

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

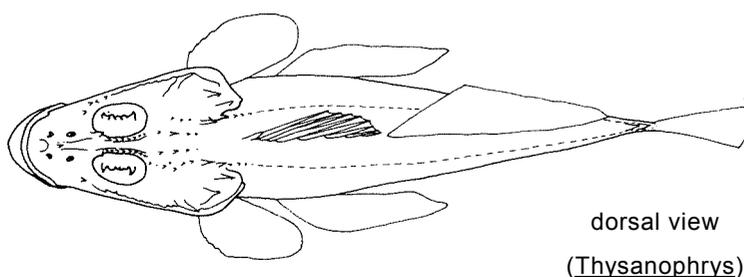
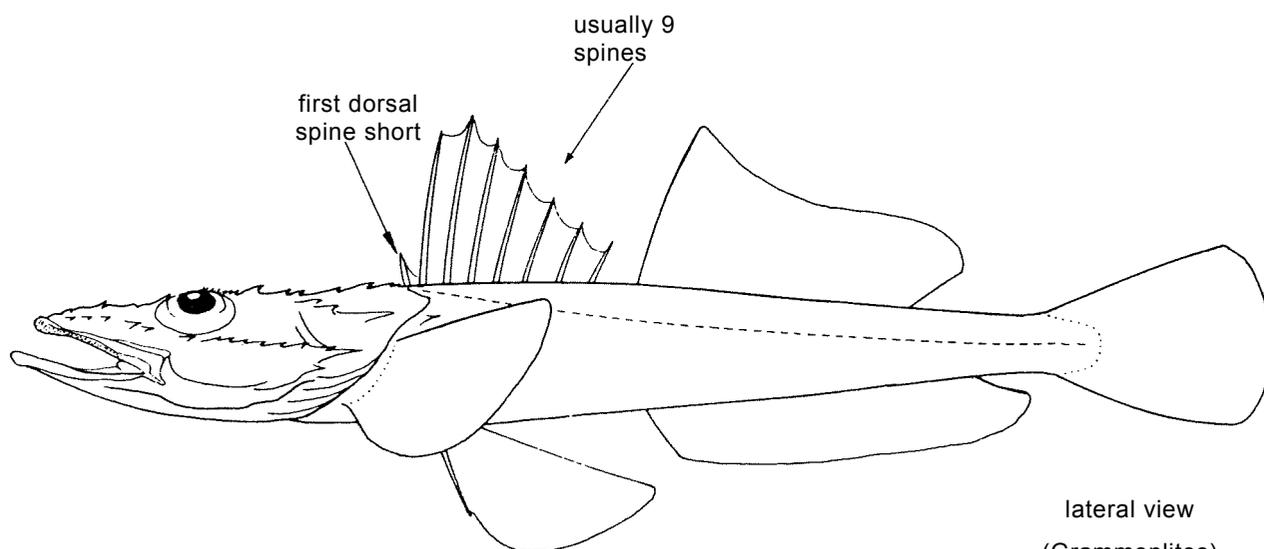
PLATYCEPHALIDAE

Spiny flatheads

Elongate fishes with head moderately to strongly depressed. Mouth large; lower jaw longer than upper; fine teeth on jaws, vomer and palatines roof of mouth in most; canines present in a few species; bony ridges of head usually bearing spines or serrations; gillrakers few, short or mere stubs; gill membranes free from isthmus; branchiostegal rays 7. Two dorsal fins, well separated; spinous dorsal with 8 to 10 spines (usually 9), the first spine short and scarcely connected to the second. Soft dorsal and anal fins with 10 to 15 rays; pelvic fins thoracic in position, set far apart toward sides of body, with 1 spine and 5 soft rays. Vertebrae 27 (usually 11 plus 16 or 12 plus 15). Lateral line complete. Scales ctenoid, usually embedded on head and breast; anterior pored scales of lateral line often bearing spines, all pored scales with a spine in some species.

Colour: dark above, pale below; the dark colours with various shades of brown, grey or black; brighter hues of reddish, purplish or greenish in some.

Benthic fishes found on mud or sand bottoms of shelf areas at depths of about 75 m or less; a second group of species are associated with rocky shores or coral reefs. Most species are good foodfishes but are of secondary importance in the commercial trawl fisheries.

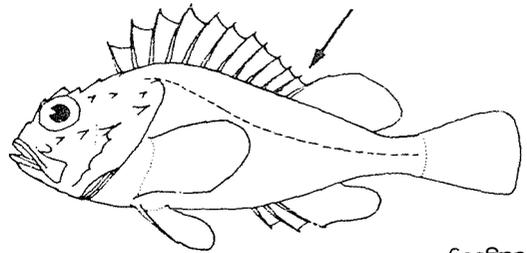


SIMILAR FAMILIES OCCURRING IN THE AREA:

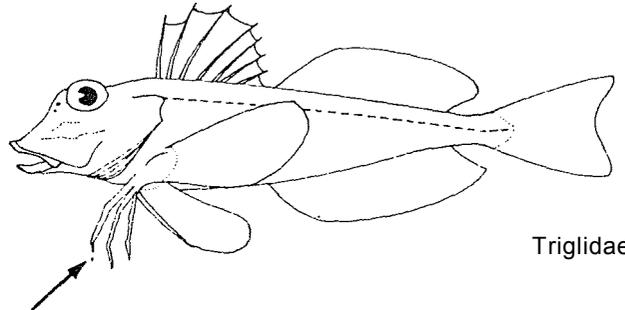
Family Scorpaenidae (Scorpionfishes): dorsal fin continuous and pelvic fins set closer together.

Family Triglidae (Searobins): lower 3 pectoral fin rays free from each other.

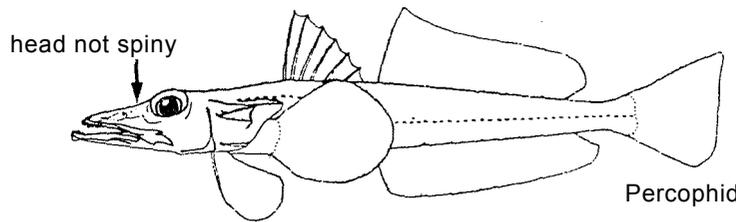
Family Percophidae (Duckbills): no spines on head or on the lateral line scales; lateral line low on body; pelvic fins set closer together.



Scorpaenidae



Triglidae



Percophidae

KEY TO GENERA OCCURRING IN THE AREA:

1a. Pored scales in lateral series about 65 or more, vomerine teeth (on roof of mouth) in 1 transverse patch (Fig.1a) Platycephalus

1b. Pored scales in lateral series about 60 or fewer, vomerine teeth in 2 separate patches (Fig.1b)

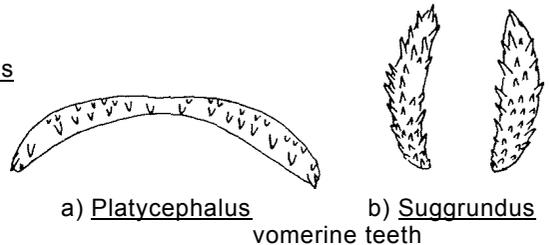
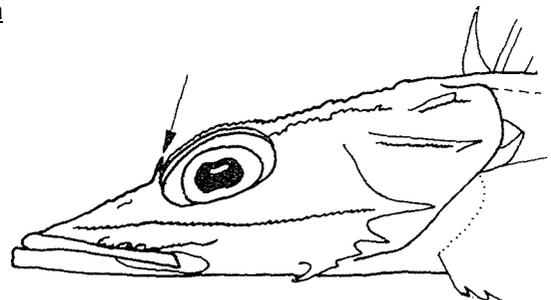


Fig.1

2a. Pored scales in lateral series about 40 or fewer Onigocia

2b. Pored scales in lateral series from 48 to 60

3a. Bony ridges above and below eye either with small spines or finely serrated (Figs 2,3)

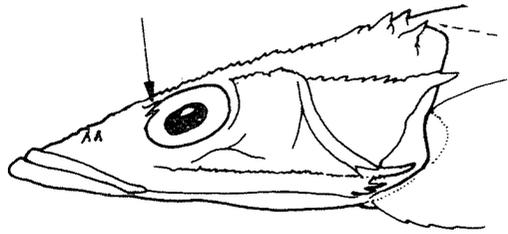


Rogadius

Fig.2

4a. Preocular spine single (Fig.2); interorbital space narrow (4.5 times or more in eye) Rogadius

4b. Two or more preocular spines (Fig.3); inter-orbital space broader (usually less than 4.5 times in eye) Sorsogona



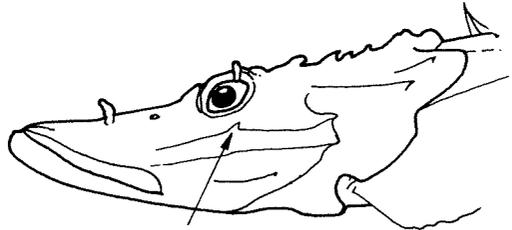
Sorsogona Fig.3

3b. Bony ridges above and below eye bearing larger spines (Figs 4,5,6)

5a. All or most pored scales of lateral series bearing a backward directed spine Grammoplites

5b. Pored scales of lateral series never bearing spines on posterior half of body

6a. Bony ridge crossing cheek below eye with a single spine under rear of eye (Fig.4) Papilloculiceps

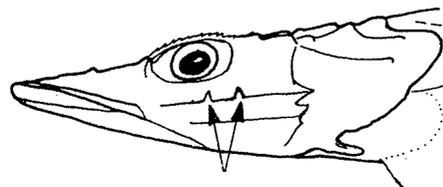


Papilloculiceps Fig.4

6b. Bony ridge crossing cheek below eye with 2 or more spines

7a. Number of scale rows slanting downward and backward above lateral line greater (by 4 to 23 scale rows) than number of pored lateral line scales Cociella

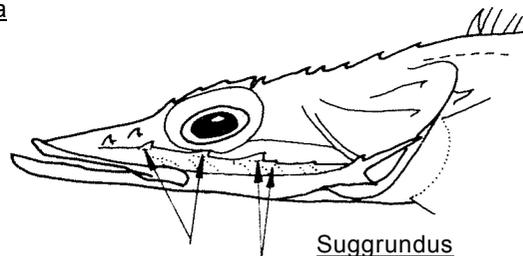
7b. Number of scale rows slanting downward and backward above lateral line about the same (may differ by 1 or 2) as the number of pored lateral line scales



Inegocia Fig.5

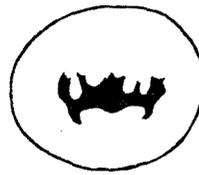
8a. Bony ridge crossing cheek below eye with 2 spines, the first below middle of eye, the second below rear margin of eye (Fig.5) Inegocia

8b. Bony ridge crossing cheek below eye usually with 4 or more spines (Fig.6)

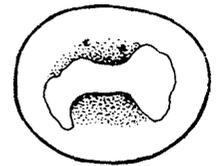


Suggrundus Fig.6

- 9a. Gillrakers of first arch usually 1 plus 4 to 6; iris lappet of eye with finger-like or branched lobes (Fig.7a) Thysanophrys
- 9b. Gillrakers of first arch usually 1 plus 6 to 7 or 2 plus 7 to 9; iris lappet lacking lobes (Fig.7b) Suggrundus



a) ThysanUhrys



b) Suggrundus

Fig.7

LIST OF SPECIES OCCURRING IN THE AREA*:

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

| | |
|--|---------------|
| <u>Cociella crocodila</u> (Tilesius, 1812) | PLATYC Coc 1 |
| <u>Grammoplites portuguesus</u> (Smith, 1953) | |
| <u>Grammoplites scaber</u> (Linnaeus, 1758) | |
| <u>Grammoplites suppositus</u> (Troschel, 1840) | PLATYC Gram 2 |
| <u>Inegocia Lapanica</u> (Tilesius, 1812) | PLATYC Ineg 1 |
| <u>Onigocia macrolepis</u> (Bleeker, 1854) | |
| <u>Onigocia oligolepis</u> (Regan, 1908) | |
| <u>Onigocia pedimacula</u> (Regan, 1904) | |
| <u>Papilloculiceps longiceps</u> (Cuvier, in Cuv. & Val., 1829) | PLATYC Pap 1 |
| <u>Platycephalus indicus</u> (Linnaeus, 1758) | PLATYC Plat 1 |
| <u>Rogadius armer</u> (Cuvier, in Cuv. & Val., 1829) | PLATYC Rog 1 |
| <u>Rogadius serratus</u> (Cuvier, in Cuv. & Val., 1829) | |
| <u>Sorsogona nigripinna</u> (Regan, 1905) | |
| <u>Sorsogona prionota</u> (Sauvage, 1873) | |
| <u>Sorsogona tuberculata</u> (Cuvier, in Cuv. & Val., 1829) | PLATYC Sor 1 |
| <u>Suggrundus cooperi</u> (Regan, 1908) | |
| <u>Suggrundus macracanthus</u> (Bleeker, 1869) | |
| <u>Suggrundus rodricensis</u> (Cuvier, in Cuv. & Val., 1829) | PLATYC Sug 1 |
| <u>Thysanophrys armatus</u> (Fowler, 1938) | |
| <u>Thysanophrys arenicola</u> Schultz, 1966 | |
| <u>Thysanophrys carbunculus</u> (Valenciennes, in Cuv. & Val., 1833) | |
| <u>Thysanophrys celebicus</u> (Bleeker, 1854) | |
| <u>Thysanophrys chii-tonae</u> Schultz, 1966 | PLATYC Thys 1 |
| <u>Thysanophrys otaitensis</u> (Cuvier, in Cuv. & Val., 1829) | |

Prepared by L.W. Knapp, Oceanographic Sorting Center, National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA

*Several undescribed species known

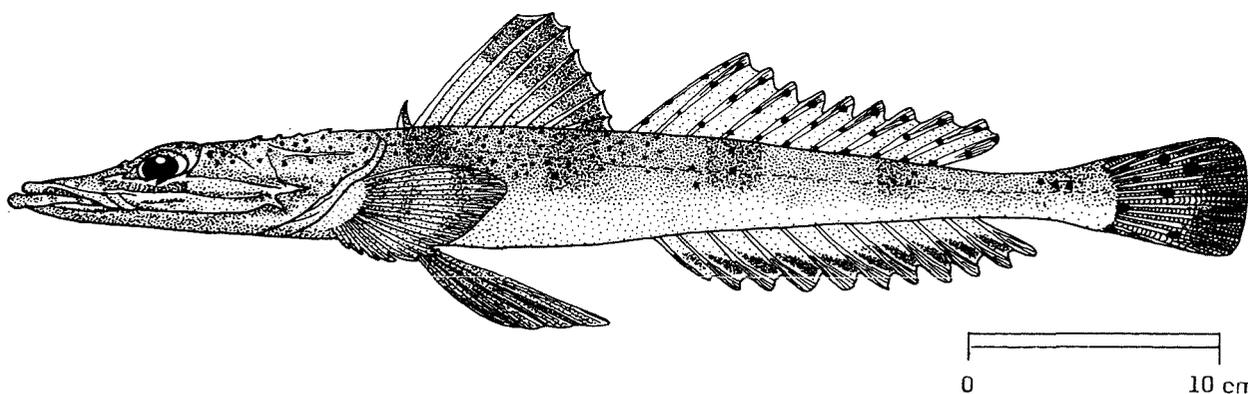
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PLATYCEPHALIDAE

FISHING AREA 51
(W. Indian Ocean)

Cociella crocodila (Tilesius, 1812)

OTHER SCIENTIFIC NAMES STILL IN USE: Platycephalus crocodilus Tilesius, 1812
Platycephalus punctatus Cuvier, in Cuv. & Val., 1829



VERNACULAR NAMES:

- FAO : En - Crocodile flathead
- Fr - Platycéphale crocodile
- Sp - Chato cocodrilo

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate with head strongly depressed. Top of head with spines and bony ridges; bony ridge crossing cheek below eye with 3 spines, one in front of eye, the second under middle of eye, a third under rear margin of eye; preopercular spines usually 2, the upper about 3 times longer than the lower; gillrakers on first arch 1 plus 4 or 5; interopercular membrane with a small, blunt flap. Second dorsal and anal fins with 11 soft rays; pectoral fins with 19 to 22 rays, usually 20 or 21. Pored lateral line scales 52 to 55, usually 53 or 54, anterior 2 to 16 bearing a small spine. From 59 to 76 scale rows slanting downward and backward above lateral line.

Colour: small, dark spots on top of head and back; 4 or 5 brown bands crossing the back in some individuals, vague or absent in others. Spinous dorsal and caudal fins with a dusky band near margin; caudal fin may have some dark spots toward base; soft dorsal fin with small dark spots; pectoral and pelvic fins more or less dusky.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Inegocia japonica: lacks dark spots on body; second dorsal and anal fins usually with 12 rays (11 in C. crocodila).

Grammoplites virtually all pored scales of lateral line bearing a spine (anterior 2 to 16 with spines in species: C. crocodila); all except G. scaber without black spots on body.

Other species of Platycephalidae: bony ridge crossing cheek below eye with a different number of spines or serrations (3 spines in C. crocodila).

SIZE :

Maximum: about 50 cm; common to 40 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

From Durban north along the African coast, through the Red Sea, and along the coasts of Pakistan, India and Sri Lanka. Also found off Thailand, Japan and Australia.

A benthic fish found on sand or mud bottoms from near shore out to about 100 m depth on the continental shelf.

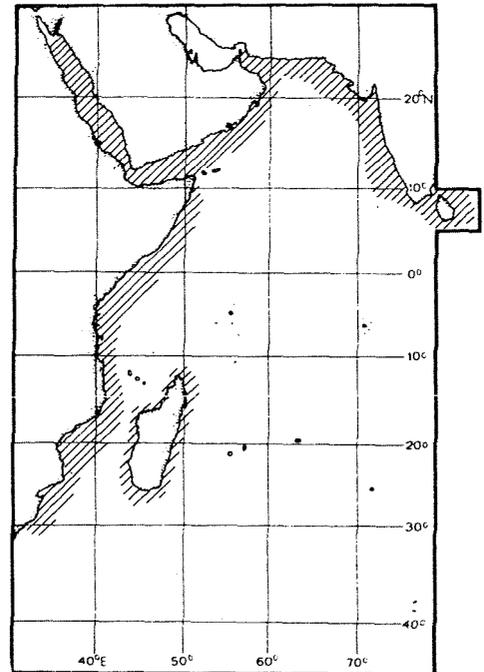
PRESENT FISHING GROUNDS:

Taken in small numbers throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

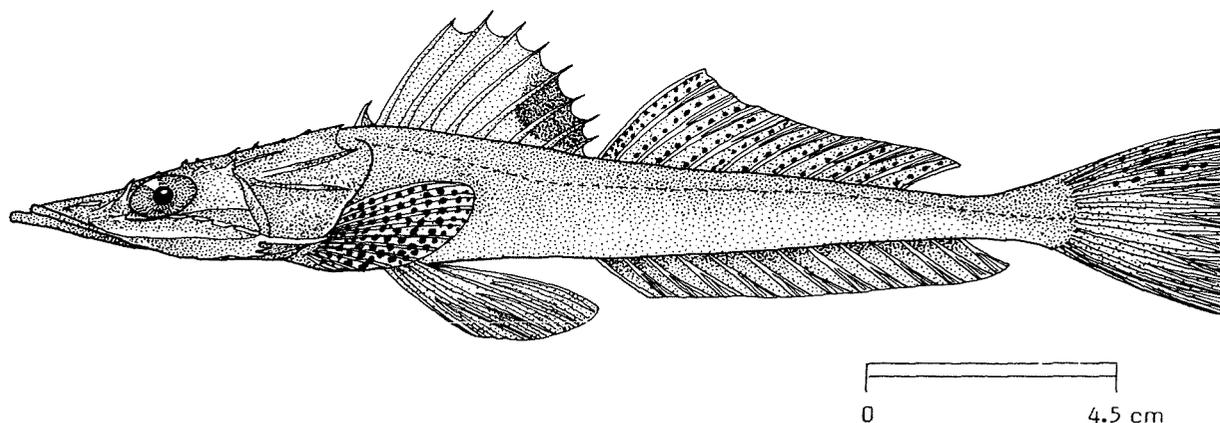
Separate statistics are not reported for this species.

Caught with bottom trawls.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PLATYCEPHALIDAE

FISHING AREA 51
(W. Indian Ocean)Grammoplites suppositus (Troschel, 1840)OTHER SCIENTIFIC NAMES STILL IN USE : Platycephalus maculipinna Regan, 1905

VERNACULAR NAMES:

FAO : En - Spotfin flathead
 Fr - Platycéphale épée
 Sp - Chato espadachfri

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate with head strongly depressed. Top of head with strong spines and bony ridges; preopercular spines usually 3; the lower two small, the upper long, reaching beyond margin of opercular membrane; gillrakers on first arch 1 plus 8; margin of interopercular membrane entire. Second dorsal fin with 12 soft rays; anal fin usually with 13 rays; pectoral rays 21 to 23, usually 22 or 23. Pored lateral line scales 51 to 55, usually 53; all bearing spines except for an occasional few on the posterior part of the body. Scale rows slanting downward and backward above lateral line about the same as the number of pored lateral line scales.

Colour: brownish above, whitish below, fins more or less dusky; first dorsal fin with a large black blotch posteriorly; upper pectoral rays, upper caudal rays and second dorsal rays with dark spots.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Grammoplites portuguesus: usually 12 anal fin rays (13 in G. suppositus); gillrakers usually 2 plus 9; upper preopercular spine not reaching margin of opercular membrane; first dorsal fin with a dark band along margin. Known only from off South Africa and Mozambique.

Grammoplites scaber: usually 12 anal fin rays; gillrakers 1 plus 5 or 6 (1 plus 8 in G. suppositus); upper preopercular spine not reaching margin of opercular membrane, first dorsal fin with a marginal dark band. Found in the area from Karachi to Sri Lanka.

Other genera of Platycephalidae: pored lateral line scales with spines only on anterior part of body.

SIZE:

Maximum: about 25 cm; common to 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

From the Red Sea and the "Gulf" to Sri Lanka.

A benthic fish found on sand or mud bottoms of the continental shelf at depths from 45 to 94 m.

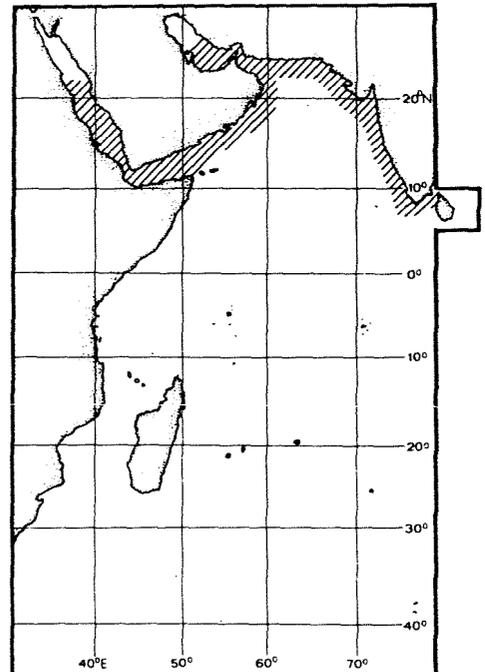
PRESENT FISHING GROUNDS:

Taken in trawl fisheries throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

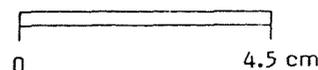
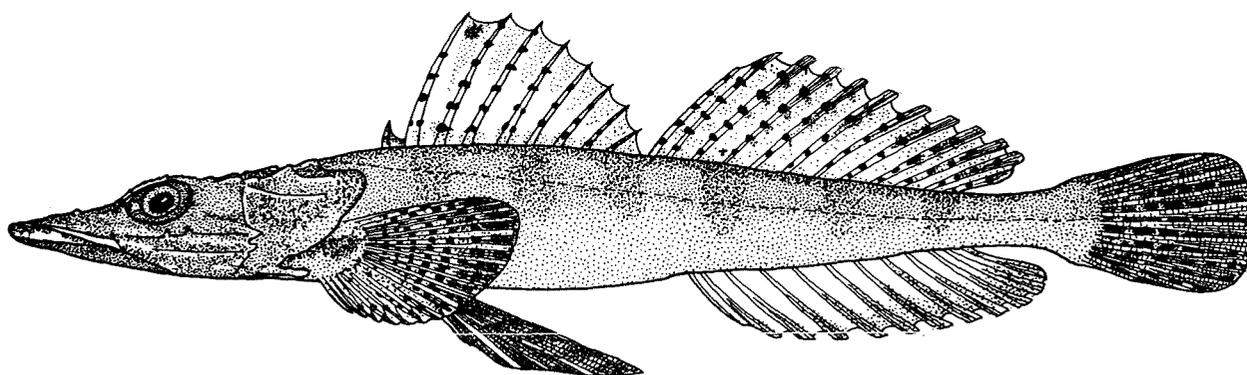
Separate statistics are not reported for this species.

Caught with bottom trawls.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PLATYCEPHALIDAE

FISHING AREA 51
(W. Indian Ocean)*Inegocia japonica* (Tilesius, 1812)OTHER SCIENTIFIC NAMES STILL IN USE: *Suggrundus isacanthus* (Cuvier, in Cuv. & Val., 1829)

VERNACULAR NAMES:

FAO: En - Japanese flathead
Fr - Platycéphalejaponais
Sp - Chato japones

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate with head moderately depressed. Head with bony ridges bearing spines; bony ridge crossing cheek below eye with 2 spines, one below middle of eye, the second below rear margin of eye; preopercular spines 2 or 3, the upper only slightly longer than the next; gillrakers on first arch 1 plus 4 or 5; interopercular membrane with a small, finger-like lobe. Second dorsal and anal fins usually with 12 rays; pectoral rays 19 to 22, usually 20. Pored lateral line scales 51 to 54, usually 52 or 53; anterior 4 to 16 scales bearing a small spine. Scale rows slanting downward and backward above lateral line about the same number as the pored lateral line scales.

Colour: brownish above, pale below; back crossed by 4 to 6 vague dark bands. Caudal fin with bold brown spots; smaller brown spots present on the dorsal and pectoral fins.

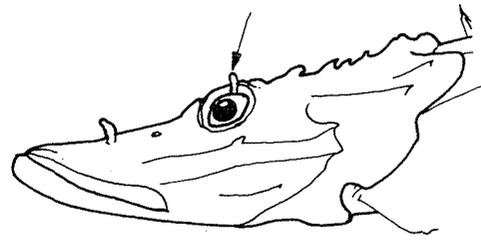
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Grammoplites species: virtually every pored scale of lateral series bearing a strong spine (anterior 4 to 16 pored scales with a spine in Inegocia japonica).

Papilloculiceps longiceps: bony ridge crossing cheek beneath eye with a single spine below rear of eye (2 spines on ridge in I. japonica); a prominent papilla on upper surface of eye (lacking in I. japonica).

Platycephalus indicus: vomerine teeth in a single transverse patch (2 separate patches in I. japonica).

Other genera of Platycephalidae: bony ridge crossing cheek below eye with 3 or more spines or serrations (2 spines present in I. japonica).



Papilloculiceps

SIZE:

Maximum: about 23 cm; common to 18 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR

Within the area, only known from Sri Lanka. Also found from the Gulf of Mannar to Japan, Indonesia, the Philippines and Australia.

A benthic fish found on sand or mud bottoms of the continental shelf at depths from 7 to 34 m.

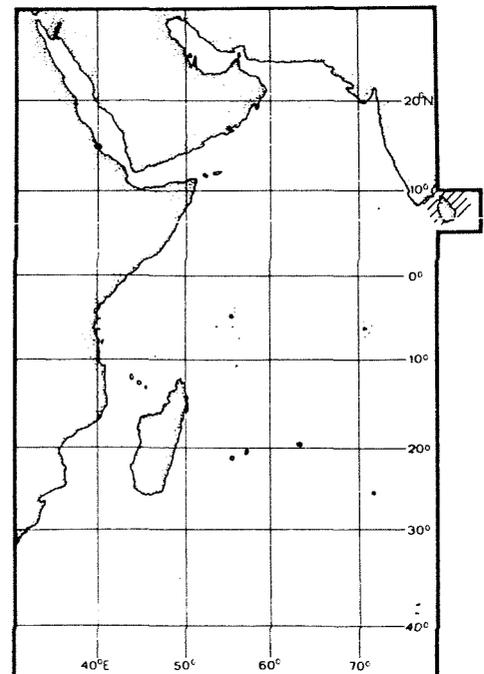
PRESENT FISHING GROUNDS:

Taken in trawl fisheries throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with bottom trawls.

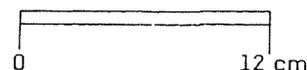
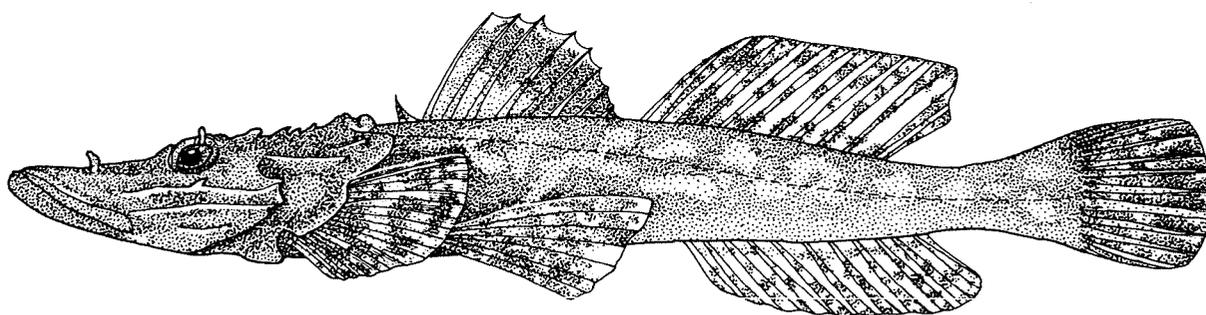


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: PLATYCEPHALIDAE

FISHING AREA 51
(W. Indian Ocean)Papilloculiceps longiceps (Cuvier, in Cuv. & Val., 1829)

OTHER SCIENTIFIC NAMES STILL IN USE:

Platycephalus longiceps Cuvier, in Cuv. & Val., 1829Platycephalus tentaculatus Rüppell, 1835Platycephalus grandidieri Sauvage, 1873

VERNACULAR NAMES:

FAO : En - Tentacled flathead
 Fr - Platycéphale tentaculé
 Sp - Chato cirroso

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate with head strongly depressed. Snout long, greatest diameter of orbit going into distance from anterior margin of orbit to tip of lower jaw about 2.5 to 3 times; a prominent papilla present on upper surface of eye; bony ridges of head bearing spines; bony ridge crossing cheek below eye with a single spine under rear margin of eye; preopercular spines 2, nearly equal in length, the lower much broader than the upper; gillrakers on first arch 1 plus 4 or 5 (usually 5); interopercular membrane with a large, blunt lobe. Second dorsal and anal fins with 11 soft rays; pectoral fins with 19 to 22 rays, usually 21. Pored lateral line scales 51 to 56, usually 53 or 54, anterior 1 or 2 scales with a small spine. From 54 to 64 scale rows slanting downward and backward above lateral line.

Colour: body brownish to greenish above, pale below. Caudal fin with 3 or 4 vertical dark bands; other fins with prominent dark blotches.

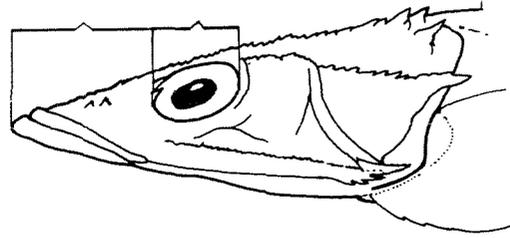
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Onigocia species: pored scales in lateral series about 40 or fewer (50 or more in Papilloculiceps longiceps).

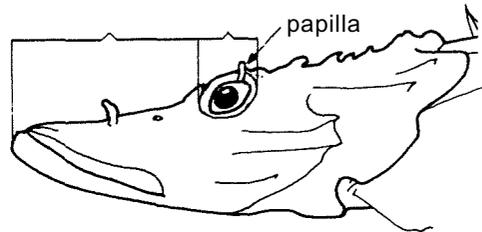
Sorsogona species: lack the broad lobe projecting from margin of interopercular membrane (present in P. longiceps); greatest diameter of eye less than 2 times into distance from anterior margin of orbit to tip of lower jaw (2.5 to 3 times in P. longiceps).

Thysonophrys species: bony ridge crossing cheek beneath eye with 2 or more spines (one spine in P. longiceps).

Other genera of Platycephalidae: lack papilla on upper surface of eye.



Sorsogona



P. longiceps

SIZE:

Maximum: about 70 cm; common to 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

From Durban to Mozambique, Madagascar, Kenya, Gulf of Aden, and through the Red Sea to the Gulf of Aqaba.

A benthic fish usually on sand bottoms in the vicinity of coral reefs at depths from 1 to 15 m.

PRESENT FISHING GROUNDS:

Taken in small numbers throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught primarily by hook and line and by spear fishermen.

