

Habitat and Biology: Inhabits coastal areas ranging widely around coral reefs. Feeds on zooplankton in large midwater aggregations. A schooling fish, often in groups with members of the genus *Pterocaesio*.

Size: Reaches a maximum size of about 18 cm.

Interest to Fisheries: Of minor importance to fisheries. Occasionally caught with traps and drive-in nets and marketed fresh in the Philippines. Used as a baitfish for tuna fisheries in the Maldives, the Laccadives, and the West Pacific.

Local Names: LACCADIVE ARCHIPELAGO: Dandi mugurang; PHILIPPINES: Dalagang bukid (Tagalog); Sulid (Visayan).

Literature: Randall (1983); Gloerfelt -Tarp & Kailola (1984); Carpenter (1987).

***Pterocaesio* Bleeker, 1876**

CAES Pter

Genus: *Pterocaesio* Bleeker, 1876, Versl.Meded.Akad.Amsterdam, (Ser. 9), 2:153. Type species, *Caesio multiradiatus* Steindachner, 1861 (= *Caesio tile* Cuvier in C. & V., 1830), by original designation.

Synonyms: *Liocaesio* Bleeker, 1876; *Clupeolabrus* Nichols, 1923.

Diagnostic Features: Body fusiform, elongate, and moderately compressed. Two postmaxillary processes; posterior end of maxilla tapered, its greatest depth anterior to hind end of premaxilla; small conical teeth in jaws; vomer and palatines with or without small conical teeth; interorbital space convex; margin of opercle with a distinct dorso-posterior flap. Dorsal fin continuous, with 10 or 11 spines and 14 to 16 soft rays, or 10 to 12 spines and 19 to 22 soft rays; spines connected broadly by membranes, anal fin with 3 spines and 11 to 13 soft rays; pectoral fin with 17 to 24 rays; procurrent caudal rays typically 9 or 10. Scales weakly ctenoid; median fins with scales in oblique rows; scales in lateral line 62 to 88, circumpeduncular scales 10 to 14 + 13 to 18; scale rows above lateral line to origin of dorsal fin 7 to 11; scale rows below lateral line to origin of anal fin 13 to 20; supratemporal band of scales distinct, confluent at dorsal midline. Predorsal configuration 0/0/0 + 2/1 + 1/or/0 + 0/0 + 2/1 + 1. Epipleural ribs 14 (rarely 13 or 15); flattened projections present on first and second epipleural ribs in some species. Anterior profile of first anal pterygiophore either strongly or weakly convex distally. Markings: side without markings, with longitudinal stripe(s), or with a large blotch above pectoral-fin base; caudal-fin lobes with black tips or with a longitudinal blackish streak in middle of each lobe.

Biology Habitat and Distribution: They inhabit coastal areas of the Indo-West Pacific, primarily around coral reefs. They are schooling fishes, often found in mixed aggregations with other species of *Pterocaesio*. They feed on zooplankton in midwater. Reproduction appears to be characterized by early sexual maturity, high fecundity, prolonged spawning season and group spawning on a lunar cycle.

Interest to Fisheries: Of minor to moderate importance as food fish. Caught by drive-in nets, gill nets, traps, trawls and handlines. Marketed fresh and dried-salted. Juveniles and adults of some species are very important as baitfish for tuna fisheries.

Species: Ten species and 3 subgenera are recognized: *Pterocaesio* (*Pterocaesio*) *tile*, *P.* (*Pisinnicaesio*) *digamma*, *P.* (*Pi.*) *chrysozona*, *P.* (*Pi.*) *pisang*, *P.* (*Squamosicaesio*) *marri*, *P.* (*S.*) *randalli*, *P.* (*S.*) *lativittata*, *P.* (*S.*) *capricornis*, *P.* (*S.*) *trilineata* and, *P.* (*S.*) *tessellata*.

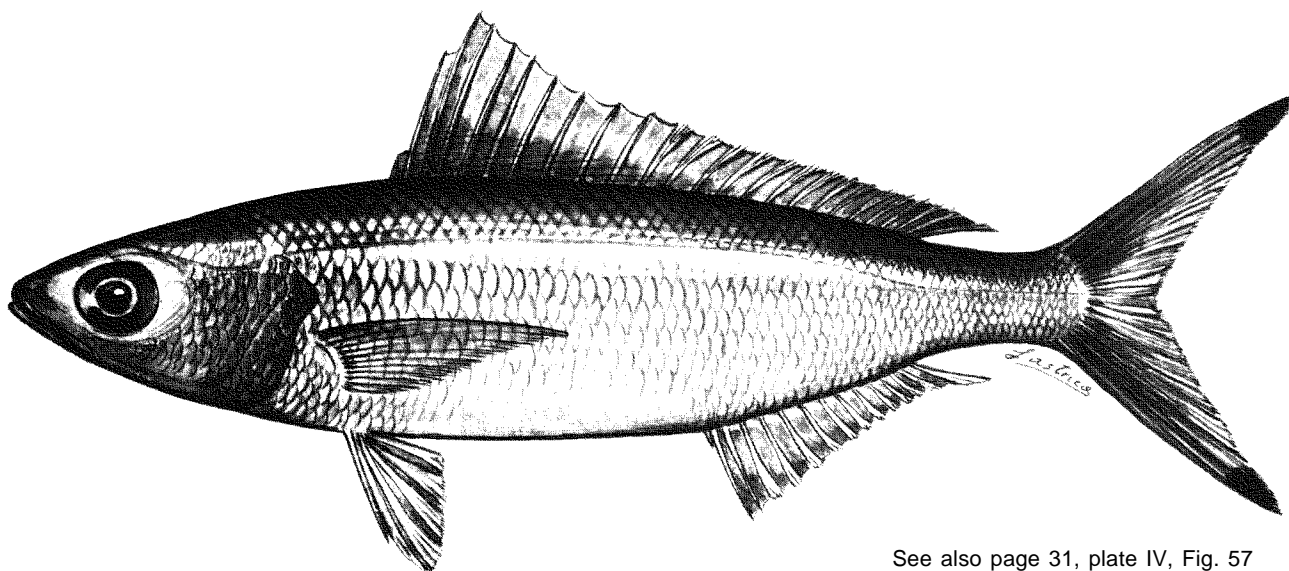
Pterocaesio capricornis Smith & Smith, 1963

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Pterocaesio capricornis Smith & Smith, 1963, The Fishes of Seychelles, p. 29, pl.94, Fig. E (Pinda, Mozambique).

Synonyms: None.

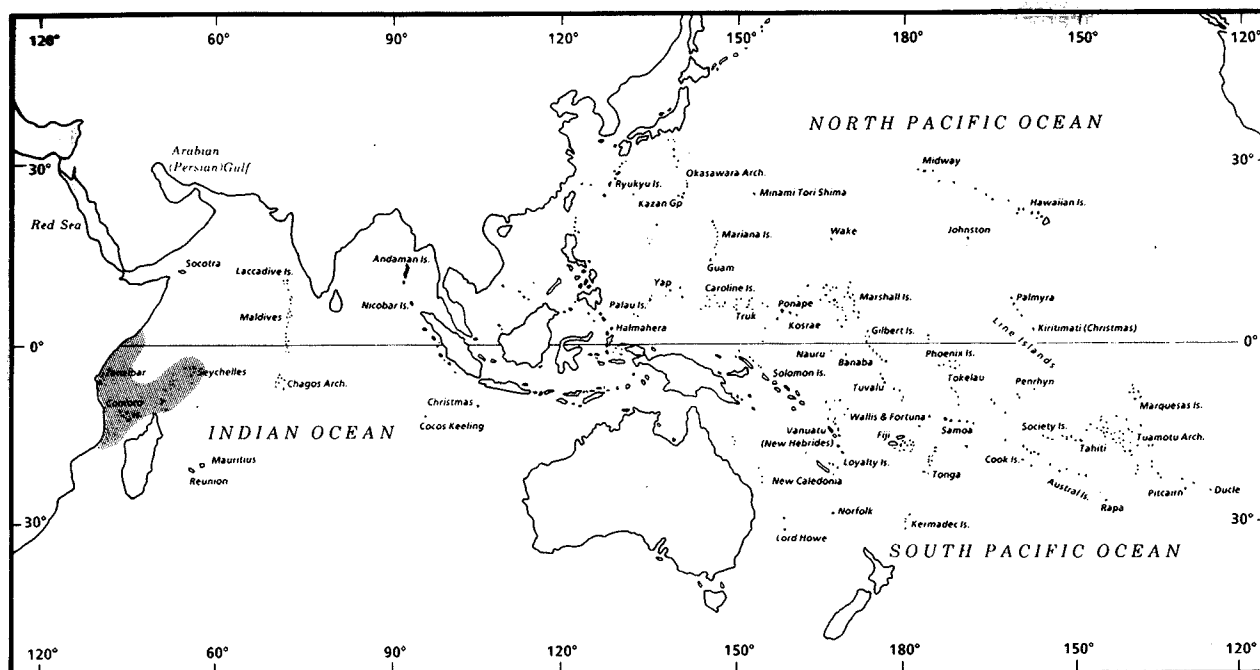
FAO Names: En - Capricorn fusilier; Fr - Fusilier capricorne; Sp - Fusilero capricornio.



See also page 31, plate IV, Fig. 57

Diagnostic Features: Body fusiform, elongate and moderately compressed. Two postmaxillary processes; small conical teeth in jaws; vomer and palatines without teeth. Dorsal fin with 10 spines and 15 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fin with 19 rays. Scales in lateral line 65 to 68; upper peduncular scale rows 11, lower peduncular scale rows 15; scale rows above lateral line to origin of dorsal fin 8 or 9; scale rows below lateral line to origin of anal fin 15; 4 scale rows on cheek; predorsal scales 24; dorsal and anal fins scaled, the dorsal with about 1/3 of the greatest height of its spinous part covered with scales. **Colour:** (according to Smith & Smith, 1963) body chequered bronzy green yellow and blue above, belly pink; a narrow yellow stripe along the body from behind the eye covering the lateral line for most of its length, above the lateral line on caudal peduncle; dorsal fin blue and yellow in front, pink behind; pectoral, pelvic and caudal fins pink; tips of caudal lobes dark brown to black.

Geographical Distribution: Western Indian Ocean, restricted to East Africa.



Habitat and Biology: Inhabits coastal areas, primarily around coral reefs. Feeds on zooplankton in midwater aggregations.

Size: Maximum size probably around 21 cm.

Interest to Fisheries: Rare in markets.

Local Names: Unavailable

Literature: Carpenter (1987).

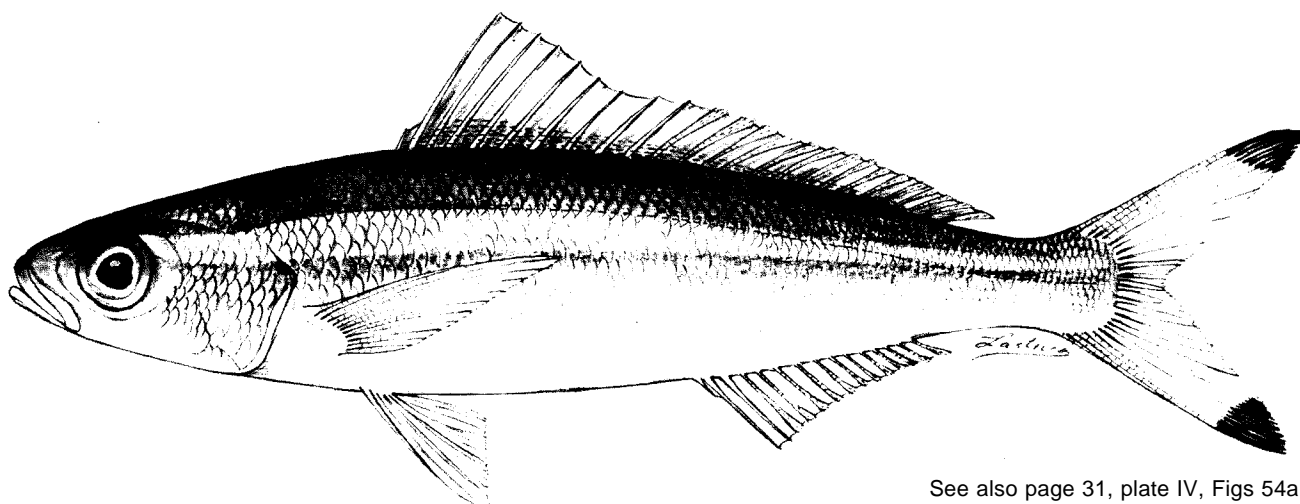
Pterocaesio chrysozona (Cuvier, 1830)

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Caesio chrysozona Cuvier [Kuhl & van Hasselt, ms] in C. & V., 1830, *Hist.Nat.Poiss.*, 6:440 (Indonesia)

Synonyms: *Pristipomoides aurolineatus* Day, 1867.

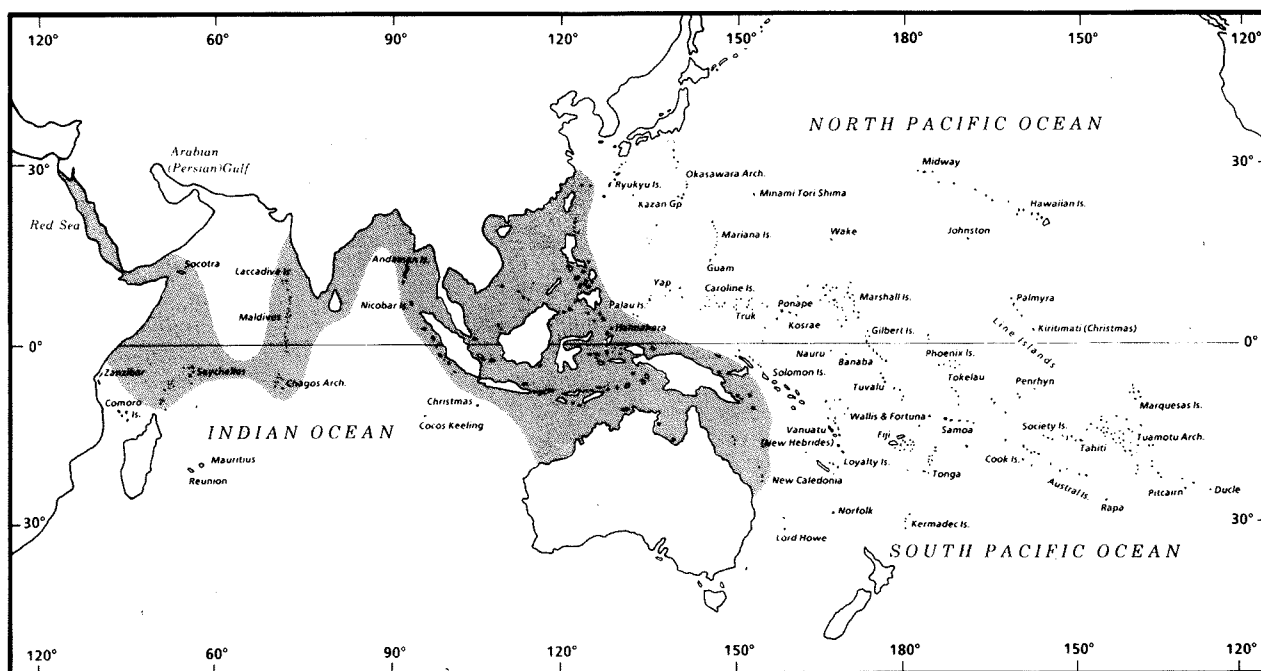
FAO Names: En - Goldband fusilier; Fr - Caesio à ceinture d'or; Sp - Fusilero cinta dorada.



See also page 31, plate IV, Figs 54a,b

Diagnostic Features: Body fusiform, elongate and moderately compressed. Two postmaxillary processes; small conical teeth in jaws, vomer and palatines. Dorsal fin with 10 (rarely 11) spines and 15 (rarely 14 or 16) soft rays; anal fin with 3 spines and 12 (rarely 11 or 13) soft rays; pectoral fin with 17 to 20 (most frequently 19) rays. Scales in lateral line usually 64 to 69; upper peduncular scale rows usually 11, lower peduncular scale rows usually 15; scale rows above lateral line to origin of dorsal fin 7 to 9; scale rows below lateral line to origin of anal fin usually 14 to 16; usually 4 scale rows on cheek; predorsal scales usually 23 to 26; dorsal and anal fins scaled, the dorsal with about 1/2 of the greatest height of its spinous part covered with scales. **Colour:** upper body light blue to brownish, lower body white to pinkish; a bright yellow band directly below lateral line for most of its length, from behind eye to base of caudal fin, 2 or 3 scales wide anteriorly, tapering to 1 scale in width on caudal peduncle where it is above lateral line; a less conspicuous yellow stripe along dorsal midline; fins white to pinkish; axil of pectoral fin black; dorsal fin slightly dusky distally; tips of caudal lobes black.

Geographical Distribution: Widespread in the Indo-West Pacific, from East Africa, including the Red Sea, to eastern Australia.



Habitat and Biology: Ranges widely around coral reefs in schools. Often found in groups with other caesionids. Feeds on zooplankton in large midwater aggregations.

Size: Reaches a maximum size of about 21 cm.

Interest to Fisheries: Moderately important as a food fish in some areas. Common in the markets of Sri Lanka and the Philippines. Caught by drive-in nets, gill nets, traps, handlines and, occasionally by trawls. A valuable tuna baitfish in the Laccadives and Maldives.

Local Names: INDONESIA: Pisang-pisang; JAPAN: Takasago; LACCADIVE ARCHIPELAGO: Churaichala, Furrua, Huden mugurang; MALAYSIA: Delah karang; PAPUA NEW GUINEA: Gawani; PHILIPPINES: Bidlawan (Visayan), Dalagang bukid (Tagalog); SRI LANKA: Hemala, liitta.

Literature: Schroeder (as *P. pisang* 225-A) (1980); Randall (1983); Fischer & Bianchi, eds. (1984); Gloerfelt-Tarp & Kailola (1984); Sainsbury *et al.* (as *P. digramma*): Carpenter (1987).

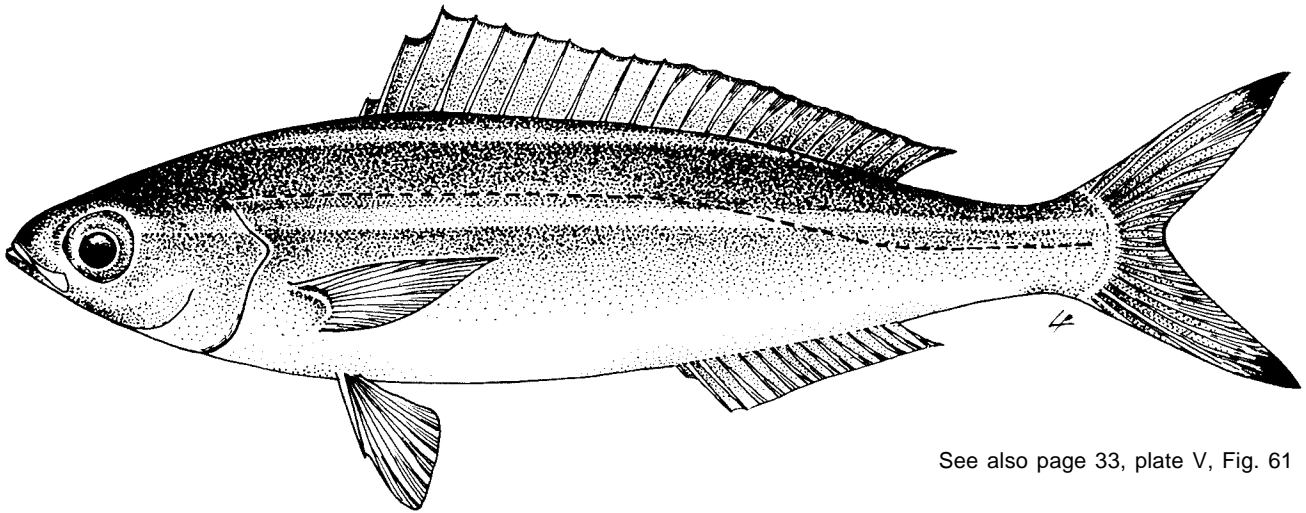
Pterocaesio digramma (Bleeker, 1865)

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Caesio digramma Bleeker, 1865, *Nat. Tijdschr. Dierk.*, 2:180 (Ambon, Indonesia).

Synonyms: None.

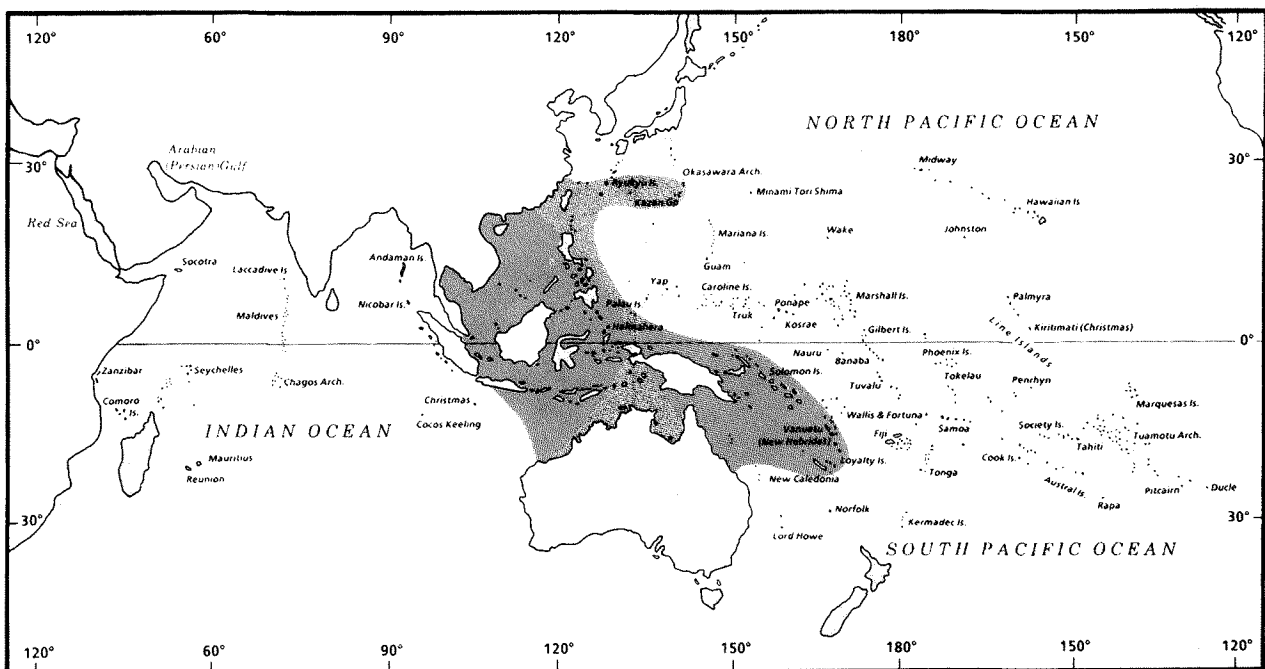
FAO Names: En - Double-lined fusilier; Fr - Fusilier à deux bandes jaunes; Sp - Fusilero de dos bandas.



See also page 33, plate V, Fig. 61

Diagnostic Features: Body fusiform, elongate and moderately compressed. Two postmaxillary processes; small conical teeth in jaws, vomer and palatines. Dorsal fin with 10 spines and 15 (rarely 14 or 16) soft rays; anal fin with 3 spines and 12 (rarely 11) soft rays; pectoral fin usually with 20 to 22 (most frequently 21) rays. Scales in lateral line 66 to 76 (most frequently 72); upper peduncular scale rows usually 12 or 13, lower peduncular scale rows usually 16 or 17; scale rows above lateral line to origin of dorsal fin 9 to 11; scale rows below lateral line to origin of anal fin usually 17 or 18; 4 or 5 scale rows on cheek; predorsal scales usually 26 to 28; dorsal and anal fins scaled, the dorsal with about 1/2 of the greatest height of its spinous part covered with scales. **Colour:** body blue to greenish dorsally, white ventrally; 2 longitudinal yellow stripes laterally, the lower running from behind upper orbit about 1 scale below the lateral line to a vertical at about middle of soft portion of dorsal fin where it crosses and usually passes above lateral line for the length of the caudal peduncle; upper stripe 1 to 2 scales below dorsal profile for most of length of body, ending dorsally on caudal peduncle; fins white to pinkish; axil of pectoral fin black; dorsal fin slightly dusky distally; tips of caudal lobes black.

Geographical Distribution: Primarily in the western Pacific, from Indonesia and western Australia to New Caledonia, north to southern Japan.



Habitat and Biology: Found in coastal areas, primarily around coral reefs. A schooling fish, often in mixed-species groups containing other pterocaesionids. Feeds on zooplankton in midwater aggregations.

Size: Reaches a maximum size of about 30 cm.

Interest to Fisheries: Moderately important as a food fish. This species is one of the most common caesionids in Philippine markets. Caught mostly by drive-in nets, gill nets, and traps. Marketed mostly fresh; sometimes dried-salted.

Local Names: JAPAN: Nisen-takasago; PHILIPPINES: Dalagang bukid (Tagalog), Utdan (Visayan).

Literature: Schroeder (as *P. chrysozonus*) (1980); Fischer & Bianchi (eds) (1984); Gloerfelt-Tarp & Kailola (1984); Gloerfelt-Tarp & Kailola (1984); Shen (as *Caesio chrysozona*) (1984); Carpenter (1987).

Remarks: *Pterocaesio digramma* has frequently been misspelled in the literature as '*diagramma*'.

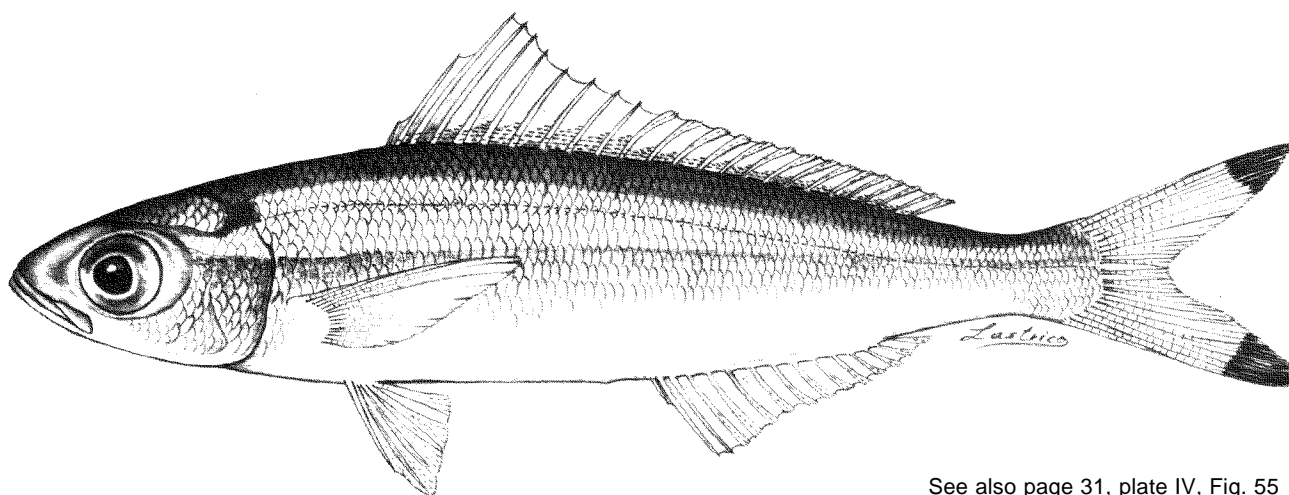
***Pterocaesio lativittata* Carpenter, 1987**

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Pterocaesio lativittata Carpenter, 1987, Indo-Pac. Fish., 15:40, pl.4 fig.B (Cocos-Keeling Islands).

Synonyms: None

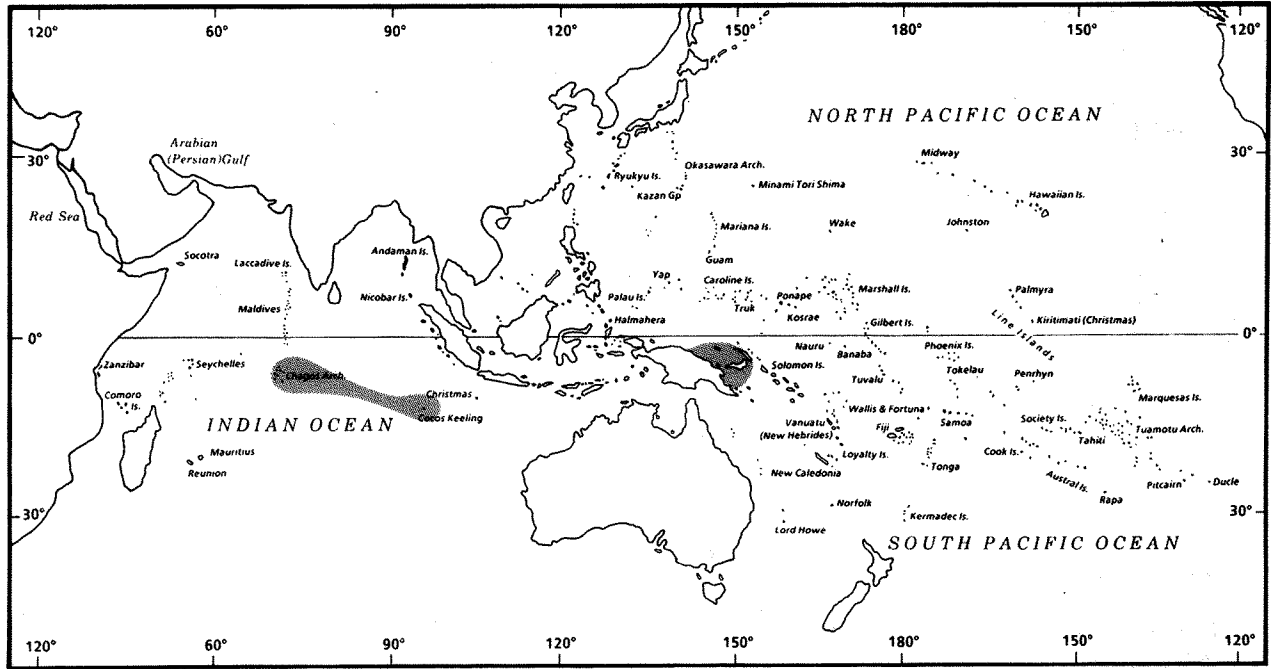
FAO Names: En - Wide-band fusilier; Fr - Fusilier à bande large; Sp - Fusilero de banda ancha.



See also page 31, plate IV, Fig. 55

Diagnostic Features: Body fusiform, elongate and moderately compressed. Two postmaxillary processes; small conical teeth in jaws and vomer; palatines without teeth. Dorsal fin with 10 spines and 15 (rarely 14 or 16) soft rays; anal fin with 3 spines and 12 (rarely 13) soft rays; pectoral fin with 21 to 23 (most frequently 22) rays. Scales in lateral line 74 to 88; upper peduncular scale rows 12 to 14, lower peduncular scale rows usually 16 or 17; scale rows above lateral line to origin of dorsal fin usually 9 or 10; scale rows below lateral line to origin of anal fin usually 16 to 18; usually 4 scale rows on cheek; predorsal scales 23 to 30; dorsal and anal fin scaled, the dorsal with about 1/2 of the height of its spinous part covered with scales; supratemporal band of scales confluent at dorsal midline. **Colour:** upper body bluish or reddish, lighter ventrally; a bright yellow band straddling the lateral line for most of its length, from tip of snout to base of caudal fin, 3 to 5 scales wide anteriorly, tapering to 1 scale in width on caudal peduncle where it is above the lateral line; fins white to pinkish; dorsal fin slightly dusky distally and yellowish near base; axil of pectoral fin with a black blotch; tips of caudal lobes black.

Geographical Distribution: Eastern Indian Ocean and western Pacific, from the Chagos Archipelago to Papua New Guinea.



Habitat and Biology: Inhabits coastal areas around coral reefs. A schooling fish, sometimes in groups with other species of *Pterocaesio*. Feeds on zooplankton in midwater aggregations.

Size: Maximum size estimated to be about 20 cm.

Interest to Fisheries: Of minor importance in fisheries; rarely seen in markets.

Local Names: Unavailable

Literature: Carpenter (1987)

Remarks: This species has been mistaken for *P. chrysozona* due to the close resemblance in colour pattern, although the two species are easily separated by meristic and osteological characters.

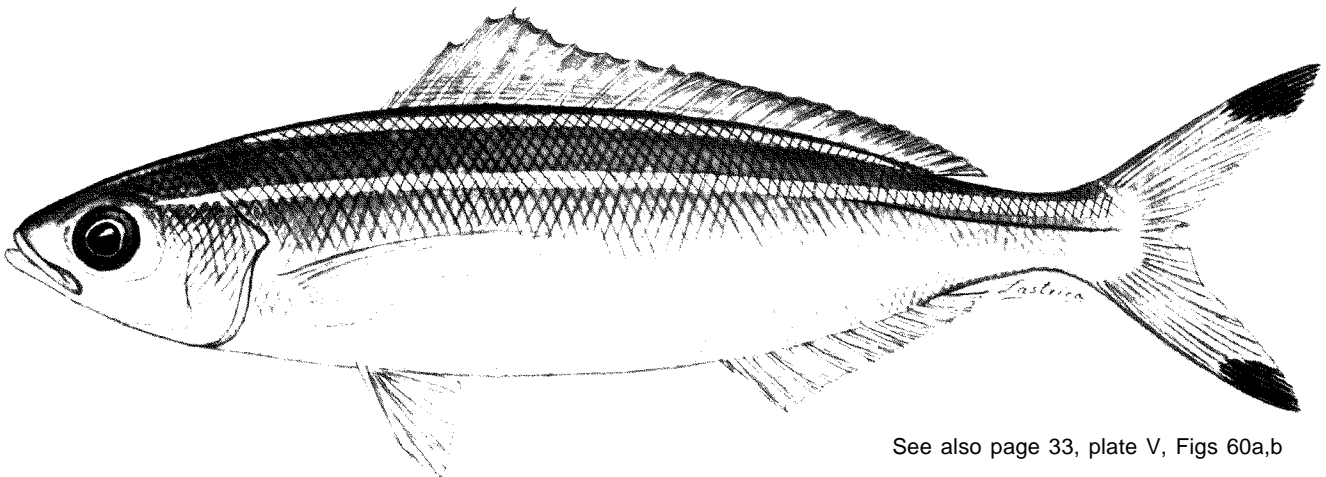
Pterocaesio marri Schultz, 1953

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Pterocaesio marri Schultz, 1953, U.S.Natl.Mus.Bull., 202:545 (Bikini Atoll, Marshall Islands).

Synonyms: *Pterocaesio kohleri* Schultz, 1953.

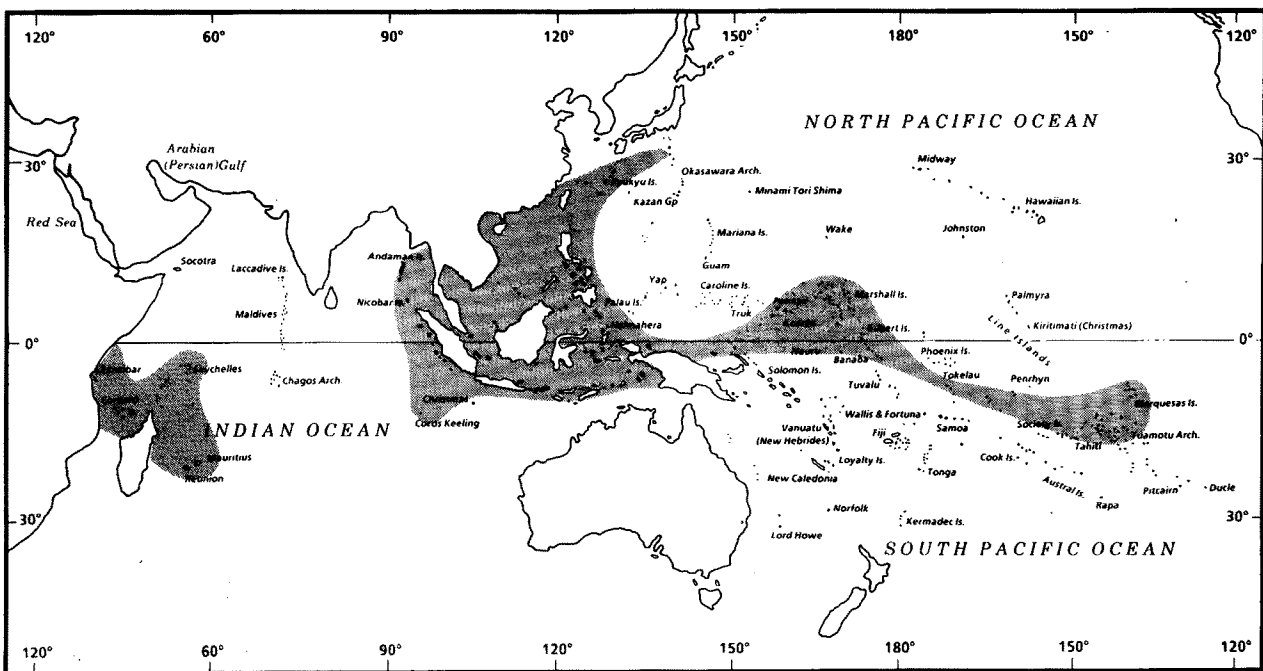
FAO Names: En - Marr's fusilier; Fr - Fusilier de Marr; Sp - Fusilero de Marr.



See also page 33, plate V, Figs 60a,b

Diagnostic Features: Body fusiform, elongate and moderately compressed. Two postmaxillary processes; small conical teeth in jaws; vomer and palatines without teeth. Dorsal fin with 10 (rarely 11) spines and 15 (rarely 14 or 16) soft rays; anal fin with 3 spines and 12 (rarely 11 or 13) soft rays; pectoral fin with 22 to 24 (most frequently 23) rays. Scales in lateral line usually 70 to 75; upper peduncular scale rows usually 12 or 13, lower peduncular scale rows usually 16 or 17; scale rows above lateral line to origin of dorsal fin 9 to 11; scale rows below lateral line to origin of anal fin usually 16 to 18; usually 5 scale rows on cheek; predorsal scales usually 26 to 30; dorsal and anal fins scaled, the dorsal with about 1/2 of the greatest height of its spinous part covered with scales; supratemporal band of scales confluent at dorsal midline. **Colour:** body blue to greenish dorsally, white ventrally; 2 longitudinal stripes laterally, about 1 scale wide each, the lower running from behind the supratemporal membrane, covering the lateral line to a vertical at about middle of soft portion of dorsal fin where it passes above lateral line for the length of caudal peduncle; upper stripe 1 to 2 scales below dorsal profile for most of length of body, ending dorsally on caudal peduncle; fins white to pinkish, dorsal fin slightly dusky distally; axil of pectoral fin and tips of caudal lobes black.

Geographical Distribution: Widespread in the Indo-West Pacific, from East Africa, not including the Red Sea or the Arabian (Persian) Gulf, to the Marquesas Islands.



Habitat and Biology: Ranges widely around coral reefs in schools. This species appears to prefer clear waters of oceanic islands or reefs far from large land masses. Feeds on zooplankton in midwater aggregations.

Size: Reaches a maximum size of about 35 cm.

Interest to Fisheries: Of minor importance to fisheries. Caught fairly often by drive-in nets in western Palawan, Philippines, and in other areas occasionally by gill nets and traps. Sometimes used as baitfish in the Indian Ocean and West Pacific tuna fisheries.

Local Names: PHILIPPINES: Dalangang bukid.

Literature: Amesbury & Myers (as *P. chrysozona*) (1982); Carpenter (1987).

Remarks: This species has often been misidentified as *P. digramma*.