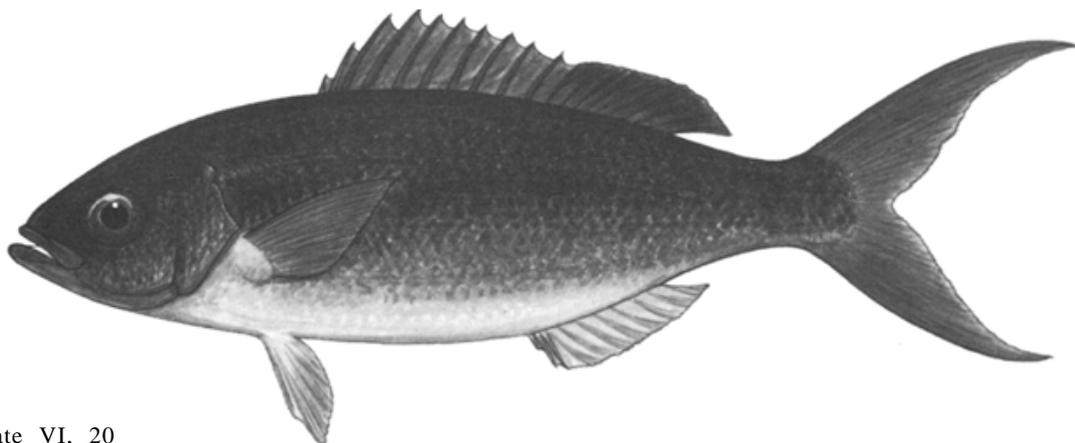


FAO Names: En- African forktail snapper; Fr -Vivaneau fourche (d'Afrique); Sp - Pargo tijera.



See Plate VI, 20

Diagnostic Features : Body moderately elongate, fusiform; maxilla extending posteriorly to below front of eye; teeth in jaws all villiform, no enlarged canines; vomerine tooth patch V-shaped, without a medial posterior extension; interorbital space broad and convex; gill rakers on lower limb 20 to 23. Dorsal fin with 10 spines and 10 soft rays; anal fin with 3 spines and 8 soft rays; dorsal and anal fin bases scaleless; pectoral fins shorter than head and not reaching level of anus, with 17 or 18 rays; caudal fin strongly forked. Scales in lateral line about 62 to 68; scale rows on back parallel to lateral line. Colour: back and sides dark brown, lighter on belly and underside of head.

Geographical Distribution : Tropical and subtropical coast of West African from Mauritania southward. Records of this species from the western Indian Ocean are probably based on misidentification.

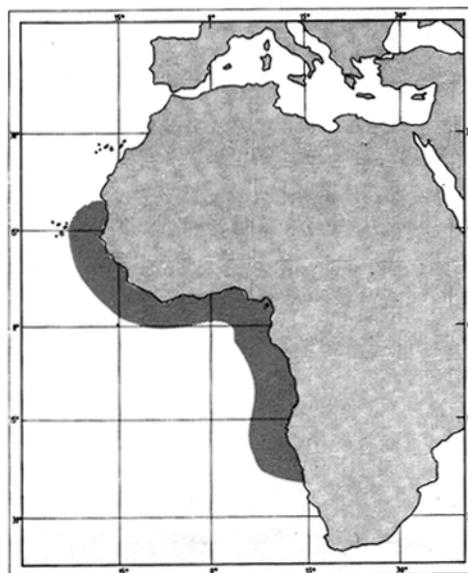
Habitat and Biology : Inhabits depths between about 30 and 300 m. Feeds on small fishes, squids and crustaceans.

Size : Maximum total length 75 cm; common to 60 cm.

Interest to Fisheries : Of potential interest to fisheries, but caught in relatively low numbers. Taken with handlines, set nets, and bottom trawls. Marketed mainly fresh. Flesh of good quality.

Local Names : SENEGAL: Mbeureugane.

Literature : Smith (1949); Fischer, Bianchi & Scott (eds) (1981); Fischer & Bianchi (eds) (1984).



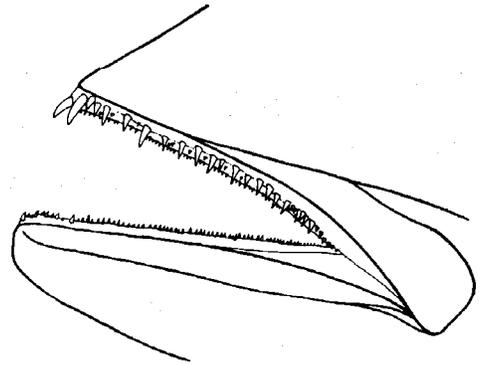
Etelis Cuvier, 1828

LUT Etel

Genus : Etelis Cuvier (in C. & V.), 1928:127. Type-species Etelis carbunculus Cuvier (in C. & V.), 1828, by monotypy.

Synonyms : Genus Eteles Swainson, 1839; Genus Elastoma Swainson, 1839; Genus Hesperanthias Lowe, 1843; Genus Macrops Duméril, 1856; Genus Etelides Jordan & Thompson, 1905; Genus Etelinus Jordan & Thompson, 1911.

Diagnostic Features : Medium-sized snappers with slender, fusiform bodies. Teeth of jaws small, conical, the outer row enlarged, and frequently with 1 or 2 pair of enlarged canines anteriorly (see figure); vomerine tooth patch V-shaped or arched, without a medial posterior extension; interorbital space flattened. Dorsal fin continuous, but spinous portion of fin incised at its junction, soft portion with 10 spines and 11 (rarely 10) soft rays; anal fin with 3 spines and 8 soft rays; dorsal and anal fins scaleless; last dorsal and anal rays longer than penultimate soft rays; pectoral fins long, slightly shorter than head, with 15 to 17 rays; caudal fin forked. Scales medium-sized, about 47 to 53 in lateral line; maxilla covered with scales. Colour: various shades of red or pink, becoming silvery or whitish on lower sides and belly.



jaws of Etelis

Biology, Habitat and Distribution : A dweller of moderately deep water (about 90 to 450 m), usually over rocky bottoms. These fish occur solitarily or in small groups. The diet consists mainly of small fishes, squids, and crustaceans.

Geographical Distribution : Inshore tropical Indo-West Pacific and western Atlantic Oceans.

Interest to Fisheries : Etelis is an important food fish in many areas, particularly islands of the Indo-West Pacific. They are caught mainly with bottom longlines and deep handlines. The flesh is of good quality and marketed mainly fresh.

Key to the species of Etelis (from Anderson, 1981) :

1a. Total gill rakers on first gill arch 17 to 22; gill rakers, excluding rudiments, on first gill arch 10 to 13; upper lobe of caudal fin short, 26 to 30% of standard length in specimens larger than 120 mm standard length. Widespread in the Indo-Pacific E. carbunculus (Fig. 1)

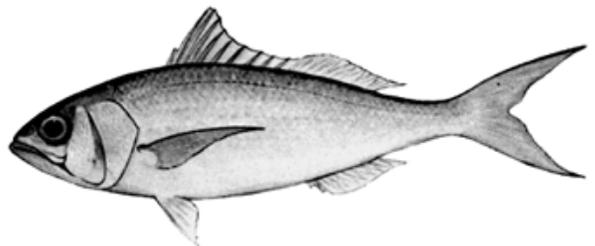


E. carbunculus

Fig. 1

1b. Total gill rakers on first gill arch 23 or more; gill rakers, excluding rudiments, on first gill arch 19 or more; upper lobe of caudal fin longer, almost always 32% of standard length or more in specimens larger than 130 mm standard length

2a. Total gill rakers on first gill arch 33 to 36; predorsal scales about 17 to 19; caudal peduncle scales 25; tubed lateral line scales 50 to 51; cheek height about 10% of standard length; distance from orbit to angle of preopercle 13 or 14% of standard length. Widespread in the western Pacific/eastern Indian Ocean E. radiosus (Fig. 2)

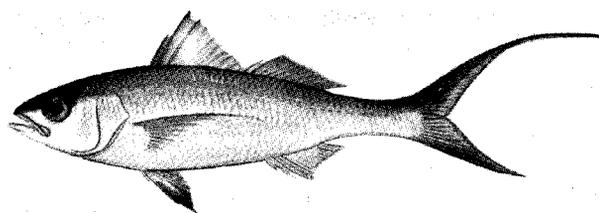


E. radiosus

Fig. 2

2b. Total gill rakers on first gill arch 23 to 28; predorsal scales 13 to 17; caudal peduncle scales 22 to 24; tubed lateral line scales 47 to 50; cheek height 5 to 8% of standard length; distance from orbit to angle of preopercle 8 to 10% of standard length

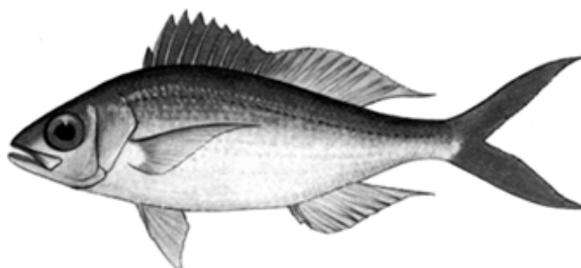
3a. Length of pelvic fin 21 to 23% of standard length; length of upper lobe of caudal fin 33 to 61% of standard length; length of lower lobe of caudal fin 32 to 41% of standard length. Widespread in the Indo-Pacific E. coruscans (Fig. 3)



E. coruscans

Fig. 3

3b. Length of pelvic fin 18 to 21 of standard length; length of upper lobe of caudal fin 27 to 40% of standard length; length of lower lobe of caudal fin 28 to 34% of standard length. Western Atlantic ... E. oculatus (Fig. 4)



E. oculatus

Fig. 4

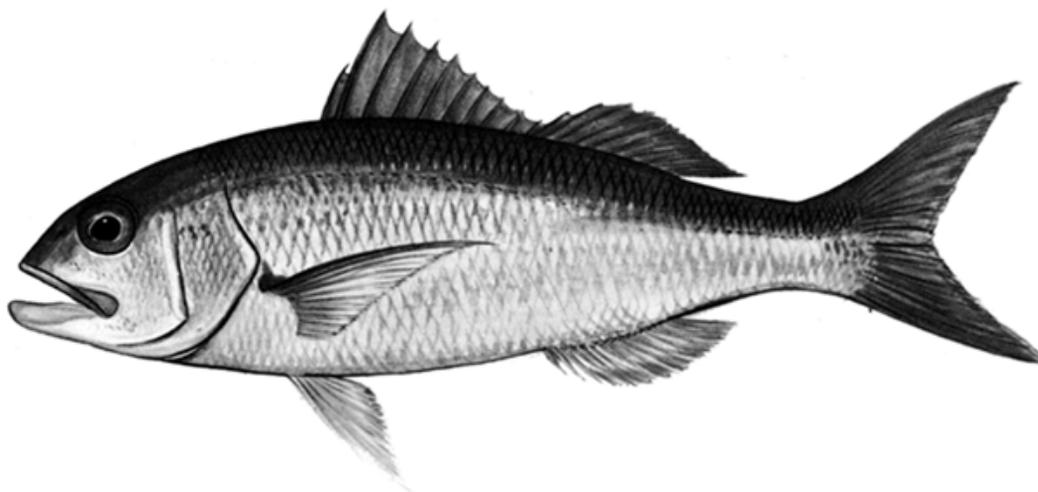
Etelis carbunculus Cuvier, 1828

LUT Etel 3

Etelis carbunculus Cuvier (in C. & V.), 1828, Hist.Nat.Poiss., 2:127 (Seychelles).

Synonyms : Eteliscus marshi Jenkins (1903).

FAO Names : En - Ruby snapper; Fr - Vivaneau rubis; Sp - Pargo rubi.



See Plate X, 39

Diagnostic Features : Body relatively elongate. Head small, eye large; interorbital space flat; lower jaw slightly projecting; a single row of conical teeth in jaws, usually 1 or 2 pair of enlarged canines anteriorly; maxilla scaled, extending to below middle of eye; vomerine tooth patch narrowly V-shaped; gill rakers on lower limb of first arch (including rudiments) 11 to 14. Dorsal fin with 10 spines and 11 soft rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 15 to 17 rays; dorsal and anal fin bases scaleless; caudal fin forked, the lobes relatively short compared with other Etelis (about 25 to 30% of standard length). Scale rows on-back parallel with lateral line. Colour: mainly pink to red, becoming white on lower sides and belly.

Geographical Distribution : Widely distributed in the tropical Indo-Pacific Ocean from the Hawaiian Islands to East Africa, and from Australia northward to southern Japan.

Habitat and Biology : Inhabits rocky bottoms at depths between about 90 and 300 m. Feeds on fishes and larger invertebrates such as squids, shrimps and crabs; also takes planktonic organisms, including pelagic urochordates. At Vanuatu (New Hebrides) spawning occurs throughout most of the year, with peak activity during November. The von Bertalanffy growth coefficient (K) and exponential rate of mortality (M) were estimated as 0.07 and 0.08, respectively, for the Vanuatu population (Brouard & Grandperrin, 1984).

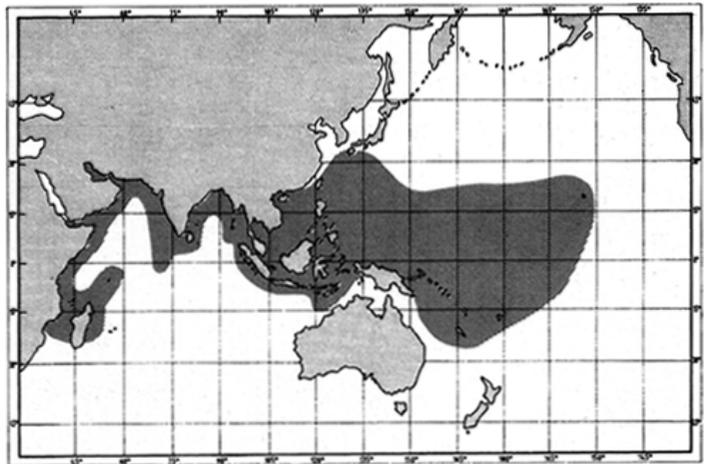
Size : Maximum total length of at least 80 cm; common to 50 cm.

Interest to Fisheries : An important food fish in some areas. During recent experimental handline fishing in the Mariana Islands, this fish was the third-most abundant species, constituting 12.5% of the total catch. It is also one of the principal species in the Hawaiian offshore handline fishery (89.5 metric tons and a revenue of US\$ 782 000 in 1984. Caught mainly with bottom longlines and deep handlines. Marketed fresh or frozen.

Local Names: GUAM: Ehu; HAWAII: 'Ula'ula; JAPAN: Hachijô-akamutsu; NEW CALEDONIA: Vivaneau rouge; PALAU: Sebus; SAMOA: Palu malau; TAHITI: Paru 'i'hi.

Literature : Anderson (1981); Masuda *et al.* (1984).

Remarks : The name *E. carbunculus* has been wrongly applied to *E. coruscans* by some previous authors including Fischer & Bianchi (eds) (1984).



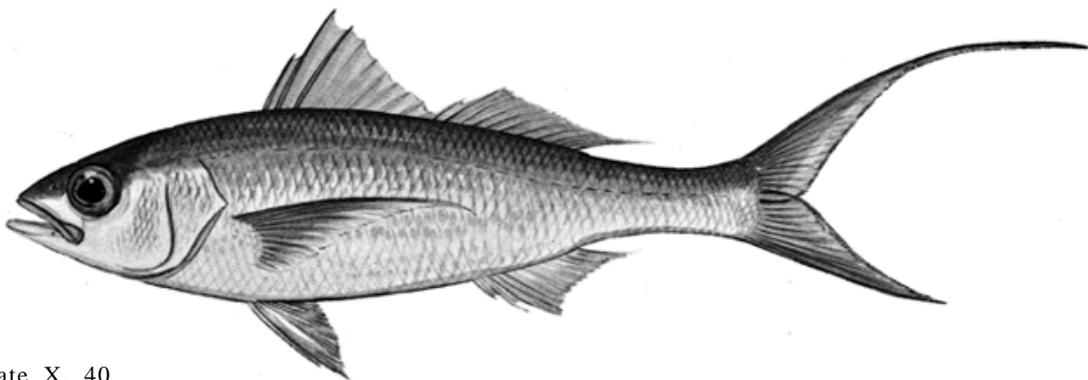
Etelis Coruscans Valenciennes, 1862

LUT Etel 2

Etelis coruscans Valenciennes, 1862, *C.r.hebd.Séanc.Acad.Sci.*, 54:2 (Ile Bourbon).

Synonyms : *Etelis evurus* Jordan & Evermann (1903).

FAO Names : En - Ruby snapper; Fr - Vivaneau laflamme; Sp - Pargo rubi.



See Plate X, 40

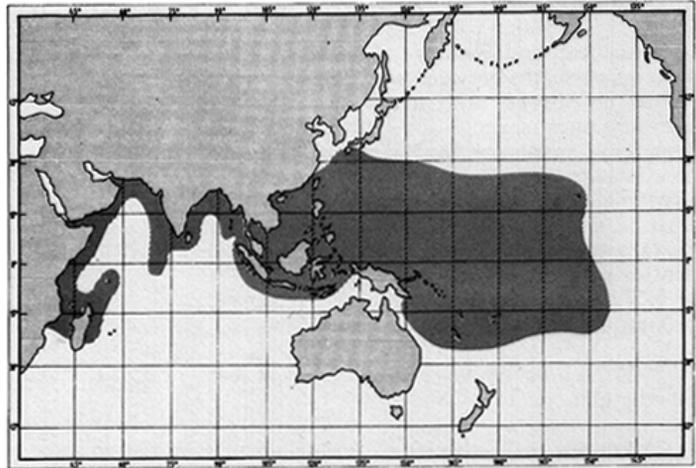
Diagnostic Features : Body slender and elongate. Head small, eye large; snout short (shorter than eye diameter); interorbital space flat; lower jaw slightly projecting; maxilla covered with small scales; both jaws with bands of small teeth, those in the outer series better developed and more widely spaced, a few anterior teeth in upper jaw canine-like; vomerine tooth patch narrowly V-shaped; gill rakers on lower limb of first arch (including rudiments) 15 to 18. Dorsal fin with 10 spines and 11 soft rays; anal fin with 3 spines and 8 soft rays;

pectoral fins with 15 or 16 rays; dorsal and anal fin bases scaleless; caudal fin deeply forked; upper caudal lobe becoming greatly elongate with increased growth. Scale rows on back parallel with lateral line. Colour: back and upper sides deep pink to red; lower sides and belly pink; fins pink to red.

Geographical Distribution : Widely distributed in the tropical Indo-Pacific Ocean from the Hawaiian Islands to East Africa, and from Australia northward to southern Japan.

Habitat and Biology : Inhabits rocky bottoms at depths between about 100 and 300 m. Feeds on small fishes, squids and crustaceans. The von Bertalanffy growth coefficient (K) and exponential rate of mortality (M) were estimated as 0.13 and 0.12, respectively, for the Vanuatu (New Hebrides) population (Brouard & Grandperrin, 1984), and 0.16 and 0.36 respectively, for the Marianas population (Ralston, in press).

Size: Maximum total length to at least 70 cm; common to 40 cm.



Interest to Fisheries : An important foodfish in some areas (for example southern Japan). It is one of the principal species in the Hawaiian offshore handline fishery (19 metric tons and a revenue of US\$ 111 700 in 1984). Caught mainly with deep handlines. Marketed fresh or frozen.

Local Names : GUAM: Onaga; HAWAII: Onaga; JAPAN: Hamadai; NEW CALEDONIA: Vivaneau la flamme; SAMOA: Palu-loa; SOUTH AFRICA: Robyn-snapper, Ruby snapper.

Literature : Anderson (1981); Masuda *et al.* (1984).

Remarks : Closely related to *E. oculatus* of the western Atlantic Ocean. The two species differ primarily with regard to pelvic and caudal fin lengths (see key to *Etelis*). The name *E. carbunculus* has been wrongly applied to *E. coruscans* by some previous authors including Fischer & Bianchi (eds) (1984).

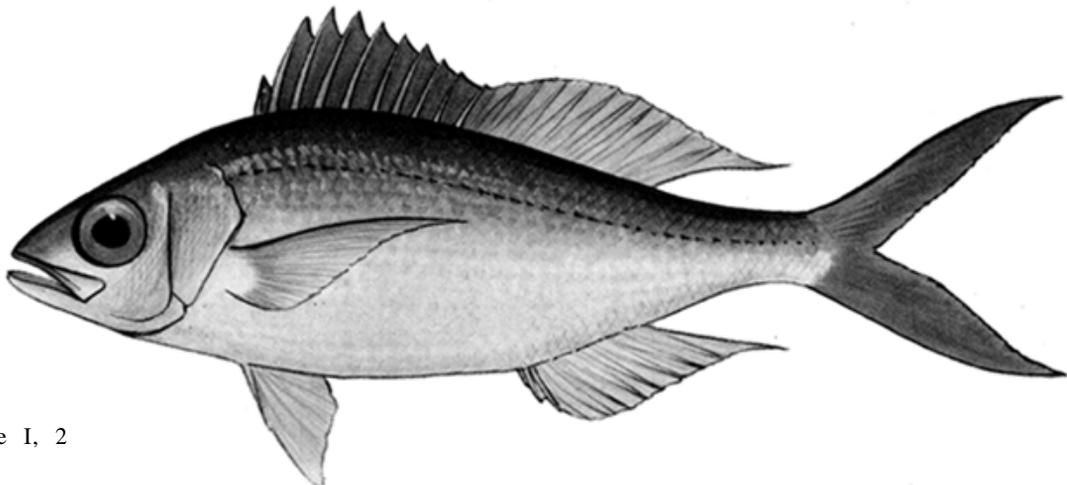
Etelis oculatus (Valenciennes, 1828)

LUT Etel 1

Serranus oculatus Valenciennes (in C. & V., 1828), *His.Nat.Poiss.*, 2:266 (Martinique).

Synonyms : None

FAO Names : En - Queen snapper; Fr -Vivaneau royal; Sp - Pargo cachucho.



See Plate I, 2

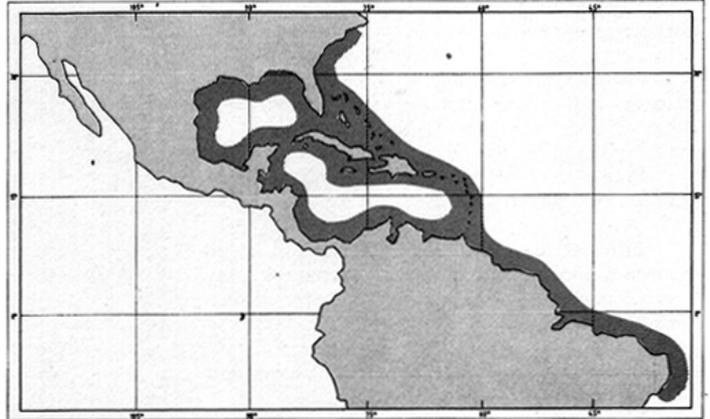
Diagnostic Features : Body elongate and slender. Eye large; snout short (shorter than eye diameter); interorbital space flat; lower jaw slightly projecting; maxilla covered with small scales; both jaws with bands of small teeth, those in the outer series better developed and more widely spaced, a few anterior teeth in upper jaw canine-like; vomerine tooth patch narrowly V-shaped; gill rakers on lower limb of first arch (including rudiments) 16 to 18. Dorsal fin with 10 spines and 11 soft rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 16 or 17 rays; dorsal and anal fin bases scaleless; caudal fin deeply forked. Scale rows on back parallel with lateral line. Colour: back and upper sides deep pink to red; lower sides and belly pale pink; fins pink except spinous portion of dorsal fin; entire caudal fin brilliant red.

Geographical Distribution : Tropical western Atlantic Ocean from Bermuda and North Carolina southward through the Caribbean to Brazil; particularly abundant in the Bahamas and the Antilles. Not reported from the northern Gulf of Mexico.

Habitat and Biology : Inhabits rocky bottoms at depths between about 135 and 450 m. Feeds mainly on small fishes and squids.

Size : Maximum total length about 60 cm; common to 52 cm.

Interest to Fisheries : Although regularly caught in some areas at present, it is mainly of interest as a potential resource. Caught mainly with single and multiple handlines; also taken with bottom longlines. Marketed mostly fresh, sometimes frozen. Flesh of good quality.



Local Names : CUBA: Cachucho, Salmonete de lo alto; PUERTO RICO: Cachucho.

Literature : Jordan & Evermann (1896); Anderson (1967); Fischer (ed.) (1978).

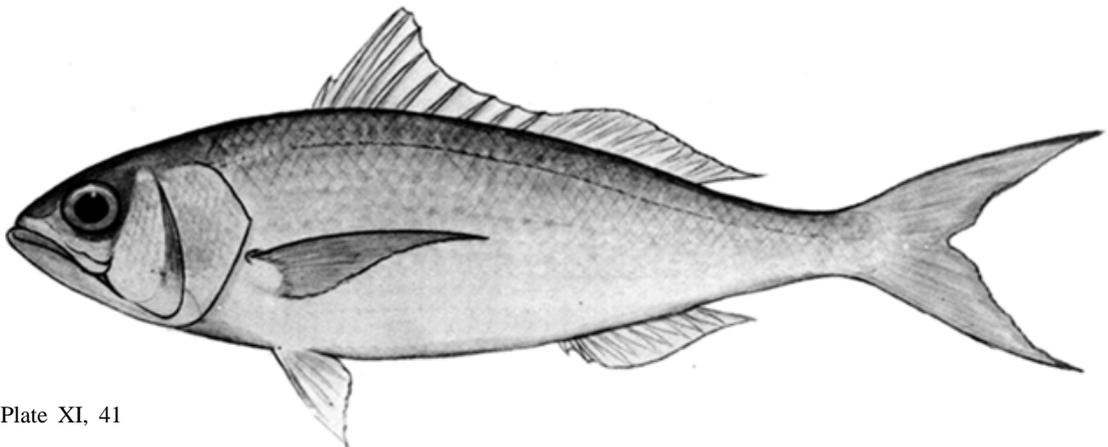
Etelis radiosus Anderson, 1981

LUT Etel 4

Etelis radiosus Anderson, 1981, Copeia, 1981(4):821 (Sri Lanka).

Synonyms : None.

FAO Names : En - Pale snapper; Fr - Vivaneau pâle; Sp - Pargo pálido.



See Plate XI, 41