves; mouth terminal (Fig.12) Canthidermis



Pseudobalistes Fig.10



Xanthichthys Fig.11



Canthidermis Fig.12

LIST OF SPECIES OCCURRING IN THE AREA:

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

Abalistes stellatus (Lacepède, 1798) BALI Abal 1

Balistapus undulatus (Mungo Park, 1797)

Balistes vetula Linnaeus, 1758

Balistooides conspiculum (Bloch & Schneider, 1801)

Balistooides viridescens (Bloch & Schneider, 1801)

Canthidermis rotundatus (Proce, 1822)

Melichthys ringens (Osbeck, 1771)

Melichthys vidus Solander, 1849)

Odonus niger (Rüppell, 1840) BALI Odon 1

Pseudobalistes flavomarginatus (Rüppell, 1828)

Pseudobalistes fuscus Bloch & Schneider, 1801)

Sufflamen bursa (Bloch & Schneider, 1801)

Sufflamen chrysopterus (Bloch & Schneider, 1801)

Sufflamen fraenatus (Bloch & Schneider, 1801) BALI Suff 1

Rhinecanthus aculeatus (Linnaeus, 1758)

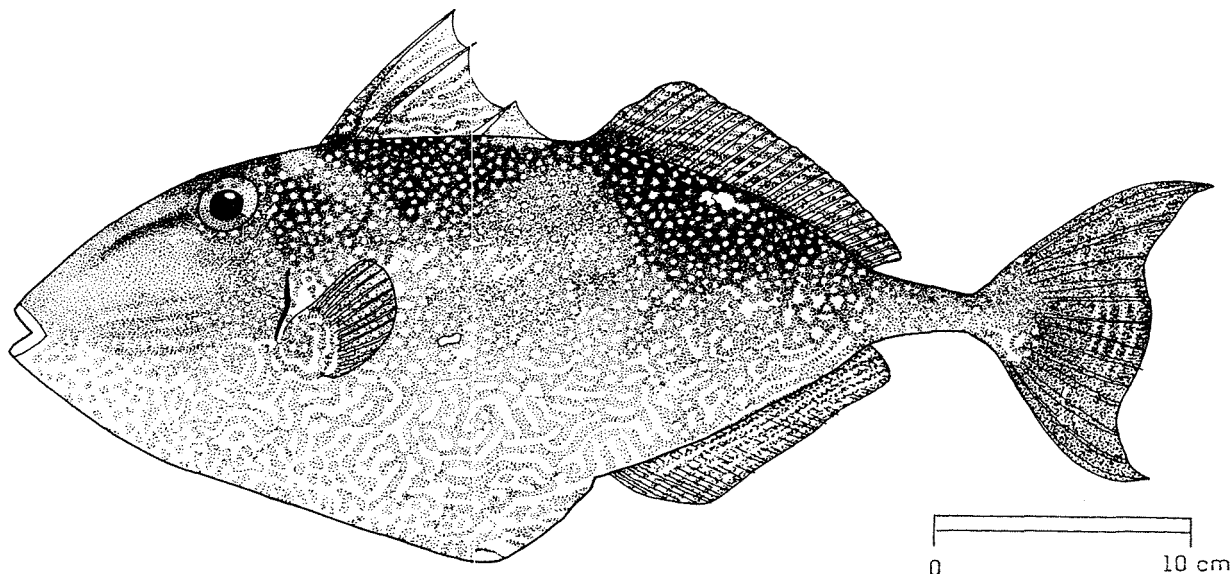
Rhinecanthus cinereus (Bonnaterre, 1788)

Rhinecanthus echarpe (Lacepède, 1798)

Xanthichthys ringens (Linnaeus, 1758)

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: BALISTIDAE

FISHING AREA 51
(W. Indian Ocean)*Abalistes stellatus* (Lacepède, 1798)OTHER SCIENTIFIC NAMES STILL IN USE : *Abalistes stellaris* (Bloch & Schneider, 1801)

VERNACULAR NAMES:

- FAO : En - Starry triggerfish
 Fr - Baliste étoilé
 Sp - Pejepuerco estrellado

NATIONAL:

DISTINCTIVE CHARACTERS:

Body deep and laterally compressed, with the large rectilinear scale plates of the thick skin forming regular rows, and the scales of the cheek in an even, relatively complete covering. Scales enlarged above the pectoral fin base and just behind the gill slit to form a flexible tympanum; scales of posterior body with prominent keels, forming longitudinal ridges. A prominent groove in the skin extending anteriorly from front of eye for a distance of about 1 eye diameter. Mouth terminal; teeth pointed, the central pair in each jaw largest. Three prominent dorsal fin spines, the first capable of being locked erect by the second; caudal fin rays of adults prolonged above and below. Caudal peduncle depressed (width greater than depth).

Colour: grey dashed with olive-green; 3 large white blotches on back, disappearing in large specimens; numerous small blue spots on body and 3 or 4 yellow lines from mouth to pectoral fin base; soft dorsal and anal fins with yellow, slightly oblique stripes; pectoral fins yellow.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Other balistid species: caudal peduncle not depressed; different colour patterns.

SIZE:

Maximum: 60 cm; common to 40 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout tropical and subtropical parts of the area. Also found in most other regions of the Indo-West Pacific.

Found over sand, sponge and weed bottoms to depths of 100 m.

Feeds on benthic animals.

PRESENT FISHING GROUNDS:

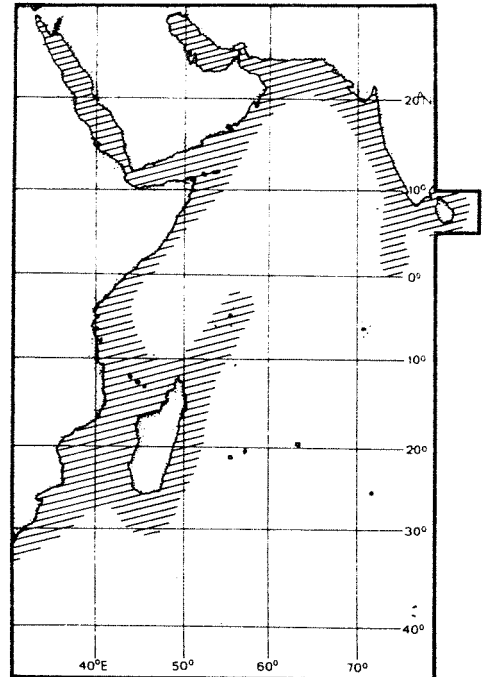
Taken incidentally throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught in bottom trawls.

Marketed fresh and dried salted.

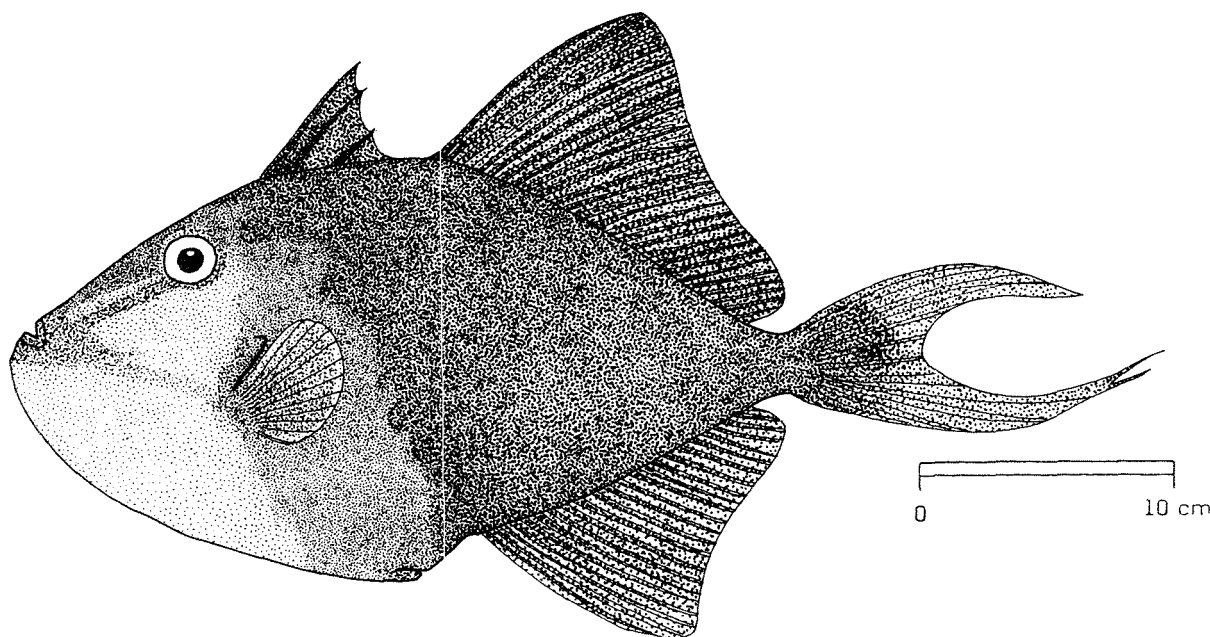


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : BALISTIDAE

FISHING AREA 51
(W. Indian Ocean)*Odonus niger* (Rüppell, 1840)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

- FAO : En - Red-toothed triggerfish
 Fr - Baliste dents rouges
 Sp - Pejepuerco dentirojo

NATIONAL:

DISTINCTIVE CHARACTERS:

Body deep and laterally compressed, with the large rectilinear scale plates of the thick skin forming regular rows, and the scales of the cheek in an even, relatively complete covering. Scales enlarged above the pectoral fin base and just behind the gill slit to form a flexible tympanum; scales of posterior body with low keels, forming longitudinal ridges. A prominent groove in the skin extending anteriorly from front of eye for a distance equal to, or slightly greater than eye diameter. Mouth supraterminal; 2 prominent fang-like teeth in upper jaw. Three prominent dorsal fin spines, the first capable of being locked erect by the second. Caudal fin rays of adults greatly prolonged above and below; anterior rays of both soft dorsal and anal fins elevated, the margins prominently concave in profile. Caudal peduncle almost round in cross section, slightly compressed.

Colour: ground colour of body and fins blackish brown, usually with a darker stripe from mouth to pectoral fin base; posterior margin of caudal fin with a lunar-shaped white bar; teeth red.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Other balistid species: teeth not red; no prominent fang-like teeth in upper jaw; different colour pattern.

SIZE:

Maximum: 60 cm; common to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, present along the East African coast, in the Red Sea, around Madagascar, Seychelles, Réunion, Mauritius, Laccadives and off south India and Sri Lanka. Also occurs in most other regions of the Indo-West Pacific.

Found in shallow waters around reefs.

Feeds on benthic animals.

PRESENT FISHING GROUNDS:

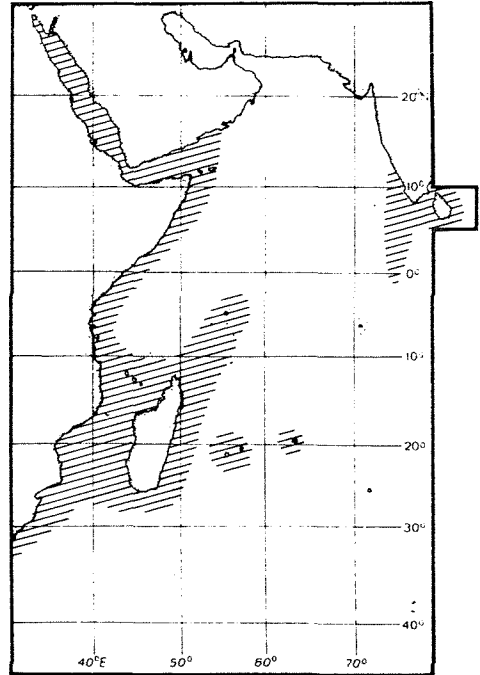
Taken incidentally throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

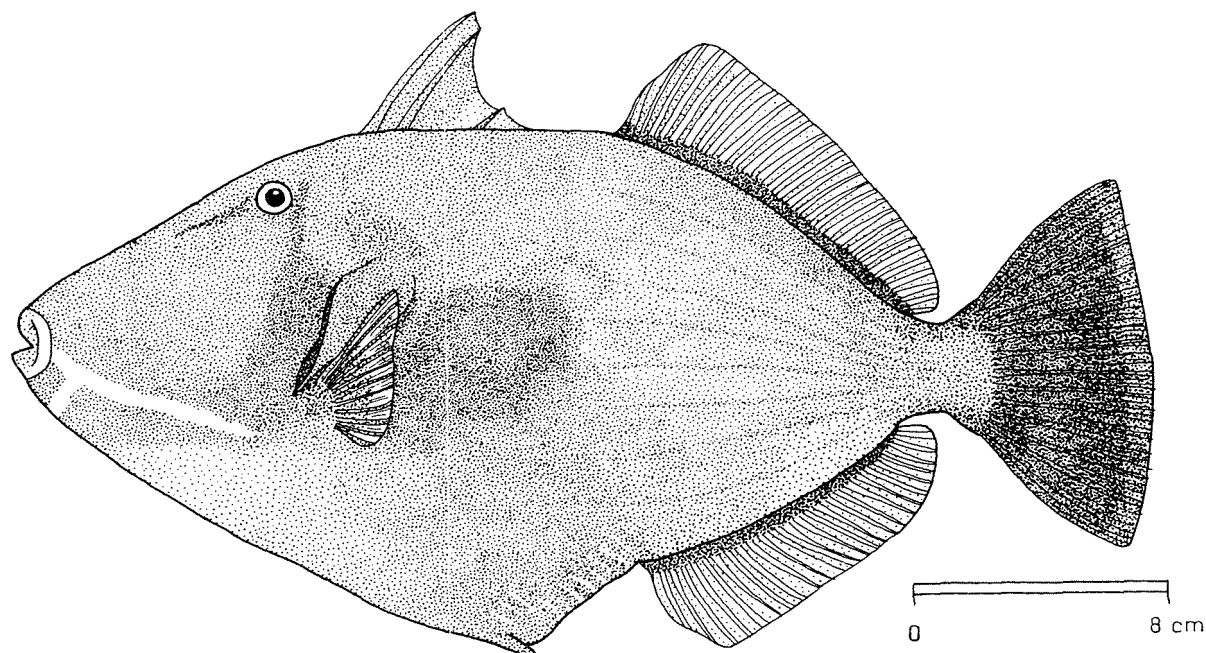
Caught by gillnets, bottom trawls and on lines.

Marketed fresh and dried salted.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: BALISTIDAE

FISHING AREA 51
(W. Indian Ocean)Sufflamen fraenatus (Bloch & Schneider, 1801)OTHER SCIENTIFIC NAMES STILL IN USE: Sufflamen capistratus (Shaw, 1804)

VERNACULAR NAMES:

FAO : En - Masked triggerfish
Fr - Baliste masque
Sp - Calafate mascarilla

NATIONAL:

DISTINCTIVE CHARACTERS:

Body deep and laterally compressed, with the large rectilinear scale plates of the thick skin forming regular rows, and the scales of the cheek in an even, relatively complete covering. Scales enlarged above the pectoral fin base and just behind the gill slit to form a flexible tympanum; scales of posterior body with keels, forming longitudinal ridges which extend from caudal peduncle to below anterior half of soft dorsal fin. A shallow groove in the skin extending anteriorly from front border of eye for a distance of about half to one eye diameter. Mouth terminal; teeth pointed, the central pair in each jaw largest. Three dorsal fin spines, the third small but readily apparent, and the first spine capable of being locked erect by the second. Caudal peduncle compressed.

Colour: head and body yellowish-brown to dark brown; a prominent yellow stripe encircling lower jaw and meeting just behind the mouth; a further yellow stripe running from mouth to just below and anterior to pectoral fin base, occasionally the yellow coloration being overlaid with red (stripes absent in juveniles); caudal fin dark brown, soft dorsal and anal fins yellowish brown to dark brown.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA :

Odonus niger: teeth red.

Abalistes stellatus: caudal peduncle depressed.

Balistes vetula: scales on posterior part of body without keels forming longitudinal ridges; upper and lower rays of caudal fin greatly prolonged.

Melichthys species: upper and lower profiles of head prominently convex (snout profile straight to slightly concave or convex in Sufflamen capistratus); teeth short with truncate cutting edges.

Balistoides species: longitudinal scale ridges extending only a short distance forward of caudal peduncle.

Rhinecanthus species and Balistapus undulatus: no groove on snout before eye.

Pseudobalistes species: cheeks naked anteriorly.

Xanthichtis ringens and Canthidermis rotundatus: no flexible tympanum above pectoral fin base.

SIZE:

Maximum: 50 cm; common to 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, known from East Africa and the Red Sea, Madagascar, Seychelles, Laccadives, south India and Sri Lanka. Also found in most other regions of the Indo-West Pacific.

Found in waters near coral reefs as well as over flat, sponge-covered bottoms at depths to 50 m.

Feeds on benthic animals.

PRESENT FISHING GROUNDS :

No data available.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught in bottom trawls and on lines.

Marketed fresh and dried salted.

