

## FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51  
(W. Indian Ocean)

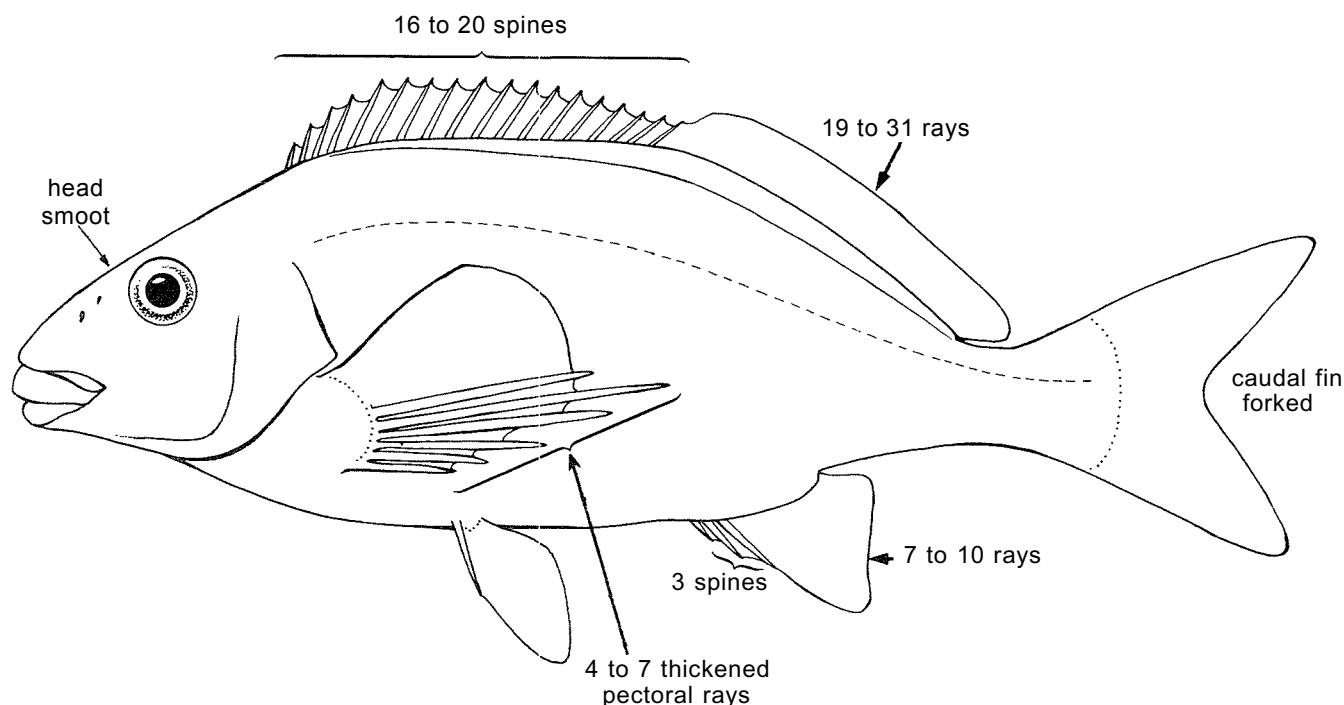
## CHEILODACTYLIDAE

Fingerfins, morwongs

Perch-like fishes, body oblong, compressed. Head smooth, mouth protractile, terminal to subterminal, small, adults with thick lips; maxilla exposed, no supramaxilla; teeth small, villiform, in several rows anteriorly in jaws, none on palatines or vomer (roof of mouth); preopercle not serrated; opercle without spines; gills 4, a slit behind the 4th, pseudobranchiae present; gillrakers moderately long. A single dorsal fin with 16 to 20 well developed heteracanth spines and 19 to 31 soft rays; a scaly sheath present along base of unpaired fins; lower 4 to 7 pectoral fin rays simple, thickened and elongated in adults; anal fin with 2 well developed spines and an additional slender spine difficult to detect in juveniles as it is adnate to the first soft ray; anal soft rays 7 to 10; caudal fin moderately forked.

Colour: mostly red and brown, either uniform, or divided horizontally into 2 colours or with dark crossbars.

Small to medium-sized fishes (*C. grandis* attains about 1 m total length) inhabiting pools, subtidal and deeper waters mainly near rocks. The larger species., used as food, are taken mainly by spears, trawl or line boats, but are caught too seldom to be of commercial importance.

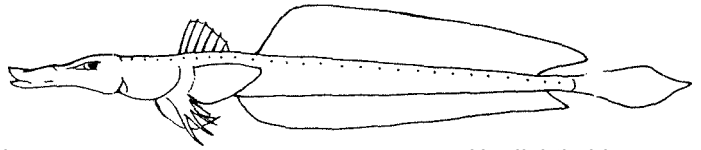


**SIMILAR FAMILIES OCCURRING IN THE AREA:**

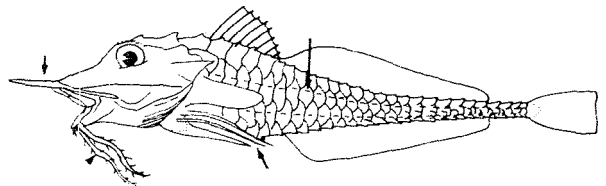
Other families with simple, enlarged, differentiated, lower pectoral fin rays (Hoplichthyidae, Peristediidae, Triglidae): shape very different, head armed with crests and spines, more than one dorsal fin. caudal fin not forked.

Scorpaenidae and Cirrhitidae: also a single dorsal fin, but caudal fin never forked. Furthermore, in the Scorpaenidae, the head is spiky; in the Cirrhitidae, the dorsal fin has characteristic tufts of cirri and 10 to 12 spines (16 to 20 in Cheilodactylidae), the spiny part being longer than the soft part.

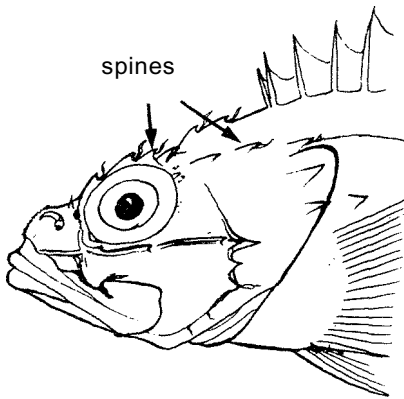
Serranidae, Sparidae, Labridae, Pomadasyidae, Lethrinidae: somewhat similar in shape, but no simple, differentiated, lower pectoral fin rays.



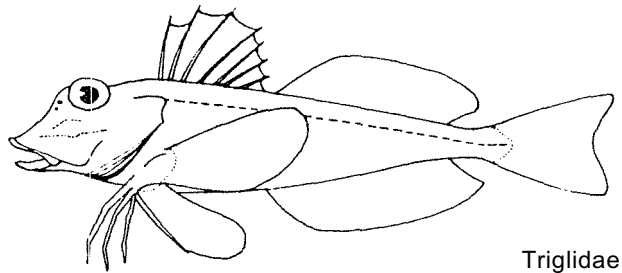
Hoplichthyidae



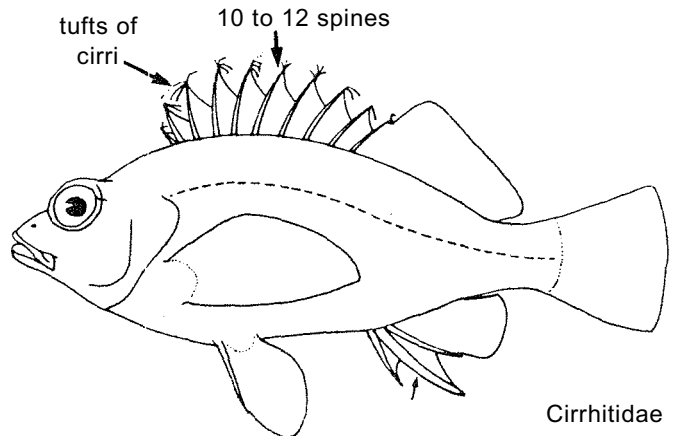
Peristediidae



Scorpaenidae



Triglidae



Cirrhitidae

**KEY TO GENERA OCCURRING IN THE AREA:**

- 1a. Scales small, about 80 in lateral line; no naked groove between dorsal sheath and body scales; 4 or 5 lower enlarged pectoral rays (Fig.1a) ..... Cheilodactylus (South Africa)
- 1b. Scales moderate, 46 to 59 in lateral line; naked groove between dorsal sheath and body scales present or absent; 6 or 7 enlarged pectoral fin rays (Figs.1b,c)
- 2a. Lateral line scales 46 to 55; a naked groove present between dorsal sheath and body scales (Fig.2); 6 or 7 lower enlarged pectoral rays of which, at least, the second and third from top are longer than rest of fin ..... Chirodactylus (South Africa)
- 2b. Lateral line scales 55 to 59; no naked groove between dorsal sheath and body scales; 6 enlarged pectoral rays, of which the topmost is distinctly longer than rest of fin (Fig.1c) ..... Acantholatris (St. Paul's & Amsterdam Islands)

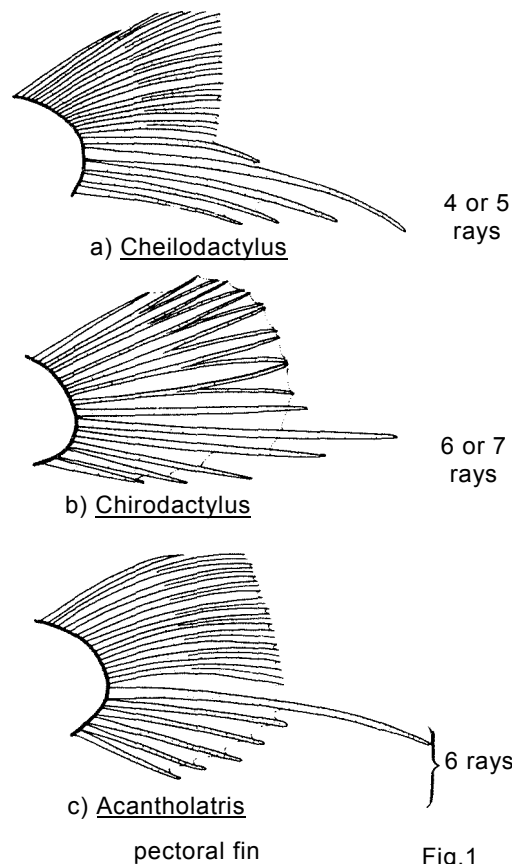
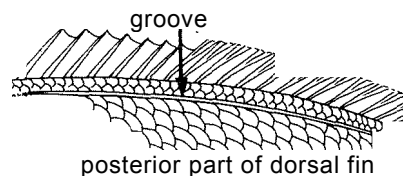


Fig.1



posterior part of dorsal fin

Chirodactylus Fig 2

**LIST OF SPECIES OCCURRING IN THE AREA:**

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

<u>Acantholatris monodactylus</u> (Carmichael, 1818)	CHEILOD Acan 1
<u>Cheilodactylus fasciatus</u> Lacepède, 1803	CHEILOD Cheil 1
<u>Cheilodactylus pixi</u> Smith, 1975	
<u>Chirodactylus brachydactylus</u> (Cuvier, 1830)	CHEILOD Chir 1
<u>Chirodactylus grandis</u> Günther, 1860)	CHEILOD Chir 2
<u>Chirodactylus jessicalenorum</u> (Smith, 1980)	CHEILOD Chir 3

\*\*Nemadactyls concinnus Richardson, 1841

Prepared by M.M. Smith, J.L.B. Smith Institute of Ichthyology, Grahamstown, South Africa and M.L. Bauchot, Muséum National d'Histoire Naturelle, Paris, France. Drawings of Chirodactylus brachydactylus and Chirodactylus jessicalenorum prepared by E.M. Tarp, J.L.B. Smith Institute of Ichthyology, Grahamstown, South Africa

\*Excluding Nemadactylus

\*\*Presence in the area doubtful; only once recorded from St. Paul's Islands

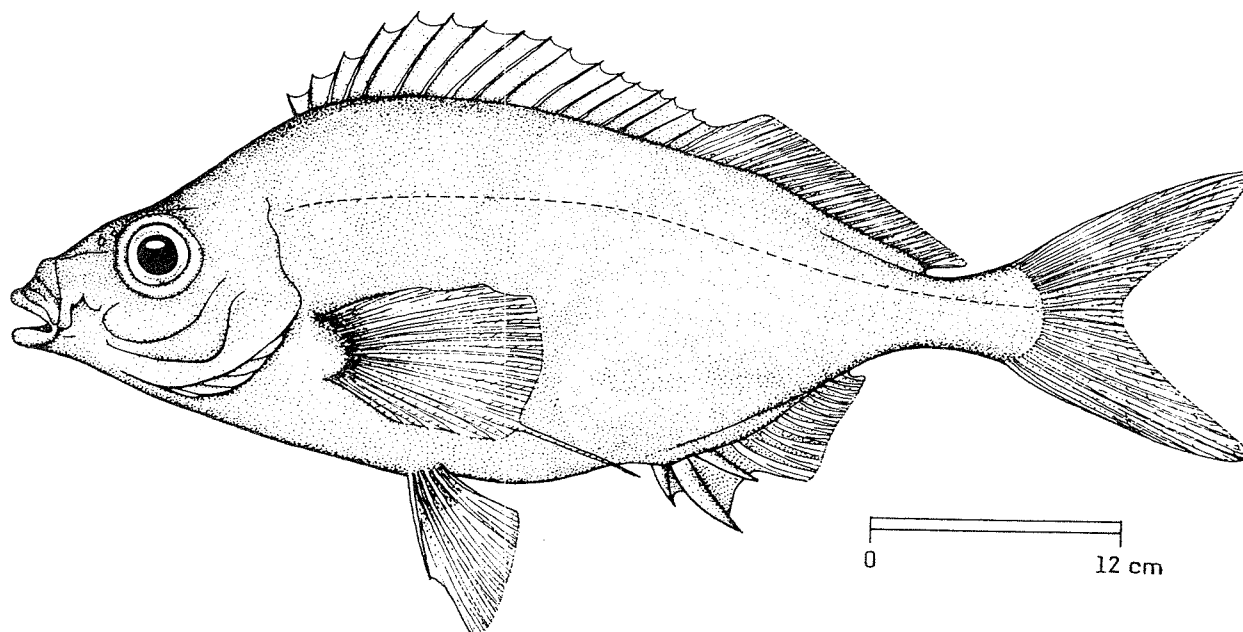
## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CHEILODACTYLIDAE

FISHING AREA 51  
(W. Indian Ocean)

Acantholatris monodactylus (Carmichael, 1818)

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO :           Fn - St. Paul's fingerfin  
                   Fr - Castanette de St. Paul  
                   Sp - Pintadilla de St. Paul

NATIONAL:

## DISTINCTIVE CHARACTERS :

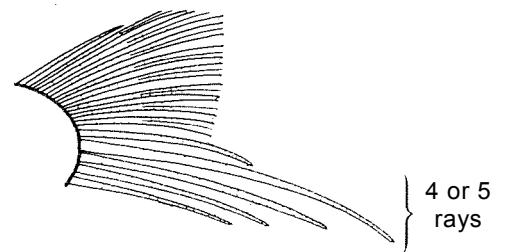
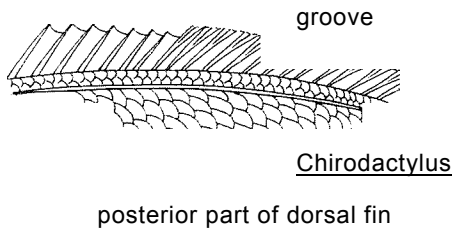
Body oblong and compressed, the shape changing with growth. Head small, without spines; eye diameter about 4 times in head length and smaller than interorbital space; mouth small, protrusible, with fairly thick lips; teeth small, villiform, in several rows anteriorly; vomer and palatines (roof of mouth) toothless; gillrakers 16 on lower limb of first arch. Dorsal fin long, with 17 or 18 spines and 24 to 27 soft rays; anal fin with 3 strong spines, the second strongest, and 12 soft rays; pectoral fins with 15 or 16 rays, of which the 6 or 7 lowermost are enlarged, simple and ending in free tips, the first or second from top thickened and longer than the rest, reaching to first or second anal fin spine; pelvic fins inserted well behind pectorals; caudal fin forked. Scales rather large, cycloid (smooth) on body and head (except snout); smaller scales (50 to 60) in lateral line; no naked groove between scaly dorsal sheath and body scales.

Colour: variable either uniform bluish grey or with crossbars disappearing when the fish is out of water.

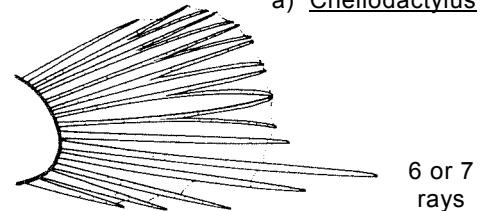
## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Cheilodactylus species: scales smaller, about 80 in lateral line; free, enlarged lower pectoral fin rays 4 or 5 (6 in A. monodactylus).

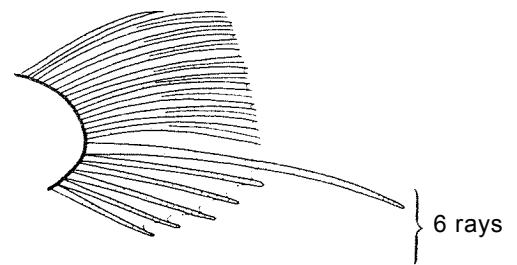
Chirodactylus species: a naked groove present between scaly dorsal sheath and body scales; soft anal fin rays 7 to 10 (12 in A. monodactylus).



a) Cheilodactylus



b) Chirodactylus



c) Acantholatris

pectoral fin

## SIZE :

Maximum. 60 cm.

## GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, so far only recorded for St. Paul's and Amsterdam Islands. Elsewhere, found in Tristan da Cunha Island, Vima Mount (west coast of South Africa), and off Australia and New Zealand.

Feeds on benthic and pelagic organisms.

## PRESENT FISHING GROUNDS:

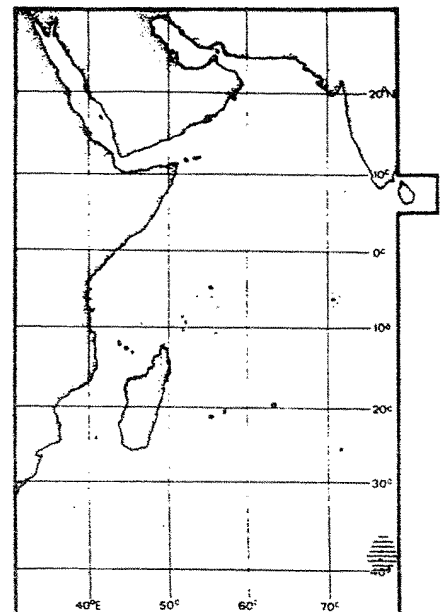
Reported to be the most abundant fish on St. Paul's Island.

## CATCHES, FISHING GEAR AND FORMS UTILIZATION:

Separate statistics are not reported for this species.

Caught chiefly on hook and line.

Marketed fresh, whole.

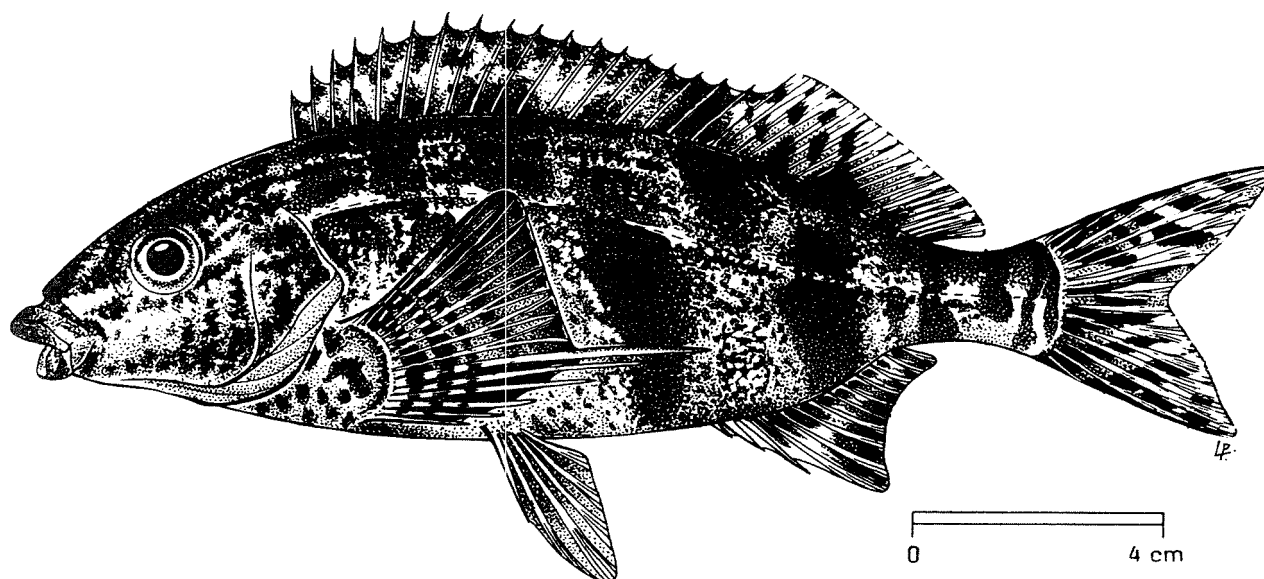


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY : CHEILODACTYLIDAE

FISHING AREA 51  
(W. Indian Ocean)Cheilodactylus fasciatus Lacepède, 1803

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO:           En - Redfingers  
                   Fr - Castanette léopard  
                   Sp - Pintadilla leopardo

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body oblong and compressed. Head small, without spines; eye diameter about equal to interorbital space, contained 4 to 4.4 times in head length; mouth small, protrusible, terminal, with fairly thick lips, the upper slightly overlapping; teeth small, villiform, in several rows anteriorly, vomer and palatines (roof of mouth) toothless; preopercle smooth; gillrakers 13 to 15 on lower limb of first arch. Dorsal fin long, with 17 to 19 spines and 23 to 25 soft rays; anal fin with 2 well developed and 1 slender spine. and 9 to 11 soft rays; pectoral fins with 1 or 2 slender, simple uppermost rays, 7 to 9 branched subequal rays, then 4 or 5 simple, thickened, elongate rays, the second longest, reaching to above anal fin; pelvic fins inserted well behind origin of pectorals; caudal fin forked. Scales small, about 80 in lateral line; dorsal and anal fins with scaly basal sheaths; no naked groove between scaly dorsal sheath and body scales; whole head, including maxilla, scaly, except for a narrow area from nostrils to eyes.

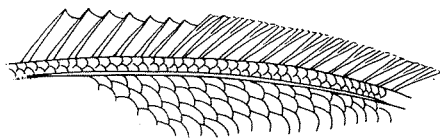
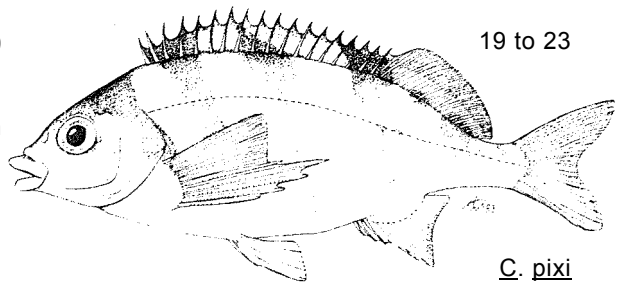
Colour: yellow to orange buff with dark brown crossbars on body, staggered to give a chequered effect. In adults, the pale interspaces become mottled with dark brown lines and blotches; caudal fin yellowish with 14 to 12 oblique sepia streaks; enlarged rays of pectoral fins and membranes red, rest of fins greenish with brown bars; pelvic fins red with green margins.

**DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:**

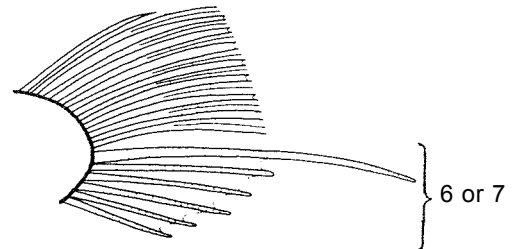
Cheilodactylus: soft dorsal fin rays 19 to 23 (23 to 25 in C. fasciatus); spinous part of dorsal fin 1.9 times the sit part of fin (1.4 to 1.8 times in C. fasciatus); dark bars across body regular, not staggered; caudal fin uniform in colour; scales with posterior skin flaps giving a ctenoid (comb-like effect).

Chirodactylus species: scales larger, 46 to 55 in lateral line 80 in C. fasciatus); their surfaces pitted as though sand-blasted; a naked groove present between dorsal sheath and body scales; lower enlarged pectoral rays 6 or 7, of which the second from top is longest (4 or 5 in C. fasciatus).

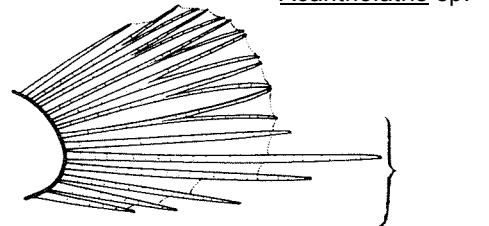
Acantholatus monodactylus (within the area, restricted to the St. Paul and Amsterdam Islands): lower enlarged pectoral fin rays 6, of which only the topmost is distinctly longer than rest of fin; scales in lateral line 55 to 59.



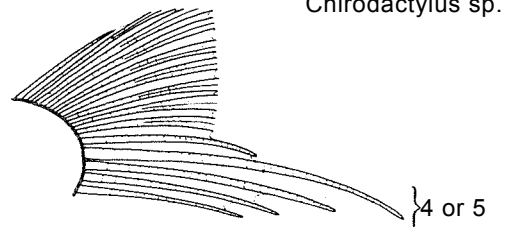
posterior part of dorsal fin  
Chirodactylus sp.



Acantholatus sp.



Chirodactylus sp.



pectoral fin  
Cheilodactylus sp.

**SIZE**

Maximum: 30 cm; common to 20 cm.

**GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:**

Known only from South Africa, from Natal on the east coast to Port Nolloth on the west coast.

Inhabits mostly shallow water among rocks, but sometimes caught down to 120 m depth. The thickened lower pectoral rays are used as feelers, and the cryptic colouring assists in hiding from enemies.

The food consists mainly of small crabs, molluscs, worms and other small invertebrates.

**PRESENT FISHING GROUNDS:**

Caught incidentally throughout its range, but too small to be of any commercial importance.

**CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:**

Separate statistics are not reported for this species.

Caught on hook and line and with other artisanal gear.

Consumed mostly fresh.

