

2.2 Information by Species

Caesio Lacepède, 1801

CAES Caes

Genus: *Caesio* Lacepède, 1801:85 Type species, *Caesio caerulea* Lacepède, 1801, by subsequent designation (Bleeker, 1876).

Synonyms: Genus *Odontonectes* Gunther, 1859

Diagnostic Features: Body fairly high to fusiform and elongate, and moderately compressed. A single postmaxillary process; posterior end of maxilla blunt, its greatest depth posterior to end of premaxilla, small, conical teeth on jaws, vomer, and palatines; interorbital space convex; margin of opercle with a pronounced dorsoposterior flap. Dorsal fin continuous, with 10 spines, all broadly connected by membranes, and 13 to 16 soft rays; anal fin with 3 spines and 10 to 13 soft rays; pectoral fin with 17 to 23 rays; procurent caudal rays typically 9 or 10. Scales weakly ctenoid; scales on dorsal and anal fins; scales in lateral line 45 to 67; upper peduncular scale rows 9 to 13, lower peduncular scale rows 12 to 17; scale rows above lateral line to origin of dorsal fin 7 to 11; scale rows below lateral line to origin of anal fin 14 to 20; supratemporal bands of scales distinct, confluent at dorsal midline or interrupted by a thin scaleless zone. Predorsal configuration 0/0/0 + 2/1 + 1/. Epipleural ribs 10 to 14, without flattened projections on first or second epipleural. Anterior profile of first anal pterygiophore strongly convex distally. Colour markings: side with or without longitudinal stripes; caudal fin either without markings, with a blackish blotch on tips of lobes, or with a longitudinal blackish streak in the middle of each lobe.

Biology, Habitat and Distribution: The species of this genus inhabit Indo-West Pacific coastal areas, primarily on coral reefs. They are schooling fishes which are often found in mixed-species schools. They feed on zooplankton in midwater aggregations. From what is known of the few species studied, reproduction is characterized by early sexual maturity, high fecundity, small pelagic eggs, spawning prolonged throughout most of the year, and mass spawning on a lunar cycle.

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

Species: There are 8 species in 3 subgenera: *Caesio (Odontonectes) cuning*, *C. (O.) lunaris*, *C. (Flavicaesio) suevica*, *C. (F.) teres*, *C. (F.) xanthonota*, *C. (Caesio) caerulea*, *C. (C.) varilineata*, and *C. (C.) striata*.

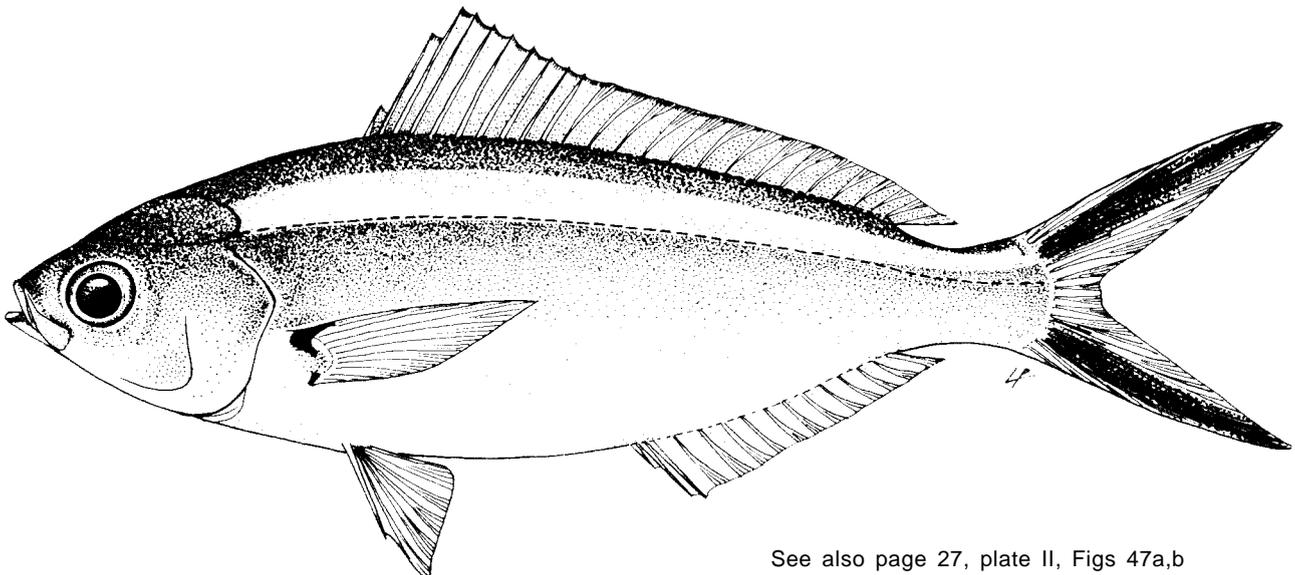
Caesio caerulea Lacepède, 1801

CAES Caes 1

Caesio caeruleus Lacepède, 1801, Hist Nat.Poiss., 3:85 (Moluccas).

Synonyms: *Smarts mauritianus* Quoy & Gaimard, 1824; *Caesio azureus* Rüppell, 1830; *Caesio maculatus* Cuvier in C. & V., 1830, *Caesio nori* Thiollière, 1856

FAO Names: En - Blue-and-gold fusilier; Fr - Caesio azuror; Sp - Fusilero azul.



See also page 27, plate II, Figs 47a,b

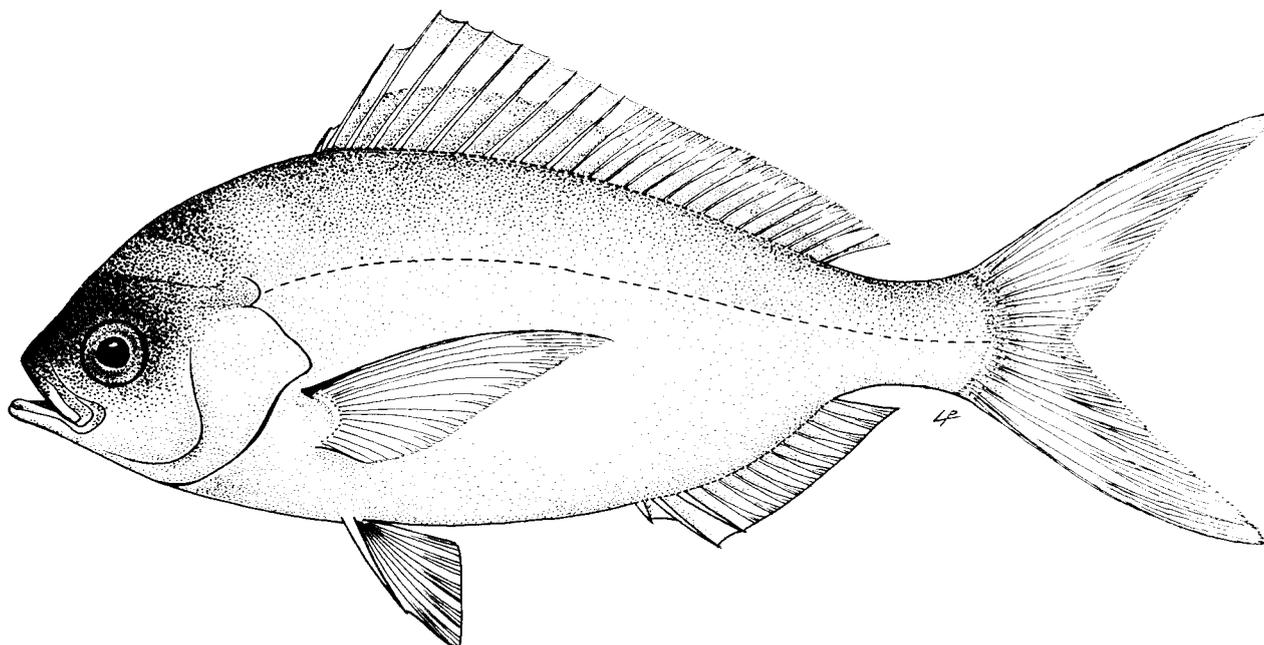
Caesio cuning (Bloch, 1791)

CAES Caes 2

Sparus cuning Bloch, 1791, *Naturg.Ausländ.Fische*, 5:31, pl.263 (Indonesia).

Synonyms: *Cichla cuning* Schneider (1801); *Caesio erythrogaster* Cuvier [Kuhl & van Hasselt, ms] in C. & V., 1830; *Caesio erythrochilurus* Fowler, 1904

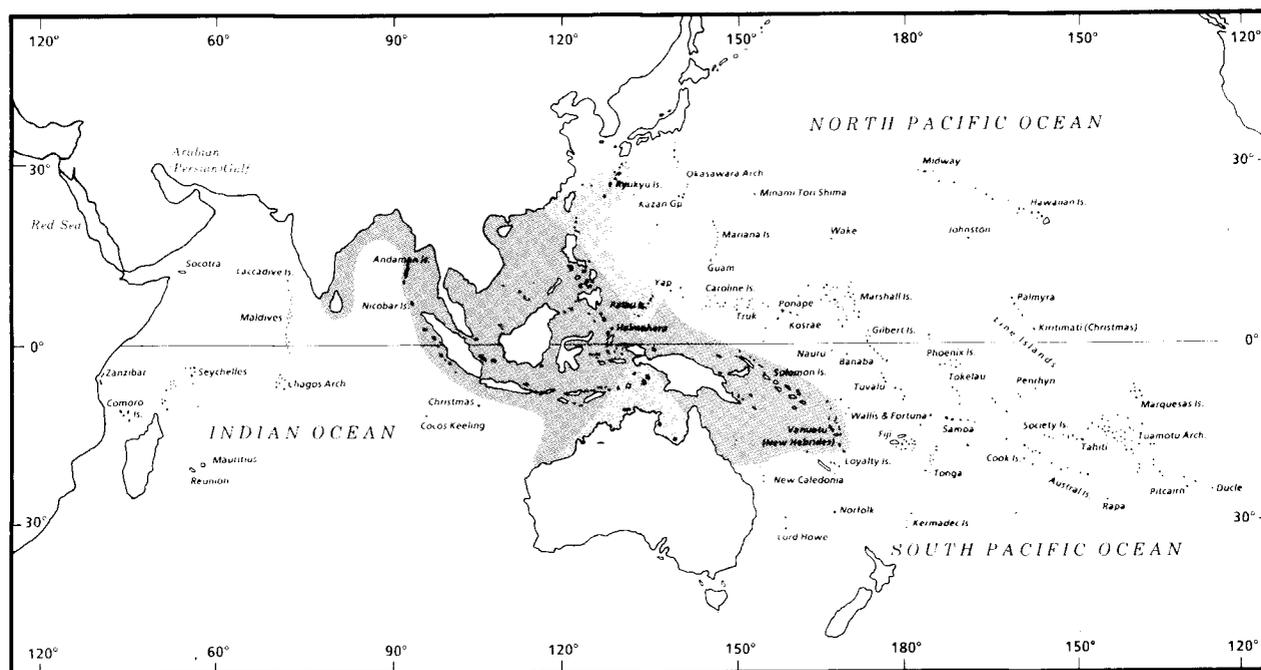
FAO Names: En - Redbelly yellowtail fusilier; Fr-Caesio à ventre rouge; Sp - Fusilero vientre colorado.



See also page 25, plate I, Figs 44a,b

Diagnostic Features: Body fairly deep and compressed. A single postmaxillary process; 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 11 (rarely 10 or 12) soft rays; pectoral fin with 18 or 19 (rarely 17 or 20) rays. Scales in lateral line 45 to 51 (most frequently 49); upper peduncular scale rows usually 9 or 10, lower peduncular scale rows usually 13 or 14; scale rows above lateral line to origin of dorsal fin usually 8 or 9; scale rows below lateral line to origin of anal fin usually 15 to 17; 4 or 5 scale rows on cheek; predorsal scales usually 21 to 25; dorsal and anal fins scaled, the spinous part of the dorsal with about 1/2 of its greatest height covered with scales; supratemporal band of scales confluent at dorsal midline. **Colour:** caudal fin, upper caudal peduncle and posterior portion of back yellow; upper body, where not yellow, greyish blue; lower sides and belly white or pinkish; pectoral, pelvic, and anal fins white to pink; axil and upper base of pectoral fin black; dorsal fin yellow posteriorly and greyish blue anteriorly.

Geographical Distribution: Tropical eastern Indian Ocean to western Pacific, from Sri Lanka to Vanuatu (New Hebrides), and from southern Japan to northwestern and northeastern Australia.



Habitat and Biology: Inhabits coastal areas, usually over rocky and coral reefs to depths of around 60 m. Of all the caesionids, *C. cuning* appears most tolerant of murky water; it is usually the most abundant caesionid in reef areas characterized by low underwater visibility. This species ranges widely between reefs as it is often captured by trawl net over soft bottom. A schooling fish, found in small to large aggregations. Feeds primarily on zooplankton in midwater.

Size: In most areas throughout its range, maximum total length to about 50 cm; in Sri Lanka it grows to an unusually large size, and often attains a total length of about 60 cm.

Interest to Fisheries: A moderately important foodfish in many areas. It is common in markets in Sri Lanka, where it is taken primarily by handline; western Thailand and Malaysia, where it is caught mostly by fish traps; the Gulf of Thailand, where it is caught in trawls; Indonesia, the Philippines and Papua New Guinea by a variety of methods including drive-in nets, fish traps and gill nets. Marketed mostly fresh.

Local Names: INDIA: Cul kilchi (Tamil); INDONESIA: Ekor kuning, Lapi; JAPAN: Yume-umeiro; PAPUA NEW GUINEA: Cavi, Kera; PHILIPPINES: Biluson (Visayan), Dalagang-bukid lapad (Tagalog), Yellow-tail fusilier (English); THAILAND: Pla hang luang; VIETNAM: Cá cham bi.

Literature: Masuda *et al.* (as *C. erythrogaster*) (1975); Schroeder (as *C. erythrogaster*) (1980); Fischer & Bianchi (eds.) (1984); Gloerfelt-Tarp & Kailola (1984); Carpenter (1987).

Remarks: *C. cuning* has often incorrectly been referred to in the literature as *C. erythrogaster*.

Caesio lunaris Cuvier, 1830

CAES Caes 3

Caesio lunaris Cuvier [Ehrenberg, ms] in C. & V., 1830, *Hist.Nat.Poiss.*, 6:441 (New Ireland).

Synonyms: None.

FAO Names: En - Lunar fusilier; Fr - Caesio à croissant; Sp - Fusilero luna.

Habitat and Biology: Found in coastal areas, mainly on or near coral reefs. Feeds on zooplankton in large aggregations. Unlike most other caesionids, this species changes colour during development. In the juvenile stage, it stays close to the reef and schools with juveniles of other caesionids, commonly with *C. cuning*. During this stage, it typically has a yellow caudal fin and peduncle. The adults typically feed a little further off the reef than other fusiliers, in deep, clear water, returning to the reef only at night to shelter. Adults lose the yellow coloration, perhaps because it is conspicuous in clear, deep water. In the Arabian (Persian) Gulf however, where water near reefs is generally shallow and murky, this species retains the yellow caudal colouration as adults.

Size: Maximum size to about 40 cm.

Interest to Fisheries: Of minor importance to fisheries in most areas. Caught primarily by drive-in nets, seines and fishtraps. Marketed mostly fresh.

Local Names: JAPAN: Hana-takasagu; INDONESIA: Pisang-pisang; MALAYSIA: Delah; PHILIPPINES: Dalagang-bukid (Tagalog), Moon caesio (English), Morong (Tagalog), Sinao-an (Visayan), Sulid (Visayan).

Literature: Masuda *et al.* (1975), Fischer & Bianchi (eds.) (1984); Gloerfelt-Tarp & Kailola (1984); Randall (1983); Carpenter (1987)

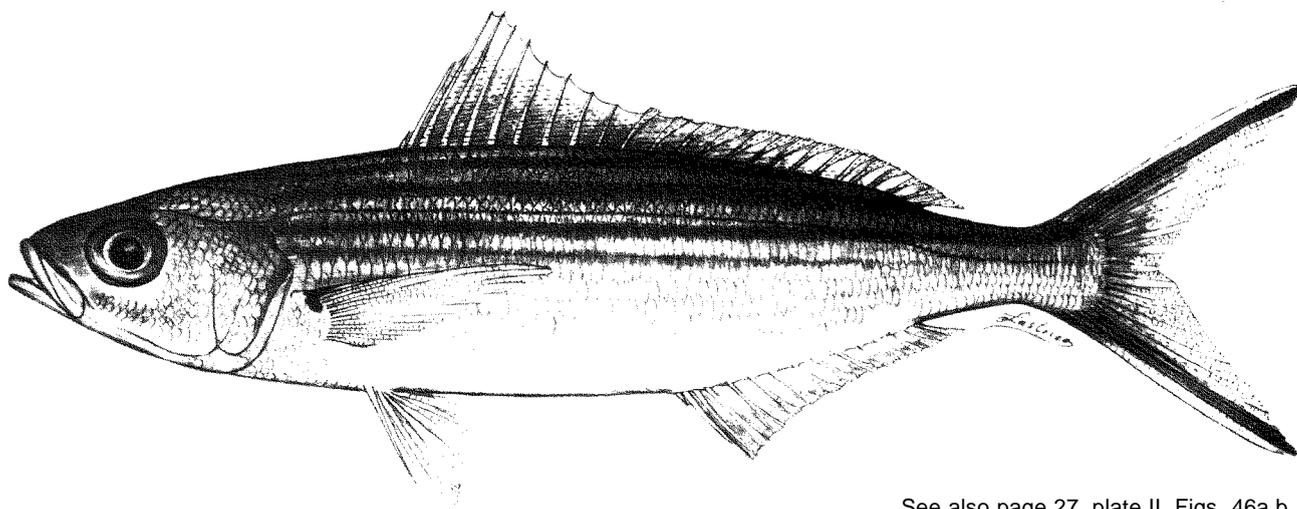
Caesio striata Rüppell, 1830

CAES Caes 4

Caesio striatus Rüppell, 1830, Fische des Rothen Meers, 131, pl. 34 (Massawa, Red Sea).

Synonyms: None

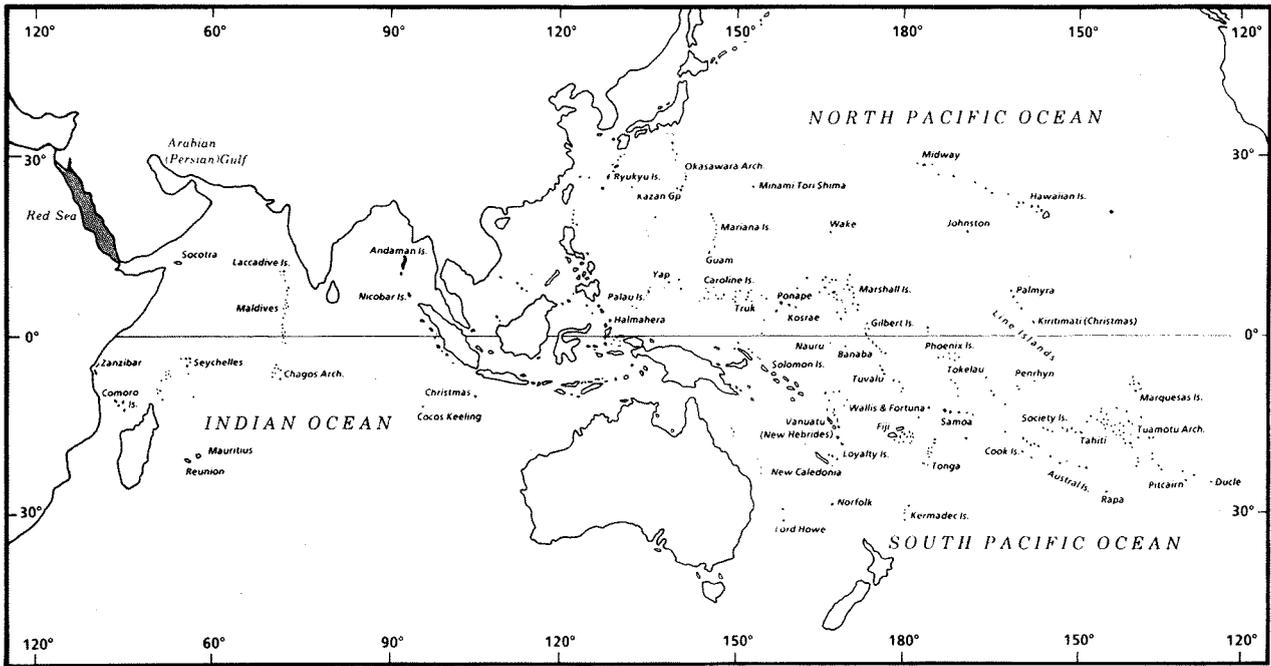
FAO Names: **En** - Striated fusilier; **Fr** - Fusilier strié; **Sp** - Fusilero estriado.



See also page 27, plate II, Figs 46a,b

Diagnostic Features: Body fusiform, elongate, and moderately compressed. A single postmaxillary process; 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 soft rays; pectoral fin with 18 to 20 rays. Scales in lateral line 59 to 67 (most frequently 62); upper peduncular scale rows usually 11, lower peduncular scale rows usually 15; scale rows above lateral line to origin of dorsal fin 8 or 9; scale rows below lateral line to origin of anal fin usually 14 to 16; usually 4 scale rows on cheek; predorsal scales usually 22 to 25; dorsal and anal fins scaled, the dorsal with about 3/5 of the greatest height of its spinous part covered with scales; supratemporal band of scales confluent at dorsal midline. **Colour:** upper body light bluish to greenish, lower body white; 4 narrow black longitudinal stripes on upper side; upper caudal peduncle and posterior portion of body with a yellow stripe between the 2 black stripes above lateral line; caudal fin with a black streak within each lobe, the tips of lobes with a small black blotch; outer margin of each caudal lobe often bordered in white, the inner margin pale; pectoral, pelvic, and anal fins white; axil of pectoral fin black, a black triangular patch on upper base of pectoral fin; dorsal fin light blue to white.

Geographical Distribution: Restricted to the Red Sea.



Habitat and Biology: Inhabits coastal areas, primarily around coral reefs. Feeds on zooplankton in midwater aggregations. A schooling fish, sometimes in groups together with *C. caeruleaurea*, *C. varilineata*, and *Gymnocaesio gymnoptera*.

Size: This species reaches a size of about 25 cm, which is the smallest maximum size of members of the genus *Caesio*.

Interest to Fisheries: Of very minor importance to coastal fisheries. Occasionally caught by gill nets, traps and handlines.

Local Names: Unavailable.

Literature: Randall (1983); Fischer & Bianchi (eds) (1984); Carpenter (1987).

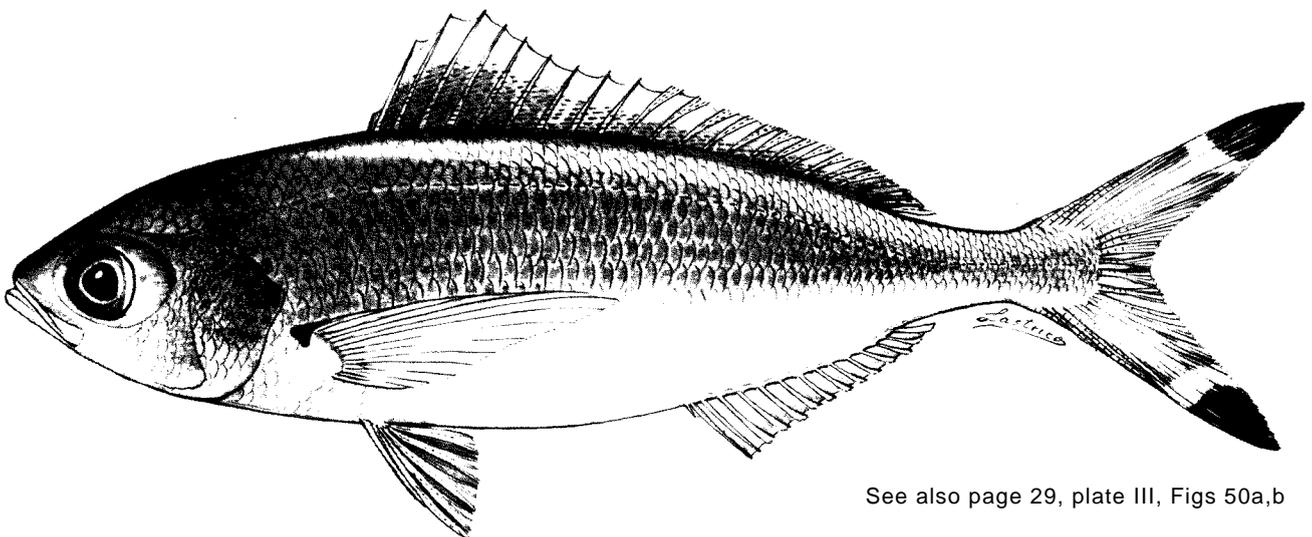
***Caesio suevica* Klunzinger, 1884**

CAES Caes 5

Caesio suevicus Klunzinger, 1884, Die Fisches des Rothen Meeres, p.46, pl.5, fig.2 (Red Sea).

Synonyms: None.

FAO Names: En - Suez fusilier; Fr - Fusilier de Suez; Sp - Fusilero de Suez.

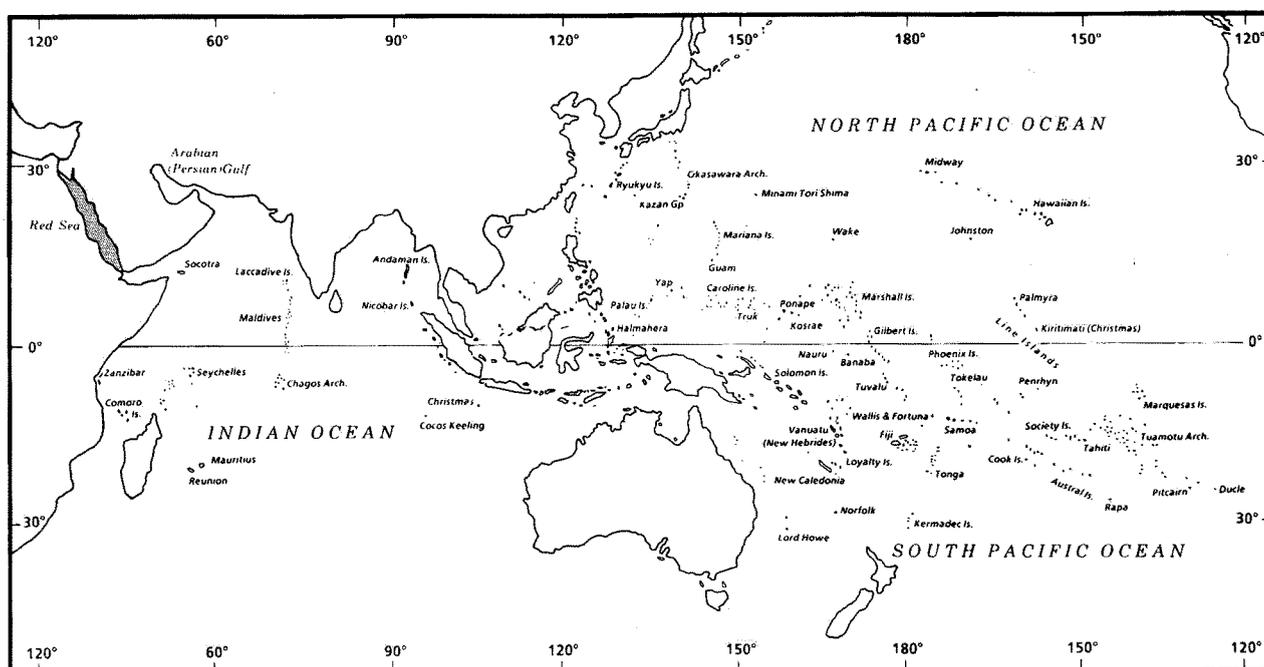


See also page 29, plate III, Figs 50a,b

Diagnostic Features: Body moderately slender, fusiform, and compressed. A single postmaxillary process; small conical teeth in jaws, vomer and palatines. Dorsal fin with 10 spines and 14 or 15 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fin with 20 or 21 rays. Scales in lateral line 51 to 58 (most frequently 54); upper peduncular scale rows usually 11, lower peduncular scale rows usually 14 or 15; scale rows above lateral line to origin of dorsal fin 7 to 9; scale rows below lateral line to origin of anal fin 15 to 17; scale rows on cheek 4 or 5; predorsal scales usually 22 or 23; dorsal and anal fins scaled, the dorsal with about 3/5 of the greatest height of its spinous part covered with scales; supratemporal band of scales generally interrupted at dorsal midline by a narrow scaleless zone.

Colour: most of body light to silvery blue, paler ventrally; a single, narrow, yellow stripe on side following the dorsal profile midway between dorsal profile and lateral line, extending from base of caudal fin anteriorly to a vertical at the first dorsal spine; a yellow streak within each lobe of caudal fin; tips of caudal fin lobes with a large black blotch which is bordered proximally by a white band; axil and upper base of pectoral fin black; pectoral, pelvic, and anal fins white to pale blue; dorsal fin bluish grey.

Geographical Distribution: Restricted to the Red Sea.



Habitat and Biology: Inhabits coastal areas, primarily on coral reefs. Feeds on zooplankton in large midwater aggregations. Often schools together with the other caesionids found in the Red Sea.

Size: Maximum size to about 35 cm.

Interest to Fisheries: Not commonly fished. It is occasionally caught by gill nets and handlines.

Local Names: Unavailable

Literature: Fischer & Bianchi (eds.) (1984); Randall (1983); Carpenter (1987)

Caesio teres Seale, 1906

CAES Caes 7

Caesio teres Seale, 1906, Occ.Pap.B.P.Bishop Mus., 4:44 (Shortland Island, Solomon Islands).

Synonyms: *Caesio pulcherrimus* Smith & Smith, 1963.

FAO Names: En - Yellow-and-blueback fusilier; Fr - Fusilier à dos jaune et bleu; Sp - Fusilero amarillo azulado.

Habitat and Biology: Found primarily around coral reefs, with a preference for coralline lagoons. A rapidly moving schooling fish which ranges widely around reefs. Feeds on zooplankton in large midwater groups. Schools together with other caesionids, most often with *C. xanthonota*. It spawns in large aggregations around the full moon. Eggs pelagic, spherical, unpigmented, usually with a single transparent oil globule and a diameter of 0.77 to 0.78 mm.

Size: Maximum size to about 40 cm.

Interest to Fisheries: Of minor to moderate importance in coastal fisheries. Caught by drive-in nets, gill nets, handlines and traps. Marketed mostly fresh.

Local Names: INDONESIA: Ekor kuning pisang; PHILIPPINES: Bilason (Visayan), Dalangang bukid (Tagalog), Morong (Tagalog), Sulid (Visayan).

Literature: Amesbury & Myers (as *C. xanthonota*) (1982), Masuda *et al.* (as *C. xanthonota*) (1975); Carpenter (1987).

Remarks: This species has most often been erroneously referred to as *C. pulcherrimus* or confused with *C. xanthonota*.

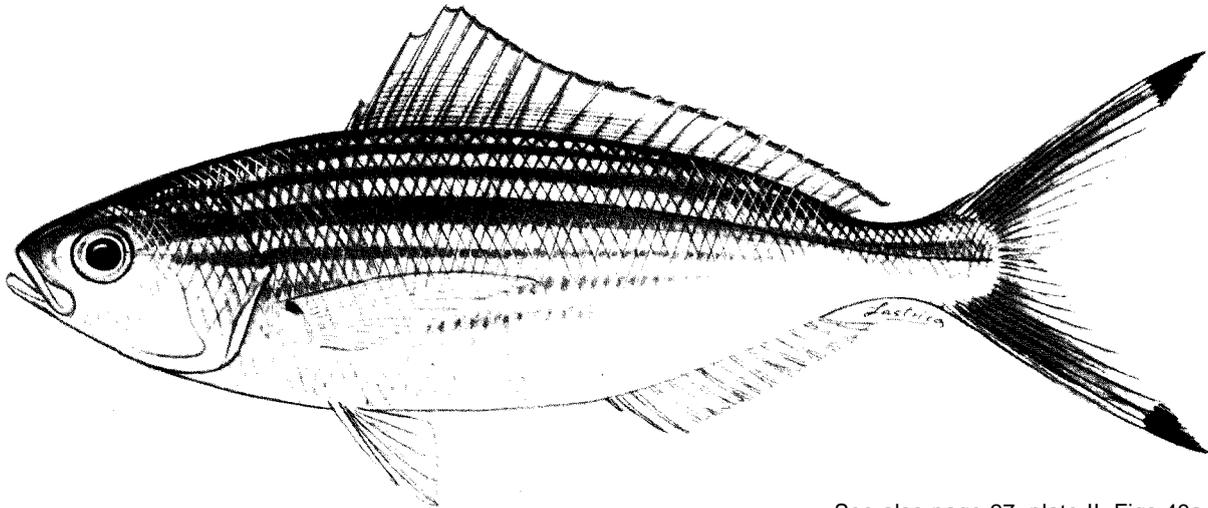
***Caesio varilineata* Carpenter, 1987**

CAES Caes 8

Caesio varilineata Carpenter, 1987, *Indo-Pac. Fish.*, 15:24, pl.2 fig.B, pl.6 fig.G [Arabian (Persian) Gulf].

Synonyms: None

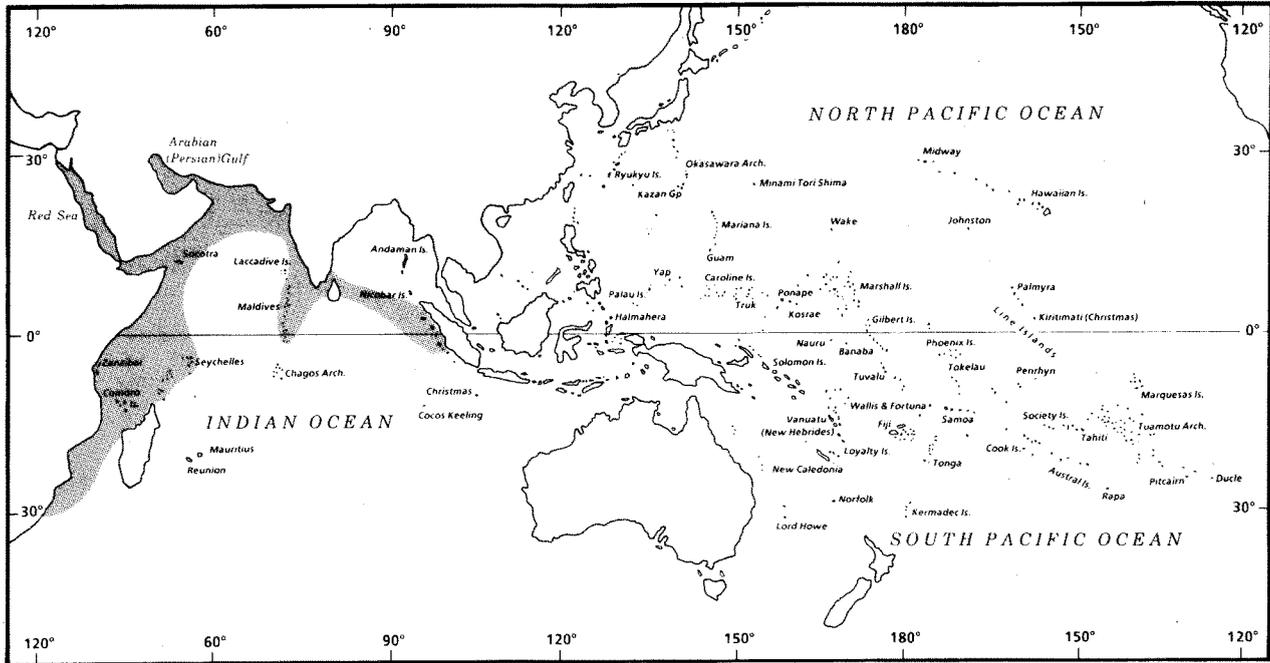
FAO Names: En - Variable-lined fusilier; Fr - Fusilier à bandes variées; Sp - Fusilero listado.



See also page 27, plate II, Figs 49a,b

Diagnostic Features: Body moderately deep, fusiform and moderately compressed. Ratio of eye diameter to head length usually around 4.3 to 5.0; a single postmaxillary process. Dorsal fin with 10 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 20 to 23 (most frequently 21) rays. Scales in lateral line 57 to 67 (most frequently 62); upper peduncular scale rows usually 11, lower peduncular scale rows usually 15; scale rows above lateral line to origin of dorsal fin 8 to 10 (most frequently 9); scale rows below lateral line to origin of anal fin usually 15 to 17; usually 4 scale rows on cheek; predorsal scales 21 to 26; dorsal and anal fins scaled, the dorsal usually with about 4/5 of the greatest height of its spinous part covered with scales; supratemporal band of scales often interrupted at dorsal midline by a scaleless zone; always a 'v'-shaped scaleless zone anteriorly at midline intruding into the supratemporal band of scales. **Colour:** upper body blue, lower body white to pale bluish; 3 to 6 (usually 4) yellow longitudinal stripes on side, 2 or 3 of these stripes covering and/or above lateral line, and 2 or 3 below lateral line; width of stripes variable, usually narrow, about 1 scale wide; sometimes the stripe above the lateral line is about 2 scales wide; caudal fin with an indistinct bluish or dark streak within each lobe, the tips of caudal lobes with a large black blotch; pectoral, pelvic, and anal fins white; axil of pectoral fin black; a black triangular patch on upper base of pectoral fin; dorsal fin light blue to pale with a black distal border.

Geographical Distribution: Primarily Indian Ocean, from East Africa, including the Red Sea and the Arabian (Persian) Gulf, to western Indonesia.



Habitat and Biology: Primarily found around coral reefs. Feeds on zooplankton in midwater aggregations. A schooling fish, commonly in groups together with *C. caeruleaurea*, *C. striata*, and *Pterocaesio tile*.

Size: Maximum size to about 40 cm.

Interest to Fisheries: Of minor to moderate importance to coastal fisheries. Fairly common in markets in tropical East Africa and Sri Lanka. Caught by gill nets, handlines and traps. Marketed fresh. Juveniles important as tuna baitfish in the Maldives and Laccadives.

Local Names: LACCADIVE ARCHIPELAGO: Churaichala, Furrua, Kekkirimughrang.

Literature: Carpenter (1987).

Remarks: This species has previously been identified as *Caesio caeruleaurea*.

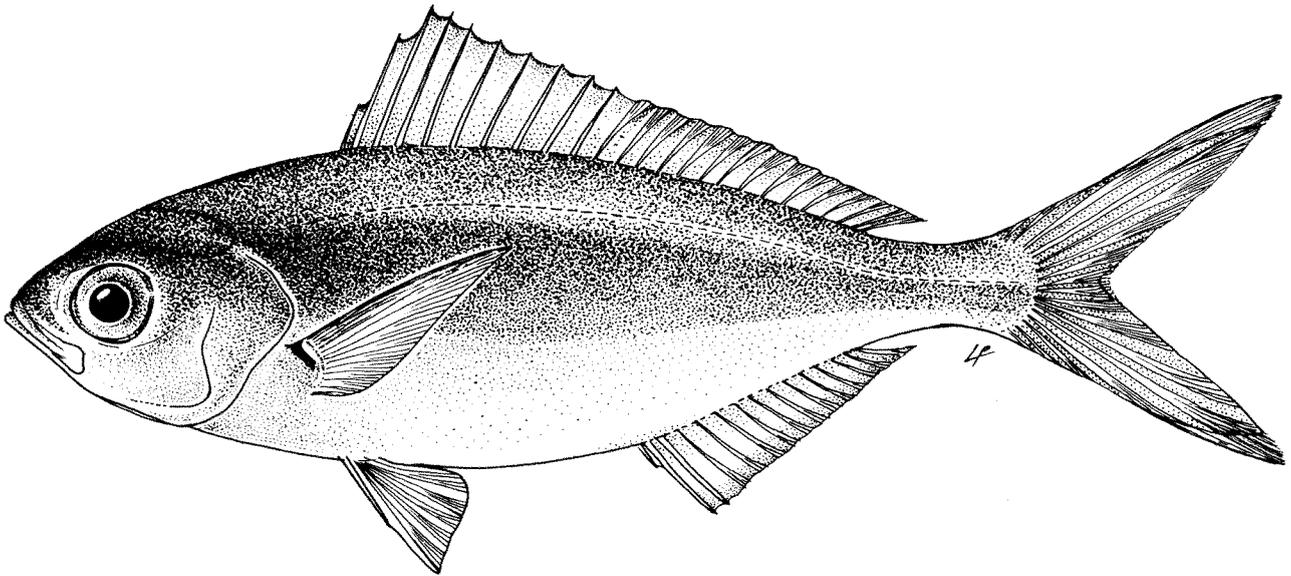
***Caesio xanthonota* Bleeker, 1853**

CAES Caes 6

Caesio xanthonotus Bleeker, 1853, Nat.Tijdschr.Neder.-,Indië, 4:466 (Indonesia).

Synonyms: None.

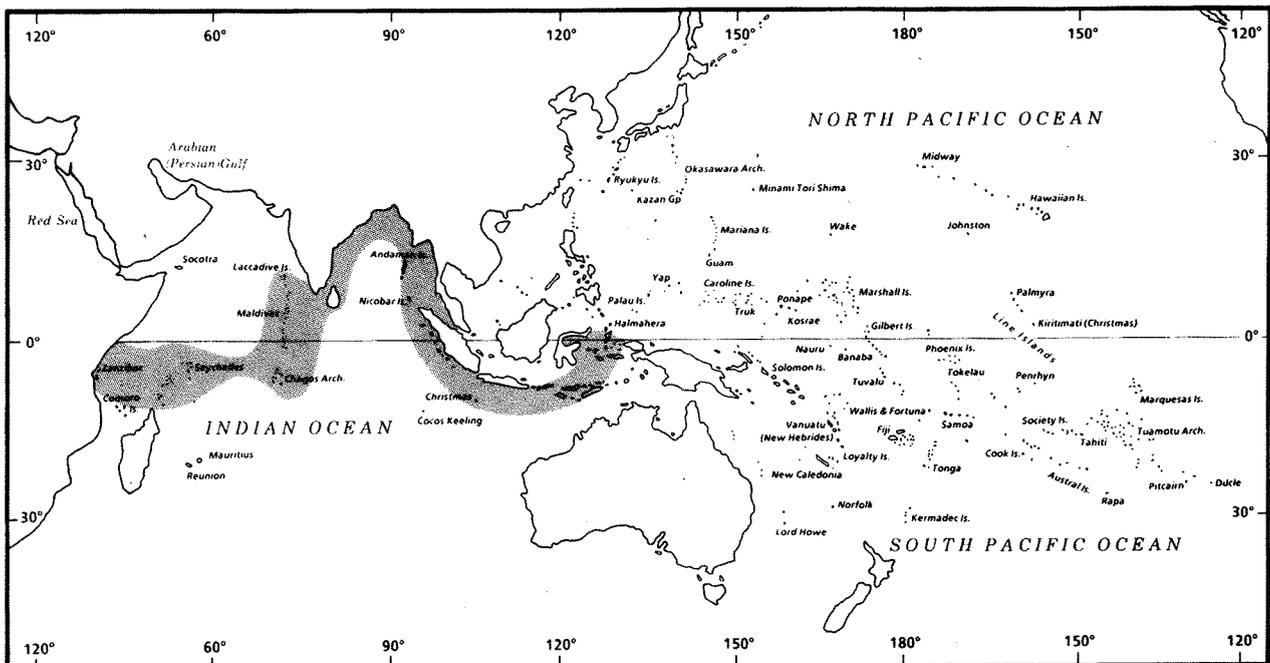
FAO Names: En - Yellowback fusilier; Fr - Fusilier à dos jaune; Sp - Fusilero de lomo amarillo.



See also page 25, plate I, Figs 43a,b

Diagnostic Features: Body moderately deep, fusiform and compressed. A single postmaxillary process; small conical teeth in jaws, vomer and palatines. Dorsal fin with 10 spines and 15 (rarely 14) soft rays; anal fin with 3 spines and 12 (rarely 11) soft rays; pectoral fin with 20 to 22 (most frequently 21) rays. Scales in lateral line 52 to 59 (most frequently 56); upper peduncular scale rows 11 or 12, lower peduncular scale rows usually 15; 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 18 or 19; 4 or 5 scale rows on cheek; predorsal scales usually 21 to 23; dorsal and anal fins scaled, the dorsal with about 2/3 of the greatest height of its spinous part covered with scales; supratemporal band of scales interrupted at dorsal midline by a narrow scaleless zone. **Colour:** upper third of body and caudal fin bright yellow, middle third blue, lower third white; axil and upper base of pectoral fin black; pectoral, pelvic, and anal fins white; dorsal fin yellow.

Geographical Distribution: Primarily Indian Ocean, from East Africa, not including the Red Sea or the Arabian (Persian) Gulf, to Indonesia.



Habitat and Biology: Inhabits coastal areas, primarily around coral reefs. A schooling fish which feeds on zooplankton in large midwater aggregations. This species ranges widely among reefs during the day but shelters on the reef at night. It sometimes schools together with *C. teres*, which has a similar colour pattern. *C. xanthonota* appears to prefer the coralline lagoon habitat more than most other species of caesionids.