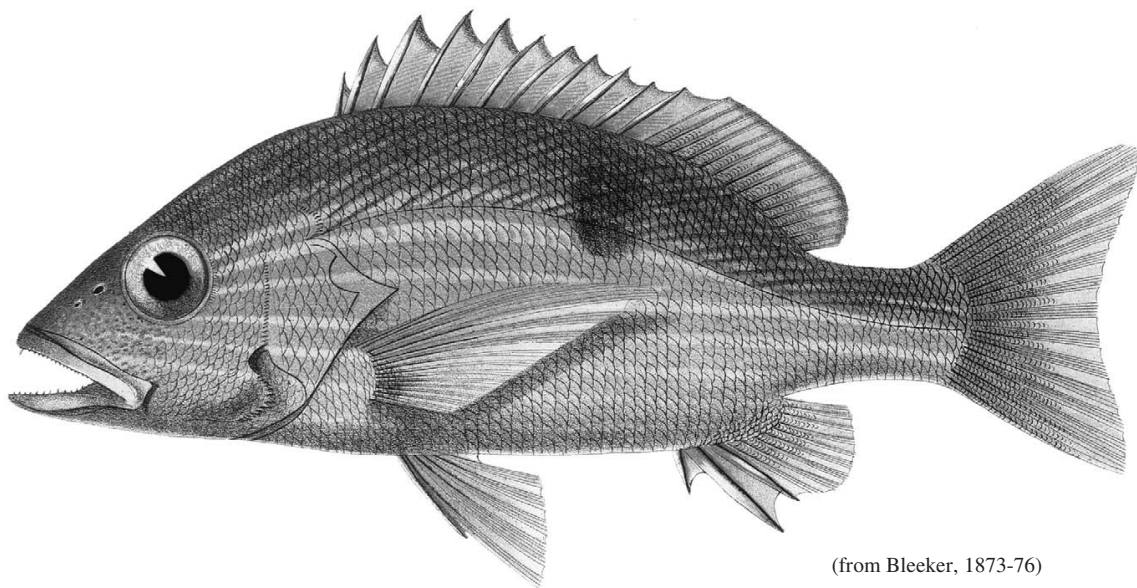


Lutjanus rufolineatus (Valenciennes, 1830)

Frequent synonyms / misidentifications: None / *Lutjanus bouton* (Lacepède, 1803).

FAO names: En - Yellowlined snapper.



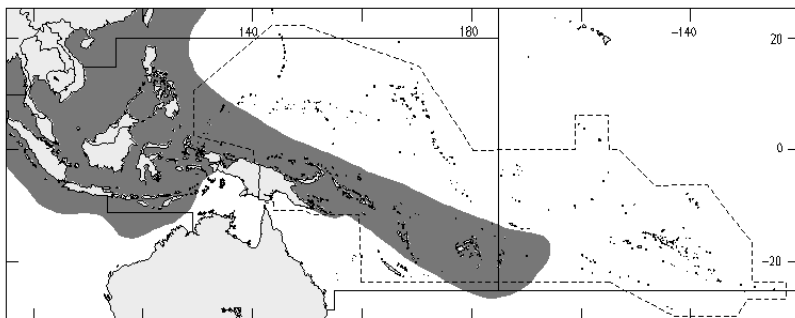
(from Bleeker, 1873-76)

Diagnostic characters: Body moderately deep, its depth 2.4 to 2.6 times in standard length. Snout somewhat pointed; eye large (3.4 to 4.2 times in head length); preorbital bone narrow, its width much less than eye diameter; preopercular notch and knob well developed; vomerine tooth patch in a crescentic band without a medial posterior extension; tongue smooth, without teeth. First gill arch with 20 to 23 gill rakers, of which 13 to 15 (including rudiments) on lower limb. **Dorsal fin with XI spines and 13 or 14 soft rays;** anal fin with III spines and 8 soft rays; posterior profile of dorsal and anal fins rounded. Caudal fin emarginate. Pectoral fins with 16 or 17 rays. Scale rows on back rising obliquely above lateral line. **Colour:** generally pink or reddish, white or silvery white ventrally; **a series of about 10 to 12 faint yellow stripes on side; some specimens with a black spot, eye size or smaller, below anterior part of soft dorsal fin at level of lateral line;** spinous dorsal fin whitish with a yellow margin; remaining fins yellowish, although pelvic fins sometimes white; axil of pectoral fins brown on dorsal portion.

Size: Maximum total length about 30 cm, commonly to 20 cm.

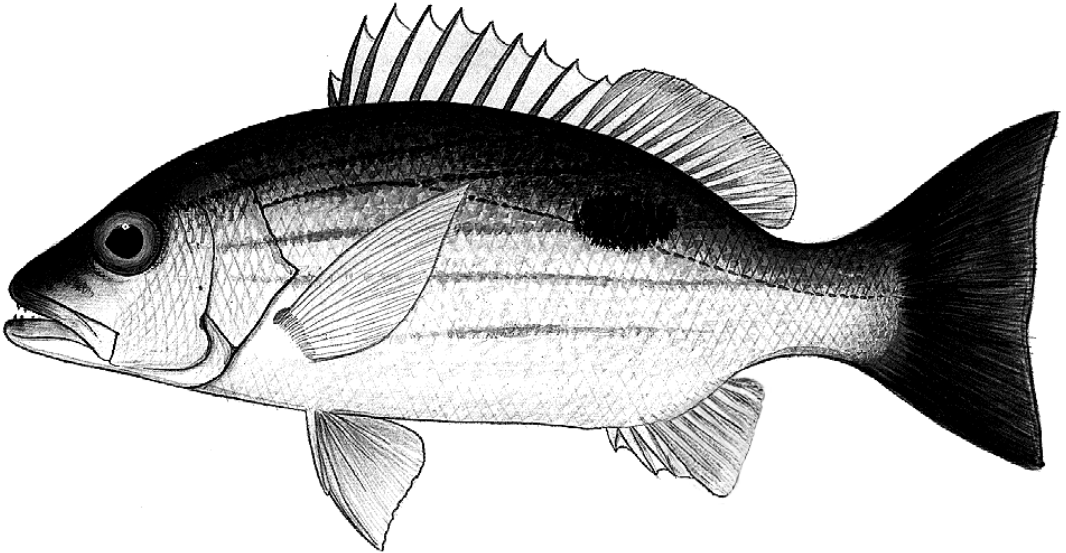
Habitat, biology, and fisheries: Inhabits coral reefs at depths between about 15 and 50 m. Usually seen in schools of up to 100 or more individuals, frequently well above the bottom. The diet includes fishes, shrimps, crabs, other crustaceans, cephalopods, and some planktonic items. At Samoa, spawning occurs throughout the year with peak activity from March to June. Occasionally seen in markets. An important subsistence fish in many areas. Caught mainly with handlines and bottom longlines. Marketed fresh.

Distribution: Western Pacific Ocean from Samoa to Sumatra and northward to southern Japan; also in the eastern Indian Ocean off northwestern Australia.



Lutjanus russelli (Bleeker, 1849)

(Plate VIII, 56)

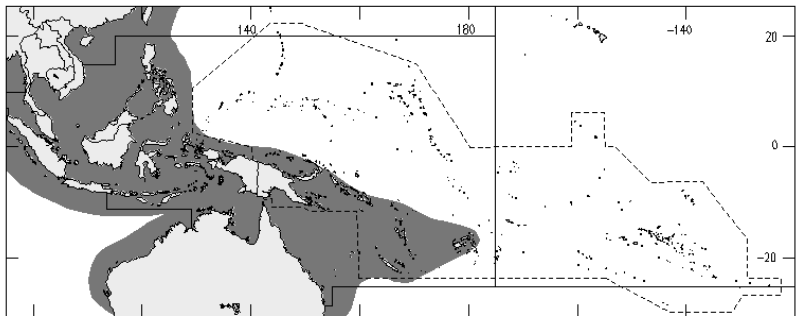
Frequent synonyms / misidentifications: None / None.**FAO names:** **En** - Russell's snapper; **Fr** - Vivaneau hublot; **Sp** - Pargo ojo de buey.

Diagnostic characters: Body moderately deep to somewhat slender, its depth 2.6 to 2.8 times in standard length. Dorsal profile of head steeply to moderately sloped; preorbital width about equal to, or slightly less than eye diameter; **preopercular notch and knob poorly developed; vomerine tooth patch triangular, with a medial posterior extension or diamond-shaped;** tongue with a patch of granular teeth. First gill arch with 13 to 18 gill rakers, of which 7 to 11 (including rudiments) on lower limb. **Dorsal fin with X spines and 14 soft rays;** anal fin with III spines and 8 soft rays; posterior profile of dorsal and anal fins rounded (anal fin sometimes angular). Caudal fin truncate or slightly emarginate. Pectoral fins with 16 or 17 rays. Scale rows on back rising obliquely above lateral line. **Colour:** **back and upper side brownish; lower sides and belly pink to whitish** with a silvery sheen; a black spot, mainly above lateral line, below anterior rays of soft dorsal fin; adults from the Indian Ocean usually with 7 or 8 narrow golden brown stripes on sides; juveniles from the western Pacific whitish, with 4 black stripes on sides and with a round black spot on upper back.

Size: Maximum total length about 45 cm, commonly to 30 cm.

Habitat, biology, and fisheries: Inhabits offshore coral reefs and also inshore rock and coral reefs. Large adults are sometimes trawled well offshore in depths to about 70 to 80 m. Juveniles frequent brackish mangrove estuaries and lower reaches of fresh-water streams. A common market species throughout its range; also a component of artisanal fisheries. Caught with handlines, traps, and bottom trawls. Marketed mostly fresh.

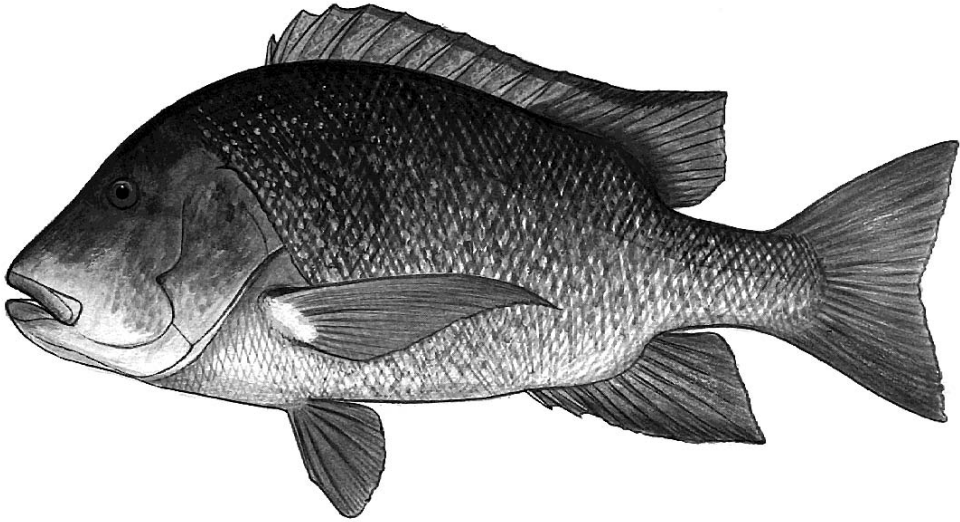
Distribution: Widespread in the Indo-West Pacific from the Fiji Islands to East Africa, and from Australia to southern Japan.



Lutjanus sebae (Cuvier, 1828)

Frequent synonyms / misidentifications: None / None.

FAO names: **En** - Emperor red snapper; **Fr** - Vivaneau bourgeois; **Sp** - Pargo imperial.

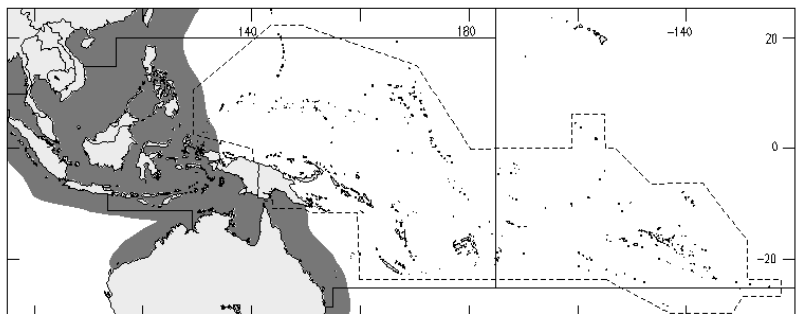


Diagnostic characters: **Body very deep, its depth 2.1 to 2.4 times in standard length.** Dorsal profile of head steeply sloped; snout profile straight or slightly convex; preorbital bone broad, much wider than eye diameter; preopercular notch and knob moderately developed; vomerine tooth patch crescentic or triangular, without a medial posterior extension; tongue smooth, without teeth. First gill arch with 16 to 19 gill rakers, of which 10 to 12 (including rudiments) on lower limb. **Dorsal fin with XI spines and 15 or 16 soft rays; anal fin with III spines and 10 soft rays;** posterior profile of dorsal and anal fins distinctly pointed. Pectoral fins with 17 rays. Caudal fin slightly forked. Scale rows on back rising obliquely above lateral line. **Colour: generally red or pink in adults; juveniles and smaller adults pink with 3 dark red bands,** the first from first dorsal-fin spine through eye to tip of snout; the second from middle of spinous part of dorsal fin to pelvic fins; and the third from base of last dorsal-fin spine running obliquely downward across caudal peduncle and along lower edge of caudal fin.

Size: Maximum total length to at least 100 cm, commonly to 60 cm.

Habitat, biology, and fisheries: Occurs in the vicinity of coral reefs, often over adjacent sand flats. Also trawled in deeper water on relatively flat bottoms. Small juveniles are frequently commensal with sea urchins, or sometimes found in mangrove areas. Adults range from about 10 to depths of at least 100 m. Feeds on fishes, crabs, stomatopods, other benthic crustaceans, and cephalopods. At New Caledonia spawning occurs mainly during spring and summer. Estimated maximum age to at least 12 years. Often found in markets and a valuable component of artisanal fisheries. It is a popular sport angling fish off the Queensland coast of Australia. Caught with handlines, traps, and bottom trawls. Marketed mostly fresh, but also dried-salted.

Distribution: Western Pacific and Indian Ocean from Australia to southern Japan, and westward to East Africa and the southern Red Sea.

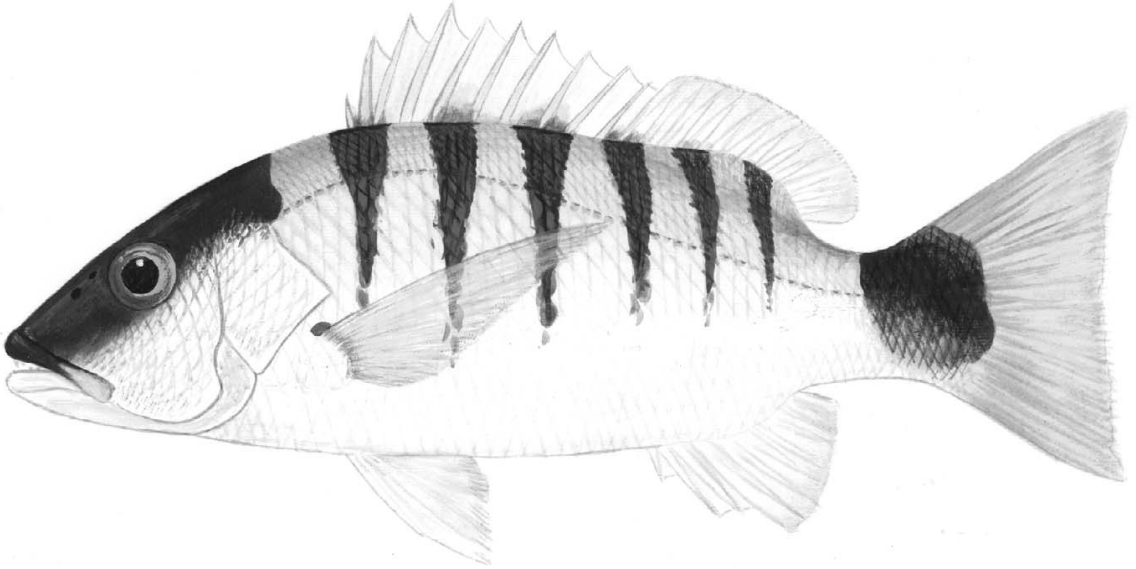


Lutjanus semicinctus (Quoy and Gaimard, 1824)

(Plate VIII, 57)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Blackbanded snapper; Fr - Vivaneau à bandes noires; Sp - Pargo cinteado.

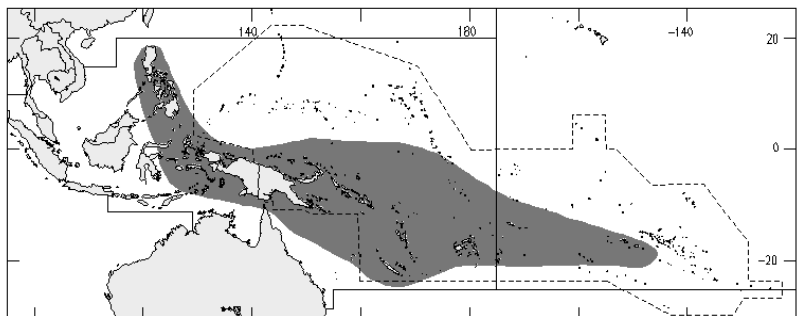


Diagnostic characters: Body moderately deep to relatively slender, its depth 2.6 to 3.1 times in standard length. Dorsal profile of head moderately sloped; preorbital width about equal to eye diameter or slightly greater; preopercular notch and knob poorly developed; vomerine tooth patch crescentic, without a medial posterior extension; tongue with a patch of granular teeth. First gill arch with 14 to 19 gill rakers, of which 8 to 12 (including rudiments) on lower limb. **Dorsal fin with X spines and 13 soft rays;** anal fin with III spines and 8 or 9 soft rays; posterior profile of dorsal and anal fins rounded to angular. Caudal fin truncate or slightly emarginate. Pectoral fins with 16 rays. Scale rows on back rising obliquely above lateral line. **Colour:** generally pink grading to white on lower half of body; snout and forehead grey; a **series of 7 narrow brown bars on upper back extending about half-way down sides;** posterior half of caudal peduncle and adjacent caudal-fin base black; fins mainly brownish, sometimes with a reddish hue, except pelvic and pectoral fins pale.

Size: Maximum total length about 35 cm, commonly to 20 cm.

Habitat, biology, and fisheries: Inhabits coral reefs at depths ranging from about 10 to 30 m. Usually found solitary or in small groups. Mainly important to artisanal fisheries, and occasionally seen in markets. Caught mostly with handlines and traps. Offered fresh.

Distribution: Mainly southern Oceania from Tahiti to New Guinea, and extending northward to the Philippines.

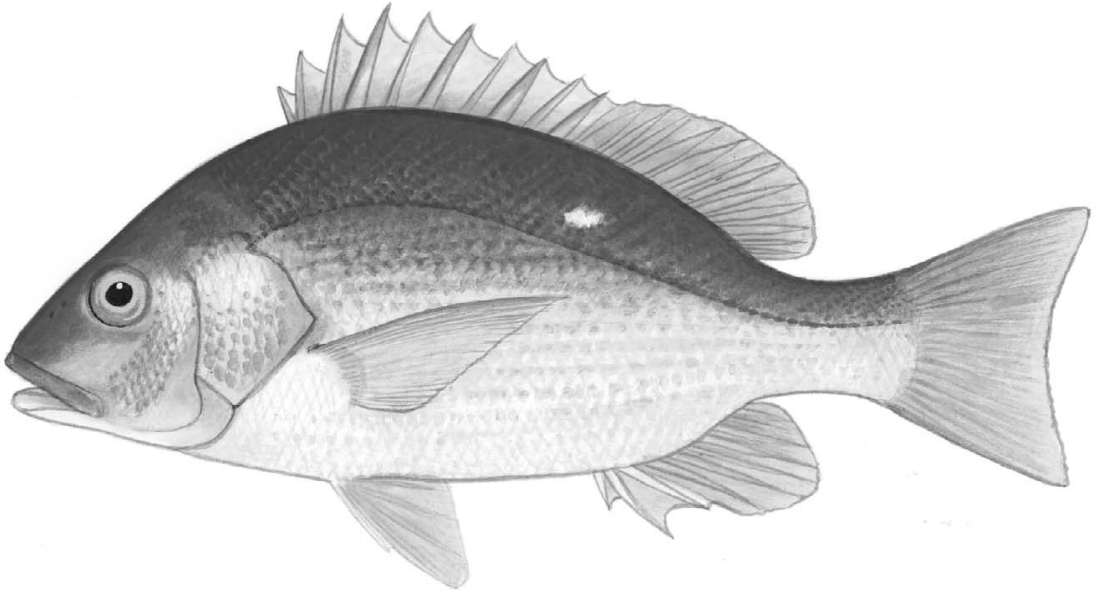


Lutjanus stellatus Akazaki, 1983

(Plate VIII, 58)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Star snapper; Fr - Vivaneau étoilé; Sp - Pargo estrellado.

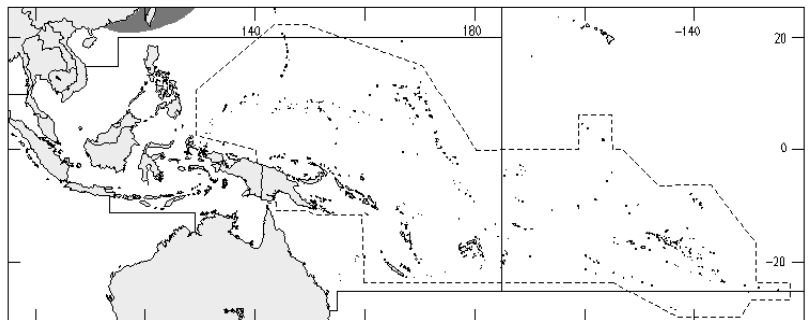


Diagnostic characters: Body relatively deep, its depth 2.3 to 2.6 times in standard length. Dorsal profile of head moderately sloped; preorbital bone broad, about wide the eye diameter; preopercular notch and knob moderately developed; vomerine tooth patch crescentic, without a medial posterior extension; tongue smooth, without teeth. First gill arch with 16 to 19 gill rakers, of which 11 to 13 (including rudiments) on lower limb. **Dorsal fin with X spines and 13 to 15 soft rays;** anal fin with III spines and 8 or 9 soft rays; posterior profile of dorsal and anal fins rounded. Caudal fin truncate or slightly emarginate. Pectoral fins with 16 to 18 rays. Scale rows on back rising obliquely above lateral line. **Colour:** back and upper sides dark brown to purplish; lower sides purple to yellow-brown grading to pale orange on belly; **a small white spot above lateral line at level of first soft dorsal-fin rays;** a blue stripe from snout to opercle; upper edge of opercle yellowish; fins greyish basally but mostly yellowish; juveniles yellowish with blue longitudinal lines on sides; a white spot bordered with black at level of lateral line below last dorsal-fin spines; a pair of horizontal blue lines below eye; fins yellow.

Size: Maximum total length about 55 cm, commonly to 35 cm.

Habitat, biology, and fisheries: Occurs in the vicinity of coral and rocky reefs. Usually found solitary or in small groups. A good eating fish found in markets of southern Japan, Taiwan Province of China, and Hong Kong. Caught by handlines, set nets, and gill nets. Usually offered fresh.

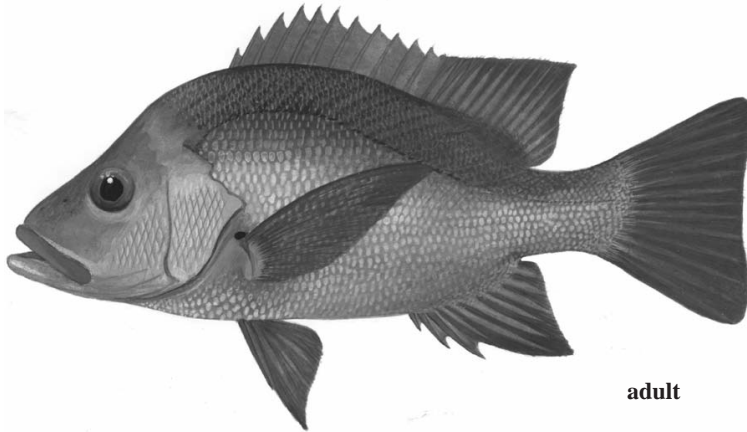
Distribution: Known only from the northwestern tropical and subtropical Pacific, from southern Japan southward to the vicinity of Hong Kong. May enter the northern part of the area.



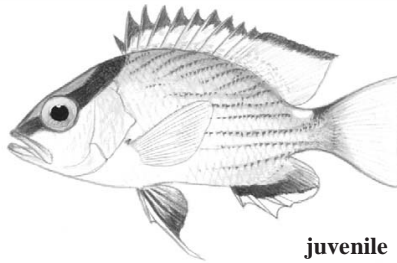
Lutjanus timorensis (Quoy and Gaimard, 1824)

Frequent synonyms / misidentifications: None / *Lutjanus malabaricus* Schneider, 1801.

FAO names: En - Timor snapper; Fr - Vivaneau de Timor; Sp - Pargo de Timor.



adult



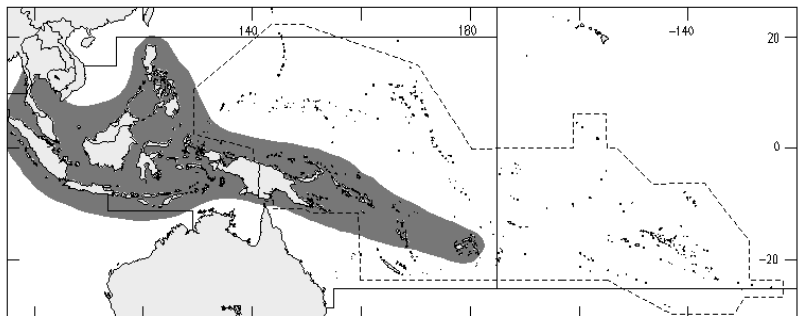
juvenile

Diagnostic characters: Body relatively deep, its depth 2.2 to 2.4 times in standard length. Dorsal profile of head steeply sloped; preorbital width greater than eye diameter; preopercular notch and knob poorly developed; vomerine tooth patch crescentic, without a medial posterior extension; tongue smooth, without teeth. First gill arch with 19 or 20 gill rakers, of which 12 or 13 (including rudiments) on lower limb. Dorsal fin with X spines and 14 or 15 soft rays; anal fin with III spines and 8 soft rays; posterior profile of dorsal and anal fins pointed. Caudal fin truncate or slightly emarginate. Pectoral fins with 17 rays. Scale rows on back rising obliquely above lateral line. **Colour:** back and upper sides reddish; lower sides and belly red or pinkish to silvery white; fins reddish; **axil of pectoral fins black.** Juveniles with a broad blackish or brownish band from upper jaw to beginning of dorsal fin and a black saddle preceded by a pearly white border on upper edge of caudal peduncle; sides with a series of fine reddish brown lines.

Size: Maximum total length about 50 cm, commonly to 30 cm.

Habitat, biology, and fisheries: Inhabits coral and rubble reefs at depths of about 20 m to at least 130 m. Usually occurs solitarily. A poorly known red snapper of potential interest to fisheries, although it appears to be relatively uncommon in market catches. Caught mainly with deep handlines and occasionally trawled. Marketed mainly fresh.

Distribution: Mainly western Pacific Ocean from Fiji Islands to Malay Peninsula; also recorded from the Andaman Sea off Thailand.

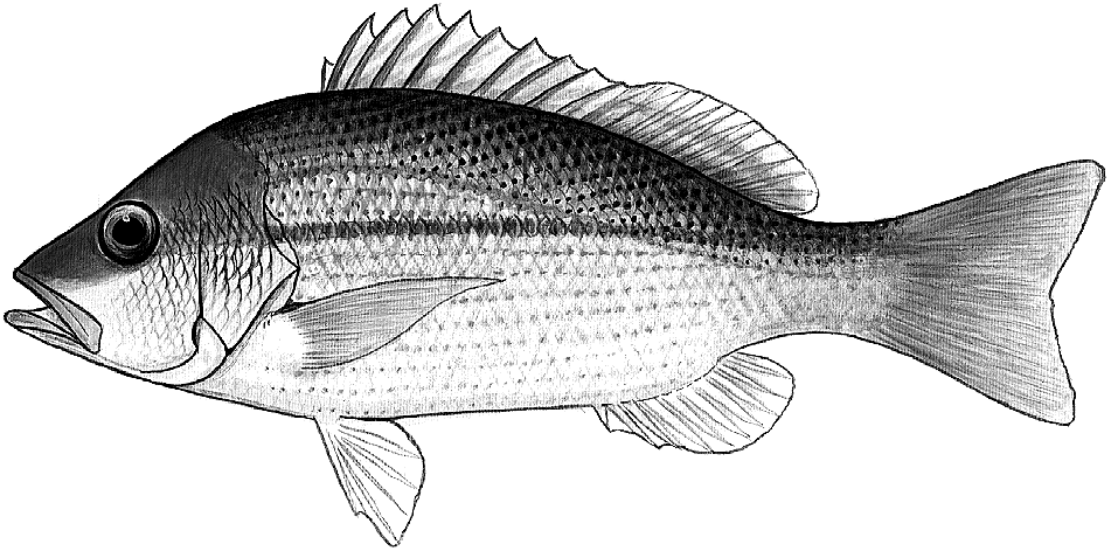


Lutjanus vitta (Quoy and Gaimard, 1824)

(Plate IX, 59)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Brownstripe snapper or Brownstripe red snapper; Fr - Vivaneau à bande brune; Sp - Pargo bitilla.

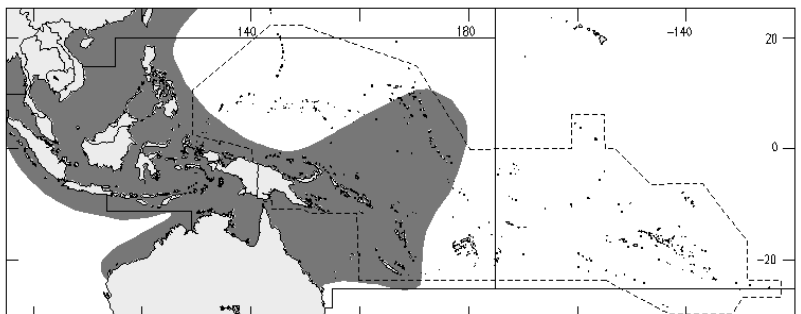


Diagnostic characters: Body moderately deep to relatively slender, its depth 2.6 to 3 times in standard length. Dorsal profile of head moderately sloped; **preorbital width about equal to eye diameter**; preopercular notch and knob poorly developed; vomerine tooth patch triangular with a medial posterior extension or diamond-shaped; tongue with a patch of granular teeth. First gill arch with 15 to 19 gill rakers, of which 9 to 12 (including rudiments) on lower limb. **Dorsal fin with X spines and 12 or 13 soft rays**; anal fin with III spines and 8 or 9 soft rays; posterior profile of dorsal and anal fins angular. Caudal fin slightly emarginate or truncate. Pectoral fins with 15 or 16 rays. Scale rows on back rising obliquely above lateral line. **Colour:** back and upper sides brown, lower sides and belly whitish or pink; narrow longitudinal brown lines, 1 per scale row, on sides, those above lateral line slanted posteriorly toward dorsal-fin base; **a dark brown to blackish stripe along middle of side from eye to upper half of caudal peduncle**; fins yellow except pelvics whitish. Juveniles and subadults with an intensely black midlateral stripe and an oval black spot, eye-sized or greater, lying in the middle of the stripe below last dorsal-fin spine.

Size: Maximum total length about 40 cm, commonly to 25 cm. Matures at about 20 cm.

Habitat, biology, and fisheries: Inhabits the vicinity of coral reefs, also in areas of flat bottom with occasional low coral outcrops, sponges, and sea whips at depths between about 10 and 40 m. Occurs solitary or in groups of up to about 30 individuals. Feeds on fishes, shrimps, crabs and other benthic invertebrates. At New Caledonia spawning occurs over most of the year with peak activity during spring and summer. Eggs have a diameter of 0.78 to 0.84 mm and hatch in about 26 hours at 26.5°C. The larvae grow at a rate of 1.2 to 1.7 mm per day during the first 1 or 2 months.

Distribution: Mainly western Pacific and eastern Indian Ocean from New Caledonia and Gilbert Islands to southern India, extending northward to southern Japan; also found in the Seychelles.



***Macolor macularis* Fowler, 1931**

Frequent synonyms / misidentifications: None / *Macolor niger* (Forsskål, 1775).

FAO names: En - Midnight snapper; Fr - Vivaneau minuit; Sp - Pargo medianoche.

Diagnostic characters:

Body relatively deep, laterally compressed. **Dorsal profile of head convex in adults, in oblique straight line in young.** Lacrimal (suborbital region) relatively broad. Nostrials on each side of snout not very close together. Mouth large and terminal, lower jaw protruding slightly when mouth closed. Premaxillae protrusible. Maxilla reaching vertical through middle of eye. Row of conical teeth in each jaw, enlarged anteriorly, and inner bands of villiform teeth on sides of upper jaw and front of lower jaw; vomerine tooth patch broadly V-shaped. **Maxilla without scales or longitudinal ridges. Preopercle with deep notch (or gash) receiving elongate interopercular spine which is distinct in specimens more than about 20 cm standard**

length. First gill arch with 37 to 42 gill rakers on upper limb, 71 to 81 on lower limb (total 110 to 122). Dorsal fin continuous, but **spinous portion distinctly notched in young**; largest individuals without notch or with barely perceptible notch. **Dorsal and anal fins distinctly pointed posteriorly.** Last soft ray of both dorsal and anal fins not produced, shorter than next to last ray. Caudal fin rounded in specimens less than about 20 mm standard length, emarginate in individuals more than about 10 cm standard length. Pectoral fins fairly long; in specimens more than about 10 cm standard length, pectoral fins 95 to 110% head length. **Pelvic fins very long and pointed in young, but short and rounded in adults.** Dorsal fin with X spines and 13 or 14 (usually 13) soft rays. Anal fin with III spines and 10 or 11 (usually 10) soft rays. Pectoral-fin rays 16 to 18 (usually 17). **Soft dorsal and anal fins with scales basally. Tubed lateral-line scales 50 to 55.** **Colour:** adults mostly brownish black to black; individuals less than about 20 cm total length black on upper sides (usually with 6 to 10 white spots) and white below, black vertical bar through eye, broad black horizontal band from eye to rear edge of opercle, and black stripe from pectoral region to distal end of lower caudal-fin lobe.

Size: Maximum standard length at least 45 cm.

Habitat, biology, and fisheries: Inhabits coastal waters in depths between about 5 and 90 m; apparently does not form large schools. Feeds largely on fishes and crustaceans. Caught with handlines, gill nets, and traps; also speared by divers. Frequently seen in markets, mainly fresh.

Distribution: Western Pacific from Ryukyu Islands southward to Australia and Melanesia. May be more widespread; confused in the literature with *Macolor niger*.

