

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

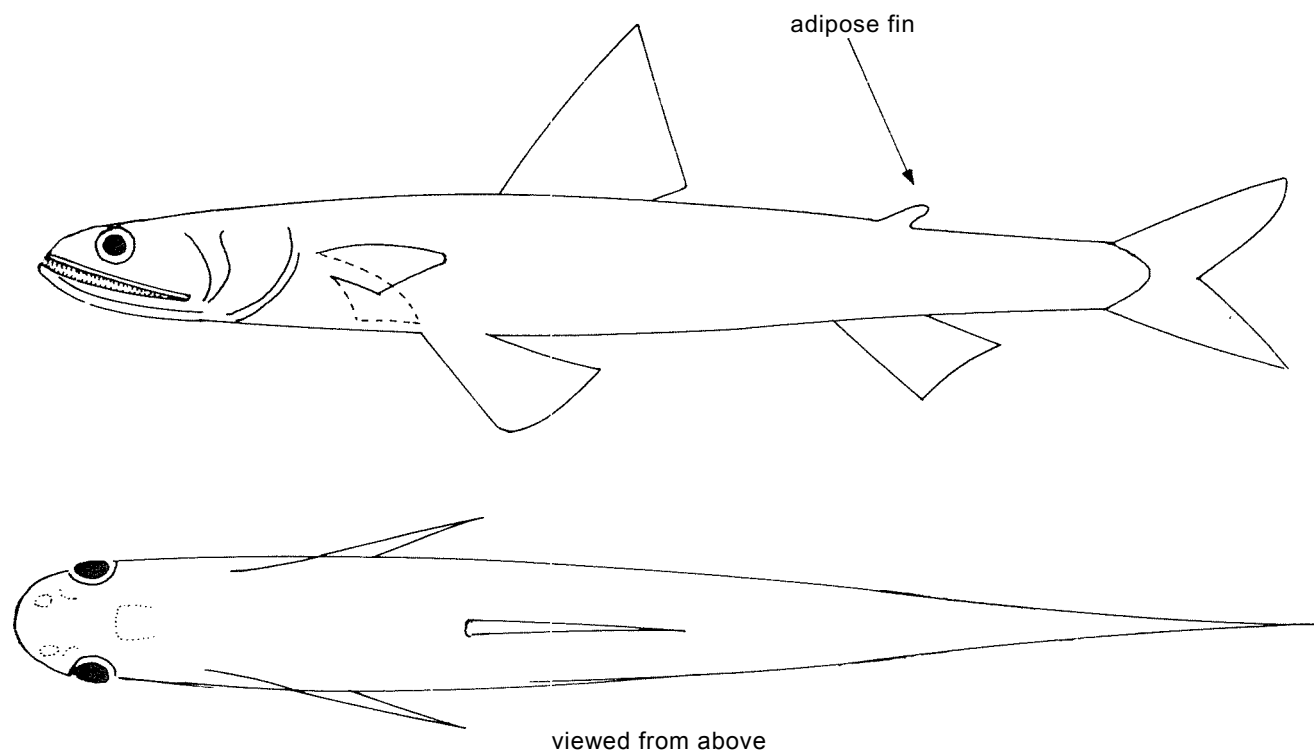
SYNODONTIDAE

Lizardfishes

Body elongate, usually cylindrical and with adipose fin. Mouth large and terminal, with rows of numerous small, slender and pointed teeth visible even when mouth is closed; teeth also on palate (roof of mouth) and tongue, those on palate in 1 or 2 bands.

Colour: green/brown on back, lighter on flanks, with dark blotches or bars down flanks or on fins in certain species.

Bottom-dwelling fishes, found on open flats or around reefs, down to more than 500 m depth. They lie motionless in wait of passing prey, which they seize with rapid darting motions; most species are fish eaters. Their flesh is said to be of good quality and flavour, though bony. The reported catch of lizardfishes in Fishing Area 51 totalled about 9 700 tons in 1981.

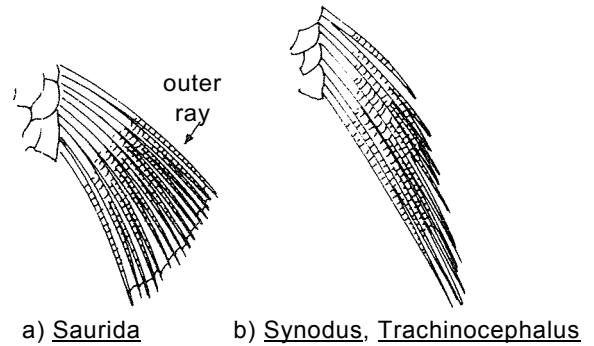
**SIMILAR FAMILIES OCCURRING IN THE AREA:**

All other families. lack the combination of an adipose fin, a robust body, and a lizard-like head with a large mouth having numerous pointed teeth visible even when mouth is closed.

KEY TO GENERA OCCURRING IN THE AREA:

1a. Nine pelvic fin rays, inner barely longer than outer (Fig.1a); palatine teeth (on roof of mouth) in 2 pairs of bands (Fig.2a) Saurida

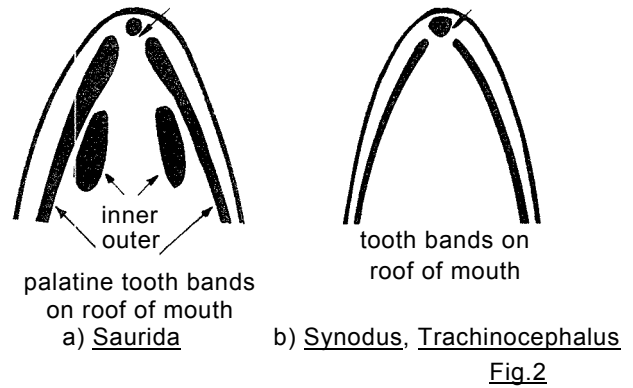
1b. Eight pelvic fin rays, inner much longer than outer (Fig.1b); palatine teeth in 1 pair of bands (Fig.2b)



pelvic fin Fig.1

2a. Eye opposite about midpoint of upper jaw (Fig.3a); head depressed; anal fin base shorter than dorsal fin base (Fig.4a) Synodus

2b. Eye nearer to anterior end of upper jaw (Fig.3b); head not depressed; anal fin base longer than dorsal fin base (Fig.4b) Trachinocephalus



palatine tooth bands on roof of mouth
a) Saurida

b) Synodus, Trachinocephalus
Fig.2

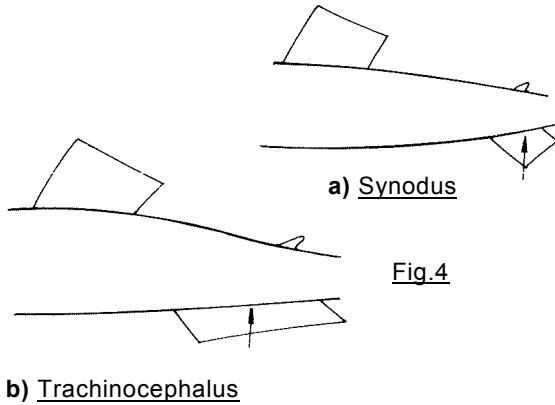
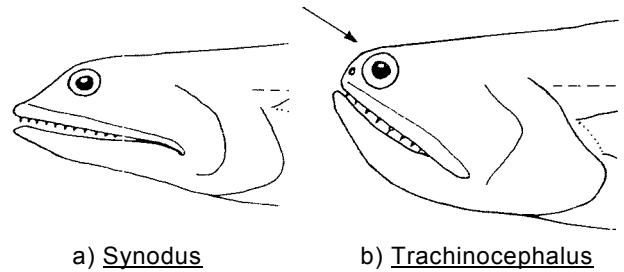


Fig.4

b) Trachinocephalus



a) Synodus

b) Trachinocephalus

Fig.3

LIST OF SPECIES OCCURRING IN THE AREA:

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

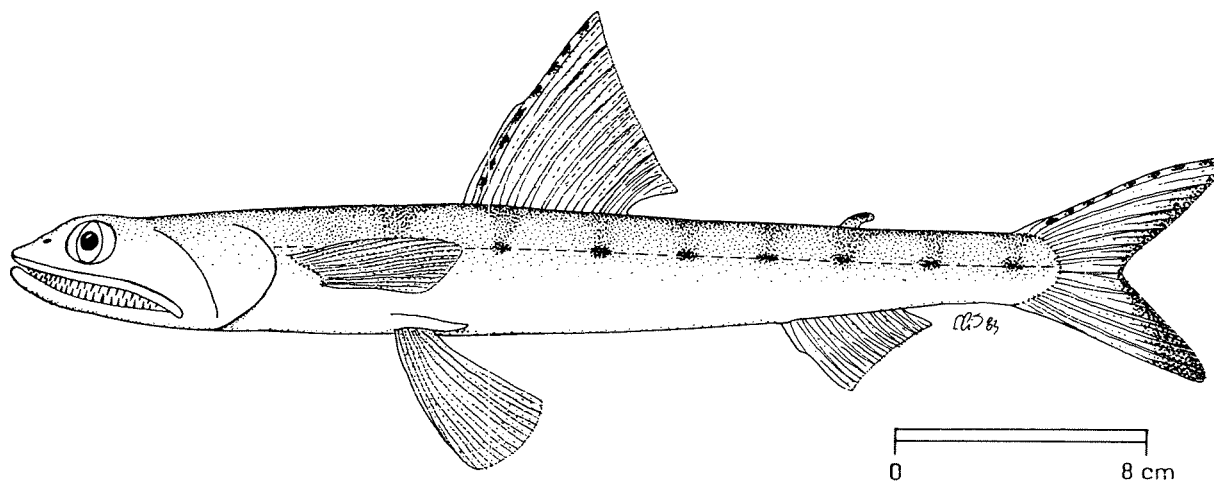
| | |
|---|----------------|
| <u>Saurida gracilis</u> (Quoy and Gaimard, 1824) | SYNOD Sauri 7 |
| <u>Saurida longimanus</u> Norman, 1939 | SYNOD Sauri 8 |
| <u>Saurida nebulosa</u> Valenciennes in Cuv. & Val., 1849 | SYNOD Sauri 9 |
| <u>Saurida tumbil</u> (Bloch, 1795) | SYNOD Sauri 2 |
| <u>Saurida undosquamis</u> (Richardson, 1848) | SYNOD Sauri 1 |
| <u>Synodus binotatus</u> Schultz, 1953 | SYNOD Synod 3 |
| <u>Synodus englemani</u> Schultz, 1953 | SYNOD Synod 4 |
| <u>Synodus hoshinonis</u> Tanaka, 1917 | SYNOD Synod 5 |
| <u>Synodus indicus</u> (Day, 1873) | SYNOD Synod 6 |
| <u>Synodus jaculum</u> Russell & Cressey, 1979 | SYNOD Synod 7 |
| <u>Synodus macrops</u> Tanaka, 1917 | SYNOD Synod 8 |
| <u>Synodus sageneus</u> Waite, 1905 | SYNOD Synod 9 |
| <u>Synodus variegatus</u> (Lacepède, 1803) | SYNOD Synod 10 |
| <u>Trachinocephalus myops</u> (Forster, 1801) | SYNOD Trach 1 |

FAO SPECIES IDENTIFICATION SHEETS

FAMILY : SYNODONTIDAE

FISHING AREA 51
(W. Indian Ocean)

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|---|
| <i>Saurida undosquamis</i> (Richardson, 1848) |
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OTHER SCIENTIFIC NAMES STILL IN USE: *Saurida grandisquamis* Günther, 1864

VERNACULAR NAMES:

FAO: En - Brushtooth lizardfish
Fr - Anoli à grandes écailles
Sp - Layarto escamoso

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate and tubular; head and caudal peduncle somewhat depressed. Several rows of teeth visible on both jaws even when mouth is closed; 2 series of teeth present on palate (roof of mouth); outer series in 2 rows anteriorly; vomer usually toothless. Dorsal fin rays usually 12 (11 or 12), longest dorsal ray about 3½ times as long as last ray; pectoral fin rays 14 or 15, longest pectoral ray nearly as long as longest pelvic ray and extending to about dorsal fin origin; pelvic fin rays subequal in length; pectoral fins long and pointed. Lateral line scales about 45 to 52; 3½ to 4½ scale rows above lateral line.

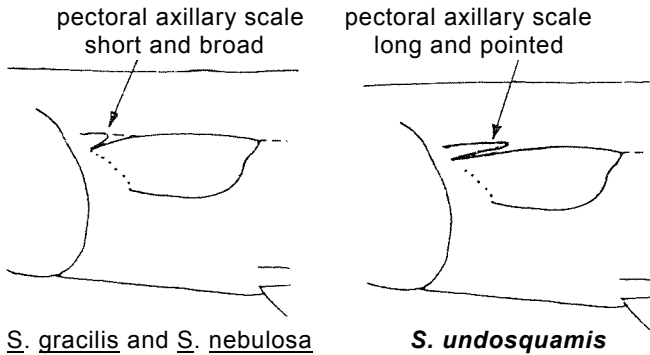
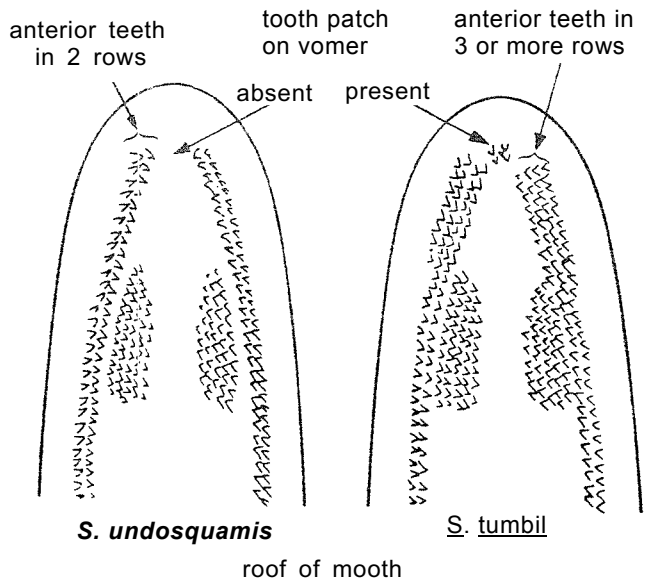
Colour: back and sides brown, belly pale or silvery. Eight to 10 bars often visible along lateral line. Distal parts of dorsal, pectoral and particularly caudal fin dusky. Second dorsal fin ray and upper caudal fin ray with a series of about 8 dark spots; fins otherwise without markings.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Sauryda tumbil: no dark spots on second dorsal ray and upper caudal ray; outer palatine teeth in 3 or 4 rows anteriorly (2 rows in S. undosquamis); a small patch of teeth present on vomer; pectoral fin about 2/3 as long as pelvic fin, not extending as far as dorsal fin origin.

S. gracilis and S. nebulosa: pectoral axillary scale short and broad; spots present on all fins; 13 or fewer pectoral fin rays (14 or 15 in S. undosquamis); longest dorsal ray less than 3 times as long as last ray.

S. longimanus: pectoral fin very long, extending to about middle of dorsal fin base.



SIZE:

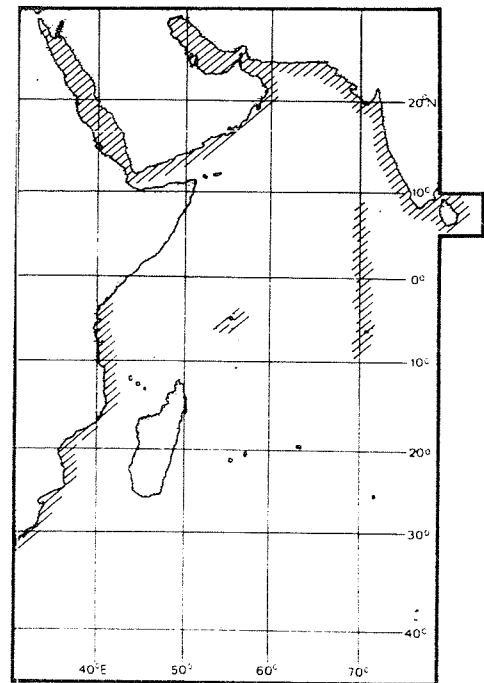
Maximum: exceeds 45 cm total length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, known from East Africa (excluding Kenya and Somalia), the Red Sea, the "Gulf", Pakistan, India, Sri Lanka, the Seychelles, the Maldives and Chagos Islands. Elsewhere, in the Eastern Indian Ocean, Malay Archipelago, Australia, China Sea, Japan and Korea. Not known from the Central or Eastern Pacific. Has recently invaded the Eastern Mediterranean through the Suez Canal and is an important food fish in the Levant Basin.

Found on muddy bottoms from 20 to at least 200 m depth, often slightly deeper than S. tumbil.

Mainly piscivorous, but feeds also on crustaceans and other invertebrates.



PRESENT FISHING GROUNDS:

Muddy bottoms of the continental shelf.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught primarily with bottom trawls.

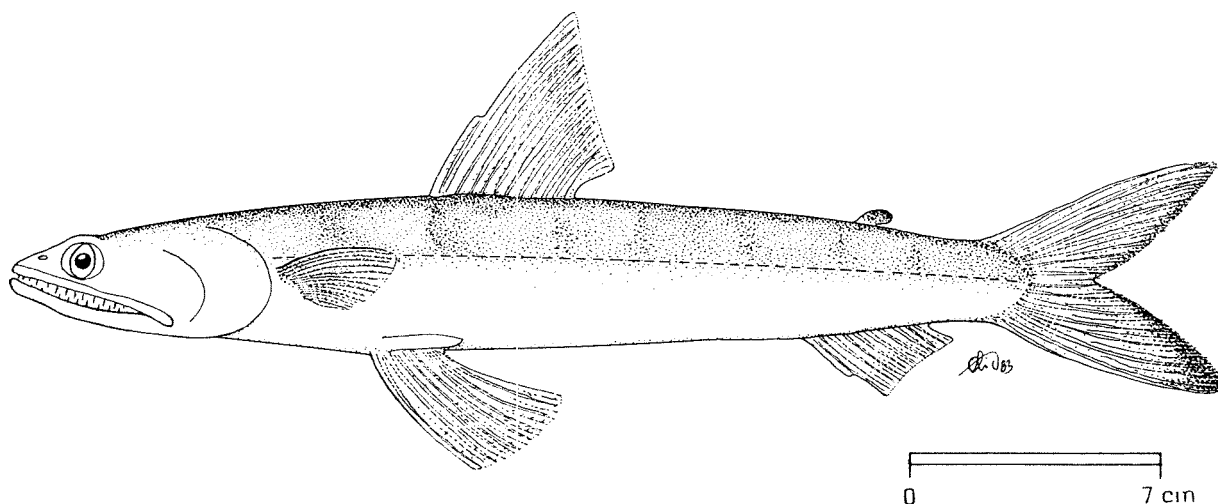
Marketed fresh and pried salted.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY : SYNODONTIDAE

FISHING AREA 51
(W. Indian Ocean)

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|-------------------------------------|
| <i>Saurida tumbil</i> (Bloch, 1745) |
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OTHER SCIENTIFIC NAMES STILL IN USE : *Saurida argyrophanes* (Richardson, 1846)

VERNACULAR NAMES:

FAO : En - Greater lizardfish
 Fr - Anoli tumbil
 bp - Lagarto tumbil

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate and tubular; head and caudal peduncle somewhat depressed. Several rows of teeth visible in both jaws even when mouth is closed; 2 series of teeth on palate (roof of mouth), outer series in 3 or 4 rows anteriorly; a small patch of teeth present on vomer. Dorsal fin rays usually 12 (11 to 13), longest ray about 4 times as long as last ray; pectoral fin rays 14 or 15, longest ray reaching to about pelvic insertion. Pelvic rays subequal in length. Pectoral axillary scale long and pointed. Lateral line scales about 50 to 56; $4\frac{1}{2}$ to $5\frac{1}{2}$ scale rows above lateral line.

Colour: back and sides brown, belly pale or silvery. Eight to 10 faint bars occasionally visible along lateral line. Distal parts of dorsal, pectoral and particularly caudal fins dusky; otherwise, no markings fins.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

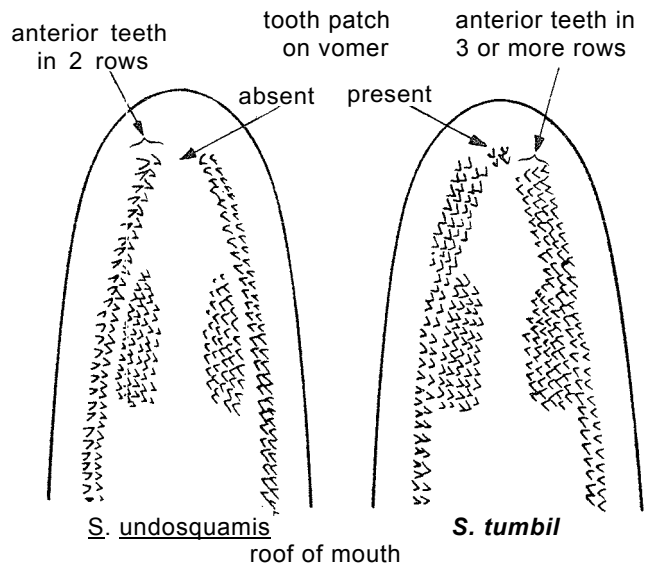
Saurida undosquamis: about 8 dark spots on 2nd dorsal fin ray and upper caudal ray; outer palatine teeth in 2 rows anteriorly (3 or 4 in S. tumbil); vomer usually toothless; pectoral fin nearly as long as pelvic fin and reaching to about dorsal fin origin.

S. gracilis and S. nebulosa: pectoral axillary scale short and broad; spots present on all fins; 13 or fewer pectoral fin rays (14 or 15 in S. tumbil); longest dorsal ray less than 4 times as long as last ray 4 times in S. tumbil).

S. longimanus: pectoral fin very long, extending to about middle of dorsal fin base.

SIZE:

Maximum: exceeds 40 cm total length.

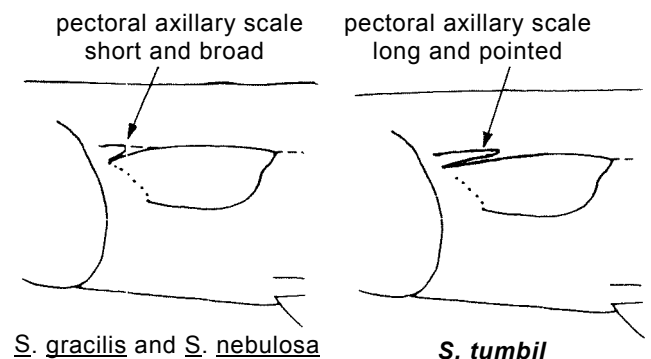


GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, known from the east coast of Africa (excluding Kenya and Somalia), Madagascar, the Red Sea, the "Gulf", Pakistan, India and Sri Lanka. Elsewhere, in the Eastern Indian Ocean, Malay Archipelago, East Indies, Australia and China Sea; not known from the Central or Eastern Pacific.

Commonly found on muddy bottoms between 20 and 60 m depth, but may enter shallower waters.

Mainly piscivorous, but also feeds on crustaceans and squid.



PRESENT FISHING GROUNDS:

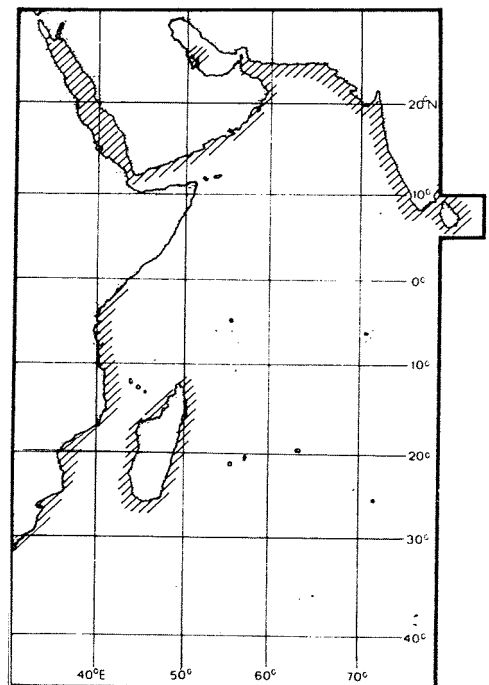
Shallow muddy bottoms of the continental shelf.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught primarily with bottom trawls.

Marketed fresh.

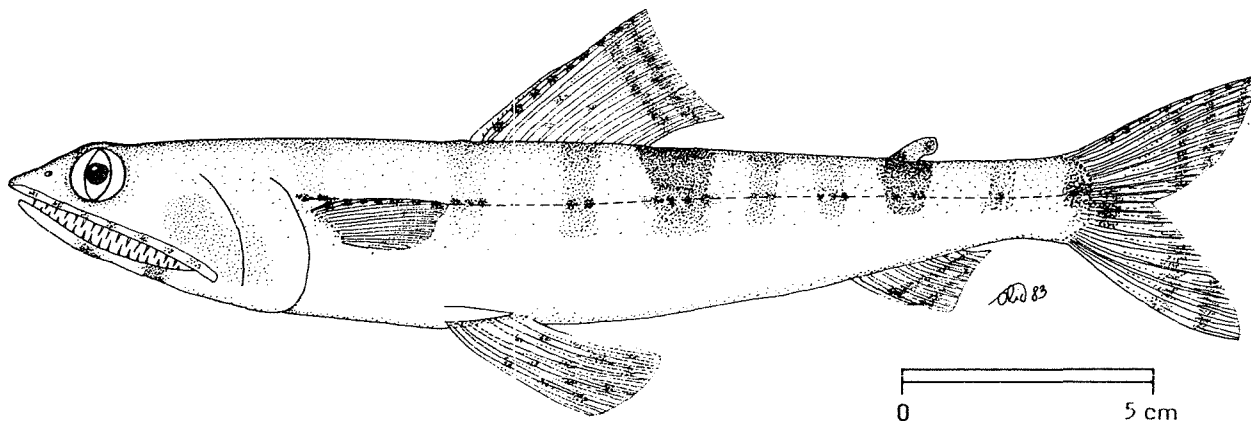


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : SYNODONTIDAE

FISHING AREA 51
(W. Indian Ocean)*Saurida gracilis* (Quay & Gaimard, 1824)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Gracile lizarafish
 Fr - Anoli grêle
 Sp - Lagarto grácil

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate and tubular; head and caudal peduncle somewhat depressed. Several rows of teeth visible in both jaws even when mouth is closed; 2 series of teeth on palate (roof of mouth); outer series in 1 or 2 rows anteriorly, inner series in about 3 or 4 rows; teeth sometimes resented on vomer. Dorsal fin rays 11 (rarely 10 or 12), longest ray less than 3 times as long as last ray; pectoral fin rays 13 (rarely 12 or 14), longest ray 12% or more of standard length and extending as far as 1st to 3rd predorsal scale row; pelvic fin rays subequal in length. Pectoral axillary scale short and broad. Lateral line scales 46 to 52; $3\frac{1}{2}$ scale rows above lateral line.

Colour: ground colour, white or pale yellow, mottled with dark brown and black on back and sides. A series of 8 to 10 blotches along lateral line and darker crossbars on back, particularly at base of caudal fin, around adipose fin and behind dorsal fin. All fins with dark bars and spots; caudal fin with a broad, vertical, pale yellow band near base.

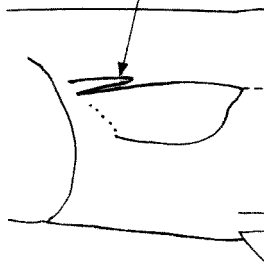
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Saurida nebulosa: pectoral fin shorter, less than 12% of standard length, with only 12 rays (usually 13 in S. gracilis), and extending posteriorly only as far as 3rd to 6th predorsal scale row (extending to 1st to 3rd predorsal scale row in S. gracilis); inner palatine teeth in 2 distinct rows (3 or 4 in S. gracilis); no vomerine teeth; dorsal fin rays often 10 (usually 11 in S. gracilis).

S. tumbil and S. undosquamis: no spots on fins (except 2nd dorsal ray and upper caudal ray in S. undosquamis); pectoral axillary scale long, pointed; pectoral fin rays 14 or 15; longest dorsal ray more than 3 times as long as last ray (less than 3 times in S. gracilis).

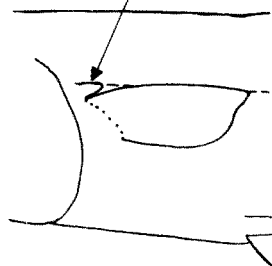
S. longimanus: pectoral fin very long, extending to about middle of dorsal fin base.

pectoral axillary scale long and pointed



Saurida tumbil, S. undosquamis and S. longimanus

pectoral axillary scale short and broad



S. gracilis

SIZE:

Maximum: about 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Widespread in the area, but not recorded from the Gulf of Aden, the "Gulf", Pakistan, India and Sri Lanka. Elsewhere, found in the Eastern Indian Ocean and in the Pacific Ocean to Hawaii.

A common shallow water form, usually found in sandy areas adjacent to coral or on the fringes of patch reefs.

Mainly piscivorous, often active at night.

PRESENT FISHING GROUNDS:

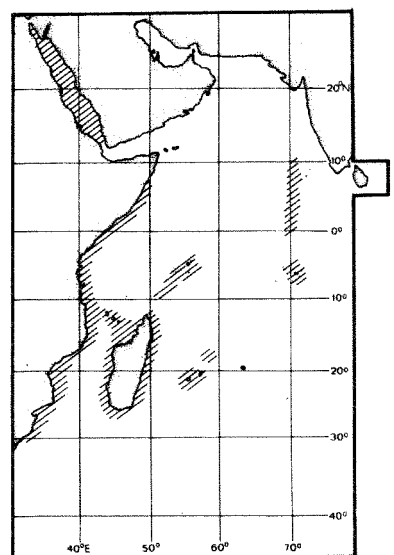
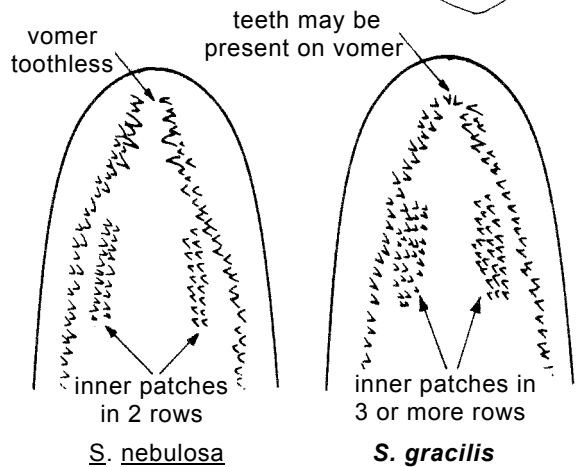
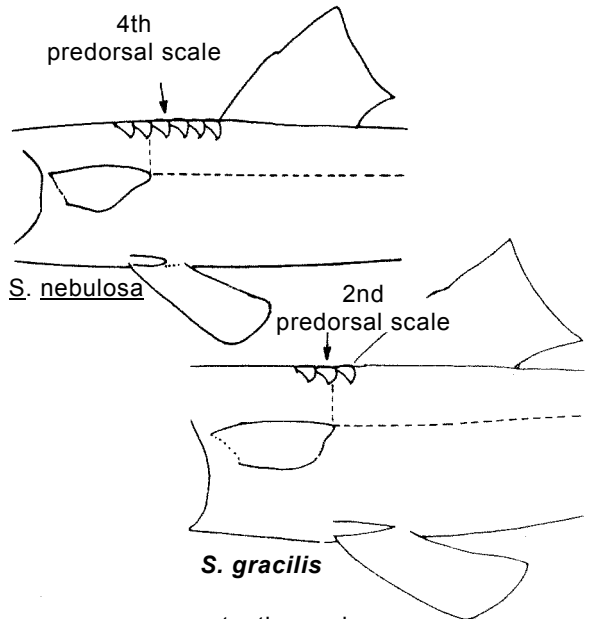
Shallow waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with artisanal gear.

Marketed fresh.



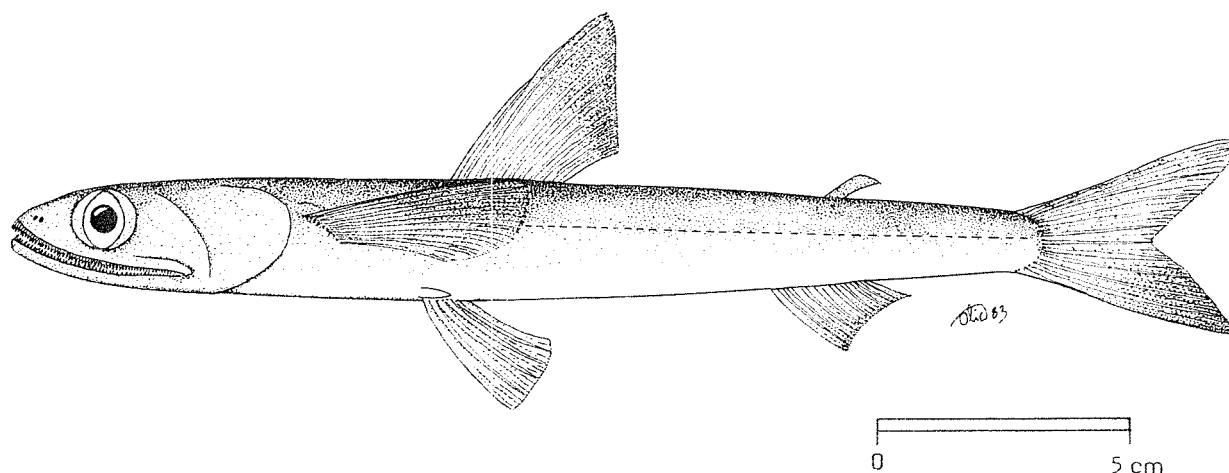
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREA 51
(W. Indian Ocean)

Saurida longimanus Norman, 1939

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

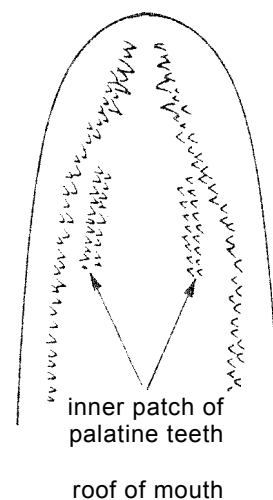
- FAO : En - Longfin lizarufish
 Fr - Anoli aile longue
 Sp - Lagarto aletón

NATIONAL :

DISTINCTIVE CHARACTERS:

Body elongate and tubular. Several rows of teeth visible in both jaws even when mouth is closed; 2 series of teeth on palatine (roof of mouth); outer series in 2 rows anteriorly, inner series well separated from outer and in 2 or 3 narrow rows; vomer toothless. Dorsal fin rays 11 or 12, longest ray more than 3 times as long as last rte; pectoral fin very long, extending to about middle of dorsal fin base; pectoral fin rays 14. Lateral line scales 45 to 52. Pelvic rays subequal in length. Pectoral axillary scale long and pointed.

Colour: brownish above, silvery white below. Upper half of pectoral fin and distal parts of dorsal fin and lower caudal lobe dusky. Sometimes a faint series of dark spots on upper caudal fin ray; fins otherwise without markings.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

All the other Saurida species have shorter pectoral fins, extending at most to about level of dorsal fin origin. In addition, S. tumbil and S. undosquamis have wide inner bands of palatine teeth; S. gracilis and S. nebulosa have spots on all fins and a short, broad pectoral axillary scale.

SIZE:

Maximum: reaches at least 25 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Presently known from the Gulf of Oman and the Arabian Sea, where it is caught between 100 and 200 m depth.

PRESENT FISHING GROUNDS:

Deeper shelf waters.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with trawls.

Marketed fresh.

