

FAO SPECIES IDENTIFICATION SHEETS

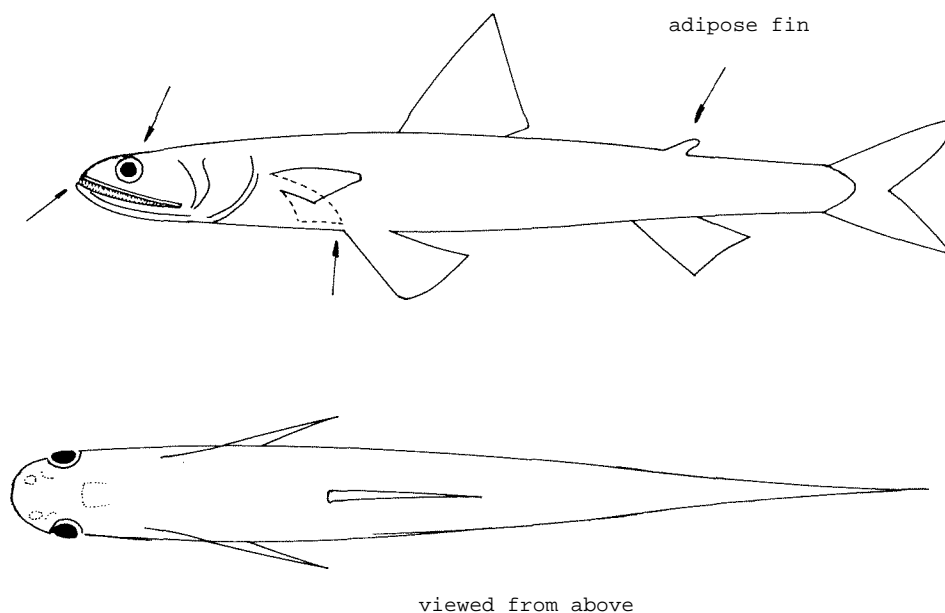
FISHING AREAS 57, 71
(E Ind. Ocean)
(W Cent. Pacific)

SYNODONTIDAE

Lizardfishes

Body elongate, usually *cylindrical* and with *adipose fin*. Head usually *lizard-like*. Mouth large and terminal, with rows of numerous small, slender and pointed teeth visible even when mouth is closed; teeth also on palate 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.



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

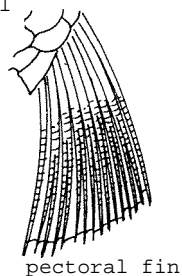
1 a. 9 pelvic fin rays, inner barely longer than outer (Fig. 1); palatine teeth in 2 pairs of bands (Fig. 2) *Saurida*

1 b. 8 pelvic fin rays, inner much longer than outer (Fig. 3); palatine teeth in 1 pair of bands (Fig. 4)

2 a. Eye opposite about midpoint of upper jaw (Fig. 5); head depressed; anal fin base shorter than dorsal fin base (Fig. 6) *Synodus*

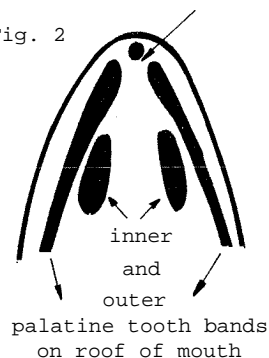
2 b. Eye nearer to anterior end of upper jaw (Fig. 7); head not depressed; anal fin base longer than dorsal fin base (Fig. 8) *Trachinocephalus*

Fig. 1



pectoral fin

Fig. 2



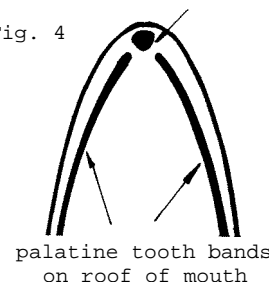
inner and outer palatine tooth bands on roof of mouth

Fig. 3



pectoral fin

Fig. 4



palatine tooth bands on roof of mouth

Fig. 5

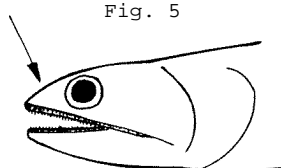


Fig. 6

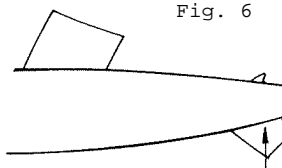
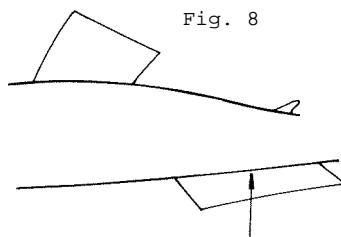


Fig. 7



Fig. 8



List of Species occurring in the Area
(Code numbers are given for those species for which Identification Sheets are included)

Saurida argentea
Saurida elongata
Saurida filamentosa
Saurida gracilis
Saurida isarankurai
Saurida longimanus
Saurida micropectoralis
Saurida tumbil
Saurida undosquamis
Saurida wanieso

SYNOD Sauri 5

SYNOD Sauri 4

SYNOD Sauri 2

SYNOD Sauri 1

SYNOD Sauri 3

Synodus houlti
Synodus indicus
Synodus japonicus
Synodus sageneus
Synodus similis
Synodus variegatus

Trachinocephalus myops

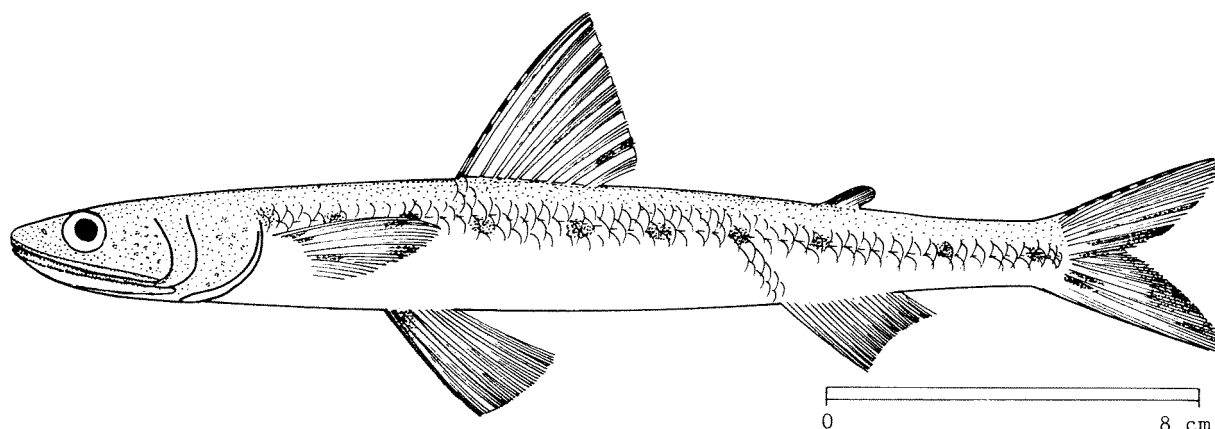
SYNOD Trach 1

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Saurida undosquamis* (Richardson, 1848)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

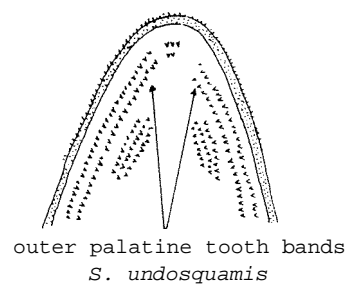
FAO: En - Brushtooth lizardfish
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, cylindrical, with lizard-like head and adipose fin. 2 rows of teeth on anterior part of outer palatine tooth bands. Pectoral fins moderately long, reaching to level of pelvic fin base; pelvic fin rays almost equal in length.

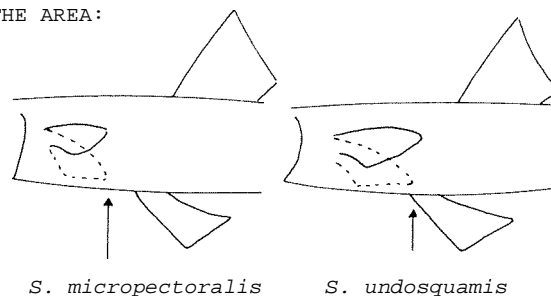
Colour: back and upper sides brown, lower sides and belly white; 4 to 7 dark dots on upper edge of caudal fin; a series of fairly distinct dark blotches along lateral line (less distinct in specimens from colder waters); stomach black; liver striped black and white.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Saurida micropectoralis: dark dots sometimes present on upper edge of caudal fin (though rather indistinct), but pectoral fins short (not reaching to level of pelvic fin base) and 3 or more rows of teeth on anterior part of outer palatines; also, belly white.

Other *Saurida* species: lack black dots on upper edge of caudal fin.



Synodus and *Trachinocephalus* species: inner rays of pelvic fins much longer than outer ones (3 times longer; equal in *Saurida*).

SIZE:

Maximum: about 40 cm;
common: 25 to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

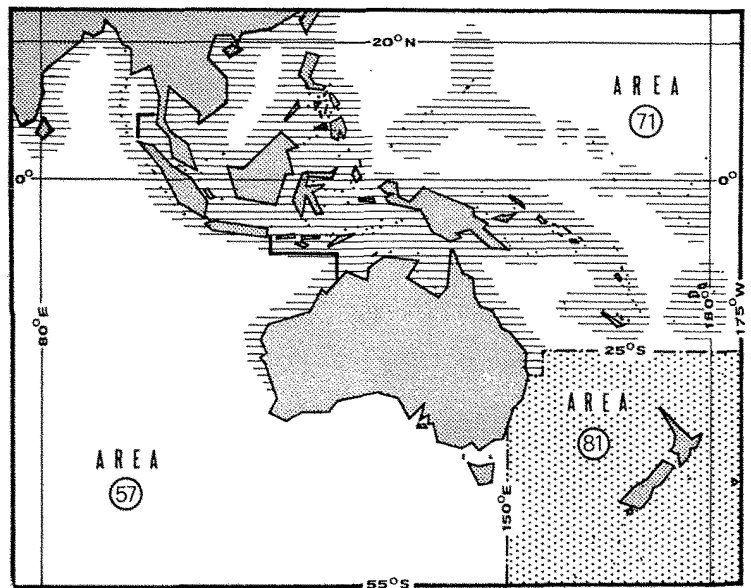
Throughout northern part of area and southward to Queensland (Australia); also, westward to East Africa.

Lives over muddy bottoms of the continental shelf, down to about 60 m.

Feeds on bottom-living invertebrates and fishes.

PRESENT FISHING GROUNDS:

Shallow, muddy bottoms of the continental shelf.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

The total reported catch for lizardfishes in 1972 was 20 000 tons (Malaysia only).

Caught with bottom trawls.

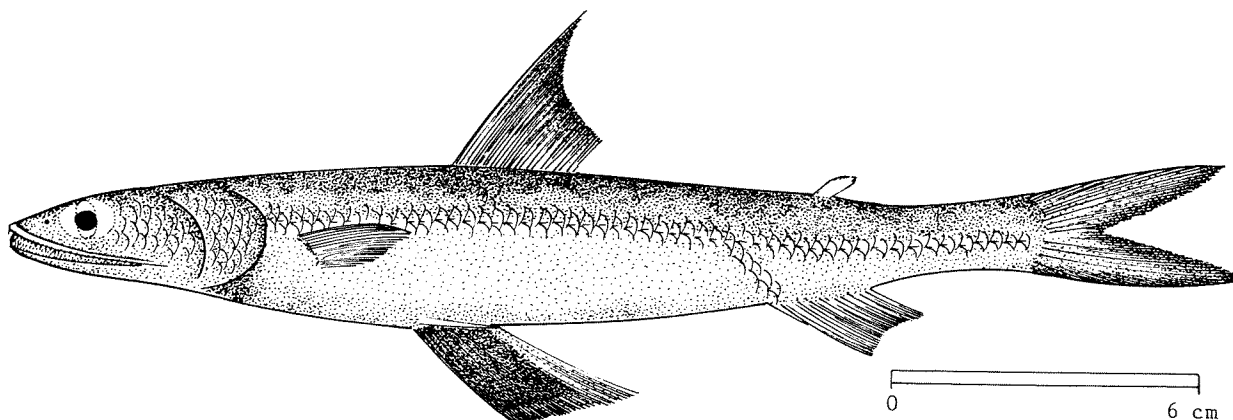
Marketed sometimes fresh; made mainly into fish cakes and fish balls.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Saurida tumbil* (Bloch, 1795)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

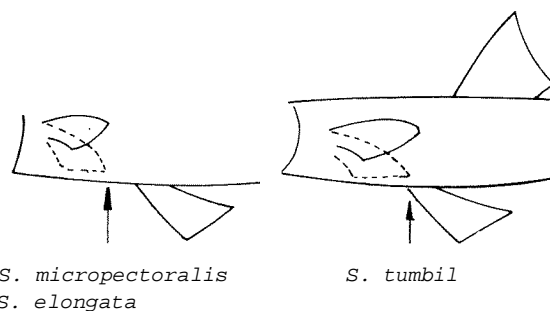
FAO: En - Greater lizardfish
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, cylindrical, with lizard-like head and adipose fin. 3 or more rows of teeth on anterior part of outer palatine tooth bands. Pectoral fins just reaching to level of pelvic fin base; pelvic fin rays almost equal in length.

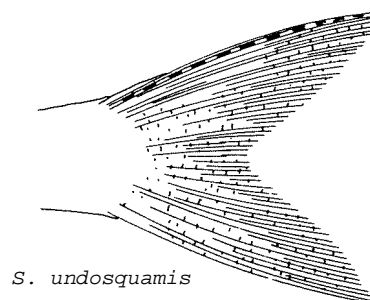
Colour: back and upper sides brown, lower sides and belly white; sometimes traces of faint darker cross-bars on back; inner side of pelvic fins dusky black, except for their margins; stomach white.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Saurida micropectoralis and *S. elongata*: short pectoral fins, their tips not reaching to level of pelvic fin base.

Saurida undosquamis: a series of distinct dark spots on upper edge of caudal fin and a series of dark blotches along lateral line; also, stomach black.

*S. undosquamis*

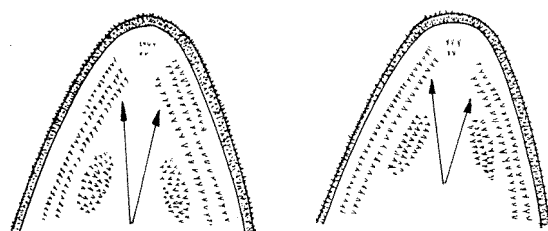
Saurida wanieso and *S. filamentosa*: only 2 rows of teeth on anterior part of outer palatine tooth bands (3 or more rows in *S. micropectoralis*); adults of these species (*S. wanieso* from 30 cm upward, *S. filamentosa* from 20 cm upward) usually have 2nd dorsal fin ray (sometimes also 3rd and 4th) greatly elongated.

Saurida gracilis: dark cross-bars or a series of dark patches on all fins.

Saurida longimanus: very long pectoral fins (reaching far beyond level of first dorsal fin ray).

Saurida isarakurai: lower jaw clearly projecting beyond tip of snout; also, lower caudal fin lobe smaller than upper.

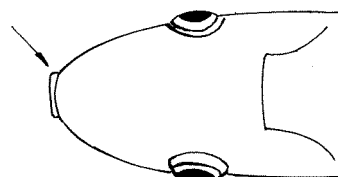
Synodus and *Trachinocephalus* species: inner pelvic fin rays much longer than outer ones (3 times longer; equal in *Saurida*).



outer palatine tooth bands

S. micropectoralis

S. wanieso
S. filamentosa



head viewed from above

S. isarakurai

SIZE:

Maximum: 45 cm; common: 20 to 30

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

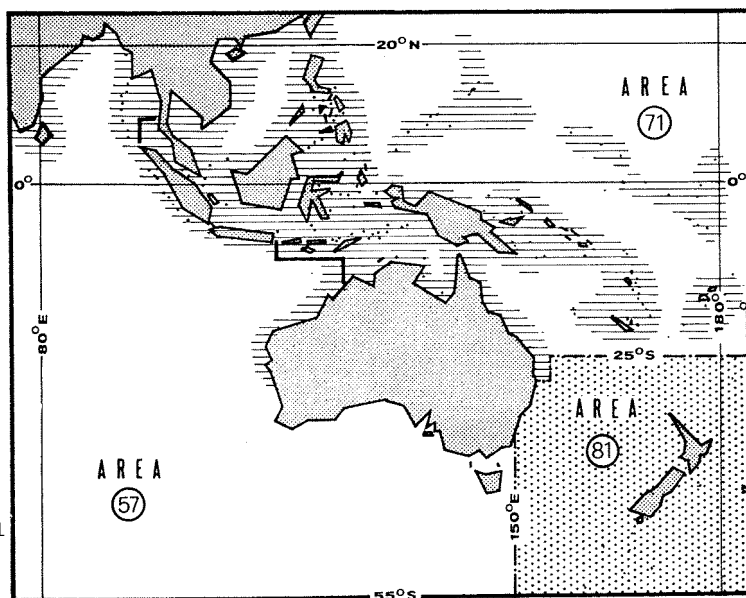
Throughout northern part of area and southward to New South Wales (Australia); also, westward to East Africa.

Lives over muddy bottoms of the continental shelf, down to about 100 m.

Feeds on bottom-living invertebrates (particularly worms) and fishes.

PRESENT FISHING GROUNDS:

Shallow muddy bottoms of the continental shelf.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

The total reported catch for lizardfishes in 1972 was 20 000 tons (Malaysia only).

Caught mainly with bottom trawls.

Marketed occasionally fresh; made mainly into fish cakes and fish balls.

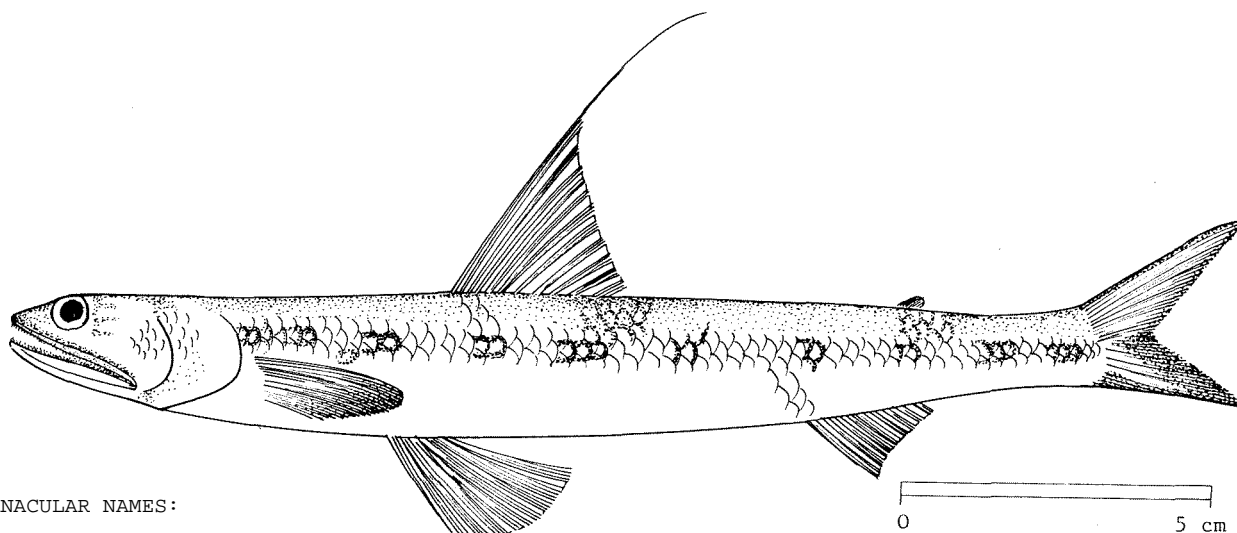
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)

<i>Saurida wanieso</i> Shindo & Yamada, 1972
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SYNONYMS STILL IN USE: *Saurida tumbil*: misidentification
? *Saurida filamentosa* Ogilby, 1910



VERNACULAR NAMES:

FAO: En - Wanieso lizardfish
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

A large species, body elongate, cylindrical, with lizard-like head and adipose fin. 2 rows of teeth on anterior part of outer palatine tooth bands. 2nd dorsal fin ray (sometimes also 3rd and 4th) distinctly elongate in adult specimens (from 30 cm upward); pectoral fins moderately long, their tips reaching to level of pelvic fin origin; pelvic fin rays almost equal in length.

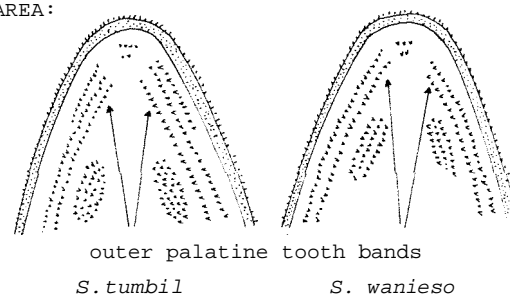
Colour: back and upper sides brown, lower sides and belly white; 9 to 10 dark blotches along lateral line, somewhat faint in adults, and traces of 3 to 4 cross-bars on back and sides; inner face of pectoral fin dusky; stomach white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Saurida filamentosa: adults sometimes with elongate dorsal fin rays, but upper half of pectoral fin violet (inner face of pectoral fin dusky in *S. wanieso*).

Adults of other *Saurida* species: no elongate dorsal fin rays. They can be further distinguished as follows:

Saurida tumbil: 3 rows of teeth on anterior part of outer palatine tooth bands.



Saurida micropectoralis: pectoral fins short, not reaching to level of pelvic fin base.

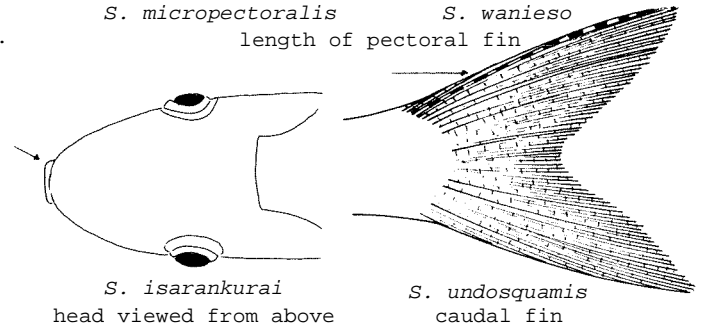
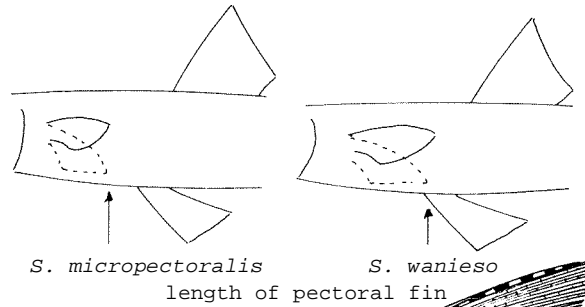
Saurida undosquamis: a series of distinct dark spots present on upper margin of caudal fin.

Saurida gracilis: cross-bars or a series of dark patches present on all fins.

Saurida longimanus: pectoral fins very long (reaching far beyond level of first dorsal fin ray).

Saurida isarankurai: lower jaw clearly projecting beyond tip of snout; also, lower lobe of caudal fin smaller than upper.

Synodus and *Trachinocephalus* species: inner pelvic fin rays much longer than outer ones (3 times longer; equal in *Saurida*).



SIZE:

Maximum: 65 cm; common: 35 to 45 cm

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

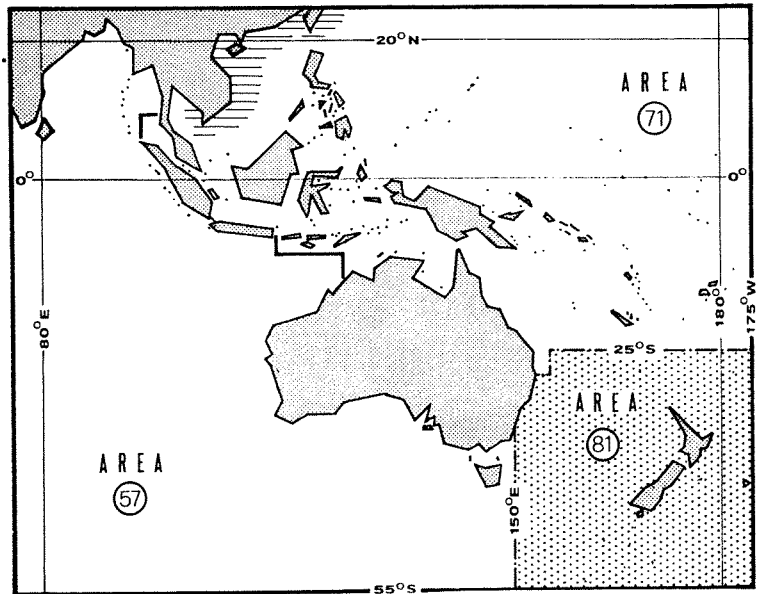
South China Sea and East China Sea.

Lives over muddy bottoms of the continental shelf, down to about 100 m.

Feeds on bottom-living invertebrates and fishes.

PRESENT FISHING GROUNDS:

Muddy grounds of the continental shelf.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

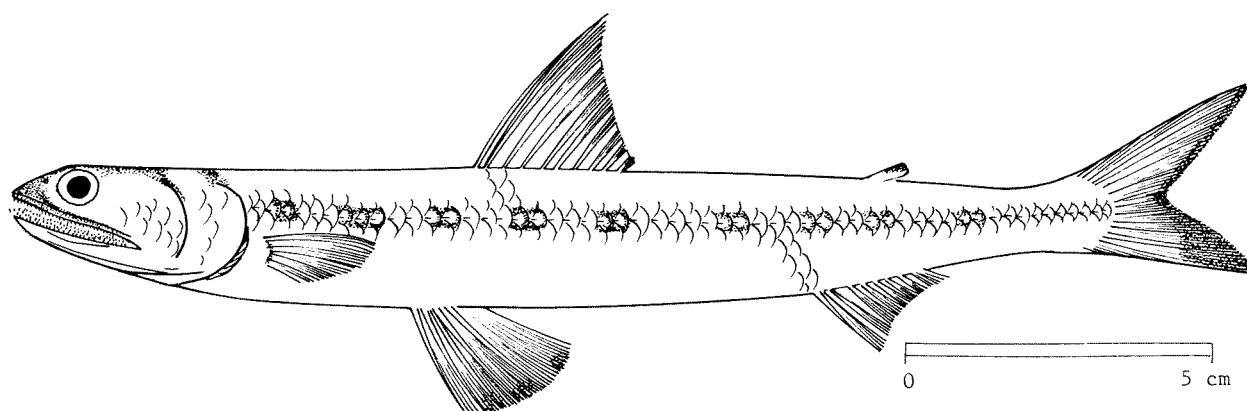
Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

Marketed sometimes fresh; mainly made into fish cakes and fish balls.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Saurida micropectoralis* Shindo & Yamada, 1972SYNONYMS STILL IN USE: *Saurida elongata*: misidentification

VERNACULAR NAMES:

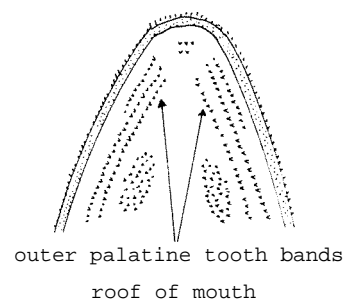
FAO: En - Shortfin lizardfish
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, cylindrical, with lizard-like head and adipose fin.
3 or more rows of teeth on anterior part of outer palatine tooth band.
Pectoral fins short, their tips not reaching to level of pelvic fin origin; pelvic fin rays almost equal in length.

Colour: back and upper sides brown, lower sides and belly white;
9 to 10 faint darker blotches along lateral line and sometimes traces
of very indistinct cross-bars on back; occasionally, faint black dots
also along upper edge of pectoral and caudal fins; upper portion of
inner face of pectoral fins dark; stomach white.

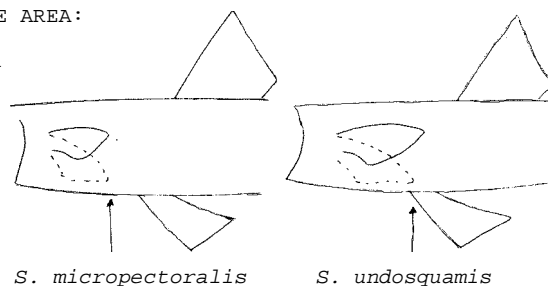


DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Saurida elongata: inner face of pectoral fins uniformly dark and no dark blotches on body.

Other *Saurida* species in area: pectoral fins longer (reaching to or beyond level of pelvic fin base).

Synodus and *Trachinocephalus* species: inner pelvic fin rays much longer than outer ones (3 times longer; equal in *Saurida*).



SIZE:

Maximum: 38 cm; common: 20 to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

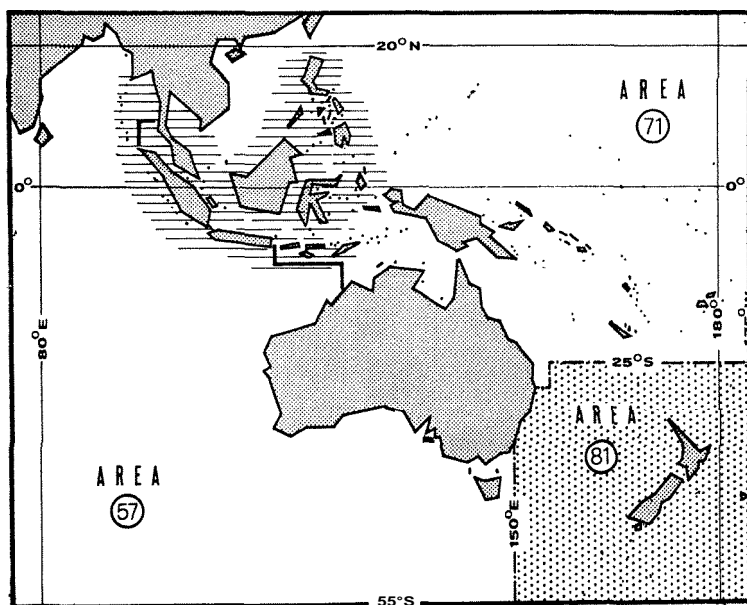
Andaman Sea and South China Sea, including the Philippine Islands, but not recorded from New Guinea and Australia.

Lives over muddy bottoms of the continental shelf down to about 60 m.

Feeds on bottom-living invertebrates and fishes.

PRESENT FISHING GROUNDS:

Shallow, muddy grounds of the continental shelf.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

The total reported catch for lizardfishes in 1972 was 20 000 tons (Malaysia only).

Caught with bottom trawls.

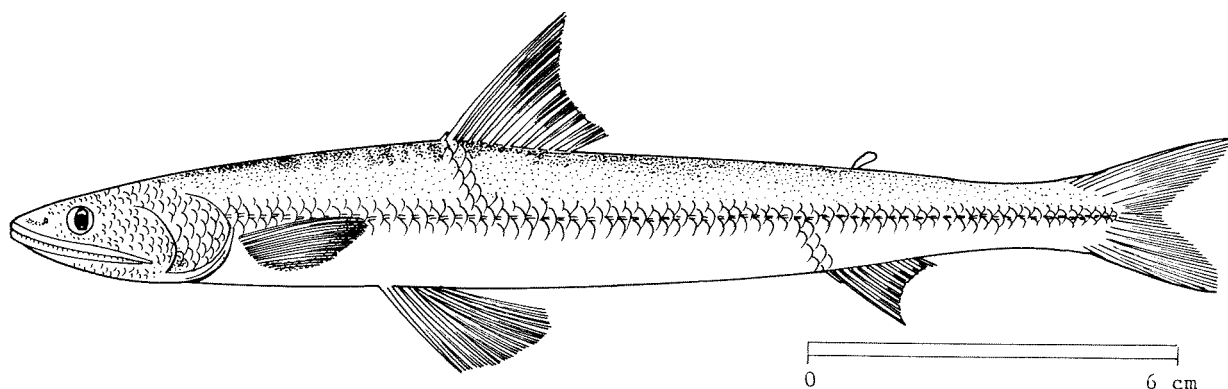
Marketed occasionally fresh; mainly made into fish cakes and fish balls.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Saurida elongata* (Temminck & Schlegel, 1846)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

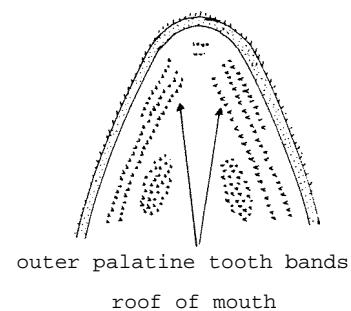
FAO: En - Slender lizardfish
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, cylindrical, with lizard-like head and adipose fin. 3 or more rows of teeth on anterior part of outer palatine tooth bands. Pectoral fins short, not reaching to level of pelvic fin base; pelvic fin rays almost equal in length.

Colour: back and upper sides brown, lower sides and belly white; no blotches or cross-bars on back and sides; inner face of pectoral fins uniformly dark; stomach white.

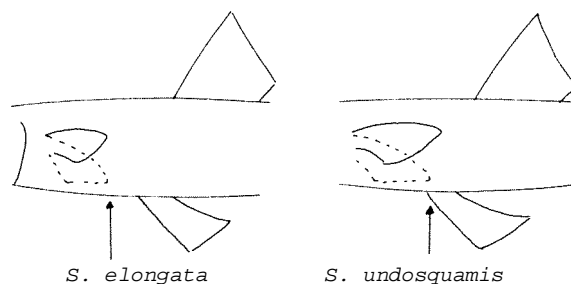


DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Saurida micropectoralis: 9 to 10 faint blotches along lateral line and only upper part of inner face of pectoral fin dark.

Other *Saurida* species in area: pectoral fins longer (reaching to or beyond level of pelvic fin base).

Synodus and *Trachinocephalus* species: inner pelvic fin rays much longer than outer ones (3 times longer; equal in *Saurida*).



SIZE:

Maximum: about 45 cm;
common: 25 to 38 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

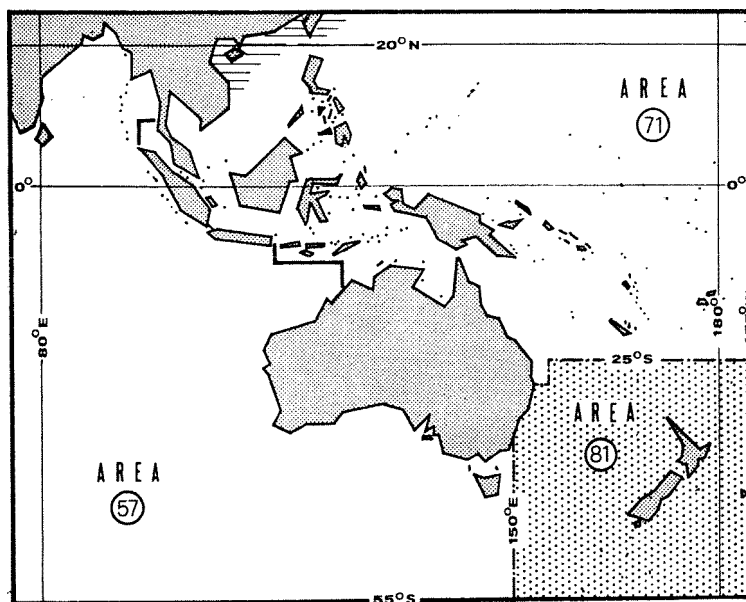
Northern part of South China Sea;
also, northward to Japan.

Lives over muddy bottoms in coastal
waters.

Feeds on small bottom-living
invertebrates and fishes.

PRESENT FISHING GROUNDS:

Muddy bottoms in coastal waters.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

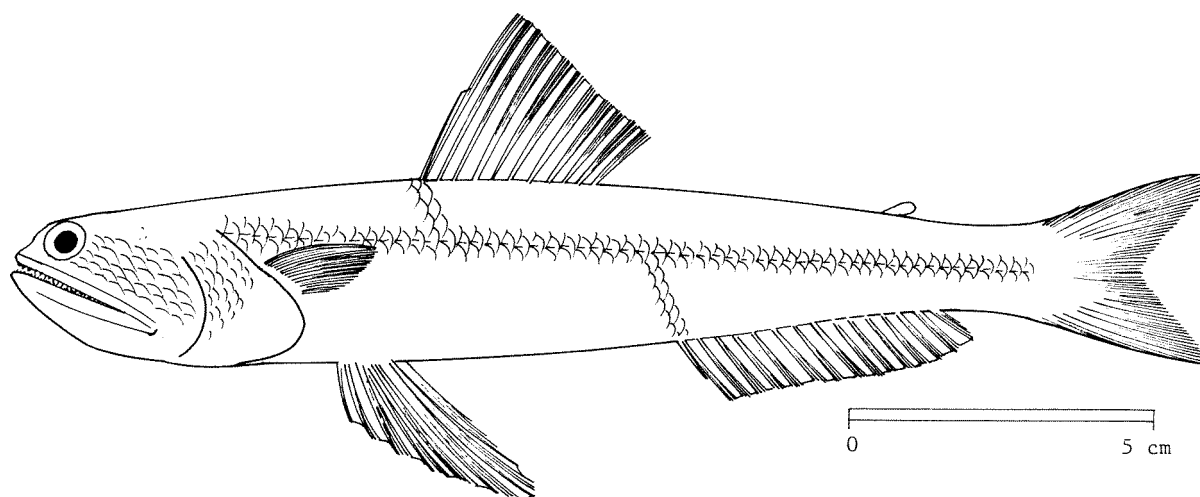
The total reported catch for lizardfishes in 1972 was 20 000 tons (Malaysia only).

Caught mainly with bottom trawls.

Marketed sometimes fresh; made into fish cakes and fish balls.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SYNODONTIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Trachinocephalus myops* (Bloch & Schneider, 1801)SYNONYMS STILL IN USE: *Trachinocephalus limbatus* (Eydoux & Souleyet, 1841)

VERNACULAR NAMES:

FAO: En - Blunnose lizardfish
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

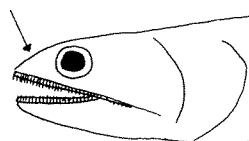
Body elongate, slightly compressed, with adipose fin; head not strongly depressed, but more or less lizard-like, with eyes placed near to tip of snout (snout shorter than eye diameter); mouth large, with small, close-set teeth; palatine teeth in a single band on each side. Inner pectoral fin rays about 3 times longer than outer ones; anal fin base distinctly longer than dorsal fin base.

Colour: head and back green/brown, upper flanks with blue/green and yellow longitudinal bands; lower flanks and belly white; fins pale yellow.

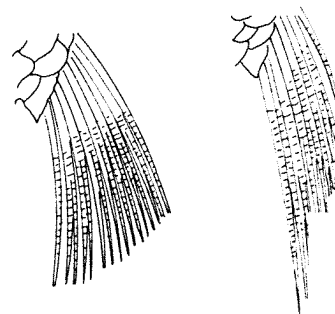
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Synodus species: snout longer equal to or larger than eye diameter), head depressed and the anal fin base equal to or shorter than dorsal fin base.

Saurida species: inner and outer pelvic fin rays almost equal in length.



Synodus

Saurida Trachinocephalus
shape of pelvic fin

SIZE:

Maximum: about 40 cm;
common: 20 to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout northern part of area and southward to New South Wales (Australia); also, westward to East Africa.

Lives over muddy bottoms of bays and coastal waters.

Feeds on small bottom-living invertebrates and fishes.

PRESENT FISHING GROUNDS:

Shallow muddy grounds of the continental shelf.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

The total reported catch for lizardfishes in 1972 was 20 000 tons (Malaysia only).

Caught mainly with bottom trawls.

Made mostly into fish cakes and fish balls.

