



## FAO SPECIES IDENTIFICATION SHEETS

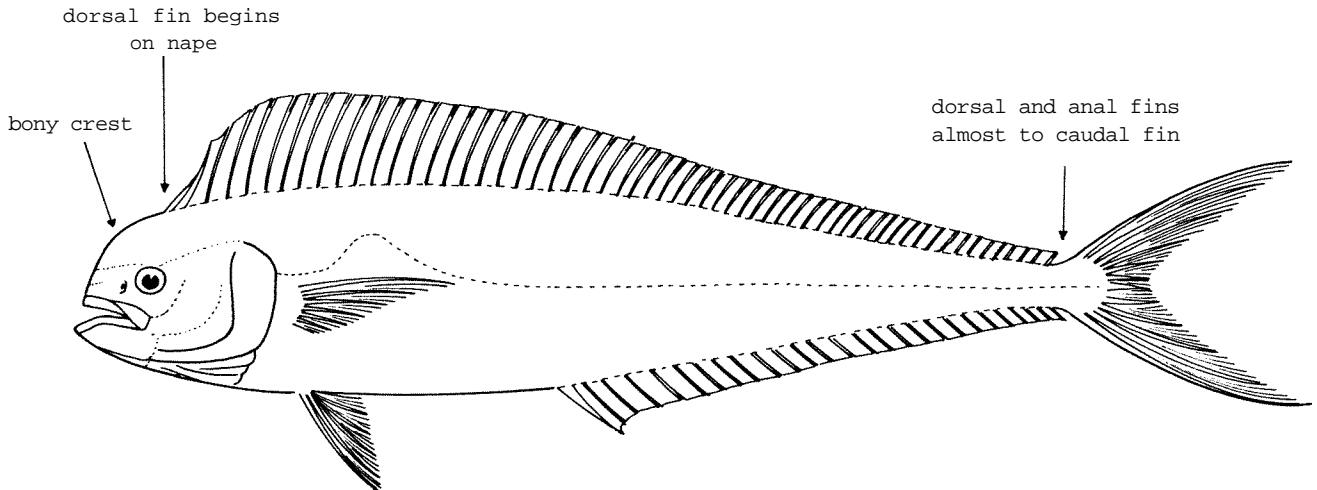
FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

## CORYPHAENIDAE

## Dolphinfishes, 'dolphins'

Elongate compressed fishes. Scales small and cycloid (smooth to touch). Mouth large, with many fine teeth in bands. *Adults develop a bony crest on front of head which is more pronounced in males.* Lateral line curved upward above pectoral fin. *Dorsal and anal fins very long, continuing almost to caudal fin.* *Dorsal fin origin on nape;* anal fin origin at or before mid-point of body; caudal fin deeply forked; pelvic fins fit into a groove in body; *no spiny rays.*

Colour: in life very variable, *sides with golden hues and back brilliant metallic greens and blues;* many small, black spots on head and body. Specimens less than 15 cm have dark vertical bars.



## SIMILAR FAMILIES OCCURRING IN THE AREA:

No other fishes have the following combination of characters: dorsal fin from nape almost to caudal fin and anal fin from about mid-point of body almost to caudal fin; no spiny rays; caudal fin deeply forked; pelvic fins present; adults with bony crest on front of head.

FAO Sheets

CORYPHAENIDAE

Fishing Areas 57,71

Key to Genera

*Coryphaena* only

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

<i>Coryphaena equiselis</i>	CORY Cory 2
<i>Coryphaena hippurus</i>	CORY Cory 1

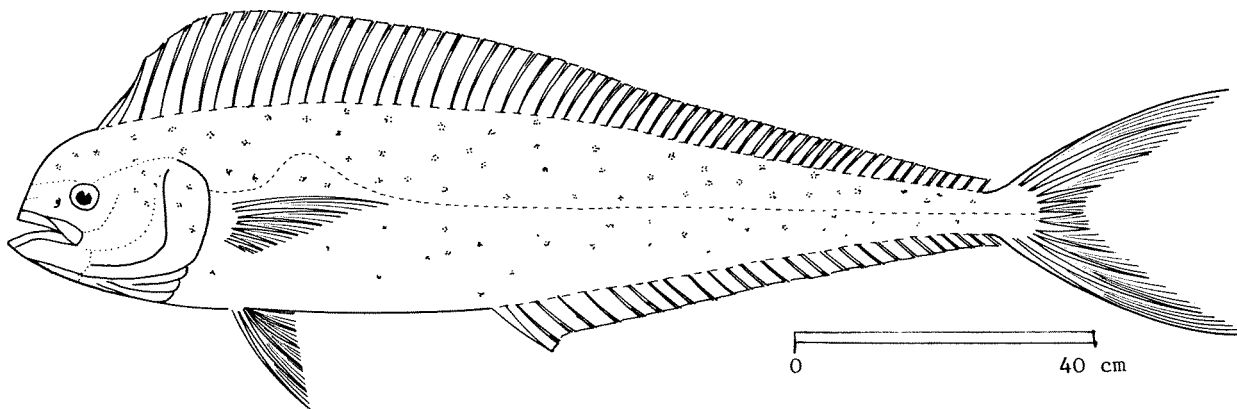
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CORYPHAENIDAE

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

*Coryphaena hippurus* Linnaeus, 1758

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

- FAO: En - Common dolphinfish
- Fr -
- Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate and compressed, greatest body depth in adults Less than 25% of standard length; young fish (up to 30 cm) have slender, elongate body with head profile slightly convex; in larger fishes (30 to 200 cm) head profile becomes vertical with development of bony crest, more pronounced in males. A single dorsal fin extending from above eye almost to caudal fin, with 55 to 65 rays; concave anal fin from anus almost to caudal fin; pectoral fin more than half of head length; caudal fin deeply forked. Tooth patch on tongue small and oval; bands of teeth on jaws, vomer and palatines.



head showing increase in steepness of profile with age

Colour: back brilliant metallic blue/green in life, after death fading to grey with green tinge; flanks silvery with golden sheen, and 1 row of dark spots or golden blotches running beside dorsal fin and 1, 2 or more rows on and below lateral line, some scattered irregularly; dorsal and anal fins black, the latter with a white edge; pectoral fins pale; caudal fin silvery with golden sheen. In juveniles, only tips of caudal fin lobes white; pelvic fins pigmented.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Coryphaena equiselis*: dorsal fin rays 48 to 55 (55 to 65 in *C. hippurus*), a broad and square tooth patch on tongue; greatest body depth more than 25% of standard length; pectoral fins about half of head length; anal fin convex in outline. In juveniles, entire margin of caudal fin white, but pelvic fins not pigmented.

SIZE:

Maximum: 200 cm; common: 70 to 100 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout whole area; also, all tropical and sub-tropical seas.

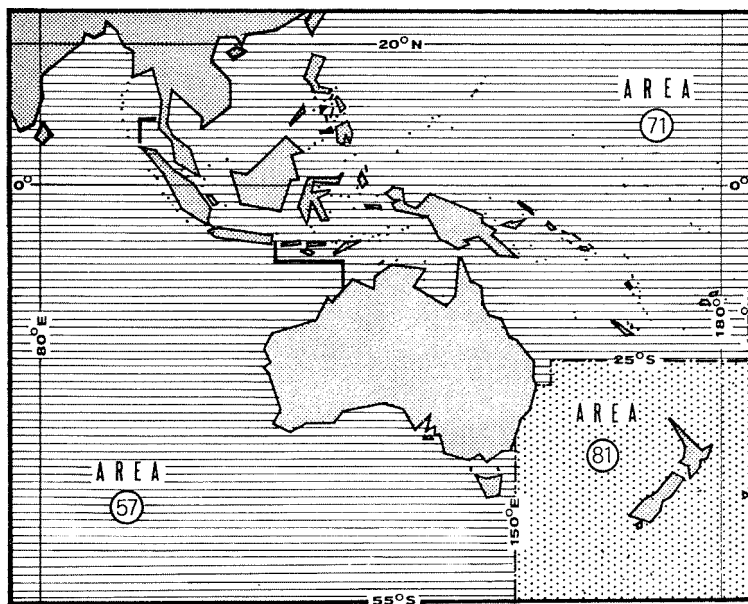
Pelagic, inhabiting open waters, but also approaching the coast; follows ships and forms small concentrations below floating objects.

Feeds mainly on fishes, but also on crustaceans and squids.

Breeds in the sea, probably approaching the coast as water temperatures rise.

PRESENT FISHING GROUNDS:

Mainly oceanic waters.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught by trolling and with floating traps; also occasionally with purse seines.

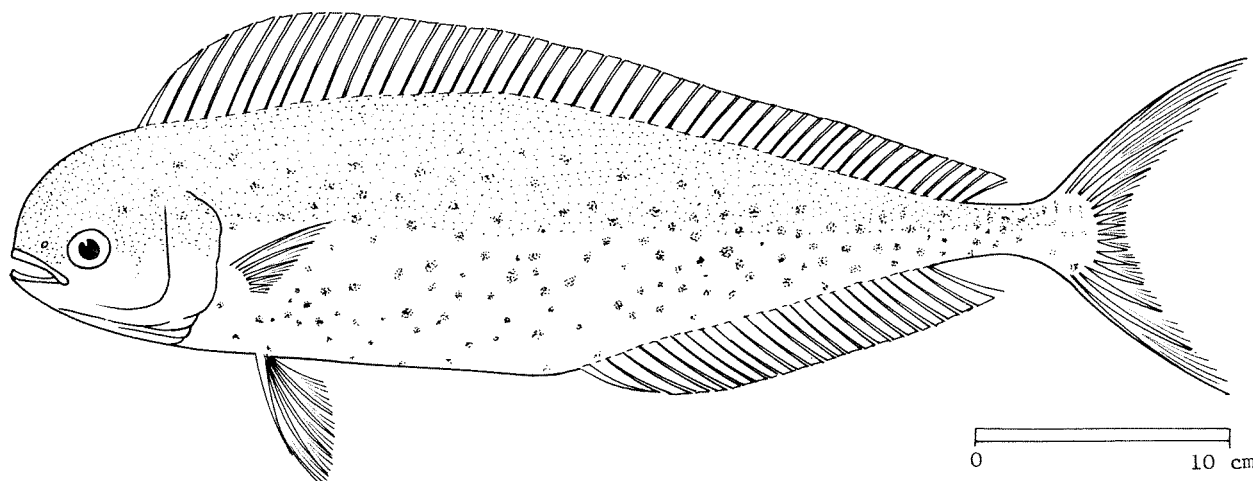
Marketed fresh; an important table fish in some areas.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CORYPHAENIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Coryphaena equiselis* Linnaeus, 1758

SYNONYMS STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Pompano dolphinfish  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body elongate and compressed, *greatest body depth in adults more than 25% of standard length*; young fish (up to 30 cm) have head profile slightly convex; in larger fishes (30 to 200 cm) head profile becomes vertical with development of bony crest, more pronounced in males. A *single dorsal fin from just behind eye almost to caudal fin, with 48 to 55 rays*; *convex anal fin from anus almost to caudal fin*; *pectoral fin about half of head length*; *caudal fin deeply forked*. *Tooth patch on tongue broad and square*; bands of teeth on jaws, vomer and palatines.

head showing increase  
in steepness of  
profile with age

Colour: back brilliant metallic blue/green in life, fading rapidly after death to grey with green tinge; flanks silvery with golden sheen and numerous black spots; dorsal fin dark. In juveniles, entire margin of caudal fin white; pelvic fins not pigmented.

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

*Coryphaena hippurus*: 55 to 65 dorsal fin rays (48 to 55 in *C. equiselis*); an oval tooth patch on tongue; greatest body depth less than 25% of standard length; pectoral fins more than half of head length; anal fin concave in outline. In juveniles, only caudal fin tips white, pelvic fins pigmented.

SIZE:

Maximum: 75 cm; common: 20 to 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

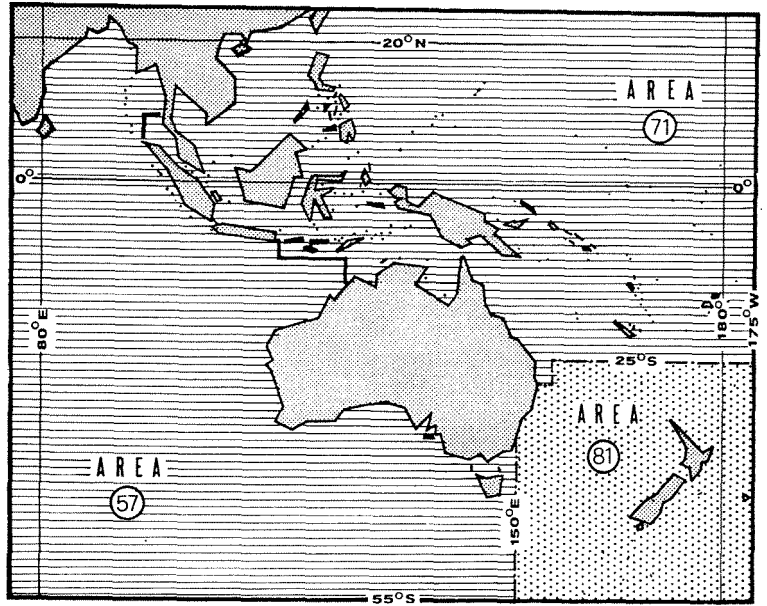
Probably throughout area, but not always distinguished from *C. hippurus*; also, probably in most tropical and sub-tropical seas.

Pelagic, inhabiting open waters, but also approaching the coast. Probably resembles *C. hippurus* in following ships and concentrating below floating objects.

Feeds on small fish and squid.

PRESENT FISHING GROUNDS:

Mainly oceanic waters.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly by trolling and with floating lines; also occasionally with purse seines.

Marketed fresh.

## FAO SPECIES IDENTIFICATION SHEETS

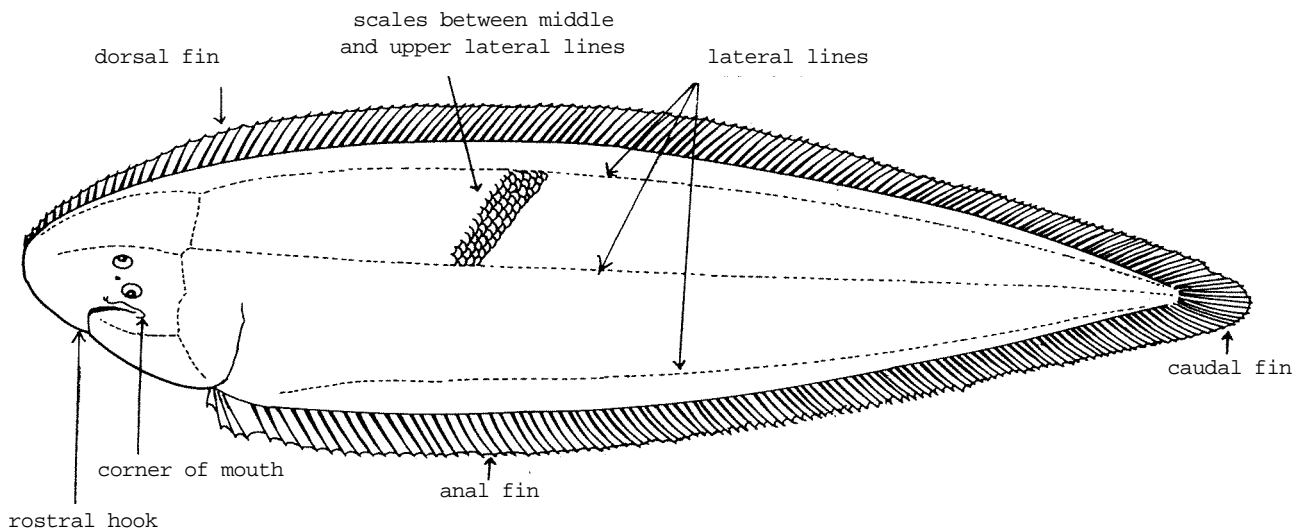
FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

## CYNOGLOSSIDAE

## Tongue soles

Tongue-shaped flatfishes with eyes on left side of body, which is highly compressed and tapers posteriorly. Mouth asymmetrical, lips sometimes fringed, teeth minute and on blind side only; rostral hook present below mouth. Preoperculum without free margin, hidden beneath skin. Dorsal fin reaching forward onto head; both dorsal and anal fins joined to caudal fin; pectoral fins absent; only left pelvic fin present; no spiny rays in dorsal and pelvic fins. Scales small, ctenoid (rough to touch) or cycloid (smooth); lateral lines variable, 0 to 3 on eyed side, 0 to 2 on blind side.

Colour: usually brownish, sometimes with indistinct cloudy patches or darker spots united into irregular cross-bands on eyed side, lighter on blind side; fins greyish. Colour highly variable according to substratum.



## SIMILAR FAMILIES OCCURRING IN THE AREA:

*Soleidae*: also have dorsal fin far forward on head and dorsal and anal fins joined to caudal fin, but eyes on right side of body (eyes on left side in *Cynoglossidae*).

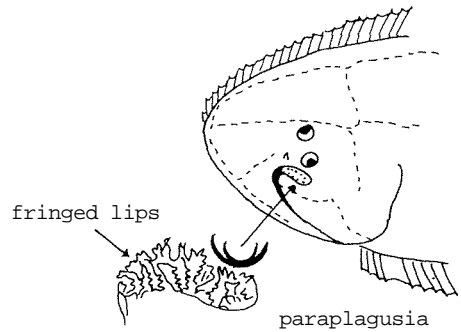
*Psettodidae*: dorsal and anal fins separate from caudal fin, dorsal fin not extending forward onto head and spiny rays present in dorsal and pelvic fins (no spiny rays in *Cynoglossidae*).

*Pleuronectidae*, *Bothidae*: margin of preoperculum free and distinct (no free margin, preoperculum hidden beneath skin in *Cynoglossidae*).



Key to Genera

- 1 a. Two or three lateral lines on eyed side
  - 2 a. Lips fringed ..... *Paraplagusia*
  - 2 b. Lips not fringed ..... *Cynoglossus*
- 1 b. No lateral line on eyed side ..... *Symphurus*



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

<i>Cynoglossus abbreviatus</i>	CYNO Cyno 1	<i>Paraplagusia bilineata</i>	CYNO Para 1
<i>Cynoglossus bilineatus</i>	CYNO Cyno 2	<i>Paraplagusia blochii</i>	
<i>Cynoglossus borneensis</i>			
<i>Cynoglossus broadhurstti</i>			
<i>Cynoglossus carpenteri</i>			
<i>Cynoglossus cynoglossus</i>	CYNO Cyno 3	<i>Symphurus australis*</i>	
<i>Cynoglossus dispar</i>		<i>Symphurus-gilesi</i>	
<i>Cynoglossus gracilis</i>		<i>Symphurus macrophthalmus</i>	
<i>Cynoglossus kopsi (C. brachycephalus)</i>		<i>Symphurus microrhynchus</i>	
<i>Cynoglossus lida</i>		<i>Symphurus regani</i>	
<i>Cynoglossus lingua</i>	CYNO Cyno 4	<i>Symphurus septemstriatus</i>	
<i>Cynoglossus macrolepidotus</i>	CYNO Cyno 5	<i>Symphurus trifasciatus</i>	
<i>Cynoglossus riacrostomus</i>	CYNO Cyno 6	<i>Symphurus woodmasoni</i>	
<i>Cynoglossus maeulipinnis</i>			
<i>Cynoglossus monopus</i>			
<i>Cynoglossus puncticeps</i>	CYNO Cyno 7		
<i>Cynoglossus semifasciatus</i>			
<i>Cynoglossus suyeni</i>			

*Symphurus* species occur at depths of 400 to 1 500 m and are thus unlikely in commercial catches.

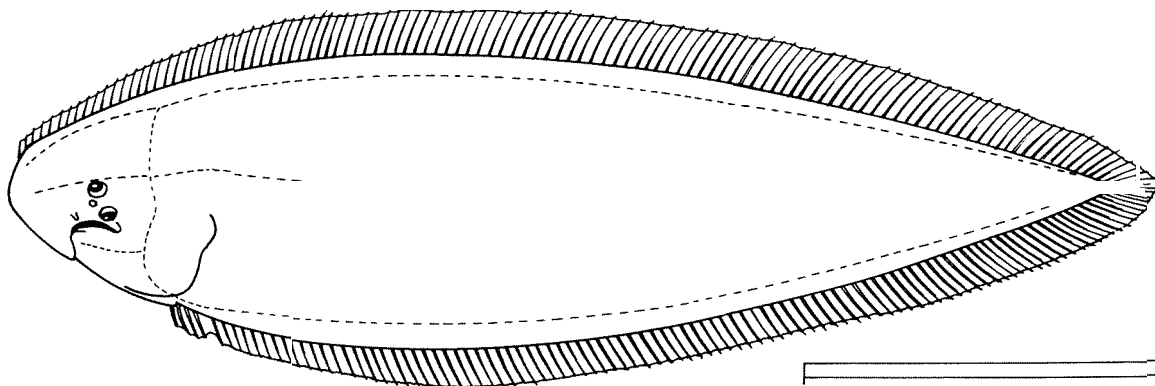
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

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

*Cynoglossus abbreviatus* (Gray, 1834)

STILL IN USE: *Cynoglossus trigrammus* (Günther, 1862)



VERNACULAR NAMES:

- FAO: En - Threelined tongue sole
- Fr -
- Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with a small scaly space between them. Snout obtusely pointed, rostral hook short, corner of mouth not reaching beyond lower eye, slightly nearer to gill opening than to tip of snout. 3 lateral lines on eyed side, none on blind side. Scales ctenoid (rough to touch) on both sides of body, small, 18 to 23 rows between upper and middle lateral lines on eyed side.

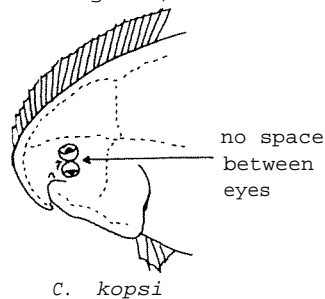
Colour: eyed side brown with dark blotches, blind side white.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Cynoglossus earpenteri* and *C. suyeni*: also have 3 lateral lines on eyed side but snout acutely pointed; also, cycloid scales on both sides (*C. carpenteri*) or no space between eyes (*C. suyeni*).

*Cynoglossus gracilis*: body more slender (depth 5 times in standard length; (about 4 times in *C. abbreviatus*).

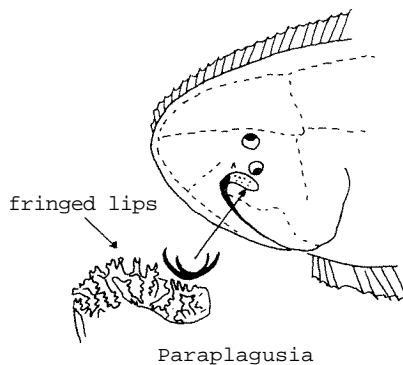
*Cynoglossus kopsi*, *C. maeulipinnis*: sometimes also have 3 lateral lines on eyed side, but no space between eyes.



*C. kopsi*

Other *Cynoglossus* species: only 2 lateral lines on eyed side (3 in *C. abbreviatus*).

*Paraplagusia* species: lips fringed.



SIZE:

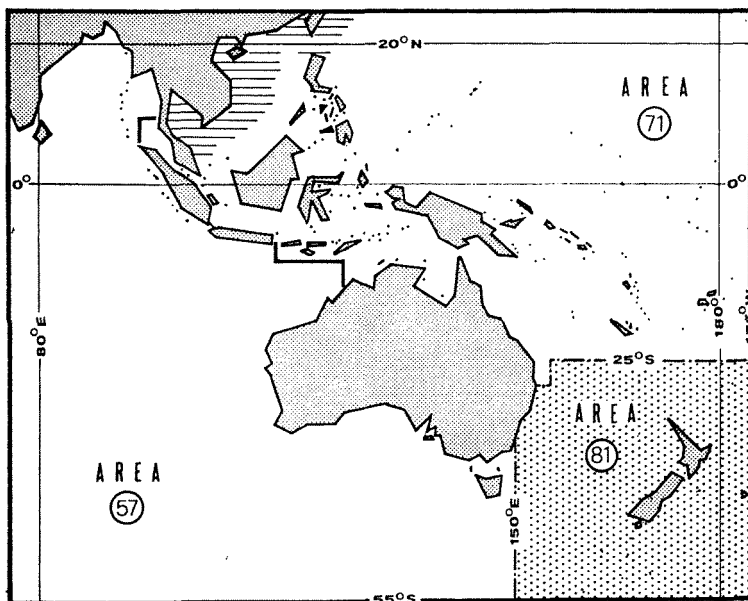
Maximum: 30 cm; common: 20 to 25 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Present only in the South China Sea, from the Gulf of Thailand to Taiwan.

Inhabits muddy and sandy bottoms of the continental shelf.

Feeds predominantly on bottom-living invertebrates.



PRESENT FISHING GROUNDS:

Trawling grounds on the continental shelf.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

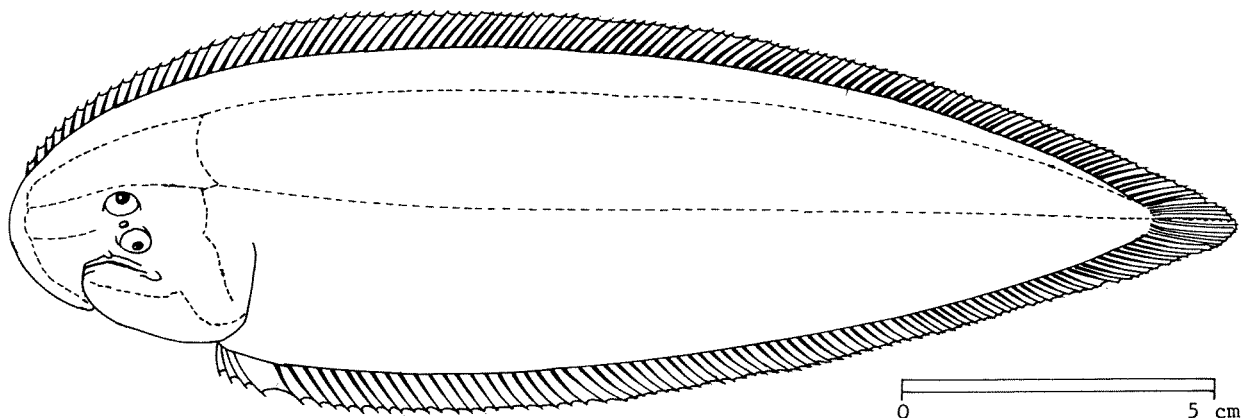
Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

Marketed mostly fresh or frozen; also dried-salted.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Cynoglossus bilineatus* (Lacepède, 1802)SYNONYMS STILL IN USE : *Cynoglossus quadrilineata* (Bleeker, 1851)

## VERNACULAR NAMES:

FAO: En - Fourlined tongue sole  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with a small scaly space between them. Snout rounded, rostral hook short, corner of mouth reaching beyond lower eye, nearer to gill opening than to tip of snout. 2 lateral lines on eyed side and 2 on blind side. Scales ctenoid (rough to touch) on eyed side but cycloid (smooth) on blind side, 13 to 16 rows between lateral lines on eyed side.

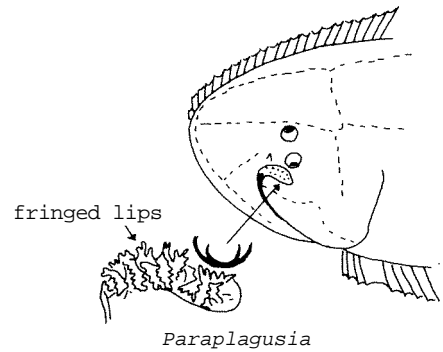
Colour: eyed side brown with an irregular dark blotch on gill cover, blind side white.

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

*Cynoglossus dispar*: also has 2 lateral lines on blind side but scales smaller, 18 to 20 scale rows between lateral lines on eyed side (13 to 16 in *C. bilineatus*).

Other *Cynoglossus* species: only 1 lateral line or none on blind side (2 on blind side in *C. bilineatus*).

*Paraplagusia* species: lips fringed.



SIZE:

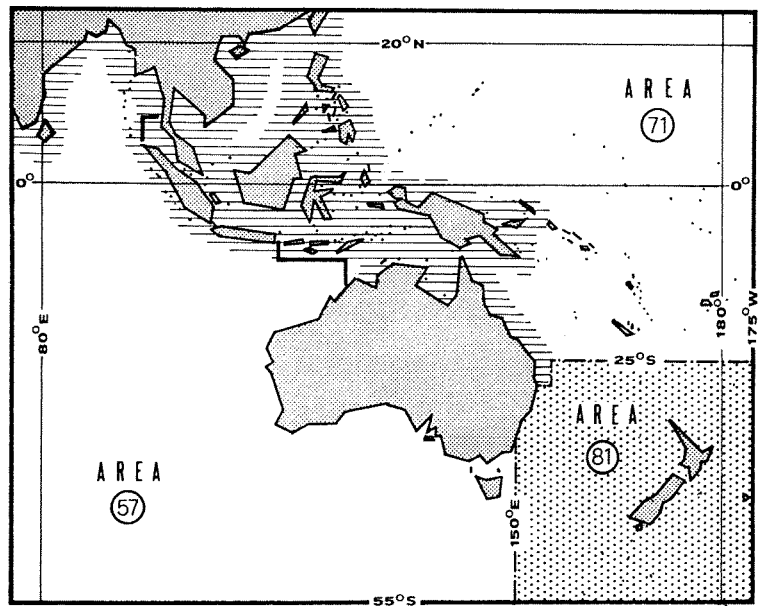
Maximum: 35 cm; common: 15 to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of the northern part of area and southward to northern coast of Australia (but absent from waters to the east of New Guinea); also, westward to west coast of India.

Inhabits muddy and sandy bottoms of the continental shelf, down to about 80 m.

Feeds predominantly on bottom-living invertebrates.



PRESENT FISHING GROUNDS:

Trawling grounds on the continental shelf.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

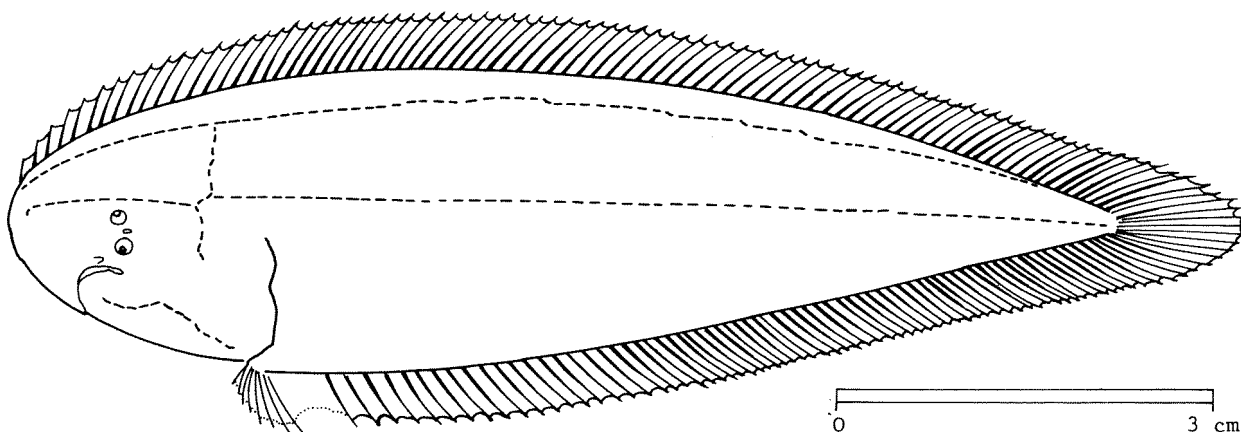
Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

Marketed mostly fresh and frozen; also dried-salted.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Cynoglossus cynoglossus* (Ham. Buch., 1822)SYNONYMS STILL IN USE: *Cynoglossus sumatranus* (Sleeker, 1853)  
*Cynoglossus bengalensis* (Sleeker, 1853)

## VERNACULAR NAMES:

FAO: En - Bengal tongue sole  
Fr -  
Sp -

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with a space between them. Snout rounded, rostral hook short, corner of mouth not reaching beyond lower eye, nearer to tip of snout than to gill opening. 2 lateral lines on eyed side but none on blind side. Scales on both sides of body ctenoid (rough to touch), 12 to 14 rows between lateral lines of eyed side.

Colour: eyed side brown/grey, with vague dark marbling.

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

*Cynoglossus macrolepidotus*: scales much larger (7 to 9 rows between lateral lines; 12 to 14 in *C. cynoglossus*) and cycloid (smooth) on blind side; also, snout pointed.

*Cynoglossus punetieeps* and *C. semifasciatus*: dark blotches forming irregular cross-bands on body.

*Cynoglossus macrostomus*, *C. kopsi*, *C. monopus* and *C. maculipinnis*: no space between eyes.

*Cynoglossus lingua*: body very elongate, its depth 6 times in standard length (about 4 times in *C. cynoglossus*).

*Cynoglossus abbreviatus*, *C. carpenters* and *C. suyeni*: 3 lateral lines on eyed side.

*Cynoglossus lida*: corner of mouth much nearer to gill opening than to tip of snout (nearer to snout in *C. cynoglossus*).

Other *Cynoglossus* species: 1 or 2 lateral lines on blind side of body (exceptions are species unlikely in commercial catches).

*Paraplagusia* species: lips fringed.

#### SIZE:

Maximum: 20 cm; common: 10 to 15 cm.

#### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Northern part of area from northeastern coasts of India to the Philippines and Indonesia; not to New Guinea or Australia.

Inhabits muddy and sandy bottoms, often in shallow areas, including river estuaries and brackish waters.

Feeds mostly on bottom-living invertebrates.

#### PRESENT FISHING GROUNDS:

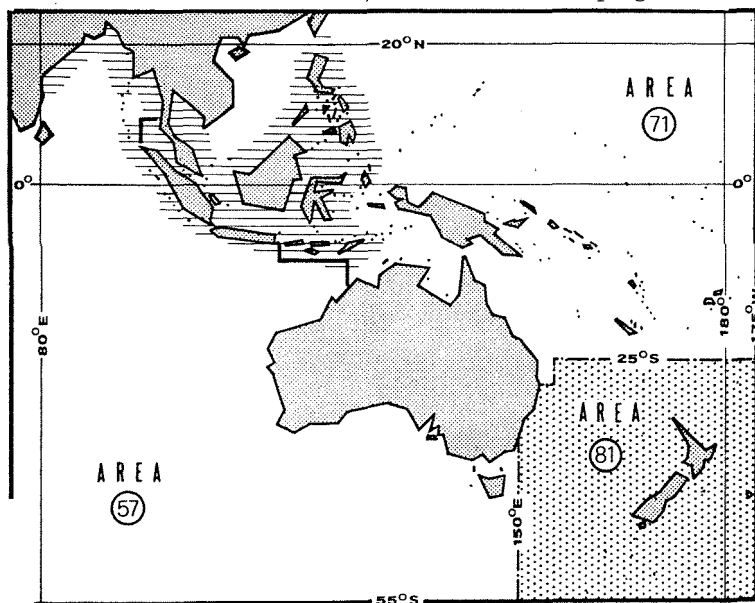
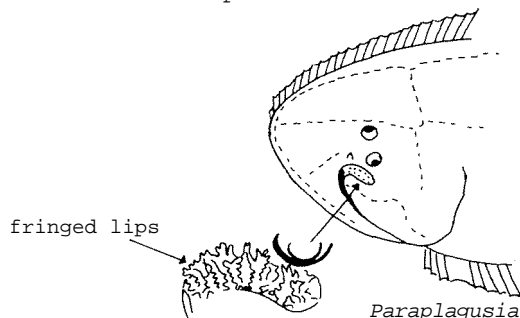
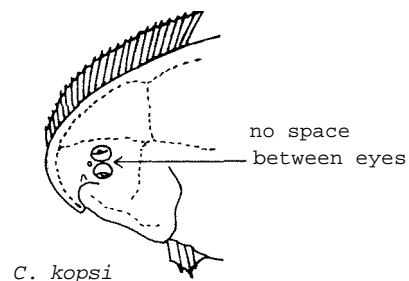
Trawling grounds on the continental shelf and in estuaries.

#### CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls; also with beach seines.

Marketed mostly fresh or frozen; also dried-salted,



## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

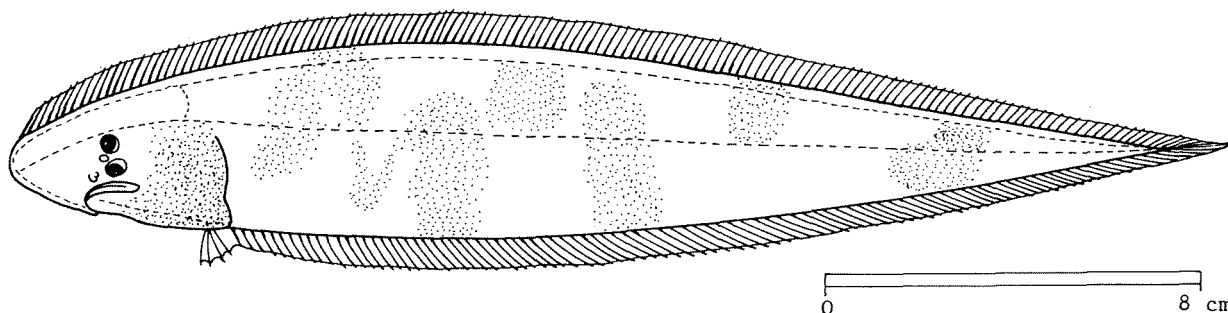
FISHING AREAS 57,71

(E Ind.Ocean)

(W.Cent. Pacific)

*Cynoglossus lingua* (Ham. Buch.1822)

SYNONYMS STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Long tongue sole

Fr -

Sp -

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body flat and very elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with a small space between them. Snout obtusely pointed, rostral hook short, corner of mouth reaching well beyond lower eye, much nearer to gill opening than to tip of snout. 2 lateral lines on eyed side but none on blind side. Scales ctenoid (rough to touch) on eyed side but cycloid (smooth) on blind side, fairly large, only 11 to 12 rows between lateral lines on eyed side.

Colour: eyed side red/brown, sometimes with irregular brown/black patches, with a large black blotch on gill cover.

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

*Cynoglossus gracilis*, *C. abbreviatus*, *C. carpenteri* and *C. suyeni*: three lateral lines on eyed side.

*Cynoglossus cynoglossus*, *C. lida* and *C. puncticeps*: body much less elongate (depth about 4 times in standard length; 6 times in *C. lingua*) and scales ctenoid on blind side.

*Cynoglossus dubius*, *C. macrolepidotus*, *C. borneensis*, *C. bilineatus*, *C. dispar* and *C. broadhursti*: also have cycloid scales on blind side, but body much less elongate (depth about 4 times in standard length; 6 times in *C. lingua*); also, 1 lateral line on blind side (*C. dubius*), or smaller scales (*C. macrostomus*), or 2 lateral lines on blind side (*C. bilineatus*, *C. dispar*).

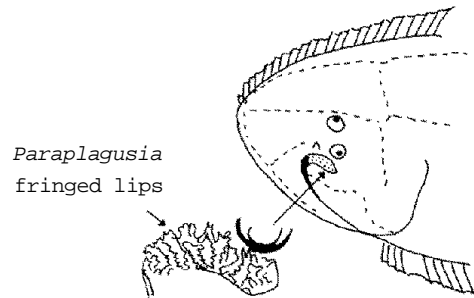
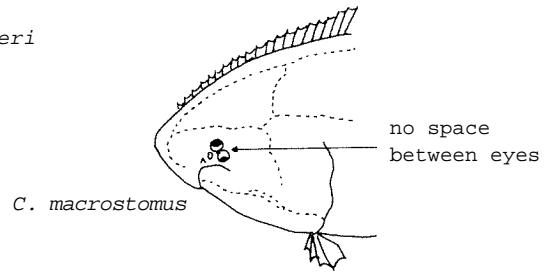


*Cynoglossus kopsi*, *C. macrostomus*, *C. monopus*, *C. suyeri*  
and *C. maculipinnis*: no space between eyes.

*Paraplagusia* species: lips fringed.

SIZE:

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



GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

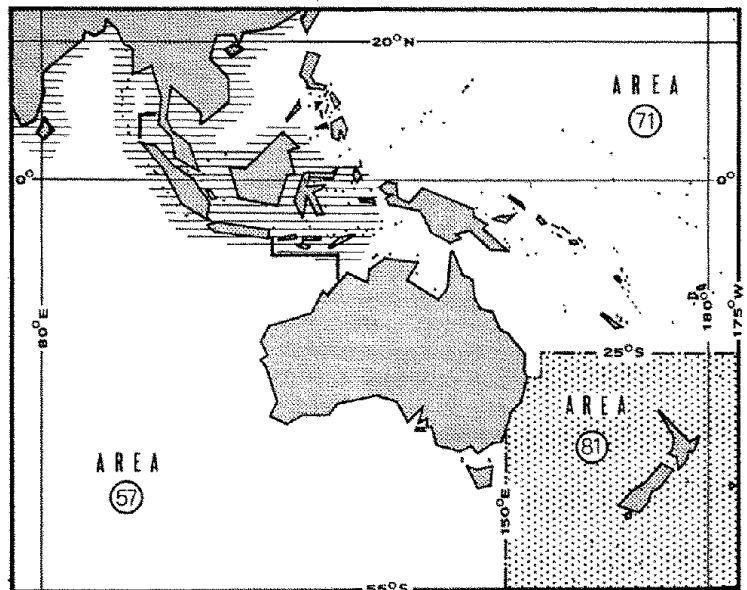
From western coast of India to the Philippines and Indonesia; not to New Guinea or Australia.

Inhabits mainly shallow muddy and sandy bottoms of the continental shelf, entering estuaries.

Feeds predominantly on bottom-living invertebrates.

PRESENT FISHING GROUNDS:

Shallow trawling grounds of the continental shelf and estuaries.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

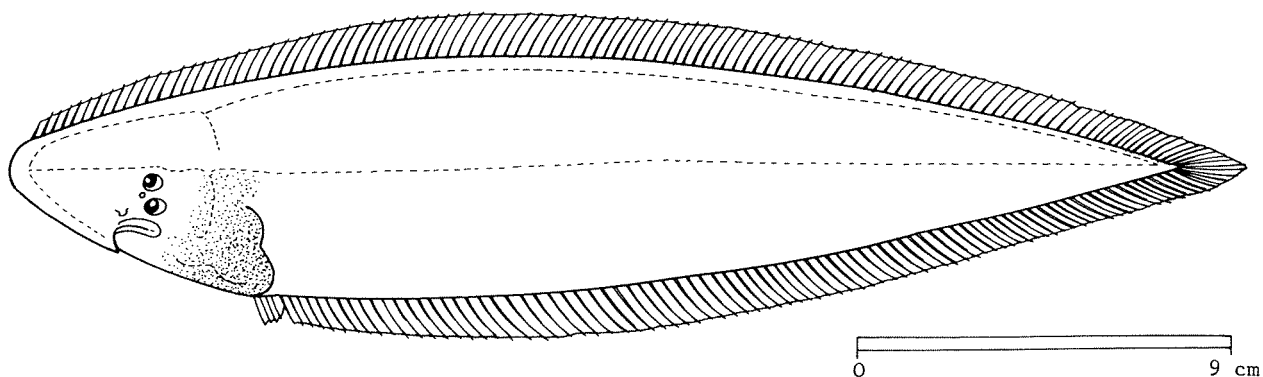
Marketed mostly fresh and frozen; also dried-salted.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Cynoglossus macrolepidotus* (Bleeker, 1851)

SYNONYMS STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Largescale tongue sole  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with a small scaly space between them. Snout obtusely pointed, rostral hook short, corner of mouth reaching or almost reaching beyond lower eye, about midway between gill opening and tip of snout. 2 lateral lines on eyed side but none on blind side. Scales ctenoid (rough to touch) on eyed side but cycloid (smooth) on blind side, large, 7 to 9 rows between lateral lines on eyed side.

Colour: eyed side uniform brown, with a dark patch on gill cover, blind side white.

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

*Cynoglossus bilineatus*, *C. dubius* and *C. dispar*: 2 lateral lines on blind side (*C. bilineatus*, *C. dispar*) or only 1 (*C. dubius*) (none in *C. macrolepidotus*).

*Cynoglossus lingua*: also has dark patch on gill cover, but body much more elongate (depth 6 times in standard length; about 4.5 times in *C. macrolepidotus*); also, scales smaller.

*Cynoglossus cynoglossus*, *C. abbreviatus* and *C. puncticeps*: scales ctenoid on blind side (cycloid scales in *C. macrolepidotus*).

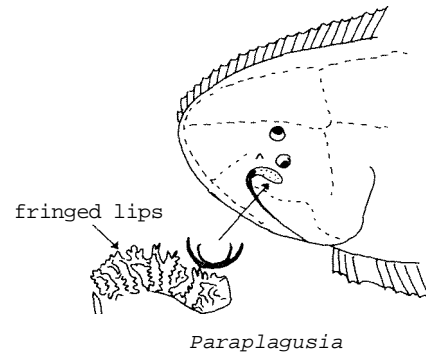
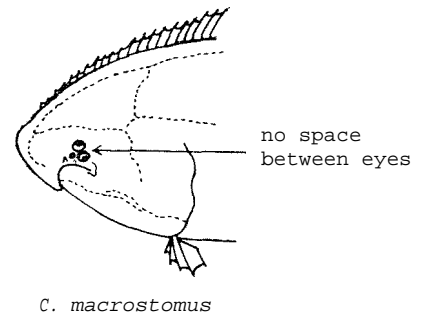
*Cynoglossus kopsi*, *C. maculipinnis*, *C. monopus*,  
*C. macrostomus* and *C. suyeni*: no space between eyes.

Other *Cynoglossus* species: scales much smaller (11 or more rows between lateral lines of eyed side; only 7 to 9 rows in *C. macrolepidotus*).

*Paraplagusia* species: lips fringed.

SIZE:

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

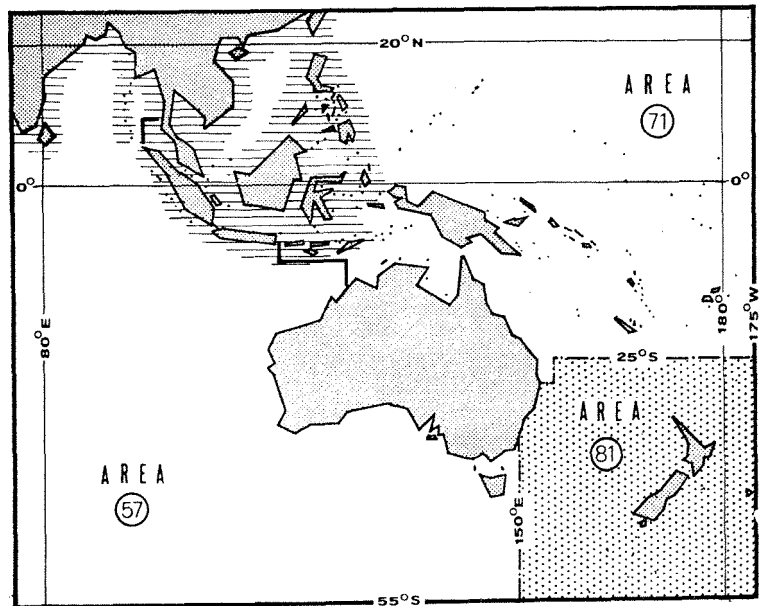


GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

From western coasts of India to the Philippines and Indonesia; not to New Guinea or Australia.

Inhabits muddy and sandy bottoms of the continental shelf.

Feeds predominantly on bottom-living invertebrates.



PRESENT FISHING GROUNDS:

Trawling grounds on the continental shelf down to 125 m.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION

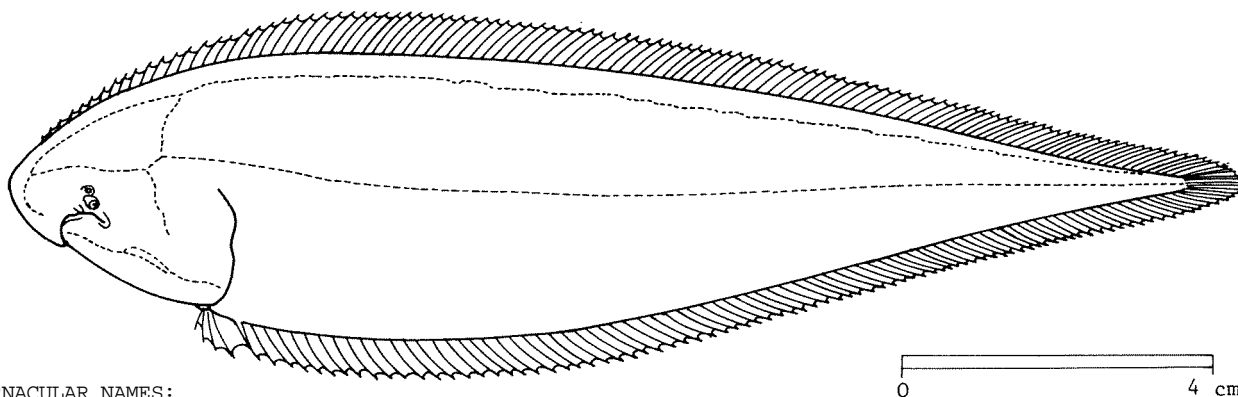
Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

Marketed mostly fresh or frozen; also dried-salted.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: GYNOGLOSSIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Cynoglossus macrostomus* Norman, 1928SYNONYMS STILL IN USE: *Cynoglossus luctosus* Chabanaud, 1947

## VERNACULAR NAMES:

FAO: En - Malabar tongue sole  
Fr -  
Sp -

## DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with no space between them. Snout short and obtusely pointed, rostral hook short, corner of mouth reaching well beyond lower eye, nearer to tip of snout than to gill opening. 2 lateral lines on eyed side but none on blind side. Scales ctenoid (rough to touch) on both sides of body, moderate-sized, 14 to 16 rows between lateral lines on eyed side.

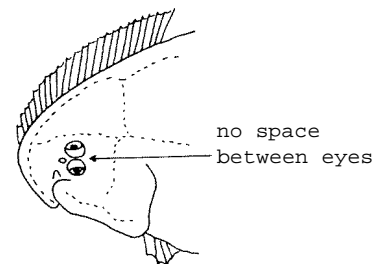
Colour: light brown on eyed side with dark brown mottling forming diffuse, irregular cross-bands; dorsal and anal fins grey/black.

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

*Cynoglossus monopus*: also has no space between eyes but eyes set on peduncular stalk (no peduncular stalk in *C. macrostomus*).

*Cynoglossus suyeni*: also no space between eyes, but 3 lateral lines on eyed side (2 in *C. macrostomus*); also, snout acutely pointed.

*Cynoglossus kopsi* and *C. maculipinnis*: also have no space between eyes, but scales larger (7 to 12 rows between lateral lines on eyed side in *kopsi*, 10 to 13 in *maculipinnis*); also upper lateral line extending along body to varying distances and a lower, third, lateral line rarely present.

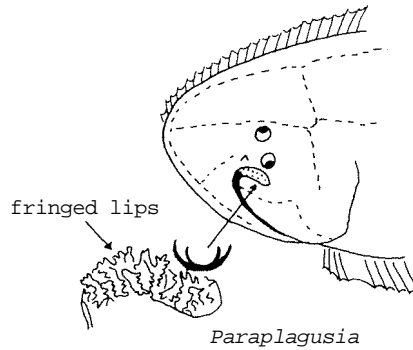
*C. kopsi*

Other *Cynoglossus* species: a distinct space between eyes (no space in *C. macrostomus*).

*Paraplagusia* species: lips fringed,

SIZE:

Maximum: 15 cm; common: 13 to 15 cm.

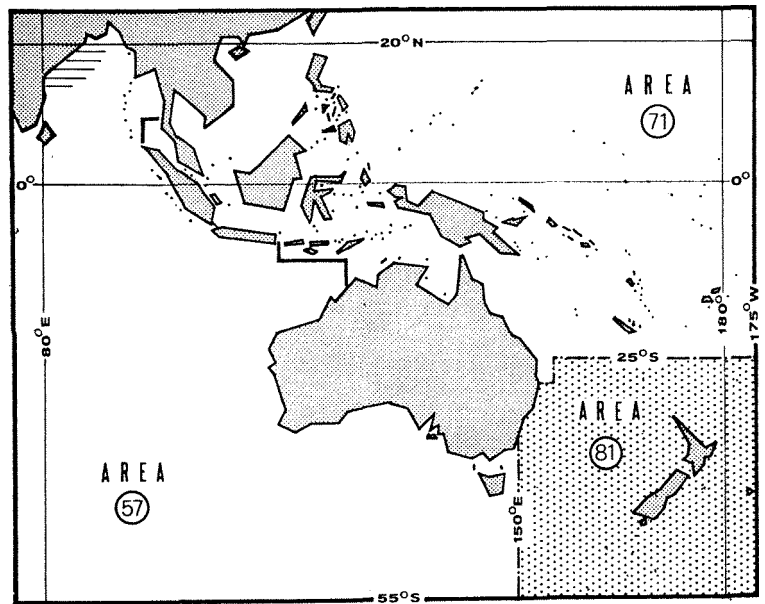


GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Restricted to the coast of India; more common on the west coast where it is the object of an important fishery.

Inhabits shallow muddy and sandy bottoms of the continental shelf, down to 25 m; also found in midwaters in certain seasons of the year.

Feeds predominantly on bottom-living invertebrates, especially worms.



PRESENT FISHING GROUNDS:

Trawling grounds of the continental shelf, mainly between depths of 15 and 25 m.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls.

Marketed mostly fresh or frozen; also dried-salted.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

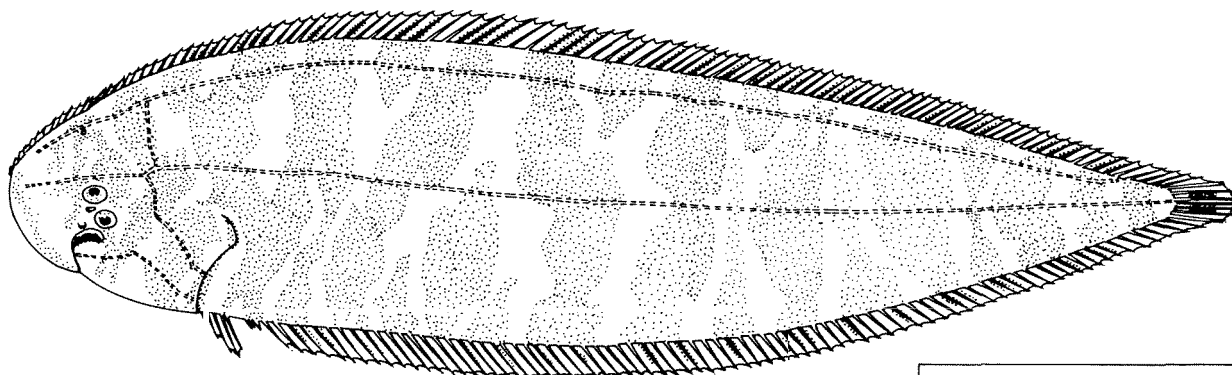
FISHING AREAS 57,71

(E Ind. Ocean)

(W Cent. Pacific)

*Cynoglossus puncticeps* (Richardson, 1846)

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

FAO: En - Speckled tongue sole

Fr -

Sp -

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on Left side of body, with a narrow space between them. Snout rounded, rostral hook short, corner of mouth not reaching beyond lower eye, a little nearer to tip of snout than to gill opening, 2 Lateral lines on eyed side, none on blind side. Scales ctenoid (rough to touch) on - both sides of body, 15 to 19 rows between lateral lines on eyed side.

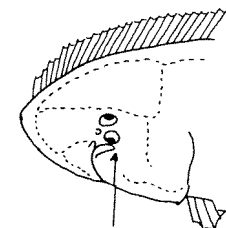
Colour: eyed side yellow/brown, with very distinct irregular dark brown blotches, often forming irregular cross-bands; some rays of dorsal and anal fins dashed with dark brown.

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

*Cynoglossus semifasciatus*: scales larger (11 to 14 rows between lateral lines on eyed side; 15 to 19 in *C. puncticeps*).

*Cynoglossus lida*: corner of mouth much nearer to gill opening than to tip of snout (corner nearer to tip of snout than to gill opening in *C. puncticeps*); also scales larger (12 to 15 rows between lateral lines; 15 to 19 in *C. puncticeps*) and no blotches on eyed side.

*Cynoglossus broadhursti*: scales cycloid (smooth) on blind side (ctenoid (rough) in *C. puncticeps*) and larger (12 to 14 rows between lateral lines on eyed side, 15 to 19 in *C. puncticeps*).



Mouth corner nearer to gill opening than to snout tip

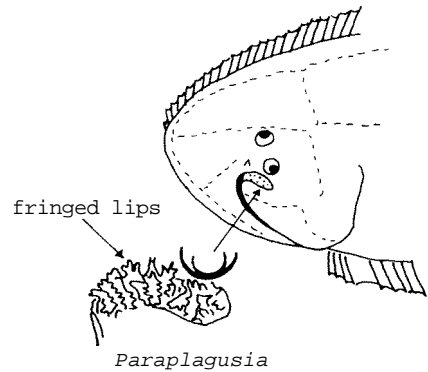
*C. lida*

Other *Cynoglossus* species: no blotches on eyed side.

*Paraplagusia* species: lips fringed.

SIZE:

Maximum: 18 cm; common: 8 to 10 cm.

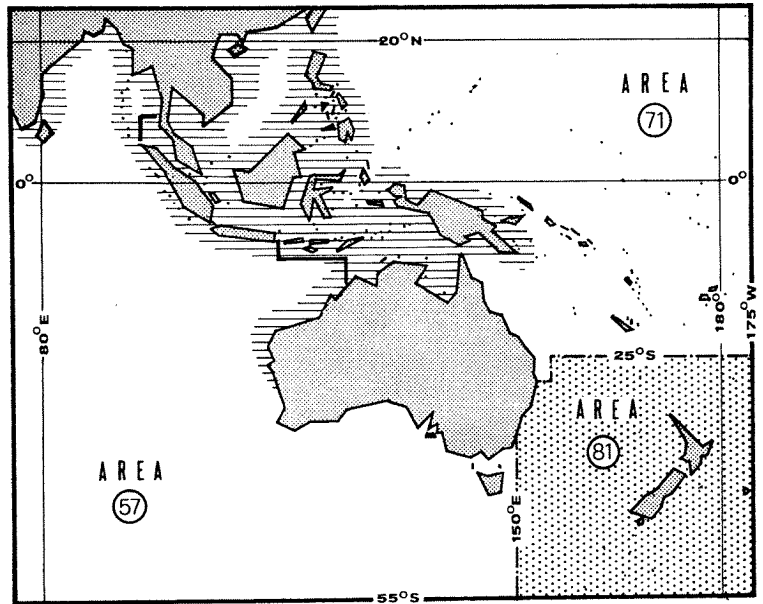


GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area and southwards to the northwestern coast of Australia.

Inhabits muddy and sandy bottoms on the continental shelf; known from brackish waters as well.

Feeds predominantly on bottom-living invertebrates.



PRESENT FISHING GROUNDS:

Trawling grounds of the continental shelf, down to 140 m; also in estuaries.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with bottom trawls and beach seines.

Marketed mostly fresh and frozen; also dried-salted.

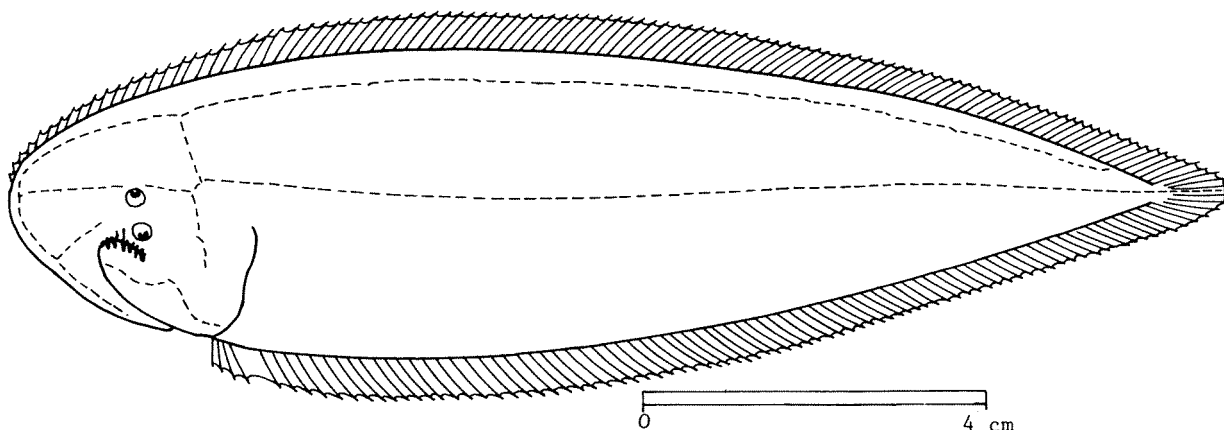
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CYNOGLOSSIDAE

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

*Paraplagusia bilineata* (Bloch, 1784)

SYNONYMS STILL IN USE: *Paraplagusia marmorata* (Bleeker, 1.851)



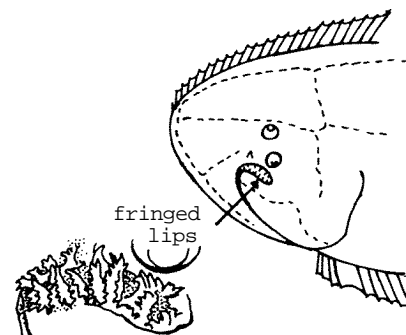
FAO: En - Doublelined tongue sole  
Fr -  
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body flat and elongate, with dorsal and anal fins joined to caudal fin. Eyes on left side of body, with a scaly space between them. Snout rounded, rostral hook long and reaching beyond lower eye; corner of mouth not reaching beyond lower eye, nearer to gill opening than to tip of snout. Mouth fringed with tentacles. 2 lateral lines on eyed side of body but none on blind side. Scales ctenoid (rough to touch) on both sides of body.

Colour eyed side brown, sometimes spotted or marbled with darker patches, blind side tinged with yellow.



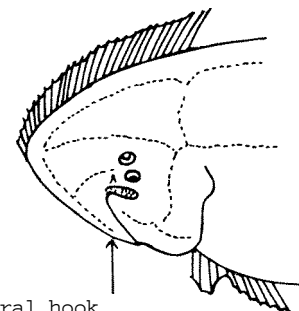
*Paraplagusia bilineata*

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Paraplagusia blochii*: rostral hook shorter (not reaching beyond lower eye).

*Cynoglossus* species: no fringe of tentacles on lips.

SIZE: Maximum: 30 cm; common: 15 to 25 cm.



*P. blochii*



GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

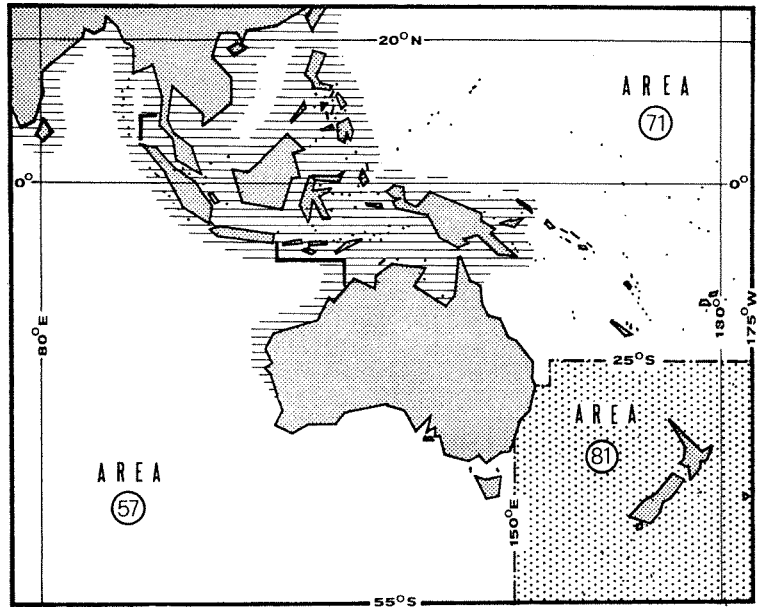
Throughout most of northern part of area and southward to northern coast of Australia.

Inhabits muddy and sandy bottoms of the continental shelf, often found in shallow and even estuarine (brackish) waters.

Feeds predominantly on bottom-living invertebrates.

PRESENT FISHING GROUNDS:

Trawling 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, occasionally also with beach seines.

Marketed mostly fresh or frozen; also dried-salted.