

## FAO SPECIES IDENTIFICATION SHEETS

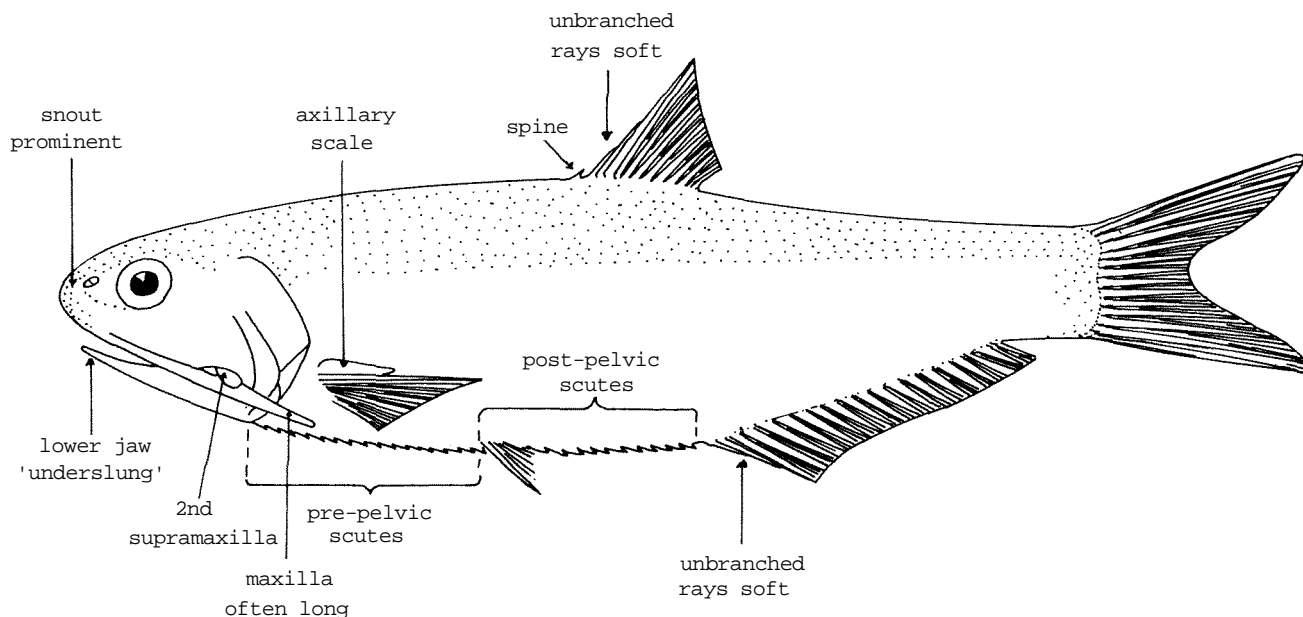
FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)

## ENGRAULIDAE

## Anchovies

Small silvery fishes, mostly 10 to 15 cm, usually with fusiform, sub-cylindrical bodies but sometimes quite strongly compressed; body tapers to very slender tail in the rat-tailed anchovies (*Coilia*); scutes present along belly, either needle-like or strongly keeled. Snout usually pig-Like, strongly projecting, Lower jaw characteristically "underslung". No spiny rays in fins; a single dorsal fin, usually short and at midpoint of body; pectoral fins set low on body, sometimes with 1 (*Setipinna*) or 4 to 19 (*Coilia*) filamentous rays; pelvic fins usually about midway between pectoral fin base and anal fin origin; anal fin short, moderate or very long; caudal fin forked except in *Coilia*. Scales always cycloid (smooth to touch) but often shed rather easily; no lateral line.

Colour: usually blue/green or brown on back, flanks wholly silver or with bright silver lateral stripe; darker markings include dark venulose area on shoulder (*Thryssa*) and dark pigmentation on all or part of dorsal, pectoral, pelvic, anal and caudal fins.



## SIMILAR FAMILIES OCCURRING IN THE AREA:

Clupeidae: have a short maxilla, a deep lower jaw and in most cases a terminal mouth.

Atherinidae: have a terminal mouth, short upper jaw, two dorsal fins and no scutes.

Key to Genera

- 1a. Body normal, not tapering to a point, caudal fin forked (Fig. 1); at most, only 1 filament in pectoral fin (*Setipinna*); anal fin not joined to caudal fin

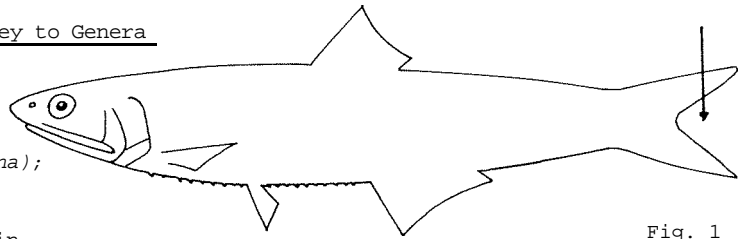


Fig. 1

- 2a. No scutes before or behind pelvic fin base (except single pelvic scute); anal fin origin well behind last dorsal fin ray; maxilla tip blunt ..... *Engraulis*

- 2b. Scutes present, needle-like or keeled

- 3a. Scutes needle-like, only present between pectoral and pelvic fin bases (Fig. 2); anal fin short, less than 25 fin rays; small, slender fishes, usually 10 to 14 cm .. *Stolephorus*

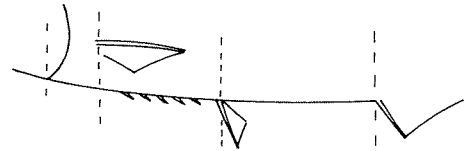


Fig. 2

- 3b. Scutes present before and behind pelvic fin base, keeled and not needle-like; anal fin longer, with more than 25 fin rays

- 4a. No scutes before pectoral fin base (rarely one or two followed by a gap) (Fig. 3)

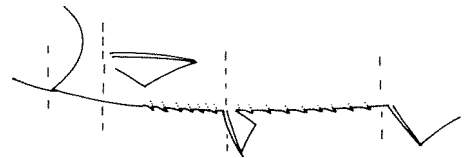


Fig. 3

- 5a. Teeth small, close-set ..... *Thrissina*

- 5b. Canine teeth, widely spaced .. *Lycothrissa*

- 4b. Scutes present before pectoral fin base and, except in *Papuengraulis*, running as a keeled series to anus (Fig. 4)

- 6a. All scutes keeled and trenchant

- 7a. 1st pectoral ray normal, not filamentous; maxilla often long, reaching beyond gill opening .. *Thryssa*

- 7b. 1st pectoral ray filamentous; maxilla usually short, not reaching to gill opening .... *Setipinna*

- 6b. Scutes barely apparent except before pectoral fin base ..... *Papuengraulis*

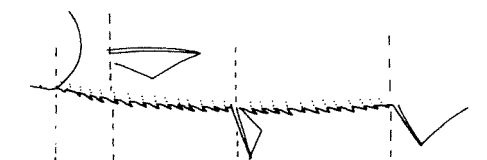


Fig. 4

pre-pectoral  
scutes

pre-pelvic  
scutes

post-pelvic  
scutes

- 1b. Body tapering to slender tail, caudal fin very small, not forked; 4 to 19 upper pectoral fin rays filamentous; anal fin joined to caudal fin (Fig. 5)

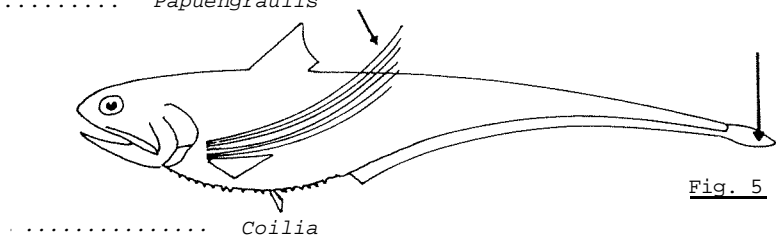


Fig. 5

..... *Coilia*

FAO Sheets

ENGRAULIDAE

Fishing Areas 57,71

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

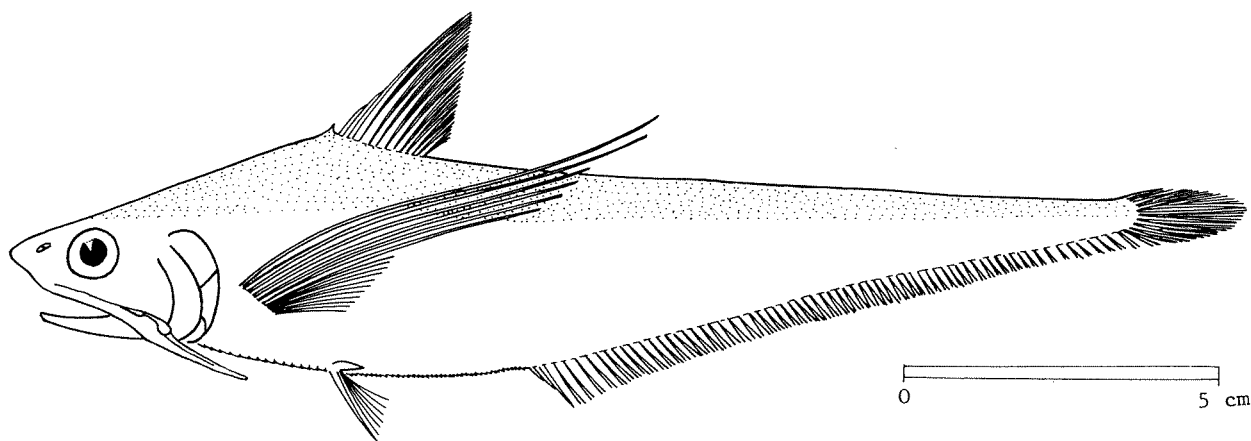
<i>Coilia coomansi</i>		Species A of Ronquillo	
<i>Coilia dussumieri</i>	ENGR Coil 2	(probably <i>S. devisi</i> )	
<i>Coilia macrognathus</i>	ENGR Coil 1	<i>Stolephorus andhraensis</i>	
<i>Coilia mystus</i>		Species B of Ronquillo	
<i>Coilia nasus</i>		<i>Stolephorus bataviensis</i>	ENGR Stol 3
<i>Coilia neglecta</i>		<i>Stolephorus buccaneers</i>	ENGR Stol 2
<i>Coilia potyfilis</i>		Species C of Ronquillo	
<i>Coilia rebentischii</i>		<i>Stolephorus chinensis</i>	
<i>Coilia rendahli</i>		<i>Stolephorus commersonii</i>	ENGR Stol 6
<i>Coilia reynaldi</i>		<i>Stolephorus heterolobus</i>	ENGR Stol 1
		<i>Stolephorus indicus</i>	ENGR Stol 5
<i>Engraulis australis</i>	ENGR Engr 2	<i>Stolephorus macrops</i>	
		<i>Stolephorus tri</i>	ENGR Stol 4
<i>Lycothrissa crocodilus</i>			
		<i>Thrissina baelama</i>	ENGR Thris 1
<i>Setipinna breviceps</i>			
<i>Setipinna godavari</i>		<i>Thryssa dussumieri</i>	
<i>Setipinna melanochir</i>	ENGR Seti 2	<i>Thryssa hamiltonii</i>	ENGR Thrys 4
<i>Setipinna phasa</i>		<i>Thryssa kaormatensis</i>	
<i>Setipinna taty</i>	ENGR Seti 1	<i>Thryssa matabariea</i>	ENGR Thrys 5
		<i>Thryssa mystax</i>	ENGR Thrys 1
		<i>Thryssa purava</i>	
		<i>Thryssa setirostris</i>	ENGR Thrys 3
		<i>Thryssa vitrirostris</i>	ENGR Thrys 2

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Coilia macrognathus* Bleeker, 1852

SYNONYMS STILL IN USE: None



## VERNACULAR NAME:

FAO: En - Bigmouth grenadier anchovy  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body elongate, its depth 4 to 5 times in standard length, tapering evenly to very slender tail (unless mutilated and new caudal fin grown); belly keeled, with 14 to 16 scutes in front of pelvic fin base, and 32 to 38 scutes behind; a small sharp spine before dorsal fin origin. Snout strongly projecting, pointed; maxilla tip pointed, reaching well beyond gill opening; maxillary teeth of uneven lengths. Lower gill rakers 21 to 26. Dorsal fin origin much nearer to snout than to caudal fin base; pectoral fin with upper 6 rays filamentous; anal fin very long, joined to caudal fin.

Colour: back brown, flanks silvery.

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

*Coilia nasus*: body more elongate (depth 6 to 7 times in standard length; 4 to 5 times in *C. macrognathus*); maxillary teeth of even lengths.

*Coilia mystus*: 25 to 30 gill rakers and 36 to 41 scutes (21 to 26 and 46 to 53 in *C. macrognathus*)

*Coilia dussumieri*: presence of pearly spots on body and less than 20 scutes.

Other *Coilia* species: maxilla shorter, not reaching beyond gill opening.

All other rat-tailed fishes (e.g. Macrouridae): no scutes along belly.

SIZE:

Maximum: 26 cm; common: about 20 cm.

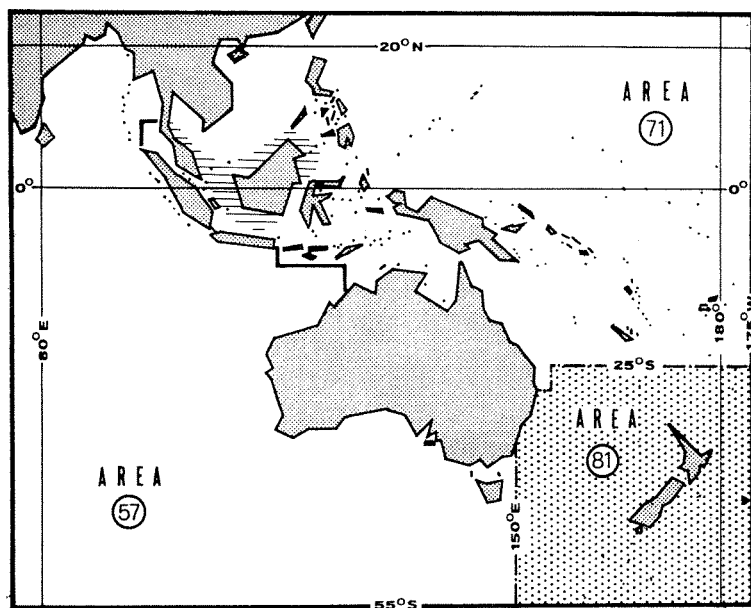
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Borneo, Sarawak, Thailand.

Inhabits coastal waters and estuaries.

PRESENT FISHING GROUNDS:

Caught throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total catch of Engraulidae in 1972 was:

area 57 (Eastern Indian Ocean): 12 800 tons (Australia: 100 tons; India: 12 700 tons)  
area 71 (Western Central Pacific): 33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with bamboo-stake traps, lift nets and beach seines; also incidentally with bottom trawls.

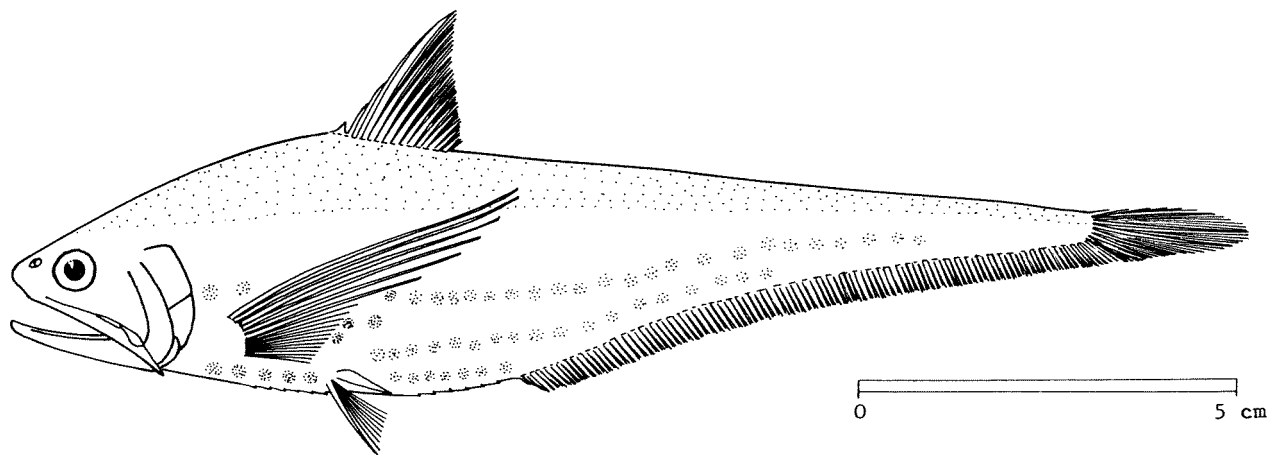
Marketed fresh, dried, dried-salted or made into fish sauce or fish balls.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Coilia dussumieri* Valenciennes, 1848

SYNONYMS STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Gold-spotted grenadier anchovy  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body elongate, tapering evenly to very slender tail (unless mutilated and new caudal fin grown); belly rather rounded, with 4 to 6 scutes between pectoral and pelvic fin bases, and 6 to 8 scutes behind pelvic fin base; a small, sharp spine before dorsal origin. Snout strongly projecting, pointed; maxilla tip pointed, reaching to or just beyond gill opening. Dorsal fin origin much nearer to snout than to caudal fin base; pectoral fin with upper 4 to 6 rays filamentous; anal fin very long, joined to caudal fin.

Colour: back brown, flanks silvery, with longitudinal rows of golden or pearly spots on lower flanks.

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

Other *Coilia* species: no spots on flanks.

All other rat-tailed fishes (e.g. Macrouridae): no scutes along belly.

SIZE:

Maximum: 20 cm; common: 13 to 17 cm.

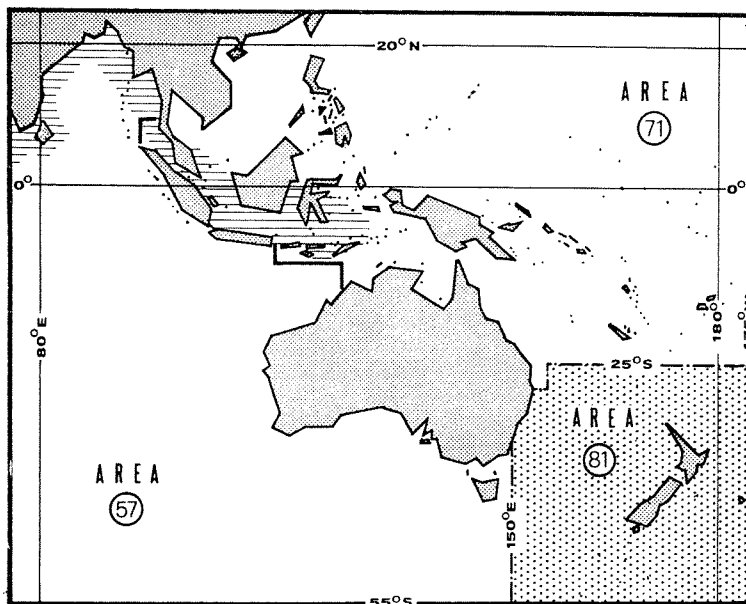
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Coasts of India and Indo-Australian Archipelago.

Inhabits coastal waters.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total catch of Engraulidae in 1972 was:

area 57 (Eastern Indian Ocean): 12 800 tons (Australia: 100 tons; India: 12 700 tons)  
area 71 (Western Central Pacific): 33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with beach seines, purse seines, bamboo-stake traps; also incidentally with bottom trawls.

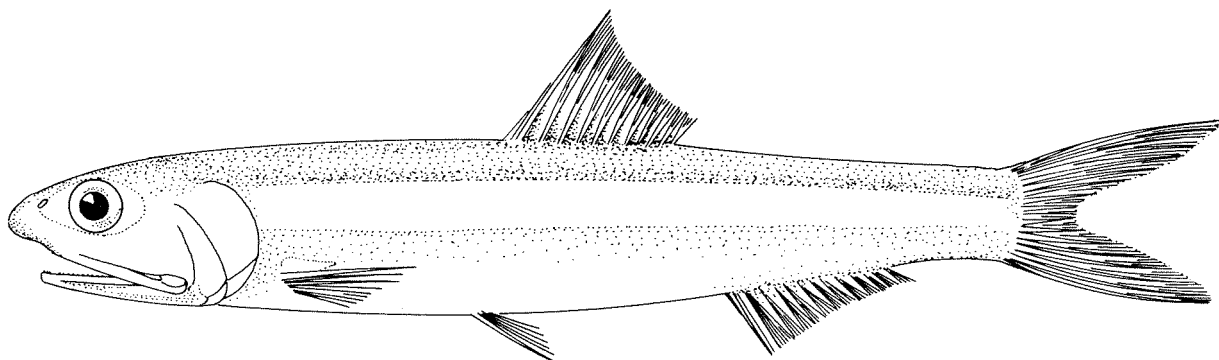
Marketed fresh, dried, dried-salted or made into fish sauce or fish balls.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Engraulis australis* (White, 1790)

SYNONYMS STILL IN USE: none.



## VERNACULAR NAMES:

FAO: En - Australian anchovy  
Fr -  
Sp.-

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body fusiform, subcylindrical, belly rounded, without scutes (except for a plate-like scute at pelvic fin bases). Snout prominent and pointed; maxilla tip truncate, not projecting beyond anterior margin of preoperculum; isthmus not reaching to hind border of gill membrane, leaving exposed a vertical bony urohyal plate. Anal fin origin behind vertical from last dorsal fin ray.

Colour: blue/green above, silvery on flanks, or with a broad silver midlateral band, its upper edge dark (or black in preserved specimens).

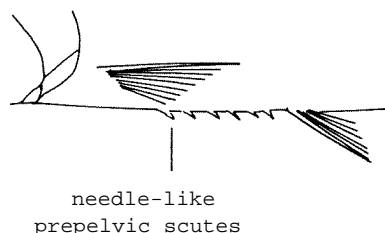
## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Stolephorus* species: 4 or more sharp, needle-like scutes present on belly before bases of pelvic fins.

*Thrissina* species: scutes present both before and behind pelvic fin bases.

*Thrissa* species: body usually compressed, deeper than wide, and sharply keeled scutes present along belly, from isthmus to anal fin origin.

*Lycothyssa* species: canine teeth present in jaws.

*Stolephorus*

## SIZE:

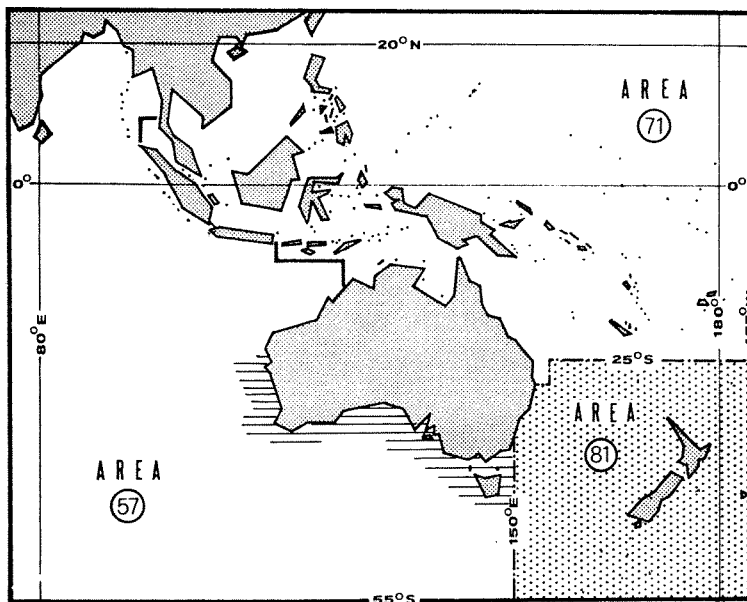
Maximum: 14 cm; common 10 cm.



#### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Southern coasts of Australia including Tasmania, northward to latitude 25°S; also eastward to New Zealand; closely allied to *E. japonicus* of Japanese waters, which extends southward to Taiwan (of which a few specimens have been recorded from Indonesia).

Inhabits inlets and coastal waters in schools, often very abundant; also, a brackish-water population in the rivers entering the Gippsland Lakes.



#### PRESENT FISHING GROUNDS:

Throughout its range, especially in Port Phillip Bay.

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

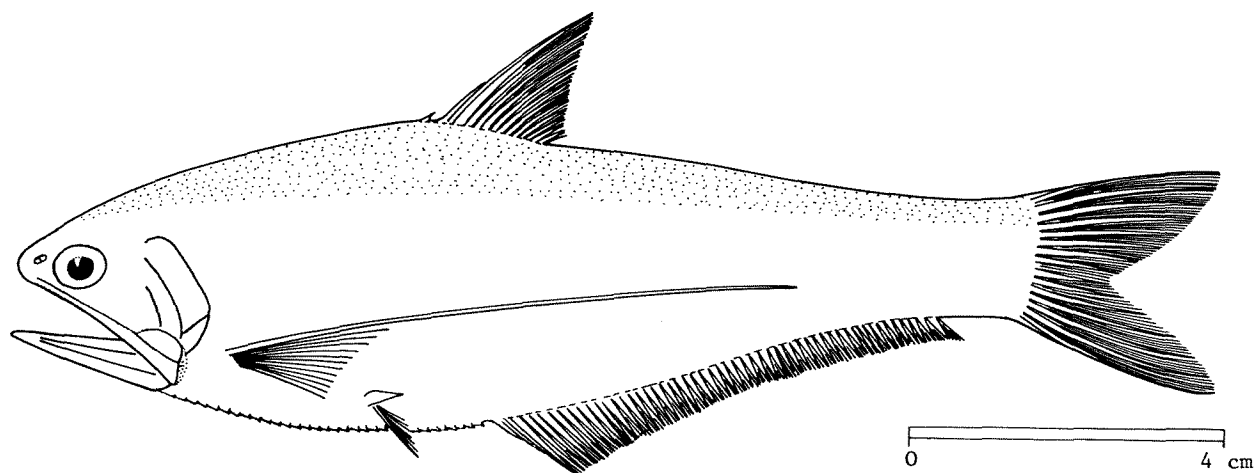
Separate statistics are not reported for this species.

Caught mainly with beach seines.

Marketed mostly fresh.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Setipinna taty* (Valenciennes, 1848)SYNONYMS STILL IN USE: *Setipinna gilberti* Jordan & Starks, 1905

## VERNACULAR NAMES:

FAO: En - Hairfin anchovy  
Fr -  
Sp -

NATIONAL:

## DISTINCTIVE CHARACTERS:

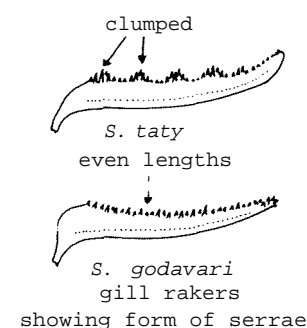
Body fusiform, strongly compressed; belly sharply keeled, with 18 to 26 scutes in front of pelvic fin base, and 7 to 12 scutes behind pelvic fin base; a small, sharp spine before dorsal fin origin. Snout moderately prominent, bluntly pointed; maxilla short, its tip truncate, just reaching to gill opening; mouth not strongly oblique; lower gill rakers 17 to 20, inner edges of rakers with small serrae forming distinct clumps. Dorsal fin origin nearer to snout than to caudal fin base; 1st pectoral ray filamentous; anal fin with 48 to 60 rays.

Colour: back brown or blue, flanks silvery.

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

*Setipinna phasa*: 72 to 75 anal fin rays (48 to 60 in *S. taty*) and only 15 to 16 pre-pelvic scutes (18 to 26 in *S. taty*).

*Setipinna godavari*: only 12 to 16 lower gill rakers (17 to 20 in *S. taty*), the serrae on the rakers not forming distinct clumps.



Other *Setipinna* species: only 11 to 13 lower gill rakers (17 to 20 in *S. taty*); dorsal fin at midpoint of body or nearer to base of caudal fin.

*Thryssa*, *Thrissina*: no filamentous 1st pectoral ray; maxilla often reaches well beyond gill opening.

*Papuengraulis*: no pectoral filament; strongly keeled scutes present only before pectoral fin base.

SIZE:

Maximum: 20 cm; common: about 16 cm.

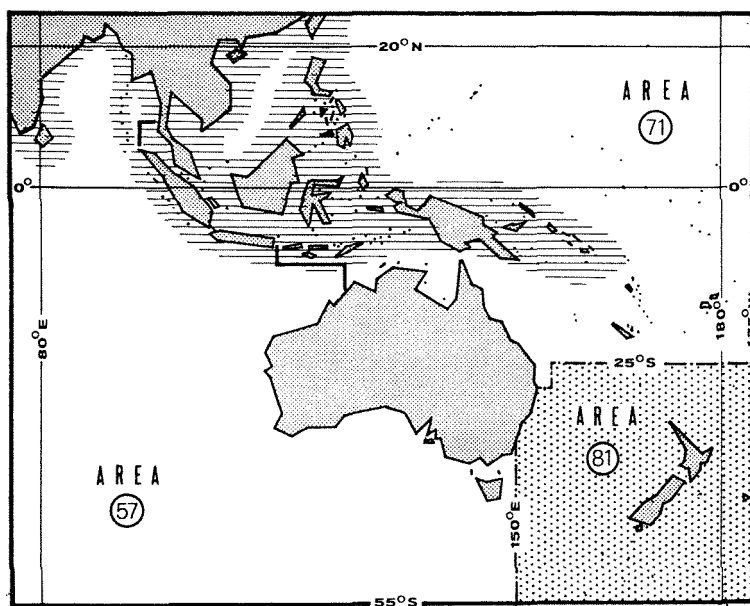
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of area, but not recorded from Australian waters.

Inhabits coastal waters and estuaries.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total catch of Engraulidae in 1972 was:

area 57 (Eastern Indian Ocean): 12 800 tons (Australia: 100 tons; India: 12 700 tons)  
area 71 (Western Central Pacific): 33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with purse seines, beach seines and bamboo-stake traps; also incidentally with bottom trawls.

Marketed fresh, dried, dried-salted or made into fish sauce or fish balls.

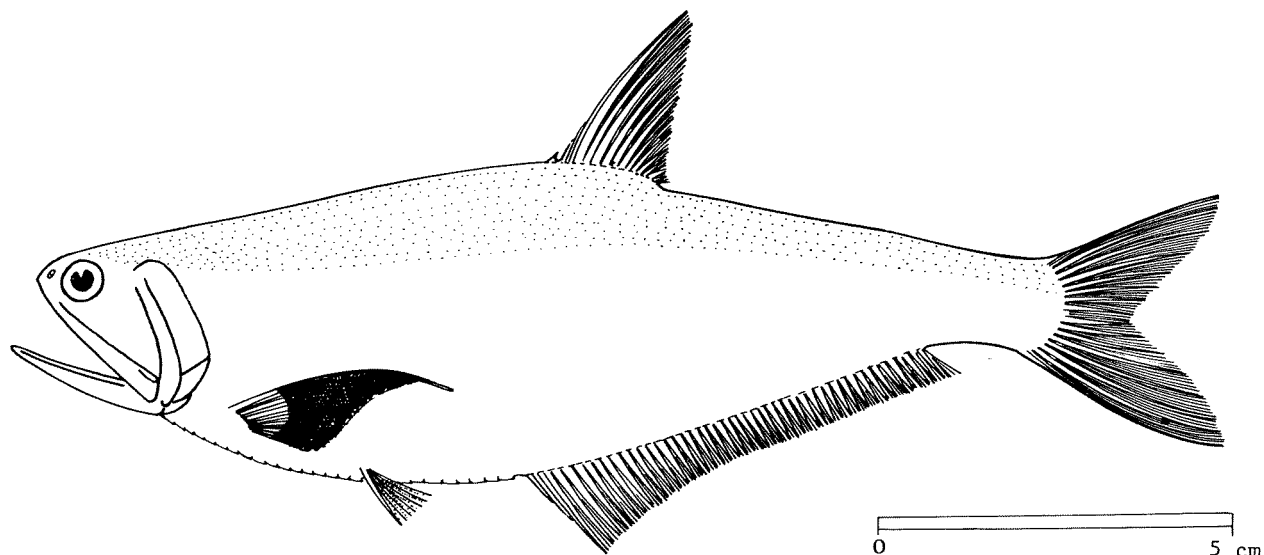
## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

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

*Setipinna melanochir* (Bleeker, 1849)

SYNONYMS STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Dusky hairfin anchovy  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body fusiform, strongly compressed; belly sharply keeled, with 19 to 22 scutes in front of pelvic fin base, and 7 to 9 behind; a small, sharp spine before dorsal fin origin. Snout short, scarcely projecting beyond tip of lower jaw; maxilla short, its tip truncate, not reaching to gill opening; mouth strongly oblique; lower gill rakers 11 to 13. Dorsal fin origin at midpoint of body or nearer to caudal fin base; 1st pectoral fin ray filamentous, but not reaching to anal fin origin; anal fin with 44 to 50 rays.

Colour: back brown or blue, flanks silvery; pectoral (and often pelvic) fins black.

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

*Setipinna breviceps*: no black on pectoral fins; pectoral filament reaching beyond anal fin origin

Other *Setipinna* species: dorsal fin origin before midpoint of body, mouth not strongly oblique, 12 to 18 gill rakers (11 to 13 in *S. melanochir*).

*Thrissa*, *Thrissina*: no filamentous 1st pectoral ray; maxilla often reaching beyond gill opening.

*Papuengraulis*: no pectoral filament; strongly keeled scutes present only before pectoral fin base.

SIZE:

Maximum: 23 cm; common: 18 to 19 cm.

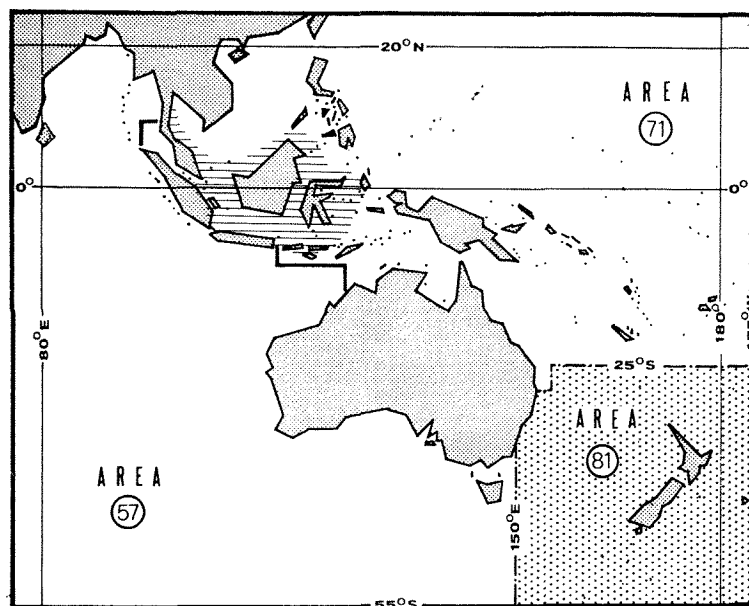
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Indonesia and possibly north to Amoy, but not recorded from Australian coasts.

Inhabits fresh and brackish waters.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species. The total catch of Engraulidae in 1972 as:

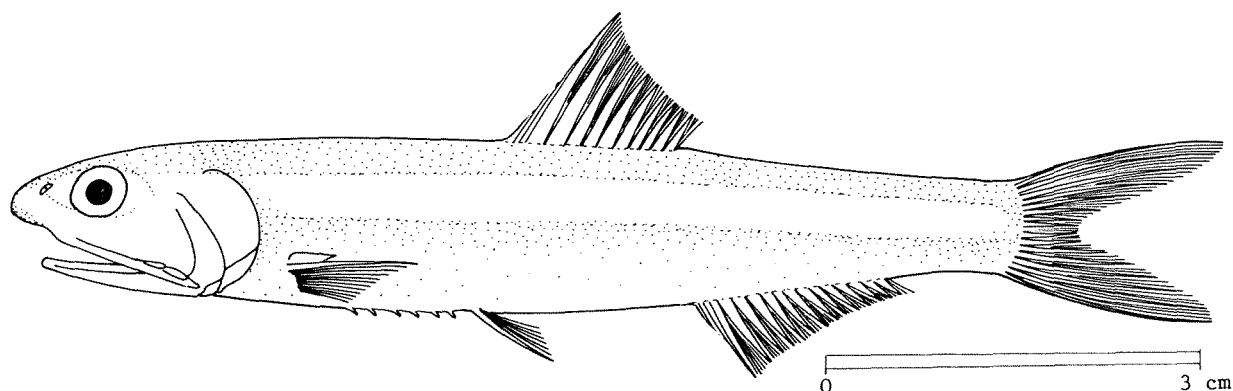
area 57 (Eastern Indian Ocean): 12 800 tons (Australia: 100 tons; India: 12 700 tons)  
area 71 (Western Central Pacific): 33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with bamboo-stake traps and beach seines; also incidentally with bottom trawls.

Marketed fresh, dried, dried-salted or made into fish sauce or fish balls.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Stolephorus heterolobus* (Rüppell, 1837)SYNONYMS STILL IN USE: *Stolephorus pseudoheterolobus*: Hardenberg, 1933  
*Anchoviella heteroloba*: Fowler, 1941

## VERNACULAR NAMES:

FAO: En - Shorthead anchovy  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

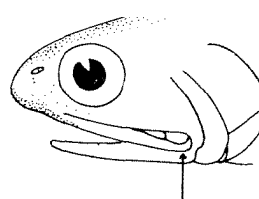
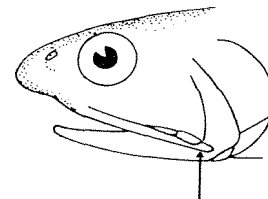
Body fusiform, sub-cylindrical; belly rounded, with 5 to 6 needle-like scutes between pectoral and pelvic fin bases. Head short (length more than 4 times in standard length); snout prominent and pointed; maxilla tip pointed, projecting beyond anterior border of pre-operculum; isthmus not reaching to hind border of gill membrane, leaving exposed a small (white or silver) diamond-shaped urohyal bony plate (easily visible without lens). Anal fin origin a little behind last dorsal fin ray. Lower gill rakers 24 to 27.

Colour: pale cream when scales lost; bright silver stripe along flanks.

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

*Stolephorus devisi*: head longer (length less than 4 times in standard length; more than 4 in *S. heterolobus*) and fewer gill rakers (21 to 24, rarely 25; 24 to 27 in *S. heterolobus*).

*Stolephorus buccaneers*: maxilla tip truncate, not reaching to anterior border of pre-operculum.

short maxilla  
*S. buccaneers*long pointed maxilla  
*S. heterolobus*

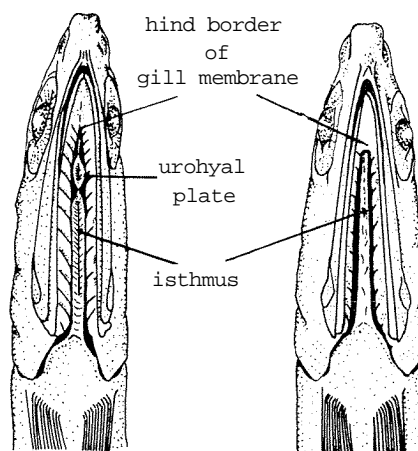
Other *Stolephorus* species: isthmus reaching to hind border of gill membrane, no diamond-shaped bony urohyal plate present; also, anal fin origin not behind last dorsal fin ray.

*Engraulis*: maxilla tip blunt and no scutes along belly.

*Thrissina*: scutes also present behind pelvic fins (but not immediately in front of pectoral fin base).

*Thryssa*: scutes present along entire belly, from isthmus to anal fin origin.

*Lycothrissa*: canine teeth present in jaws.



#### SIZE:

Maximum: 12 cm; common: 10 cm.

head viewed from below  
*S. heterolobus*      *S. bataviensis*, etc.

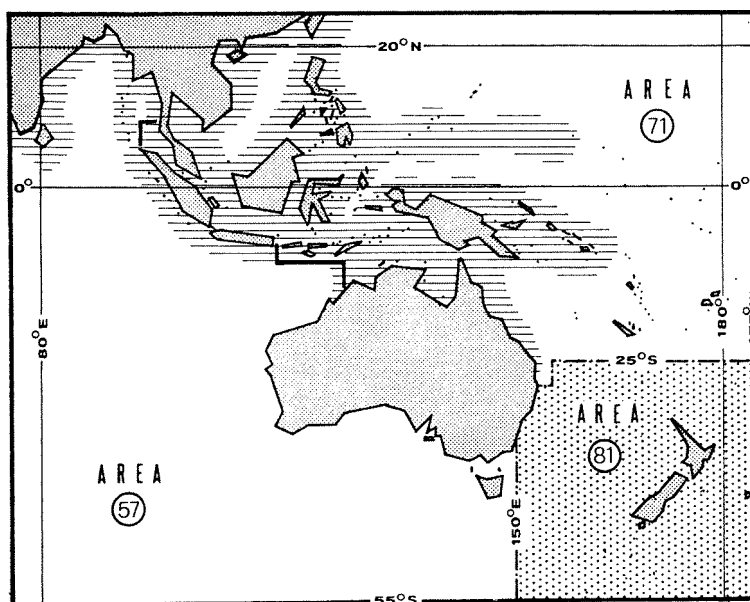
#### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area, and southward to Queensland; also, westward to East Africa and eastward to Okinawa.

Pelagic, feeding on zooplankton and phytoplankton.

#### PRESENT FISHING GROUNDS:

Throughout its range and especially in Philippines, Singapore, Malaysia.



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

Separate statistics are not reported for this species, although it seems to comprise a substantial proportion (42 to 96%) of the *Stolephorus* catches in the Philippines. The total reported catch of Engraulidae in 1972 was:

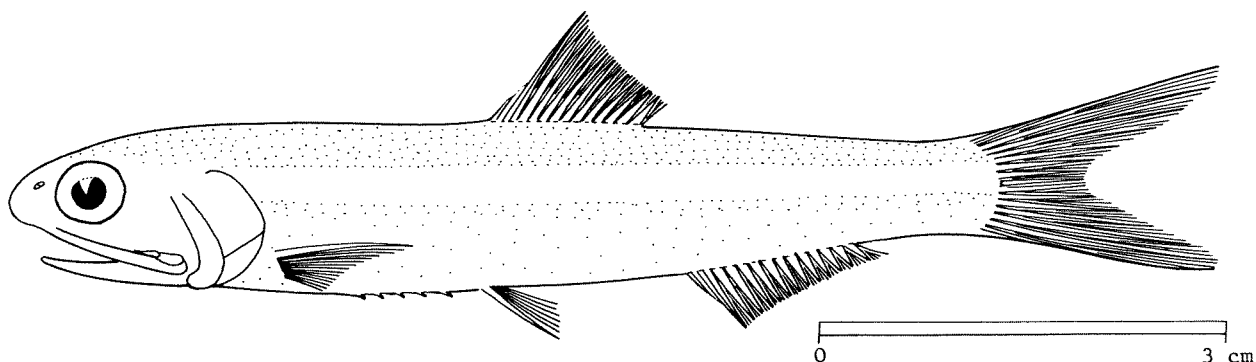
area 57 (Eastern Indian Ocean):	12 800 tons (Australia: 100 tons; India: 12 700 tons)
area 71 (Western Central Pacific):	33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with purse seines, beach seines, fish traps, often using light; also incidentally with bottom trawls.

Marketed fresh, dried, dried-salted or made into fish meal, fish sauce or fish balls; also used as bait.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

FISHING AREAS 57,71  
(E Ind. Ocean)  
(W Cent. Pacific)*Stolephorus buccaneers* Strasburg, 1960SYNONYMS STILL IN USE: *Anchoviella zollingeri*: Fowler, 1941

## VERNACULAR NAMES:

FAO: En - Buccaneer anchovy  
Fr -  
Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

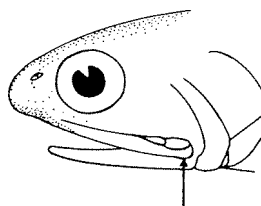
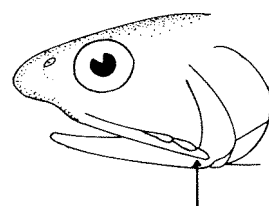
Body fusiform, sub-cylindrical; belly rounded, with 4 to 6 needle-like scutes between pectoral and pelvic fin bases. Snout prominent but rounded; maxilla tip blunt, not reaching to anterior border of pre-operculum; isthmus not reaching to hind border of gill membrane, leaving exposed a small (white or silver) diamond-shaped fleshy plate (easily visible without lens). Anal fin origin behind last dorsal ray. Lower gill rakers 24 to 26.

Colour: pale cream when scales lost; bright silver stripe along flanks.

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

*Stolephorus* Species B of Ronquillo: only 16 to 18 Lower gill rakers (24 to 26 in *S. buccaneers*); also, maxilla 4 to 5 times in standard length (5 to 6 times in *S. buccaneeri*).

*Stolephorus heterolobus*: maxilla tip pointed and reaching well beyond anterior border of pre-operculum.

short maxilla  
*S. buccaneers*long pointed maxilla  
*S. heterolobus*



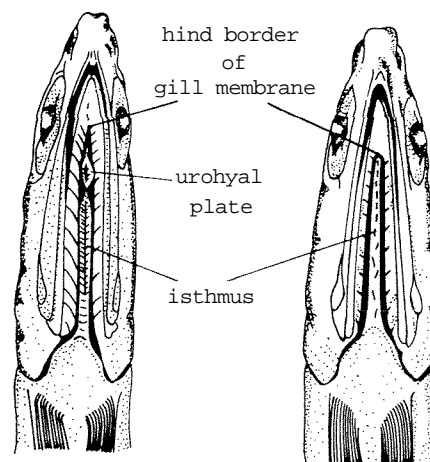
Other *Stolephorus* species: isthmus reaching to hind border of gill membrane, no diamond-shaped urohyal plate; also, anal fin origin not behind last dorsal fin ray.

*Engraulis*: no scutes along belly.

*Thrissina*: scutes also present behind pelvic fins (but not immediately in front of pectoral fin base).

*Thryssa*: scutes present along entire belly, from isthmus to anal fin origin.

*Lycothrissa*: canine teeth present jaws.



#### SIZE:

Maximum: 11 cm; common: about 9 cm.

#### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

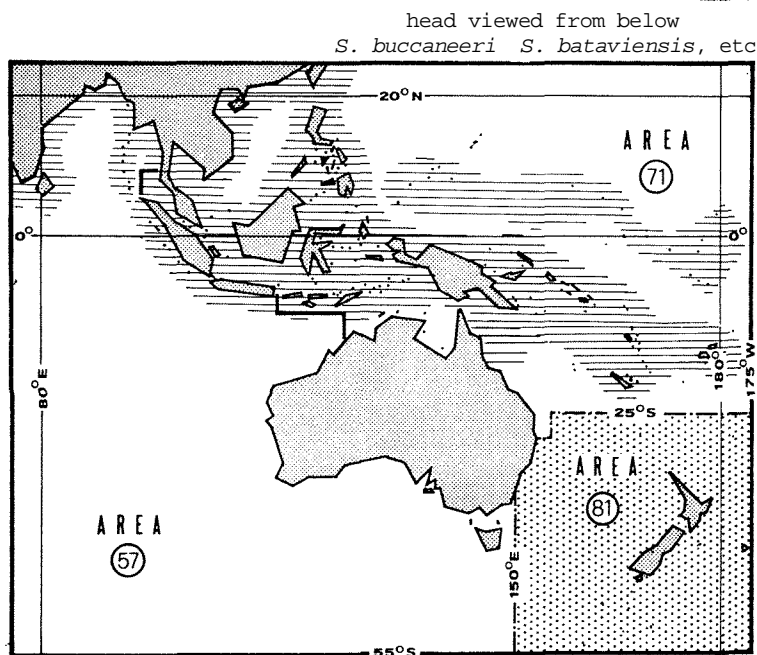
#### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of area, possibly as far south as Queensland (Australia); also, westward to East Africa and eastward to Japan and Hawaii.

Pelagic, feeding on plankton.

#### PRESENT FISHING GROUNDS:

Throughout its range.



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

Separate statistics are not reported for this species, although it seems to comprise a significant proportion of *Stolephorus* catches in some area, e.g. the Philippines. The total reported catch of Engraulidae in 1972 was:

area 57 (Eastern Indian Ocean): 12 800 tons (Australia: 100 tons; India: 12 700 tons)  
 area 71 (Western Central Pacific): 33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with purse seines, beach seines, bamboo-stake traps, often using light; also incidentally with bottom trawls.

Marketed fresh, dried, dried-salted or made into fish meal, fish sauce or fish balls; also used for bait.

## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ENGRAULIDAE

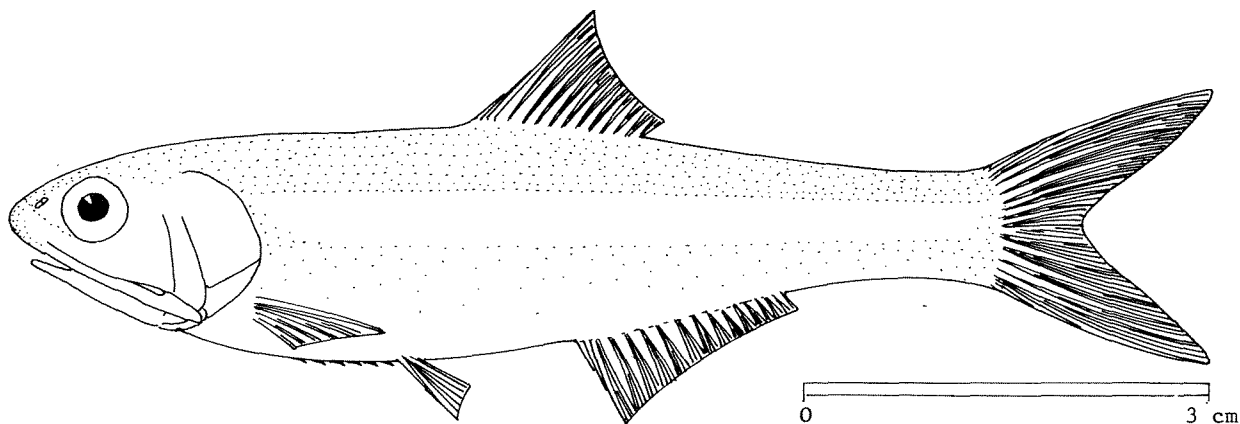
FISHING AREAS 57,71

(E Ind. Ocean)

(W Cent. Pacific)

*Stolephorus bataviensis* Hardenberg, 1933

SYNONYMS STILL IN USE: *Anchoviella bataviensis*: Fowler, 1941  
*Stolephorus insularis* Hardenberg, 1933 (homonym)



## VERNACULAR NAMES:

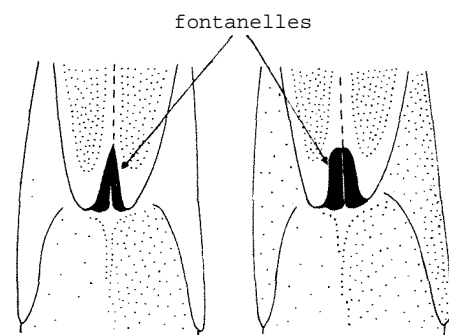
FAO: En - Batavian anchovy  
 Fr -  
 Sp -

## NATIONAL:

## DISTINCTIVE CHARACTERS:

Body fusiform, moderately compressed; belly with 4 to 7 needle-like scutes between pectoral and pelvic fin bases. Head short, snout rather rounded; maxilla tip pointed, projecting beyond posterior border of pre-operculum; hind border of pre-operculum evenly rounded near maxilla tip; isthmus reaching to hind border of gill membrane. Posterior frontal fontanelles narrow, with straight borders. Anal fin origin below dorsal fin base. Lower gill rakers usually not more than 23.

Colour: pale cream when scales lost; bright silver stripe along flanks.



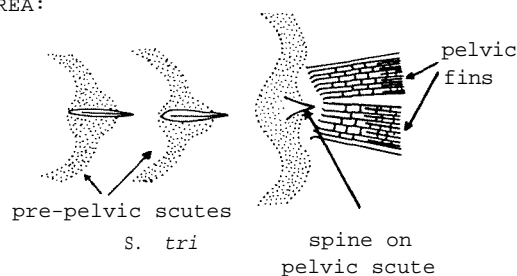
head viewed from above  
*S. bataviensis*      *S. commersonii*  
*S. indicus*        *S. chinensis*

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

*Stolephorus commersonii*, *S. chinensis*: posterior frontal fontanelles broad, with outer borders sigmoid; also, usually more than 23 gill rakers on lower arch.

*Stolephorus indicus*: maxilla tip not reaching to posterior border of pre-operculum.

*Stolephorus tri*: a small spine before dorsal fin and another on pelvic scute; lower gill rakers 23 to 27.



*Stolephorus andhraensis*, *S. macrops*, Species C of Ronquillo: preoperculum indented near maxilla tip.

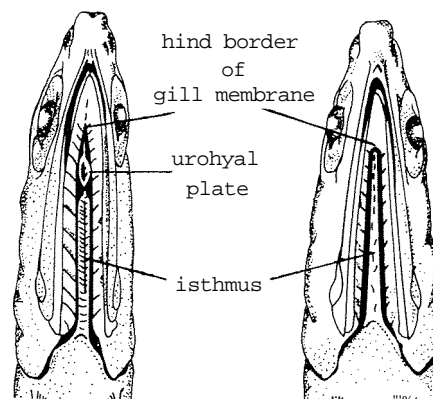
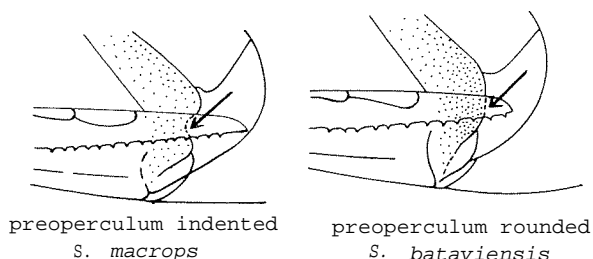
Other *Stolephorus* species: isthmus not reaching to hind border of gill membrane, leaving exposed a small (white or silver) diamond-shaped urohyal plate (easily visible without lens).

*Engraulis*: maxilla tip blunt and no scutes along belly.

*Thrissina*: scutes also present behind pelvic fins (not not immediately in front of pectoral fin base).

*Thryssa*: scutes present along entire belly, from isthmus to anal fin origin.

*Lycothrissa*: canine teeth present in jaws.



head viewed from below  
*S. buccaneeri* *S. bataviensis*, etc.

#### SIZE:

Maximum: 11 cm; common: 9 cm.

#### GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

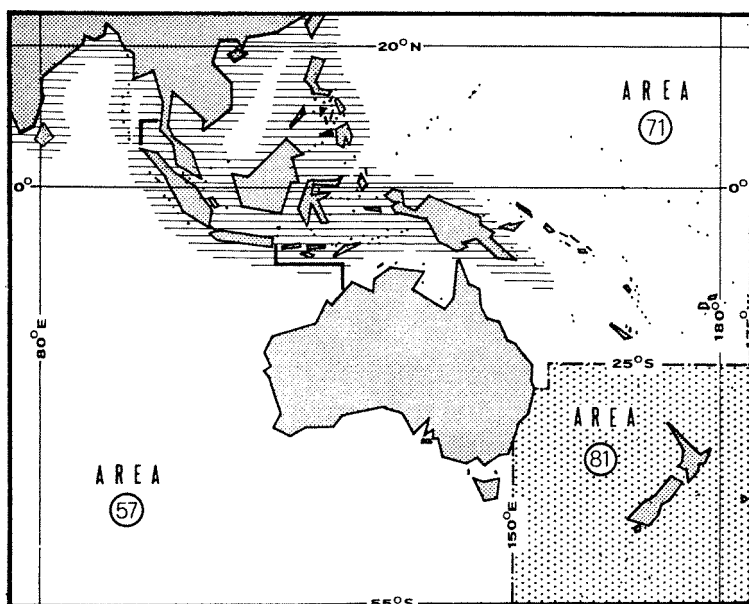
Throughout most of area, but perhaps absent from Australia.

A coastal pelagic species.

Feeds on plankton organisms.

#### PRESENT FISHING GROUNDS:

Throughout its range and especially the Philippines, Thailand and Vietnam.



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

Separate statistics are not reported for this species. The total catch of Engraulidae in 1972 was:

area 57 (Eastern Indian Ocean): 12 800 tons (Australia: 100 tons; India: 12 700 tons)  
area 71 (Western Central Pacific): 33 500 tons (Malaysia: 200 tons; Philippines: 33 300 tons)

Caught mainly with purse seines, beach seines, bamboo-stake traps, often using light; also incidentally with bottom trawls.

Marketed fresh, dried, dried-salted or made into fish meal, fish sauce and fish balls.