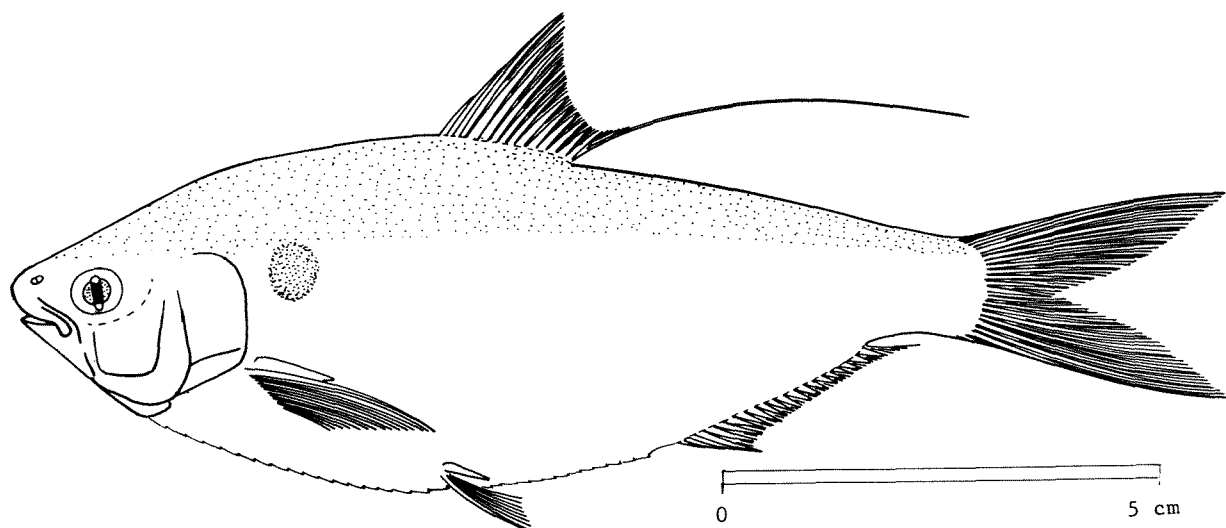


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Nematalosa nasus* (Bloch, 1795)SYNONYMS STILL IN USE: *Dorosoma nasus*: Weber & de Beaufort, 1913

VERNACULAR NAMES:

FAO: En - Bloch's gizzard-shad
Fr -
Sp -

NATIONAL:

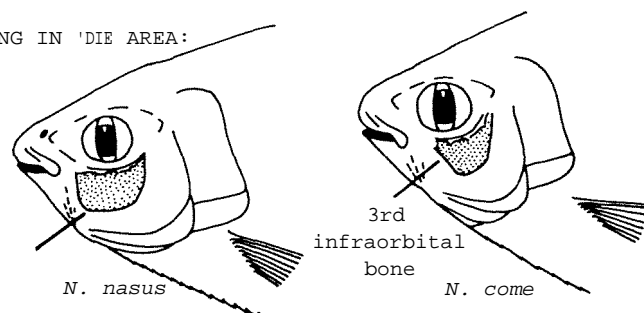
DISTINCTIVE CHARACTERS:

Body oval, deep, its depth 2.3 to 2.6 times in standard length; belly rounded with scutes. Dorsal fin origin a little before midpoint of body, Last dorsal ray filamentous; anal fin fairly short (18 to 22 rays) and lying behind dorsal fin base; pelvic fins below anterior part of dorsal fin base. Gill rakers numerous (more than 200 on lower part of gill arch), their length less than half of corresponding gill filaments on anterior arch. Mouth inferior, Lower jaw flared laterally. 3rd infraorbital large, its anterior border rising almost vertically from lower jaw articulation. Paired predorsal scales overlapping in midline.

Colour: blue/brown on back, flanks silvery, dark patch on shoulder.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN 'DIE AREA:

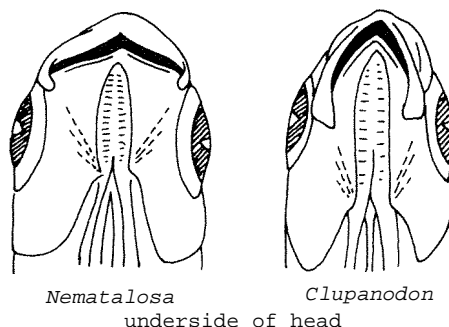
All other *Nematalosa* species: 3rd infraorbital little expanded, its lower border oblique or horizontal, not reaching to lower jaw articulation and leaving exposed a triangular or trapezoidal space (3rd infraorbital greatly expanded and rising almost vertically from above lower jaw articulation in *N. nasus*).



Clupanodon, *Konosirus* species: gill rakers of 1st arch at least 3/4 the length of corresponding gill filaments (gill rakers 1/2 or less the length of corresponding filaments in *Nematalosa* species); also lower jaw not strongly flared laterally when viewed from below (strongly flared in *Nematalosa*).

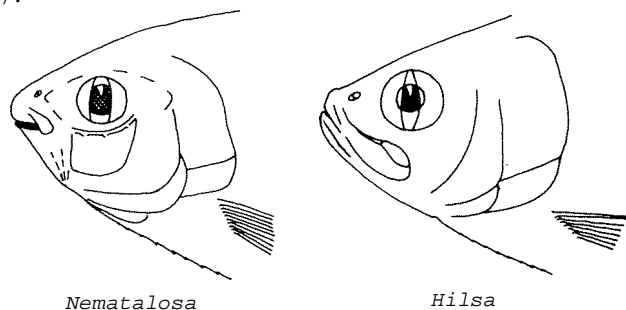
Anodontostoma species: last dorsal ray normal (a long filament in *Nematalosa* species).

All other clupeid species: mouth more or less terminal (distinctive mouth in *Nematalosa* species) and last dorsal ray normal (filamentous in *Nematalosa*).



SIZE:

Maximum: 23 cm; common: 13 to 14 cm.



GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

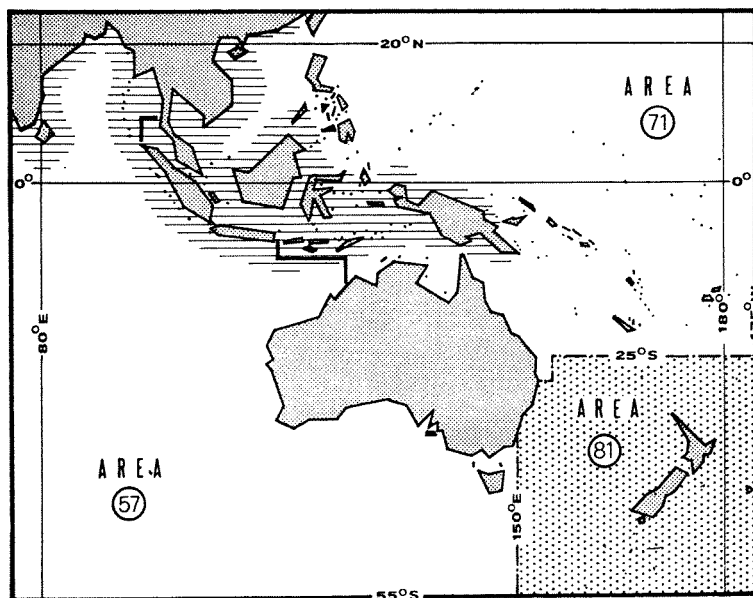
Throughout most of northern part of area; northward to Hong Kong.

Inhabits coastal waters; pelagic.

Feeds on detritus.

PRESENT FISHING GROUNDS:

Caught throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

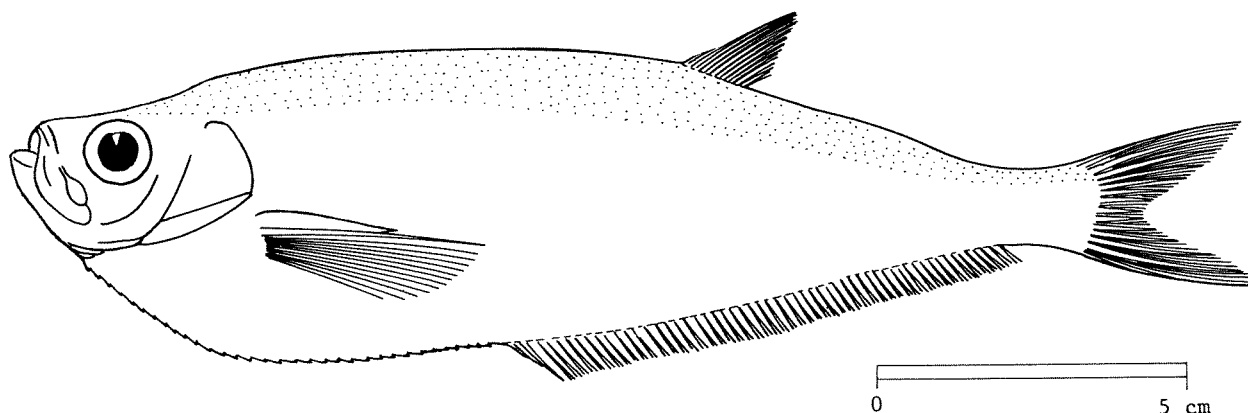
Separate statistics are not reported for this species.

Caught mainly with set nets and purse seines.

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

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Opisthopterus tardoore* (Cuvier, 1829)SYNONYMS STILL IN USE: *Opisthopterus indicus* (Swainson, 1839)
Opisthopterus tartoor (Valenciennes, 1847)
Opisthopterus macrognathos Bleeker, 1866

VERNACULAR NAMES:

FAO: En - Tardoore
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate and strongly compressed, its depth 3.0 to 3.5 times in standard length; belly with strongly keeled scutes (total about 30). Top of head concave, mouth directed upward. Dorsal fin short, its origin much behind midpoint of body; pelvic fins absent; anal fin very long (total 57 to 60 rays), its origin well before dorsal fin origin; pectoral fin longer than head. Lower jaw very prominent.

Colour: back blue/green, flanks silvery.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Opisthopterus valenciennesi: pectoral fin shorter than head (longer than head in *O. tardoore*).

Ilisha, *Pellona* species: pelvic fins present (absent in *Opisthopterus*).

Raeonda species: pelvic and dorsal fins absent.

SIZE:

Maximum: 22 cm; common: 18 to 20 cm.

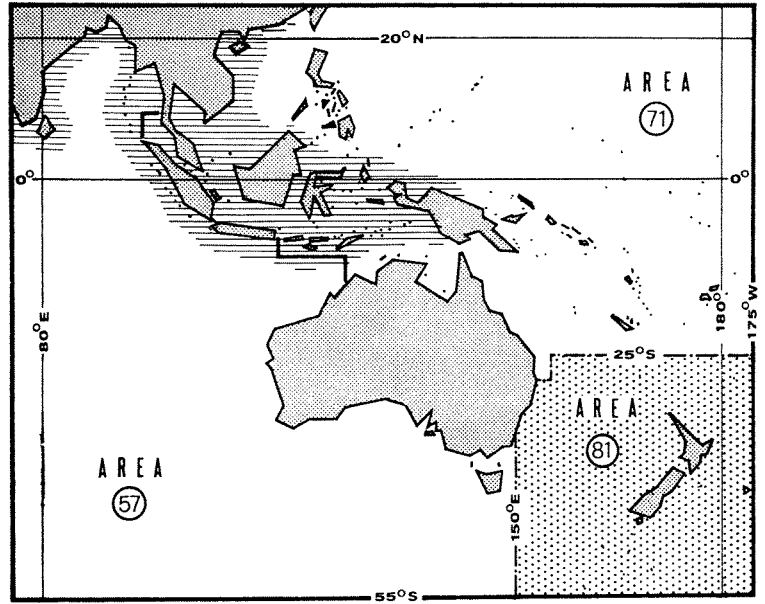
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Coasts of India to New Guinea, and possibly north to Hong Kong.

Inhabits coastal waters; pelagic; probably not abundant.

PRESENT FISHING GROUNDS:

Caught throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

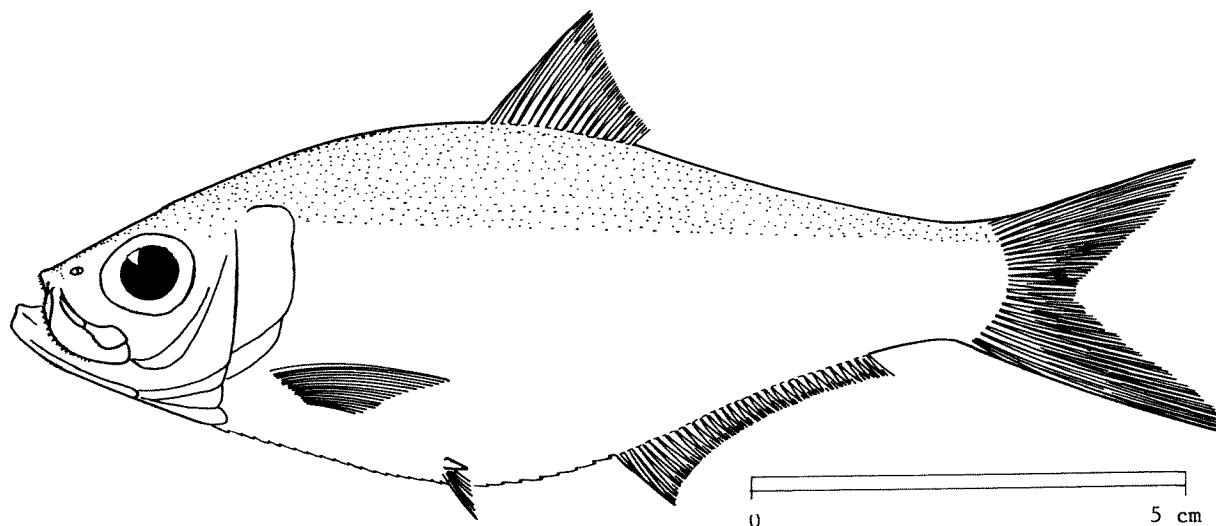
Separate statistics are not reported for this species.

Caught with lift nets, gill nets and set nets.

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

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Pellona ditchela* Valenciennes, 1847SYNONYMS STILL IN USE: *Pellona hoeveni* Bleeker, 1852

VERNACULAR NAMES:

FAO: En - Indian pellona
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

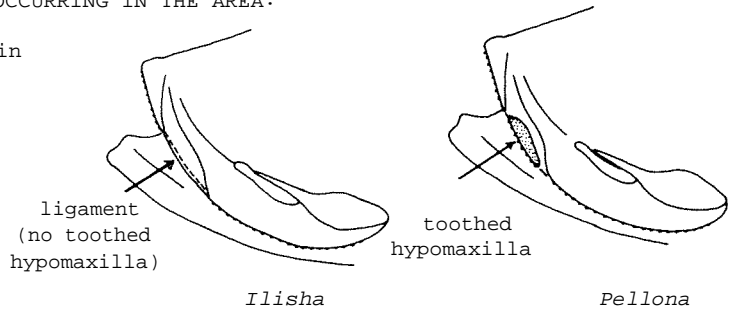
Body fairly deep and compressed, its depth about 2.8 times in standard length; belly with strongly keeled scutes (pre-pelvic scutes 19). Dorsal fin base short, its origin at about midpoint of body; pelvic fins before dorsal fin origin; anal fin fairly long (36 rays), its origin a little behind dorsal fin base. Head large, its length about 3.5 times in standard length; eye large, about 3 times in head; lower jaw very prominent; toothed hypomaxilla present in upper jaw.

Colour: blue/brown on back, flanks silvery, fins hyaline.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Ilisha species: no toothed hypomaxilla in upper jaw (small toothed hypomaxilla can be felt with finger-nail in *Pellona* species).

Opisthopterus species: anal fin much longer (50 to 70 rays; 30 to 40 in *Pellona*); pelvic fins absent.



SIZE:

Maximum: 20 cm; common: about 14 cm.

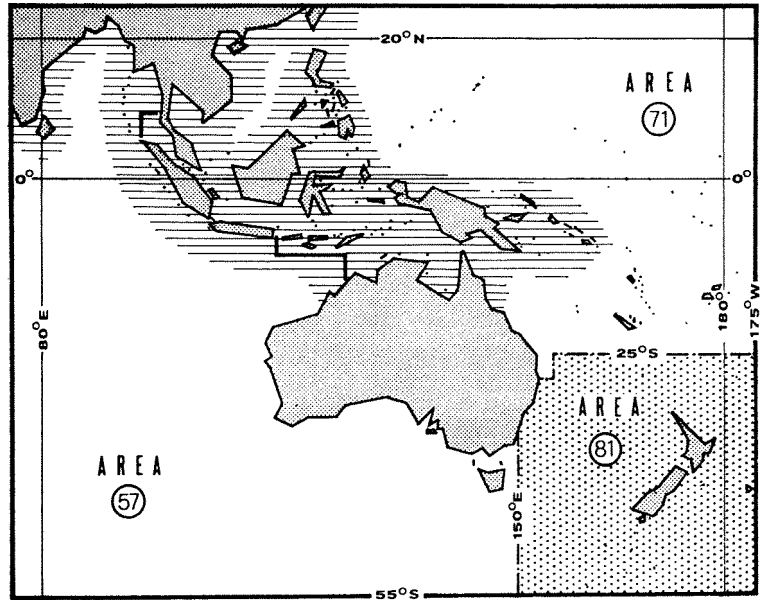
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area to northern tip of Australia; also, westward to East Africa and northward to Taiwan.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Caught throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics for this species are reported by Malaysia only (1972: 1 300 tons).

Caught mainly with purse seines and beach seines.

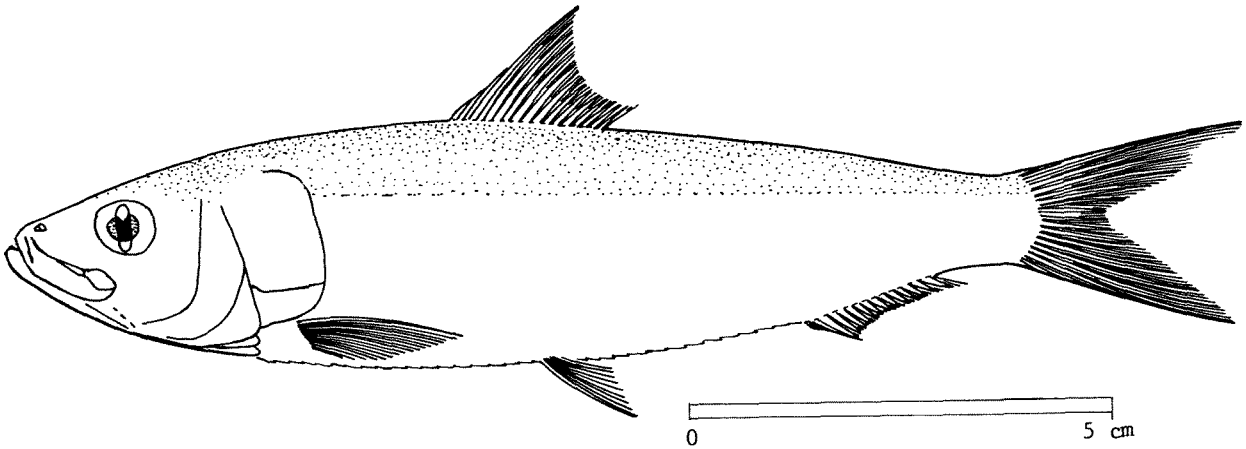
Marketed fresh, dried, dried-salted, boiled, or made into fish meal or fish balls.

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Sardinella longiceps* Valenciennes, 1847

SYNONYMS STILL IN USE: None



VERNACULAR NAMES:

FAO: En - Indian oil-sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, cylindrical; belly rounded, with scutes but without prominent keel. Dorsal fin origin nearer to snout than to caudal fin base; anal fin base short and well behind dorsal fin base; pelvic fins below middle of dorsal fin base. Head very long, about 3 times in standard length. Pelvic fin with 9 rays. Gill rakers fine and numerous, more than 130 on lower part of gill arch.

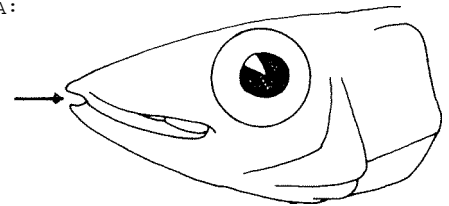
Colour: blue/green on back, flanks silvery.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

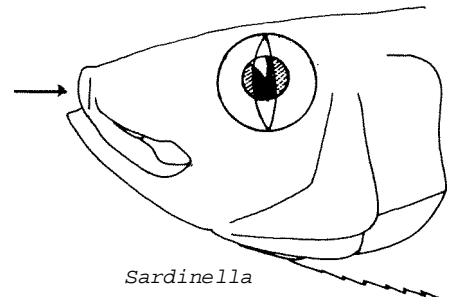
Sardinella aurita: head shorter (3.6 to 4.0 times in standard length; 2.9 to 3.5 times in *S. longiceps*); absent from Indian Ocean.

All other *Sardinella* species: only 8 pelvic rays and less than 130 gill rakers on lower part of gill arch.

Dussumieria acuta: no scutes along belly, 8 pelvic rays and characteristic mouth shape.



Dussumieria



Sardinella

SIZE:

Maximum: 20, possibly 23 cm; common: about 10 to 15 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Coasts of India, North Borneo and Philippines (not recorded from Thailand, Malaysia, Cambodia, Vietnam and Australia); also, westward to East Africa.

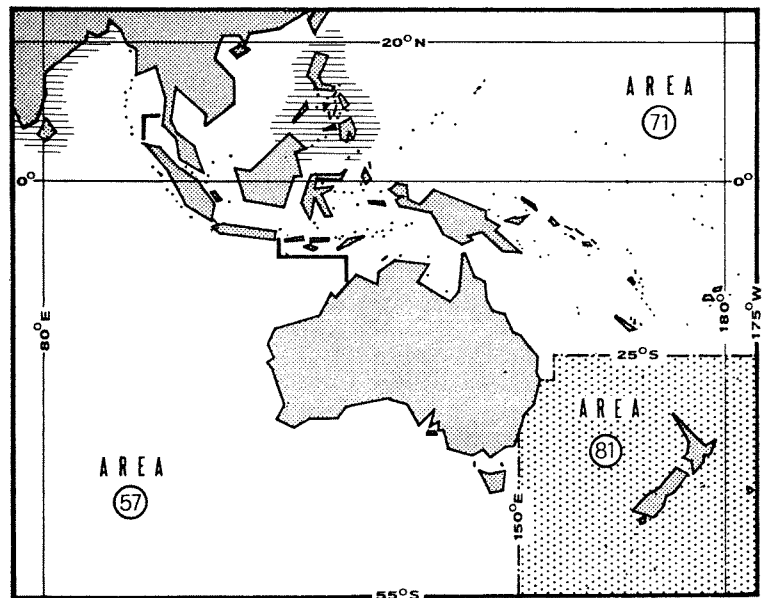
Inhabits coastal waters; pelagic; Very abundant off Indian coasts.

Feeds on plankton, especially diatoms.

For further information see FAD Species Synopsis CB/S 15.

PRESENT FISHING GROUNDS:

Caught throughout its range; important Indian fishery.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

The total reported catch in 1972 was:

area 57 (Eastern Indian Ocean): 1 100 tons (Bangla Desh: 1 000 tons)

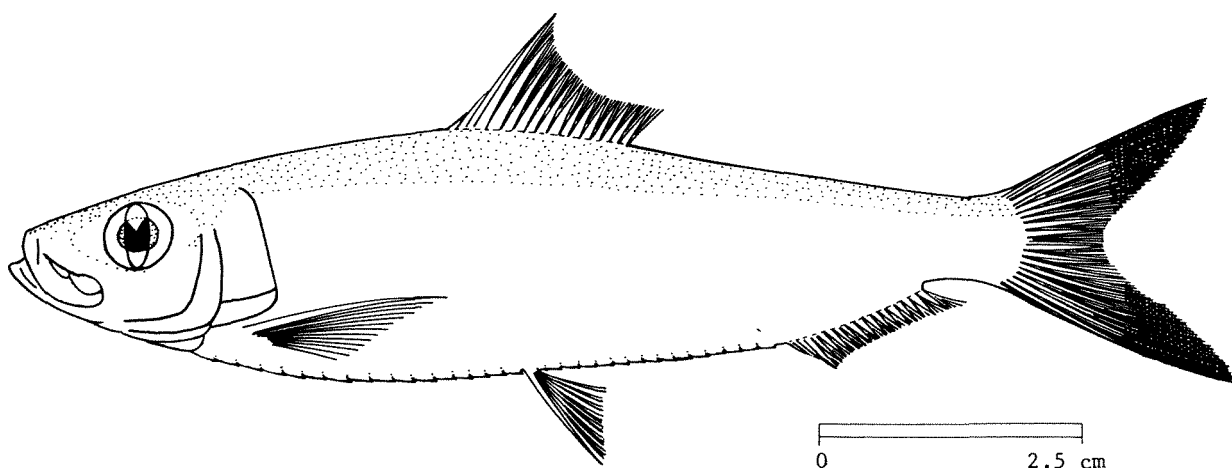
area 71 (Western Central Pacific): 76 400 tons (Philippines only)

Caught with beach seines, boat seines, drift nets, gill nets and purse seines.

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

FAD SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Sardinella melanura* (Cuvier, 1829)SYNONYMS STILL IN USE: *Clupea (Harengula) melanura*: Weber & de Beaufort, 1913
Harengula vittata (Valenciennes, 1847)
Herklotsichthys vittatus (Valenciennes, 1847)
Clupea (Harengula) atricauda (Günther, 1868)

VERNACULAR NAMES:

FAO: En - Blacktip sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body fusiform, a little compressed; belly sharp with keeled scutes. Dorsal fin origin slightly before midpoint of body; anal fin base short and lying far behind dorsal fin base; pelvic fins below anterior half of dorsal fin. Lower gill rakers 45 to 68.

Colour: back blue/green, flanks silvery. Tips of caudal fin black (never black in other species of *Sardinella*).

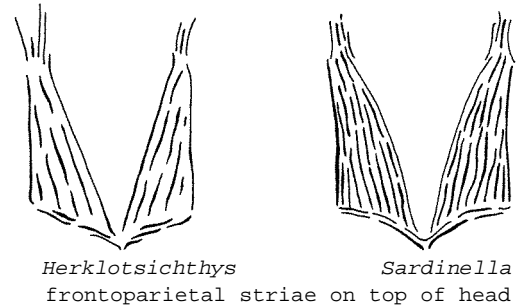
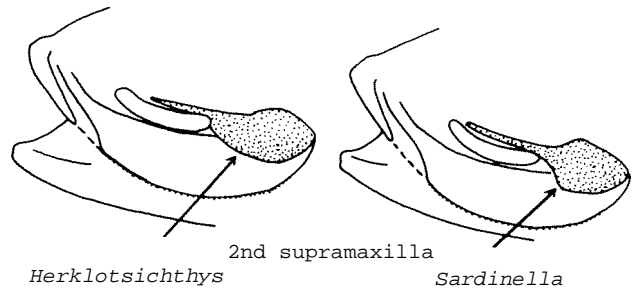
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

All other *Sardinella* species: no black caudal tips (at most dusky).

Herklotsichthys species: lower portion of paddle-shaped 2nd supramaxilla longer than upper (about equal in *Sardinella*), and only 3 to 6 frontoparietal striae on top of head (7 to 14 striae in *Sardinella*).

SIZE:

Maximum: 15 cm; common: 12 cm.



GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

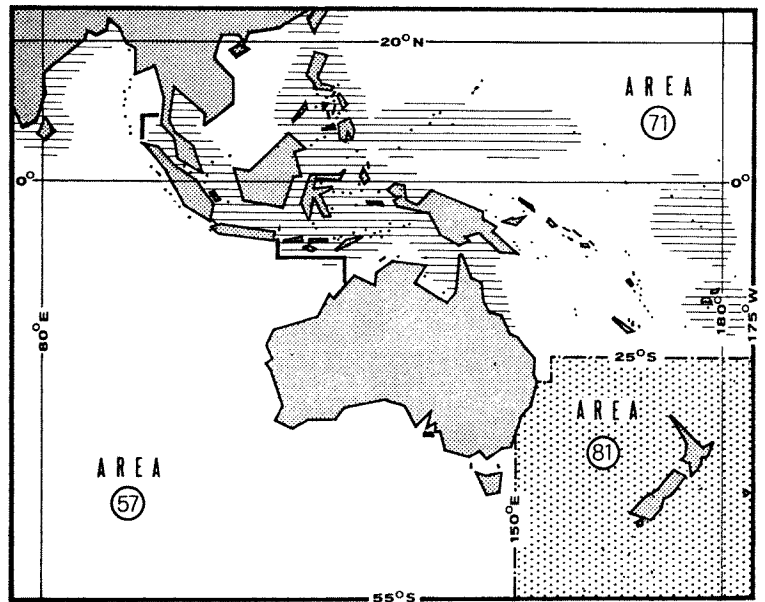
Throughout most of northern part of area, including northern tip of Australia, northward to Taiwan; also, westward to East Africa.

Inhabits coastal waters; pelagic.

Feeds on small planktonic organisms.

PRESENT FISHING GROUNDS:

Caught throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with purse seines, lift nets and set nets.

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

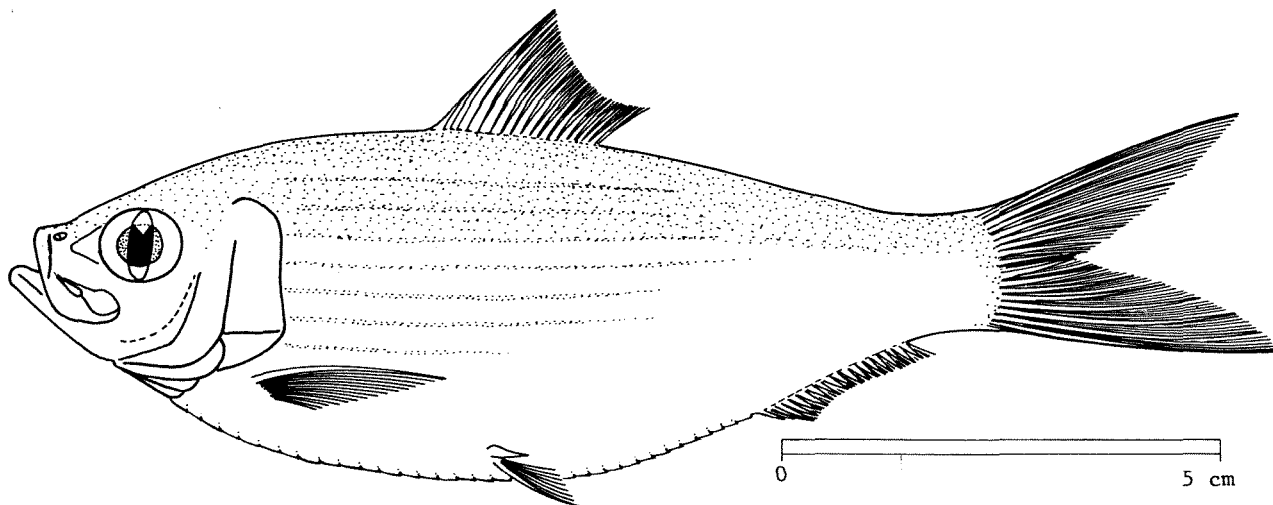
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

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

Sardinella brachysoma Bleeker, 1852

SYNONYMS STILL IN USE: *Clupea (Harengula) brachysoma*: Weber & de Beaufort, 1913
Sardinella hypselosoma Bleeker, 1855



VERNACULAR NAMES:

FAO: En - Deepbody sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Deep compressed body, its depth 2.6 to 3.3 times in standard Length; belly sharp with keeled scutes. Dorsal fin origin slightly before midpoint of body; anal fin base short and lying far behind dorsal fin base; pelvic fins below anterior part of dorsal fin base. Lower gill rakers 54 to 65. Scales strongly fimbriated posteriorly.

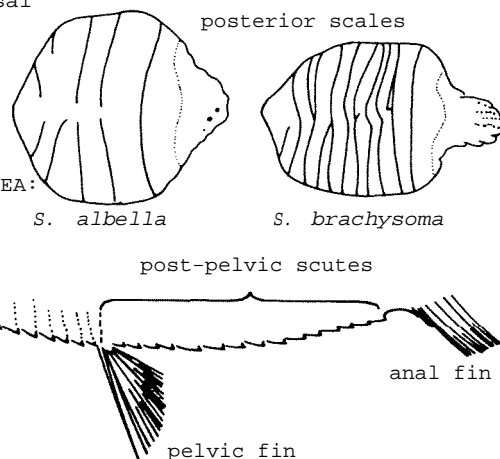
Colour: back blue/green, flanks silvery.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

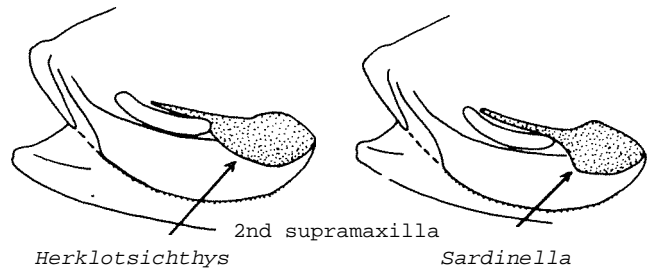
Sardinella melanura: caudal tips black.

Sardinella albella, *S. fimbriata*: only 4 to 5 vertical striae (interrupted at centre) on posterior scales (numerous continuous or overlapping striae on posterior scales in *S. brachysoma*).

Sardinella gibbosa: 15 to 16 (rarely 14 or 17 to 18) post-pelvic scutes (12 to 14 in *S. brachysoma* and in *S. albella*, *S. fimbriata*, *S. melanura*).



Herklotsichthys species: lower portion of paddle-shaped 2nd supramaxilla longer than upper (about equal in *Sardinella*), and only 3 to 6 frontoparietal striae on top of head (7 to 14 striae in *Sardinella*).



SIZE:

Maximum: 17 cm; common: 13 to 14 cm.



Herklotsichthys
frontoparietal striae on top of head

Sardinella
frontoparietal striae on top of head

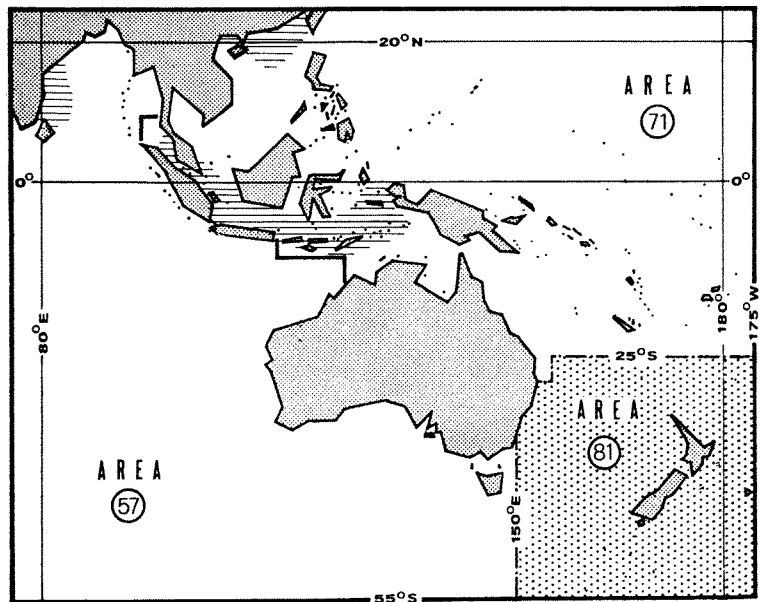
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Eastern coasts of India, Indonesia, and Hong Kong.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with purse seines, lift nets and set nets.

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

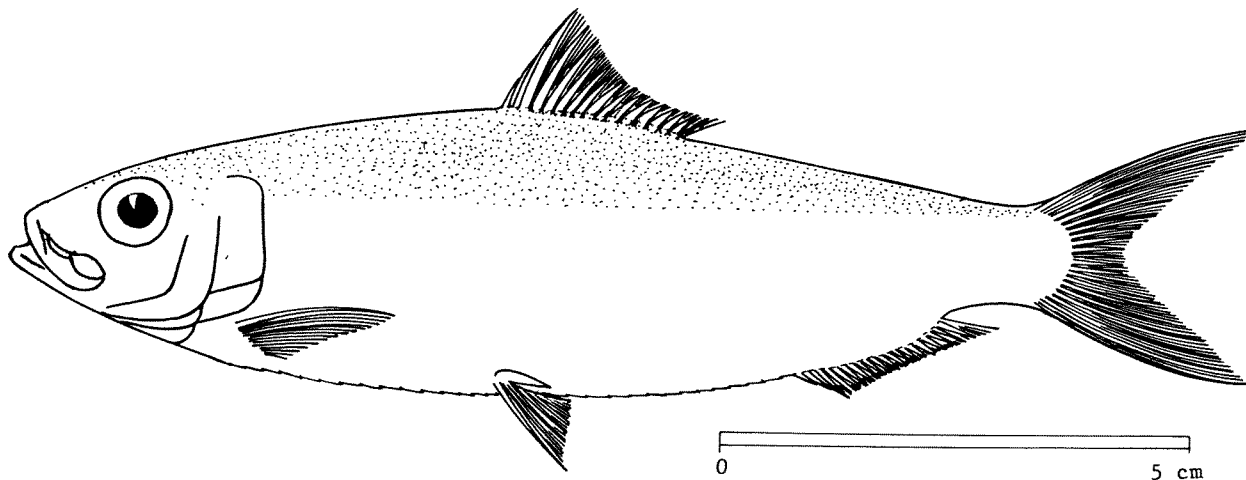
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

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

Sardinella albella (Valenciennes, 1847)

SYNONYMS STILL IN USE: *Clupalosa bulan* Bleeker, 1849
Harengula bulan: Fowler, 1941
Sardinella perforata (Cantor, 1850)



VERNACULAR NAMES:

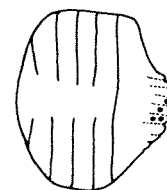
FAO: En - White sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Fusiform, compressed body, its depth 2.8 to 3.0 times in standard Length; belly sharp with keeled scutes. Dorsal fin origin slightly before midpoint of body, anal fin base short and lying far behind dorsal fin base, pelvic fins below anterior part of dorsal fin base. Lower gill rakers 47 to 62. Anterior scales perforated and fimbriated at posterior margin.

Colour: back blue/green, flanks silvery.

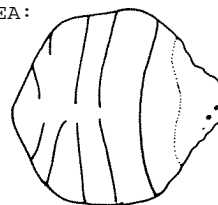


S. albella
anterior scale

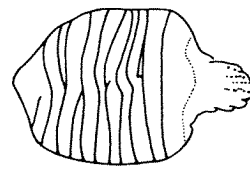
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Sardinella melanura: caudal tips black.

Sardinella brachysoma, *S. zunasi*: numerous vertical scale striae that overlap at centre of scale on posterior scales (only 4 to 5 striae, interrupted at centre of scale on posterior scales of *S. albella*).



S. albella



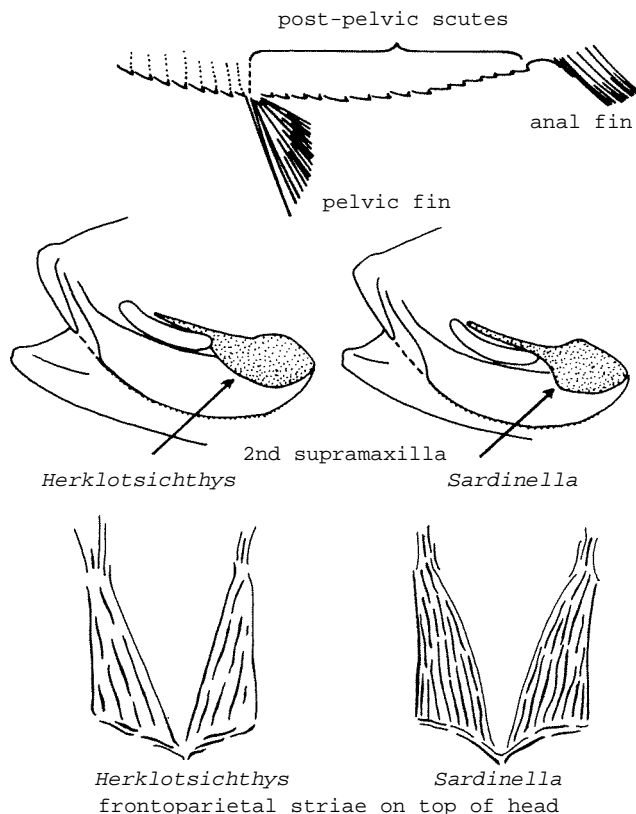
S. brachysoma
posterior scales

Sardinella gibbosa: 15 to 16 (rarely 14 or 17 to 18) post-pelvic scutes (12 to 14 in *S. brachysoma*, *S. melanura*, *S. fimbriata*).

Herklotsichthys species: lower portion of paddle-shaped 2nd supramaxilla longer than upper (about equal in *Sardinella*), and only 3 to 6 frontoparietal striae on top of head (7 to 14 striae in *Sardinella*).

SIZE:

Maximum: 13 cm; common: 7 to 8 cm.



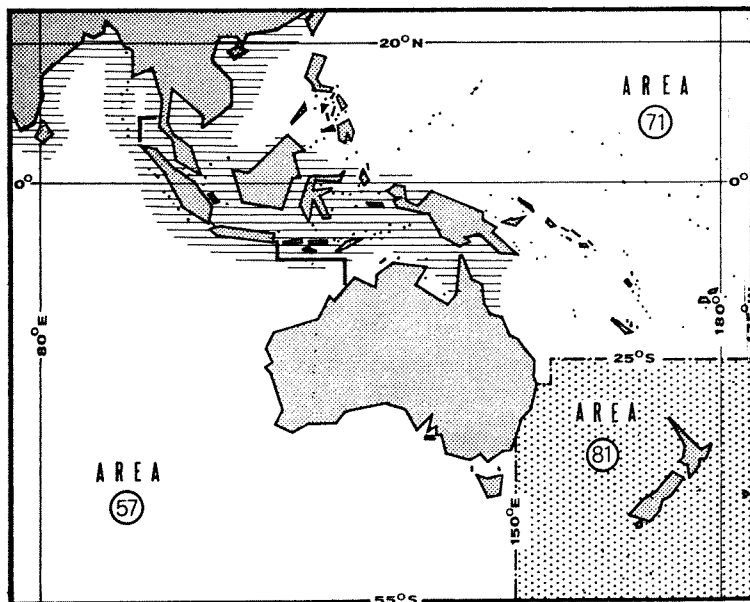
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area, northward to Taiwan; possibly southward to northern tip of Australia; also, westward to Red Sea.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

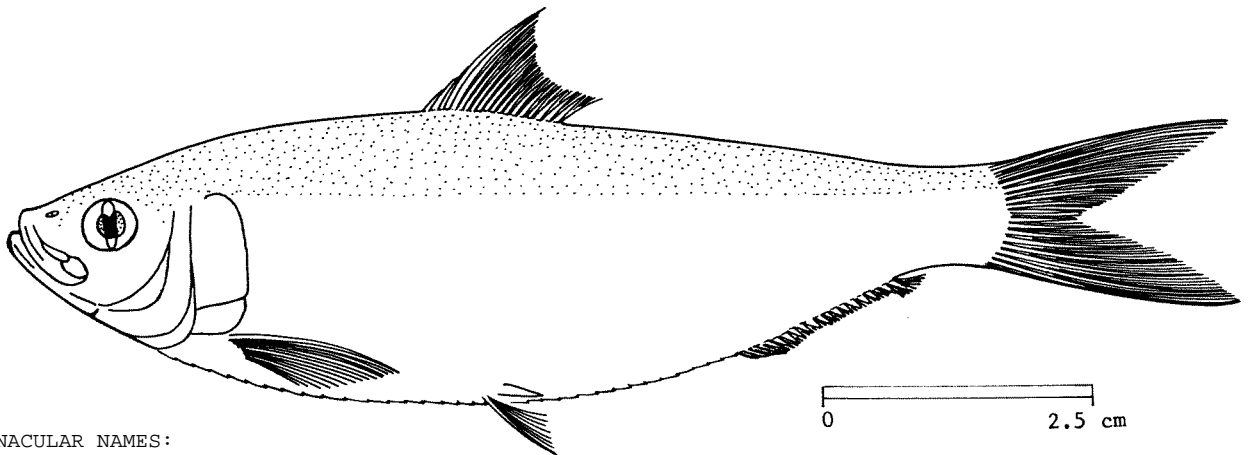
Separate statistics are not reported for this species.

Caught mainly with purse seines, lift nets and set nets.

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

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Oceans)
(W Cent. Pacific)*Sardinella fimbriata* (Valenciennes, 1847)SYNONYMS STILL IN USE: *Clupea* (*Harengula*) *fimbriata*: Weber & de Beaufort, 1913

VERNACULAR NAMES:

FAO: En - Fringescale sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Fusiform, compressed body, its depth 3.0 to 3.6 times in standard length; belly sharp with keeled scutes. Dorsal fin origin slightly before midpoint of body; anal fin base short and lying far behind dorsal fin base; pelvic fins below anterior part of dorsal fin base. Lower gill rakers 60 to 81. Anterior scales perforated and fimbriated at posterior margin.

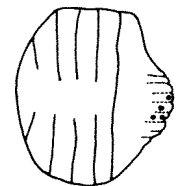
Colour: back blue/green, flanks silvery.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

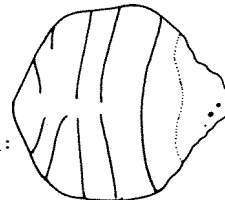
Sardinella melanura: caudal tips black.

Sardinella brachysoma, *S. zunasi*: numerous vertical scale striae that overlap at centre of scale on posterior scales (only 4 to 5 striae, interrupted at centre of scale on posterior scales of *S. fimbriata*).

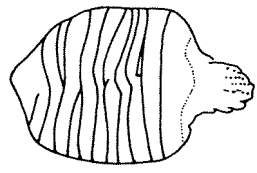
Sardinella gibbosa: 15 to 16 (rarely 14 or 17 to 18) post-pelvic scutes (12 to 14 in *S. fimbriata* and in *S. brachysoma*, *S. melanura*, *S. albella*).



S. fimbriata
anterior scale



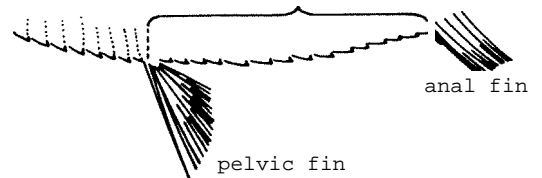
S. albella



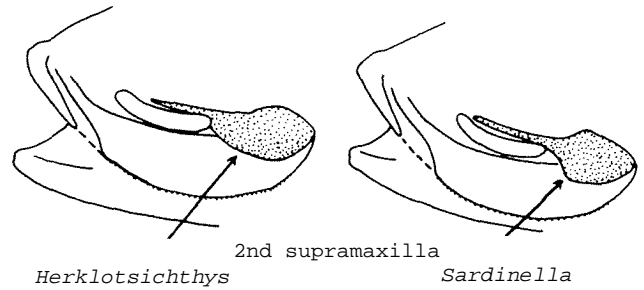
S. brachysoma

posterior scales

post-pelvic scutes

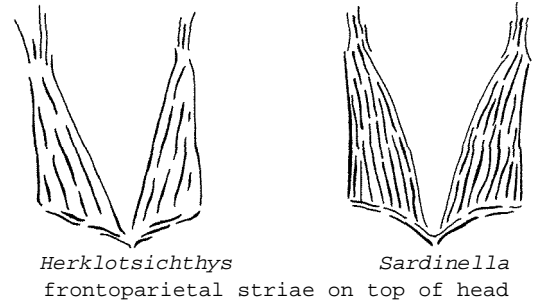


Herklotsichthys species: lower portion of paddle-shaped 2nd supramaxilla longer than upper (about equal in *Sardinella*), and only 3 to 6 frontoparietal striae on top of head (7 to 14 striae in *Sardinella*).



SIZE:

Maximum: 16 cm; common: about 12 cm.



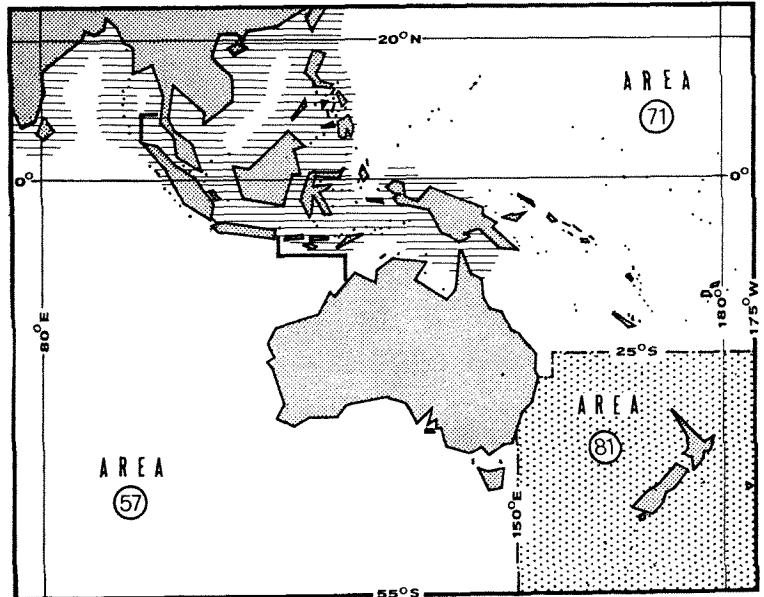
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area, possibly to northern tip of Australia, northward to Taiwan; also, westward to Red Sea.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with purse seines, lift nets and set nets.

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

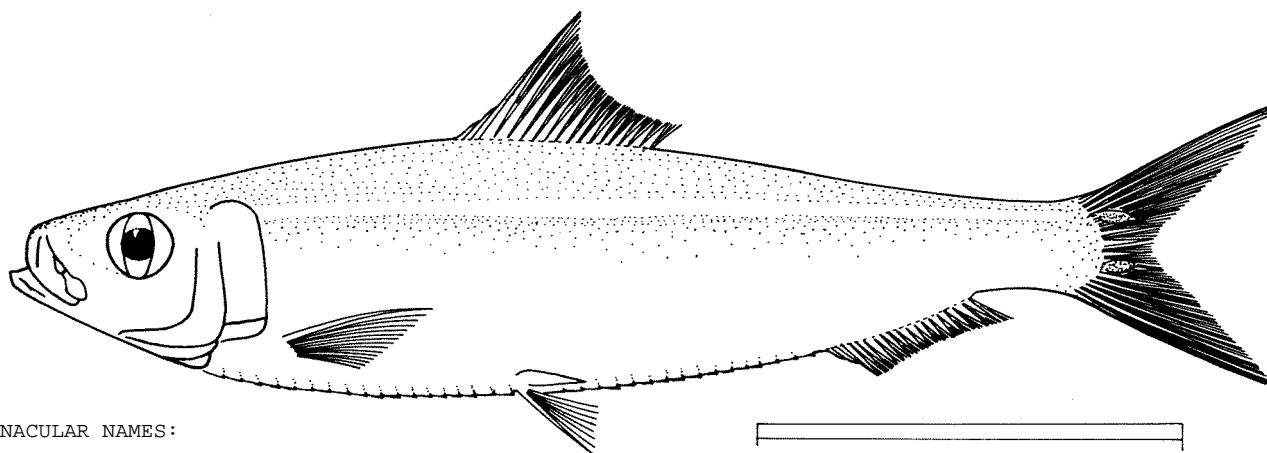
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

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

Sardinella gibbosa (Bleeker, 1849)

SYNONYMS STILL IN USE: *Sardinella jussieu* (Lacepède, 1803) (*nomen dubium*)
Sardinella tembang (Bleeker, 1851)



VERNACULAR NAMES:

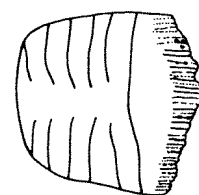
FAO: En - Goldstripe sardinella
Fr -
Sp -

NATIONAL:

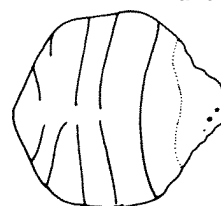
DISTINCTIVE CHARACTERS:

Body fusiform, a little compressed, its depth 3.6 to 4.1 times in standard Length; belly sharp with keeled scutes; post-pelvic scutes 15 to 16 (rarely 14 or 17 to 18). Dorsal fin origin slightly before midpoint of body, anal fin base short and lying far behind dorsal fin base, pelvic fins below anterior part of dorsal fin base. Lower gill rakers 43 to 63. Anterior scales with a few perforations and fimbriated at posterior margin.

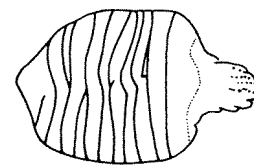
Colour: blue/green above and silvery on flanks, separated by a narrow yellow horizontal Line; black spot at bases of anterior dorsal rays.



S. gibbosa
anterior scale



S. albela



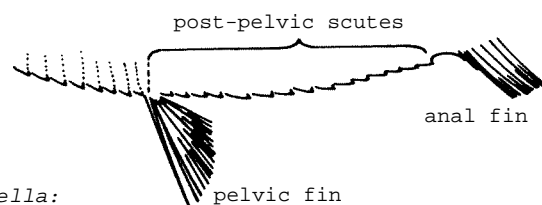
S. brachysoma

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Sardinella melanura: caudal tips black.

Sardinella brachysoma, *S. zunasi*: numerous vertical scale striae that overlap at centre of scale (only 4 to 5 striae, interrupted at centre of scale on posterior scales of *S. gibbosa*).

Sardinella fimbriata, *S. brachysoma*, *S. melanura*, *S. albela*: 12 to 14 post-pelvic scutes (15 to 16, rarely 14 or 17 to 18 in *S. gibbosa*):

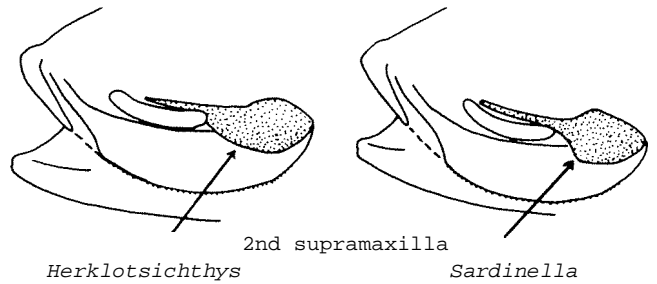


post-pelvic scutes

anal fin

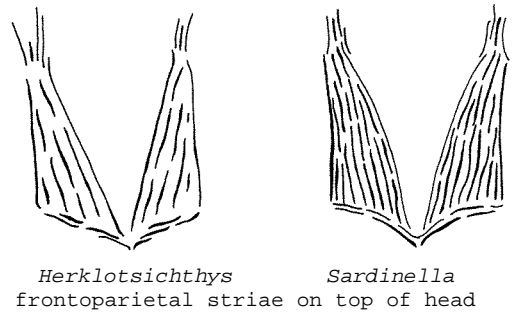
pelvic fin

Herklotsichthys species: lower portion of paddle-shaped 2nd supramaxilla longer than upper (about equal in *Sardinella*); only 3 to 6 fronto parietal striae on top of head (7 to 14 striae in *Sardinella*).



SIZE:

Maximum: 18.5 cm; common: about 15 cm.



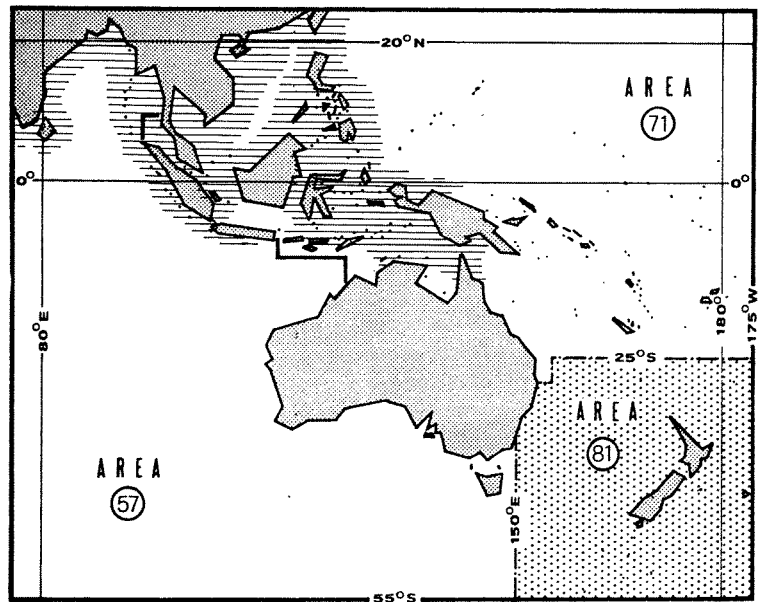
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area, possibly to northern tip of Australia; northward to Taiwan; also, westward to East Africa.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Throughout its range, and especially in India, also in Thailand.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

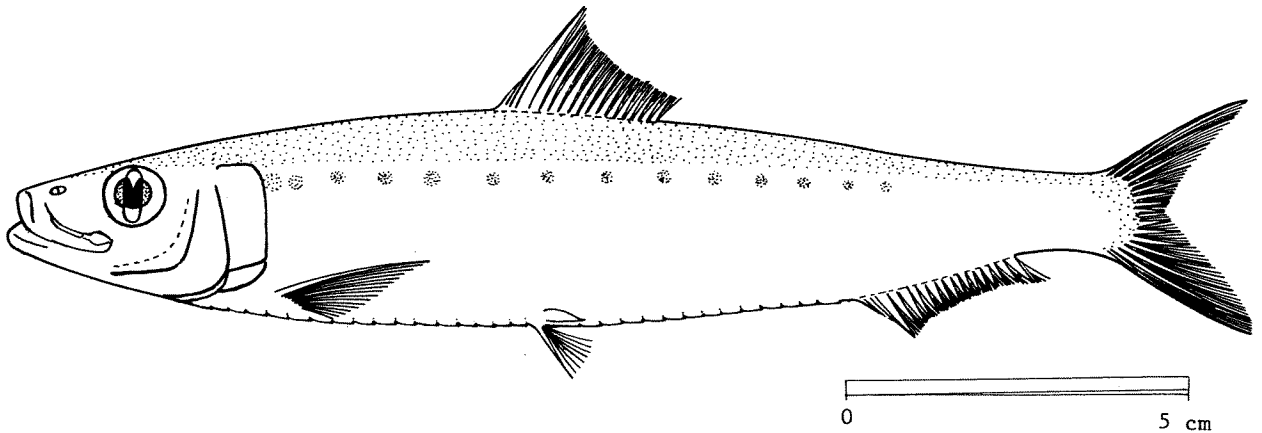
Separate statistics are not reported for this species.

Caught with purse seines, lift nets and set nets.

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

FAD SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Sardinella sirm* (Walbaum, 1792)SYNONYMS STILL IN USE: *Clupea (Amblygaster) sirm*: Weber & de Beaufort, 1913
Sardinella leiogastroides Bleeker, 1854
Clupea (Harengula) pinguis: Weber & de Beaufort, 1913

VERNACULAR NAMES:

FAO: En - Spotted sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Body elongate, sub-cylindrical, its depth 4.1 to 5.2 times in standard length; belly rounded, scutes present but not strongly keeled. Dorsal fin origin a little before midpoint of body; anal fin base short and lying far behind dorsal fin base; pelvic fins below anterior part of dorsal fin base. Lower gill rakers 36 to 42. Maxilla reaching to vertical from anterior margin of eye.

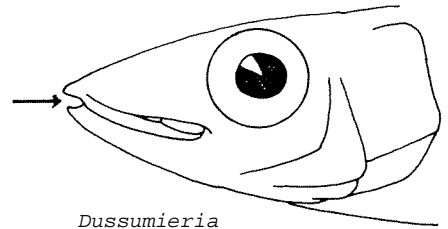
Colour: blue/green above and silvery on flanks, with 10 to 20 golden spots on flanks which become black or may disappear after death.

DIFFERENTIAL CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

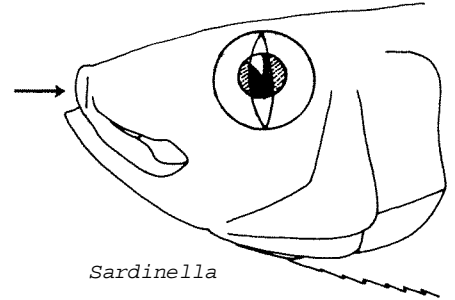
Sardinella clupeioides, *S. leiogaster*: no spots on flanks; only 26 to 30 or 31 to 36 gill rakers on lower part of gill arch; in *S. leiogaster* a black dorsal fin (also in *S. clupeioides*).

Sardinella longiceps: 9 pelvic rays and more than 130 gill rakers on lower part of gill arch.

Dussurnieria acuta: no scutes present along belly; a characteristic pointed mouth.



Dussurnieria



Sardinella

SIZE:

Maximum: 23 cm; common: 17 to 18 cm.

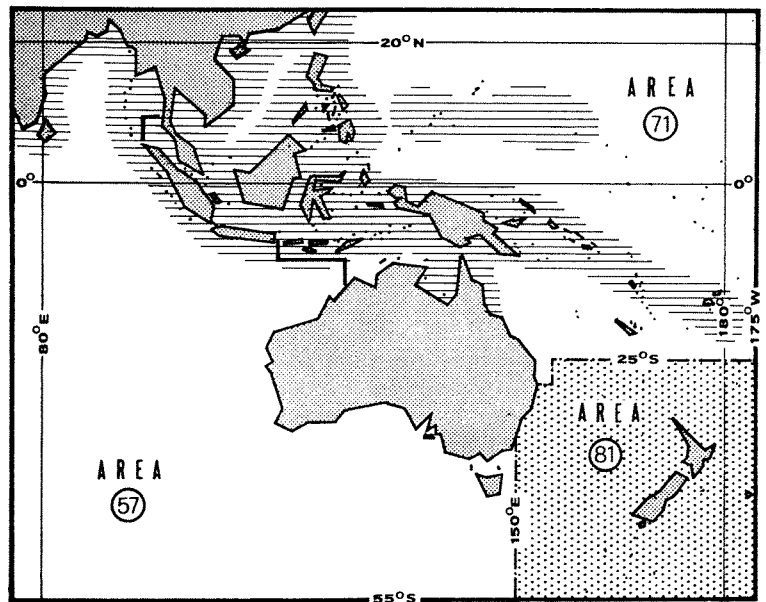
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area and possibly to northern tip of Australia; also, westward to East Africa and northward to Okinawa.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

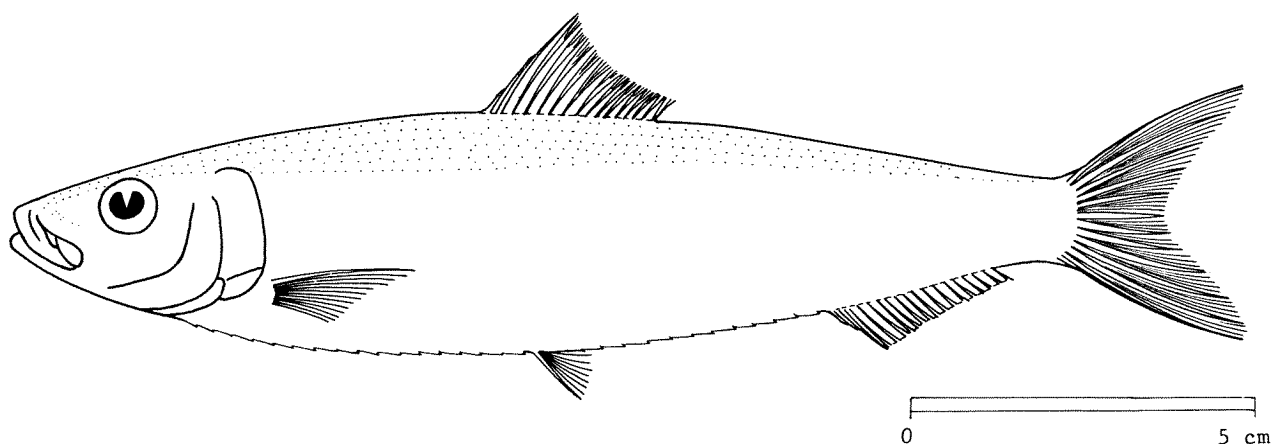
Separate statistics are not reported for this species.

Caught with encircling gill nets, purse seines and bamboo stake traps.

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

FAD SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

FISHING AREAS 57,71
(E Ind. Ocean)
(W Cent. Pacific)*Sardinella leiogaster* Valenciennes, 1847SYNONYMS STILL IN USE: *Clupea (Amblygaster) leiogaster*: Weber & de Beaufort, 1913

VERNACULAR NAMES:

FAO: En - Smoothbelly sardinella
Fr -
Sp -

NATIONAL:

DISTINCTIVE CHARACTERS:

Elongate, sub-cylindrical body, its depth 4.1 to 4.5 times in standard length; belly rounded, scutes present but not strongly keeled. Dorsal fin origin equidistant between snout and caudal fin base; anal fin base short and lying far behind dorsal fin base; pelvic fins below anterior part of dorsal fin base. Lower gill rakers 31 to 36. Maxilla not reaching to vertical from anterior margin of eye.

Colour: blue/green above and silvery below, without spots on flanks; dorsal fin black (or dusky when fully extended).

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

S. clupeioides: 26 to 30 gill rakers on lower part of gill arch (31 to 36 in *S. leiogaster*); body depth 3.5 to 4.1 times in standard length (4.1 to 4.5 in *S. leiogaster*).

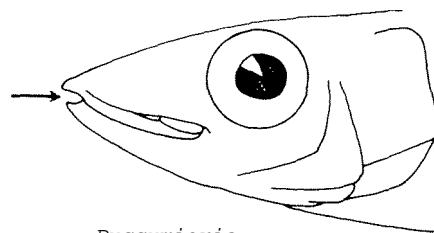
S. sirm: spots present on flanks, more gill rakers (36 to 42), and dorsal fin not black.

Sardinella longiceps: 9 pelvic fin rays and more than 130 gill rakers on lower part of gill arch.

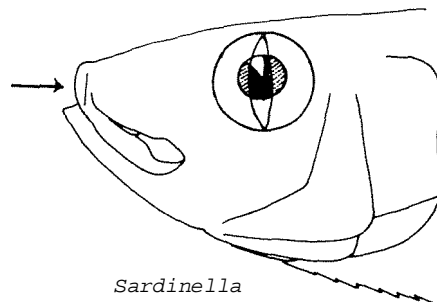
Dussumieria acuta: no scutes along belly and a characteristic pointed mouth.

SIZE:

Maximum: 26 cm; common: 19 to 24 cm.



Dussumieria



Sardinella

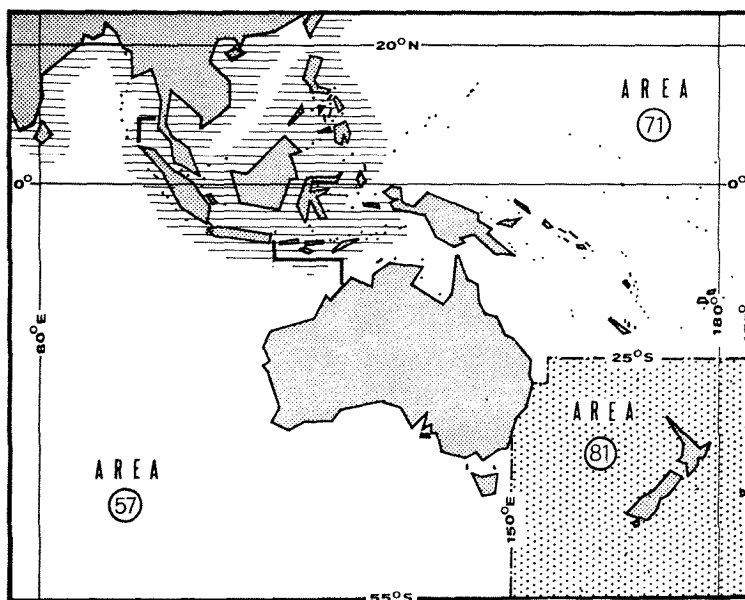
GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of northern part of area; also, westward to East Africa.

Inhabits coastal waters; pelagic.

PRESENT FISHING GROUNDS:

Throughout its range.



CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION

Separate statistics are not reported for this species.

Caught mainly with purse seines and set nets.

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

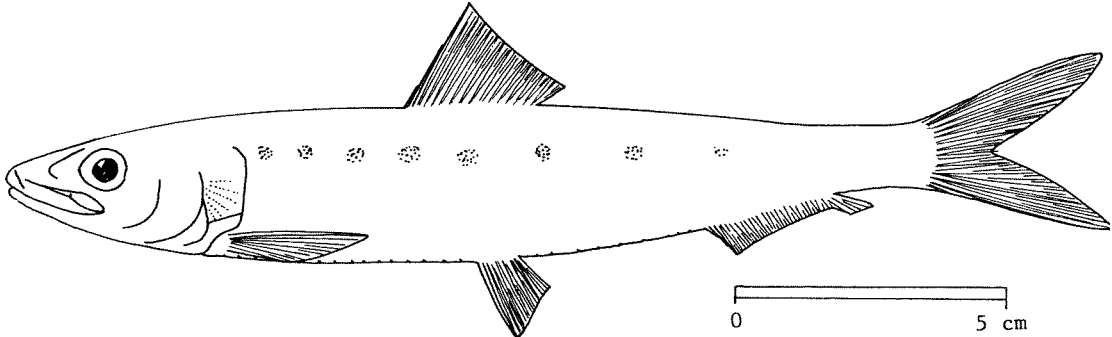
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CLUPEIDAE

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

Sardinops sagax neopilchardus (Steindachner, 1879)

SYNONYMS STILL IN USE: *Sardinops neopilchardus* (Steindachner, 1879)



VERNACULAR NAMES:

FAO: En - Australian pilchard
Fr -
Sp -

NATIONAL:

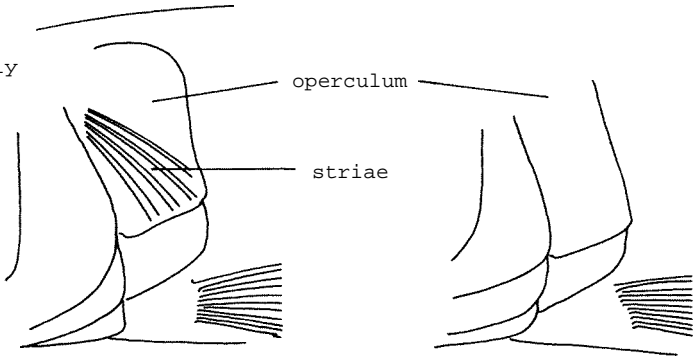
DISTINCTIVE CHARACTERS:

Body elongate, rather round in cross-section, belly with inconspicuous scutes. Operculum with distinct radiating bony striae. Dorsal fin at about midpoint of body; anal fin short, its last two rays longer than those in front.

Colour: upper parts olive or dark green, flanks silvery with a series of up to 15 small dark spots, sometimes with a second or even third row below.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Sardinella species: operculum smooth, at most covered by radiating canals in skin; also, hind margin of gill opening irregular, not evenly rounded.

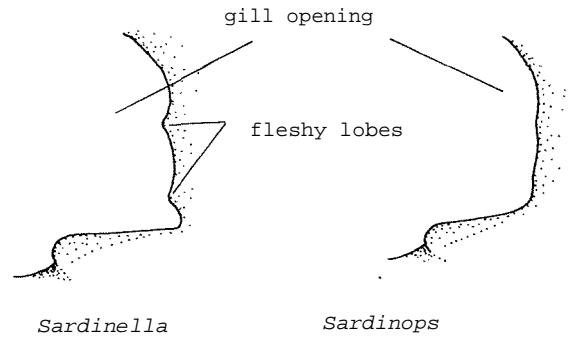


Sardinops

Sardinella

Etrumeus teres: no scutes along belly, operculum without radiating bony striae; also, 14 to 15 branchiostegal rays (about 7 in *Sardinops*).

Other clupeid species: operculum smooth and scutes on belly usually sharply keeled; also, spots present along flanks only in deep-bodied species.



SIZE:

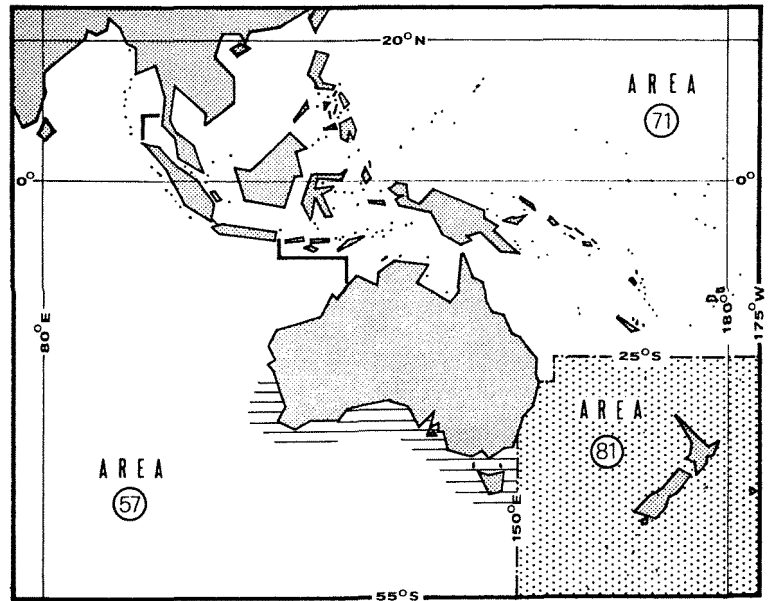
Maximum: 28 cm; common 15 to 18 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Southern coasts of Australia, including Tasmania; also, eastward to New Zealand.

Inhabits coastal waters, often abundant, sometimes in vast schools.

Feeds on small plankton organisms.



PRESENT FISHING GROUNDS:

Throughout its range, especially Victoria, but also New South Wales and Western Australia.

CATCHES, MAIN FISHING GEAR AND PRINCIPAL FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with hoop nets, purse seines, lamparas and beach seines in Victoria.

Marketed mostly fresh.

