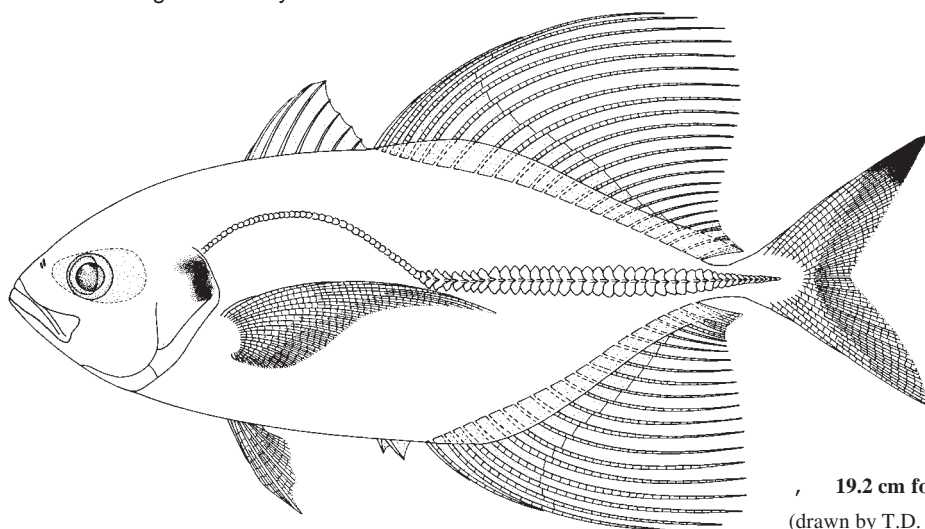


***Pantolabus radiatus* (Macleay, 1881)**

Frequent synonyms / misidentifications: *Caranx radiatus* Macleay, 1881; *Absalom radiatus* (Macleay, 1881) / None.

FAO names: En - Fringefin trevally.



19.2 cm fork length

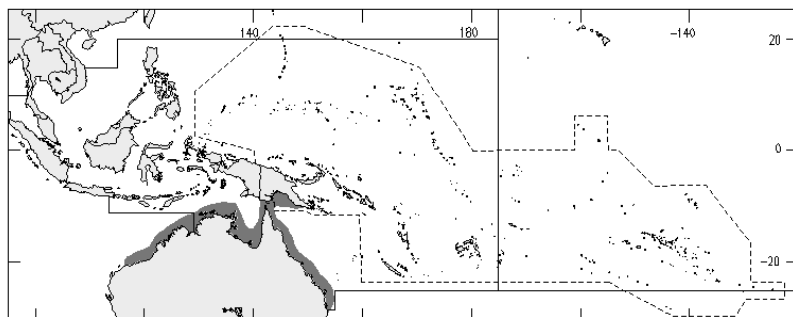
(drawn by T.D. Pedersen)

Diagnostic characters: Body elongate oval, compressed; dorsal and ventral profiles equally convex; snout pointed. Eye diameter about equal or larger than snout length, with **adipose eyelid well developed on posterior half of eye only**. Upper jaw extending to below middle of centre of pupil, and with posterior margin distinctly concave. **Upper jaw with an outer row of moderately enlarged conical teeth bordered by an inner band of small, sharply pointed teeth; lower jaw with a single row of moderately enlarged conical teeth, sometimes with a few inner teeth anteriorly**. Gill rakers (including rudiments) 11 to 13 on upper limb and 25 to 28 on lower limb of first gill arch (**total 36 to 41**). Two separate dorsal fins, the first with VIII spines, followed by I spine and 23 to 26 soft rays; anal fin with II detached spines followed by I spine and 18 to 20 soft rays; spinous dorsal fin relatively high, equal or subequal lobe of second dorsal fin in females; **second dorsal fin and anal fin with well-developed scaly basal sheaths; adult males with all soft dorsal- and anal-fin rays produced as filaments (females without filaments)**. Lateral line moderately arched anteriorly, with junction of curved and straight parts below a vertical from between fourth and sixth soft rays of second dorsal fin; chord of curved part of lateral line contained 1.6 to 2.2 times in straight part (to caudal-fin base); scales in curved part 33 to 41; straight part with 0 to 9 scales and 38 to 49 scutes; total scales and scutes in lateral line (excluding scales on caudal fin) 77 to 85. Breast completely scaly, except sometimes a small naked patch on ventral midline anteriorly. Vertebrae 10+14. **Colour:** olive-green to bluish green above, silvery to white below; black spot on operculum; spinous and soft dorsal fins, and anal fin orange-yellow; caudal fin pale to bright yellow with tip of upper lobe black; pelvic fins white and pectoral fins pale orange to hyaline.

Size: Largest specimen examined 21.5 cm fork length, 24.5 cm total length.

Habitat, biology, and fisheries: In northern Australia in coastal waters, sometimes entering river mouths, rarely found in depths exceeding 30 m. Diet consists primarily of epibenthic crustaceans. Caught mainly with bottom trawls.

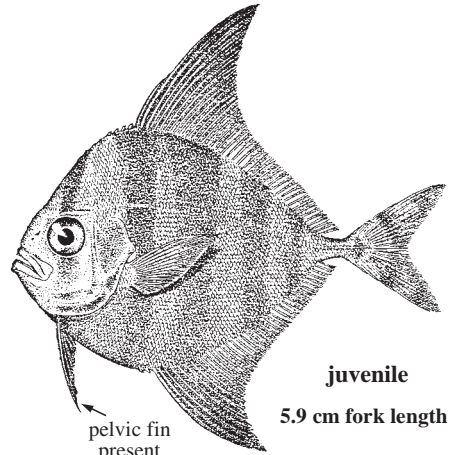
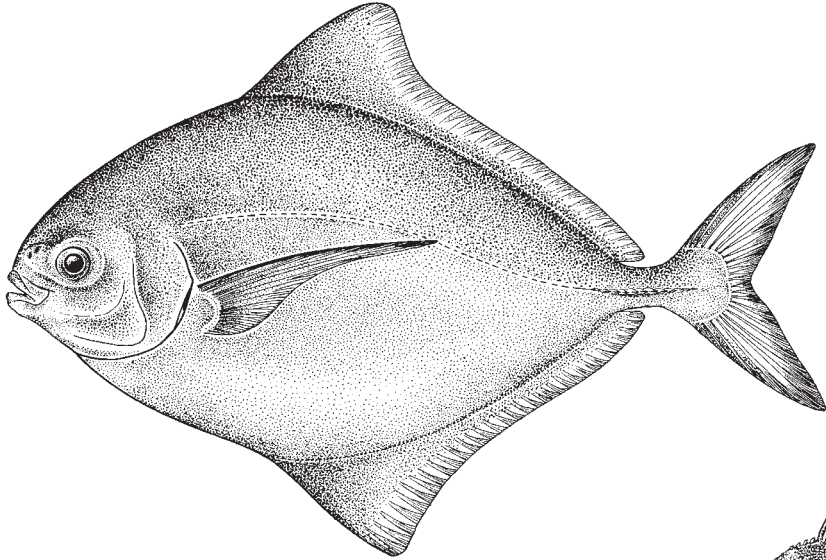
Distribution: Known only from Papua New Guinea and Australia: Port Headland, Western Australia (20°18'S) to Port Curtis, Queensland (23°55'S).



Parastromateus niger (Bloch, 1795)

Frequent synonyms / misidentifications: *Apolectus niger* (Bloch, 1795); *Formio niger* (Bloch, 1795); *Citula halli* Evermann and Seale, 1907/ None.

FAO names: En - Black pomfret; Fr - Castagnoline noire; Sp - Palometa negra.

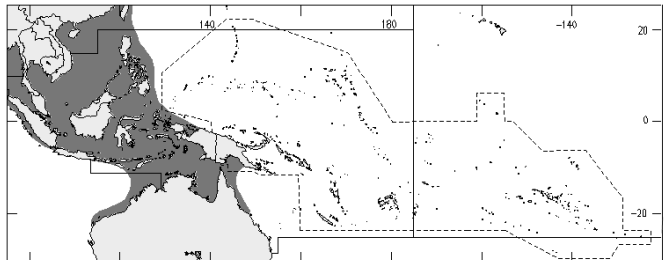


Diagnostic characters: Body deep and compressed; dorsal and ventral profiles of body strongly and equally convex. Mouth terminal with upper jaw unrestricted dorsally and ending below and slightly before anterior margin of eye. Both jaws with a single row of small conical teeth. Gill openings unrestricted laterally and ventrally. **Dorsal fin with VI or V short spines (embedded and not apparent in adults) followed by I spine and 41 and 44 soft rays;** anal fin with II spines (embedded and not apparent in adults) followed by I spine and 35 to 39 soft rays; **profile of second dorsal and anal fins nearly identical, with elevated, broadly rounded anterior lobes;** **pelvic fins absent in specimens larger than about 10 cm fork length, and in juveniles positioned distinctly anterior to a vertical line through pectoral-fin base;** pectoral fins long and falcate. Lateral line very weakly arched anteriorly, with junction of straight and curved parts below posterior third of dorsal fin; straight part of lateral line with 8 to 19 weak scutes, forming a slight keel on caudal peduncle; **scales small and deciduous, and almost completely covering dorsal and anal fins;** breast completely scaly. Vertebrae 10+14. **Colour:** in life, adults uniformly silvery grey to bluish brown (yellowish brown when deciduous scales missing); fins with dark edges; young with dark vertical bars and long black jugular pelvic fins.

Size: Maximum total length about 55 cm; commonly to 30 cm total length.

Habitat, biology, and fisheries: Generally near the bottom during the day, rising to near the surface at night. Often occurs in large schools, and not uncommonly observed swimming on their sides. Usually found in depths of 15 to 40 m, generally over muddy bottoms. Feeds on zooplankton. The principal gear used is gill nets, but boat seines and trawls also take black pomfrets.

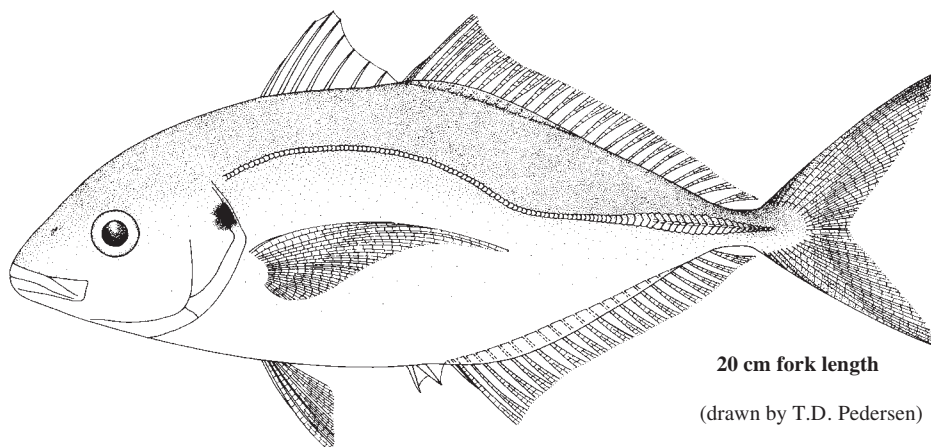
Distribution: Pelagic on the continental shelf from South Africa, Mozambique, Kenya, the Arabian Sea, Bay of Bengal, Indonesia, the Philippines, China, southern Japan, and Australia. Most abundant on the west coast of India and in Indonesia.



Pseudocaranx dentex (Bloch and Schneider, 1801)

Frequent synonyms / misidentifications: *Caranx dentex* (Bloch and Schneider, 1801); *C. georgianus* Cuvier, 1833; *Usacaranx georgianus* (Cuvier, 1833); *Caranx nobilis* Macleay, 1881; *C. cheilio* Snyder, 1904; *C. natalensis* Gilchrist and Thompson, 1911 / None.

FAO names: **En** - White trevally; **Fr** - Carangue dentue; **Sp** - Jurel dentón.



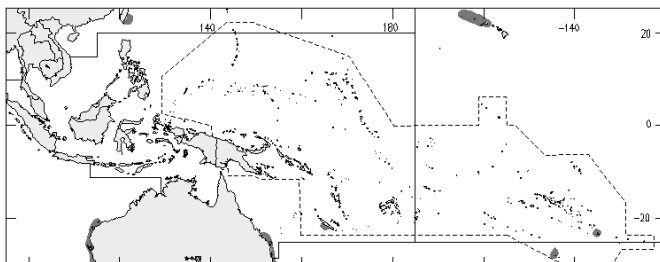
Diagnostic characters: Body elongate, moderately deep and compressed, with dorsal and ventral profiles similar. Eye relatively small with adipose eyelid poorly developed. Lips noticeably papillose and upper jaw projecting beyond lower in large adults; **end of upper jaw essentially vertical. Both jaws with a single row of blunt conical teeth, upper jaw sometimes with an inner series of conical teeth anteriorly. Gill rakers (including rudiments) 9 to 11 on upper limb and 20 to 24 on lower limb of first gill arch (total 29 to 35).** Two separate dorsal fins, the first with VIII spines, the second with I spine and 24 to 28 soft rays; anal fin with II detached spines followed by I spine and 20 to 24 soft rays; terminal dorsal and anal-fin rays enlarged and a little separated from adjacent rays but not detached; spinous dorsal fin high, longest spine height slightly longer than length of soft dorsal-fin lobe. Lateral line with a weak and extended anterior arch, with junction of curved and straight parts of lateral line below vertical from twelfth to fourteenth soft rays of second dorsal fin; chord of curved part of lateral line contained 0.6 to 0.85 times in straight part (to caudal-fin base); **curved part of lateral line with 57 to 78 scales;** straight part of lateral line with 2 to 27 anterior scales and 16 to 30 scutes; total scales and scutes in lateral line (excluding scales on caudal fin) 91 to 115; **no scales on preorbital bone below and in front of eye and on expanded part of maxilla; breast completely scaly.** Vertebrae 10+14-15. **Colour:** pale greenish to steely blue above, silvery below; a yellow stripe usually present along sides (wider posteriorly) and at bases of soft dorsal and anal fins; caudal fin and soft dorsal fins dusky yellow; **a diffuse black spot on upper margin of opercle.**

Size: Maximum fork length about 82 cm; commonly to 40 cm fork length; weight to 10.7 kg.

Habitat, biology, and fisheries: Found mainly on banks and shelf slope habitats at depths of 80 to 200 m throughout much of its range, but at some localities juveniles and occasionally adults may also frequent the shoreline. Fishes, molluscs, and crustaceans constitute the bulk of the diet of this opportunist bottom feeder. Caught mainly with bottom trawls.

Distribution: A broadly distributed, anti-tropical species. In the Indo-Pacific known from off South Africa, Japan, Australia, New Zealand, Rapa, Pitcairn, Hawaiian Archipelago, and Easter Island. Also occurs on both sides of the Atlantic Ocean (Bermuda, off North Carolina, southern Brazil, Azores, Madeira, Canary, Cape Verde, Ascension, and St. Helena islands) and in the Mediterranean Sea.

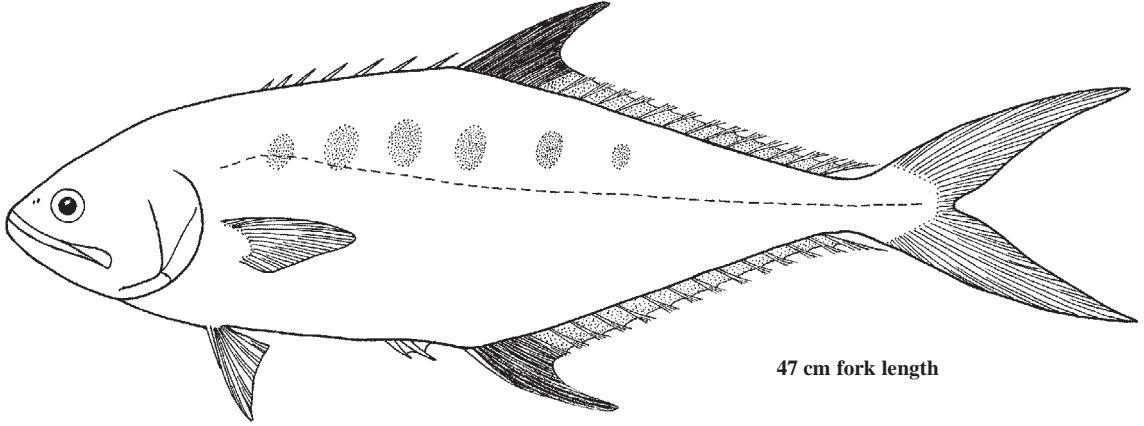
Remarks: *Pseudocaranx wrighti*, which is known only from western and southern Australia and thus outside the WCP area, is included in the key to species of *Pseudocaranx*. Australian fishery biologists need to be able to distinguish both of these species, which in the past have often been confused.



Scomberoides commersonnianus Lacepède, 1802

Frequent synonyms / misidentifications: *Chorinemus commersonnianus* (Lacepède, 1802) / The name *Scomberoides lysan* (Cuvier) had been generally misapplied to this species prior to Smith-Vaniz and Staiger's (1973, *Proc. Cal. Acad. Sci.*) revision of *Scomberoides*.

FAO names: **En** - Talang queenfish; **Fr** - Sauteur talang; **Sp** - Jurel saltador.



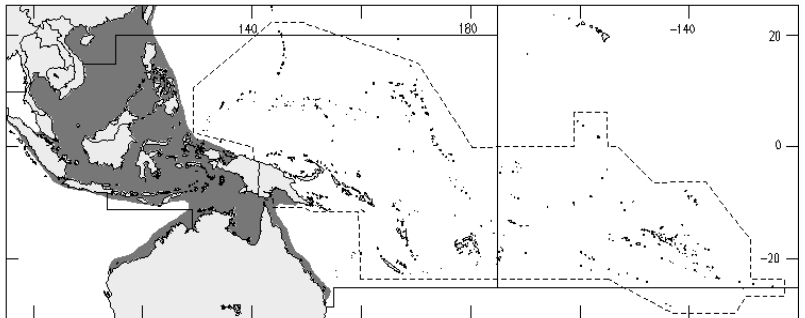
47 cm fork length

Diagnostic characters: Body oblong to elliptical, strongly compressed; ventral profiles similar, snout blunt with dorsal profile of head and scales on midbody nape slightly convex. Upper lip joined to snout at midline by a bridge of skin (frenum), except crossed by a shallow groove in very young. **Upper jaw extends well beyond posterior margin of eye in adults. Lower jaw with 2 rows of teeth separated by a shallow groove, adults with teeth in inner row about equal in size to those in outer row. Gill rakers (excluding rudiments) 0 to 3 on upper limb and 7 to 12 on lower limb of first gill arch (total 8 to 15).** Two separate dorsal fins, the first with VI or VII short spines, depressible into a shallow groove on dorsal midline, followed by I spine and 19 to 21 soft rays; anal fin with II detached spines followed by 16 to 19 soft rays; **posterior soft dorsal-and anal-fin rays consisting of semidetached finlets**, bases of anal and second dorsal fins about equal in length; height of second dorsal-fin lobe 14.4 to 19.8% of fork length in specimens larger than 15 cm fork length; pelvic fins about equal in length or shorter than pectoral fins. Lateral line only slightly irregular, weakly to moderately convex above pectoral fins, becoming straight posteriorly. No scutes; **scales on midbody below lateral line, partially embedded and broadly oblong. No caudal peduncle grooves. Vertebrae 10+16. Colour:** in life, head and body dusky green to bluish dorsally, grey to silvery below, large individuals often golden, especially ventrally; **sides of adults with 5 to 8 large, plumbeous blotches above or touching lateral line, first 2 may intersect lateral line;** dorsal and anal fins dusky to dark, uniformly pigmented; pectoral fins of adults frequently with a dusky blotch ventrally.

Size: Largest specimen examined 94 cm fork length; reported to attain 120 cm total length. African spearfishing record 14.4 kg.

Habitat, biology, and fisheries: Although periodically entering estuaries, generally intolerant of low salinities, and turbid water; swims in small groups and usually frequents reefs and offshore islands. As is true of all members of the genus, the spines of the first dorsal and anal fins are venomous (especially the latter) and capable of inflicting painful stings. Primarily a daytime feeder on fishes, cephalopods, and other pelagic prey; young use specialized juvenile dentition to aggressively remove scales and epidermal tissue from other fishes. Caught with drift set nets, gill nets, seines, and on hook-and-line.

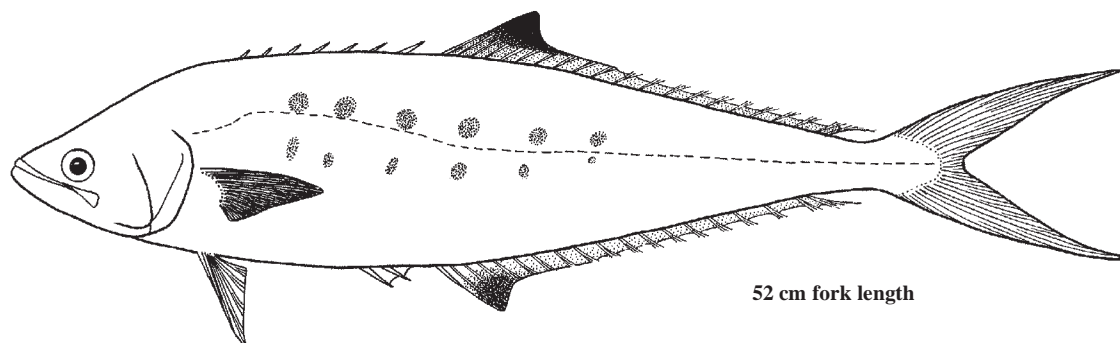
Distribution: Broadly distributed throughout the Indian Ocean; elsewhere in the Indo-West Pacific known from the Gulf of Thailand, Okinawa, Indonesia, the Philippines, Australia, and Papua New Guinea.



Scomberoides lysan (Forsskål, 1775)

Frequent synonyms / misidentifications: *Chorinemus sanctipetri* Cuvier, 1832; *C. orientalis* Temminck and Schlegel, 1844 / The name *Scomberoides lysan* (Cuvier) had been generally misapplied to *S. commersonianus* prior to Smith-Vaniz and Staiger's (1973, *Proc. Cal. Acad. Sci.*) revision of *Scomberoides*.

FAO names: En - Doublespotted queenfish; Fr - Sauteur sabre; Sp - Jurel sable.

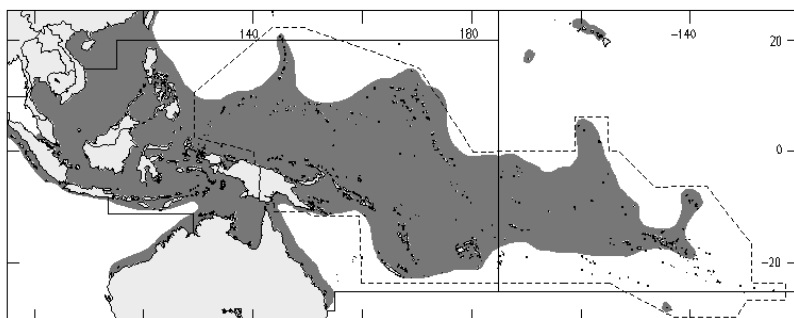


Diagnostic characters: Body oblong to elliptical, strongly compressed; dorsal and ventral profiles nearly equal, snout pointed with dorsal profile of head and nape slightly concave. Upper lip joined to snout at midline by a bridge of skin (frenum), except crossed by a shallow groove in very young. **Upper jaw extends to or slightly beyond posterior margin of eye in adults.** Lower jaw with 2 rows of teeth separated by a shallow groove, adults with teeth in inner row equal in size to those in outer row. **Gill rakers (excluding rudiments)** 3 to 8 on upper limb and 15 to 20 on lower limb of first gill arch (**total 21 to 27**). Two separate dorsal fins, the first with VI or VII short spines, depressible into a shallow groove on dorsal midline, followed by I spine and 19 to 21 soft rays; anal fin with II detached spines followed by 17 to 19 soft rays; **posterior soft dorsal- and anal-fin rays consisting of semidetached finets**, bases of anal and second dorsal fins about equal in length; height of second dorsal-fin lobe 9.1 to 14.2% of fork length in specimens larger than 15 cm fork length; pelvic fins about equal in length or shorter than pectoral fins. Lateral line only slightly irregular, weakly to moderately convex above pectoral fins becoming straight posteriorly. No scutes; **scales on midbody below lateral line partially embedded and sharply lanceolate.** No caudal peduncle grooves. Vertebrae 10+6. **Colour:** in life, body grey-green dorsally, silvery grey to midline and silvery white ventrally; **adults with a series of 6 to 8 dusky roundish blotches above and below lateral line, occasionally connected by narrow isthmus (blotches faint or absent in young); distal half of dorsal-fin lobe abruptly and heavily pigmented;** anal-fin lobe white or pale yellow, often interradiated membranes of several anterior rays black, especially in large individuals.

Size: Largest specimen examined 58.5 cm fork length.

Habitat, biology, and fisheries: Often travels in small schools and inhabits inshore waters from shallow lagoons to offshore areas from the surface to depths of 100 m. Reported to be attracted by hitting the surface of the water repeatedly in rapid succession. As a true of all members of the genus, the spines of the first dorsal and anal fins are venomous (especially the latter) and capable of inflicting painful stings. Feeds primarily on fishes and small crustaceans; young use specialized juvenile dentition to aggressively remove scales and epidermal tissue from other fishes. Caught with drift set nets, gill nets, seines, and on hook-and-line.

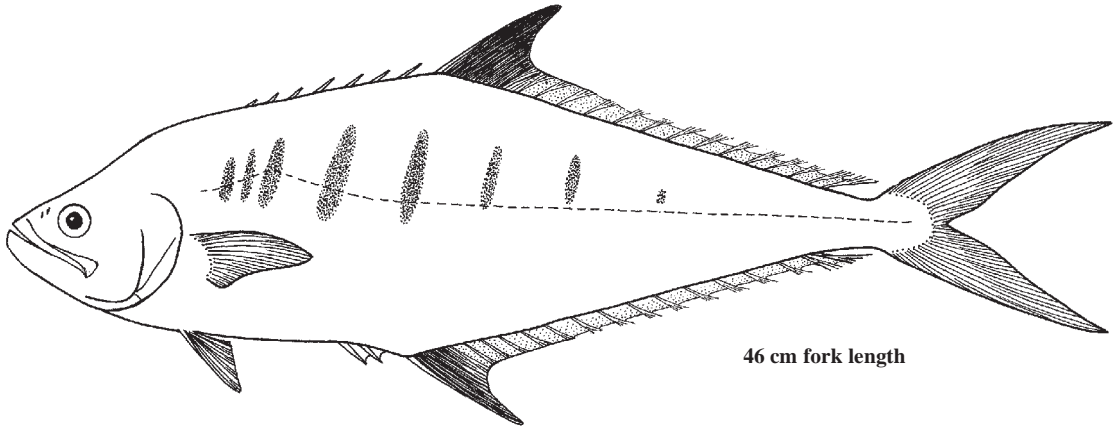
Distribution: Broadly distributed throughout the Indian ocean, except no confirmed records from the Persian Gulf; widespread elsewhere in the Indo-West Pacific, from Okinawa to Australia and eastward to Hawaii.



Scomberoides tala (Cuvier, 1832)

Frequent synonyms / misidentifications: *Chorinemus tala* Cuvier, 1832; *C. hainanensis* Chu and Cheng, 1958 / None.

FAO names: En - Barred queenfish; Fr - Sauteur carsia; Sp - Jurel carsia.



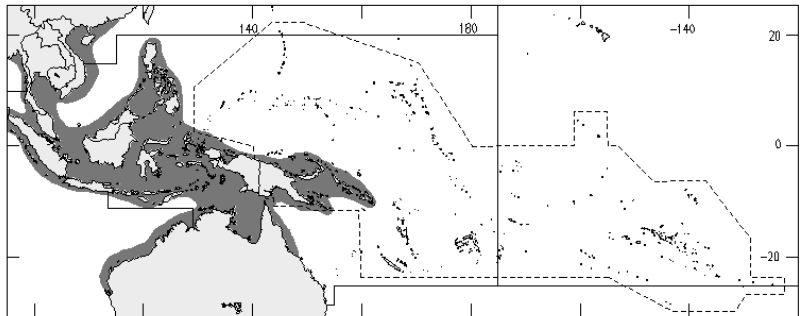
46 cm fork length

Diagnostic characters: Body oblong to elliptical, strongly compressed; snout and nuchal profile nearly straight. Upper lip joined to snout at midline by a bridge of skin (frenum), except crossed by a shallow groove in very young. **Upper jaw extends slightly beyond margin of eye in adults. Lower jaw with 2 rows of teeth separated by a shallow groove, adults with teeth in inner row distinctly larger than those in outer row. Gill rakers (excluding rudiments) 1 to 3 on upper limb and 7 to 11 on lower limb of first gill arch (total 11 to 15).** Two separate dorsal fins, the first with VI or VII short spines, depressible into a shallow groove on dorsal midline, followed by I spine and 19 to 21 soft rays; anal fin with II detached spines followed by 16 to 19 soft rays; **posterior soft dorsal-and anal-fin rays consisting of semidetached finlets;** bases of anal and second dorsal fins about equal in length; height of second dorsal-fin lobe 14.6 to 18% of fork length in specimens larger than 15 cm fork length; pelvic fins about equal in length or shorter than pectoral fins. Lateral line only slightly irregular, weakly to moderately convex above pectoral fins becoming straight posteriorly. No scutes; **scales on midbody below lateral line partially embedded and bluntly lanceolate.** No caudal peduncle grooves. Vertebrae 10+16. **Colour:** in life, head and body greenish grey dorsally, grey to silvery below; **sides of adults with 4 to 8 vertically elongate plumbeous blotches, most of which intersect lateral line;** dorsal and anal fins dusky to dark and uniformly pigmented; pectoral fins yellow and pelvic fins white in adults.

Size: Largest specimen examined 62 cm fork length.

Habitat, biology, and fisheries: An inshore species whose biology is poorly known. As is true of all members of the genus, the spines of the first dorsal and anal fins are venomous (especially the latter) and capable of inflicting painful stings. Adults feed primarily on other fishes. Caught with drift set nets, gill nets, seines, and on hook-and-line.

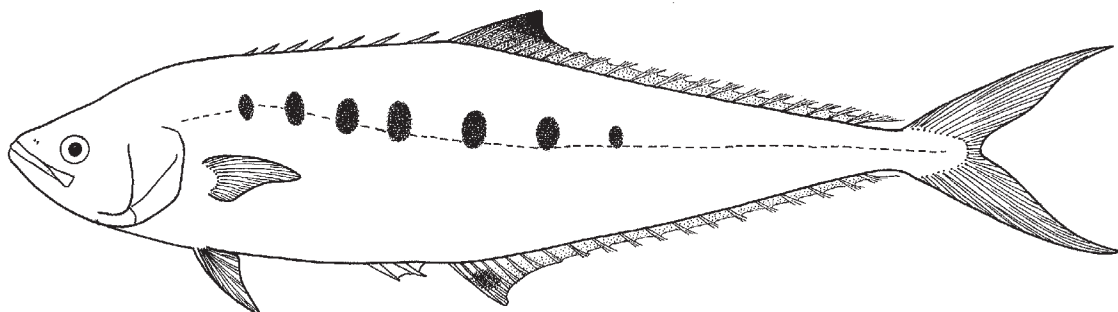
Distribution: In the Indian Ocean known only from Sri Lanka, but probably also occurs on the west coast of India. Elsewhere known from the east coast of India, Andaman Islands, Gulf of Thailand, Malaysia, Indonesia, the Philippines, Australia, and the Solomon Islands.



Scomberoides tol (Cuvier, 1832)

Frequent synonyms / misidentifications: *Chorinemus tol* Cuvier, 1832 / None.

FAO names: En - Needlescaled queenfish; Fr - Sauteur leurre; Sp - Jurel saltarín.



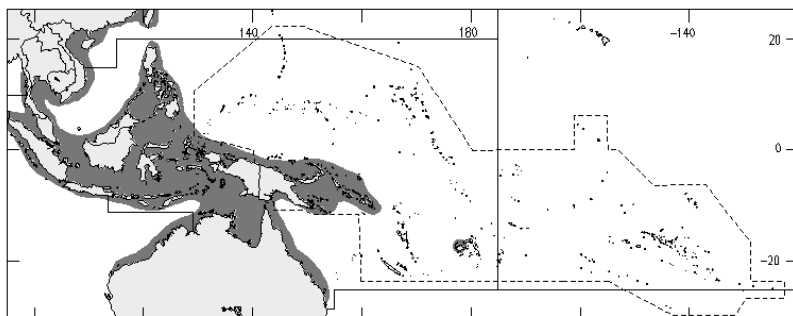
45 cm fork length

Diagnostic characters: Body oblong to elliptical, strongly compressed; dorsal and ventral profiles nearly equal, snout pointed with dorsal profile of head and nape slightly concave. Upper lip joined to snout at midline by a bridge of skin (frenum), except crossed by a shallow groove in very young. **Upper jaw extends to posterior margin of pupil in adults.** Lower jaw with 2 rows of teeth separated by a shallow groove, adults with teeth in inner row equal in size to those in outer row. **Gill rakers (excluding rudiments)** 4 to 7 on upper limb and 17 to 20 on lower limb of first gill arch (**total 21 to 26**). Two separate dorsal fins, the first with VI or VII short spines, depressible into a shallow groove on dorsal midline, followed by I spine and 19 to 21 soft rays; anal fin with II detached spines followed by 18 to 20 soft rays; **posterior soft dorsal-and anal-fin rays consisting of semidetached finlets**, bases of anal and second dorsal fins about equal in length; height of second dorsal-fin lobe 7.7 to 11.2% of fork length in specimens larger than 15 cm fork length; pelvic fins about equal in length or shorter than pectoral fins. Lateral line only slightly irregular, weakly to moderately convex above pectoral fins becoming straight posteriorly. No scutes; **scales on midbody below lateral line partially embedded, slender and needle-like.** No caudal peduncle grooves. Vertebrae 10+6. **Colour:** in life, body bluish dorsally, white ventrally; **adults with 5 to 8 oval or vertically oblong black blotches, the first 4 or 5 of which intersect lateral line (blotches faint or absent in young); distal half of dorsal-fin lobe abruptly and heavily pigmented; anal-fin lobe usually immaculate, white in life.**

Size: Largest specimen examined 47 cm fork length.

Habitat, biology, and fisheries: Usually found in small schools near the surface in coastal waters. As is true of all members of the genus, the spines of the first dorsal and anal fins are venomous (especially the latter) and capable of inflicting painful stings. Feeds primarily on fishes; young use specialized juvenile dentition to aggressively remove scales and epidermal tissue from other fishes. Caught with drift set nets, gill nets, and seines.

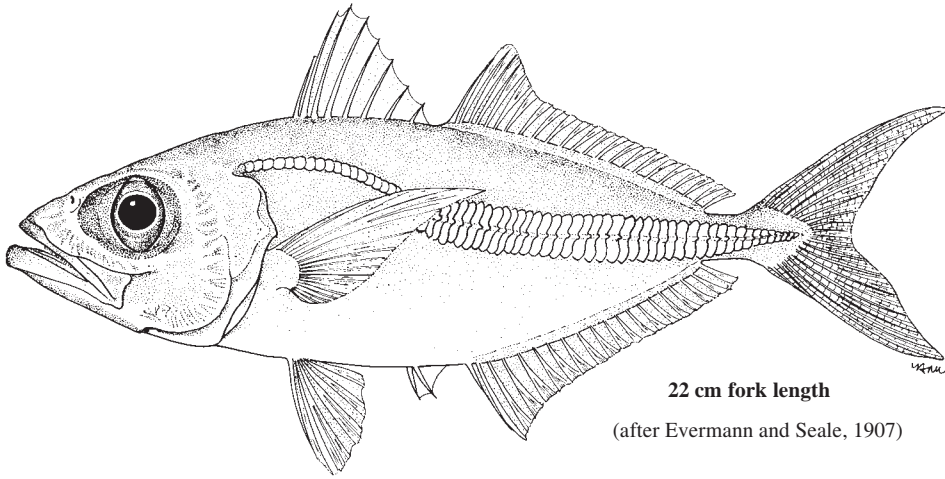
Distribution: Broadly distributed throughout most of the Indian and western Pacific oceans, from Japan to Australia, and eastward to Fiji.



***Selar boops* (Cuvier, 1833)**

Frequent synonyms / misidentifications: None / None.

FAO names: En - Oxeye scad; Fr - S elar oeil de boeuf; Sp - Chicharro ojo buey.

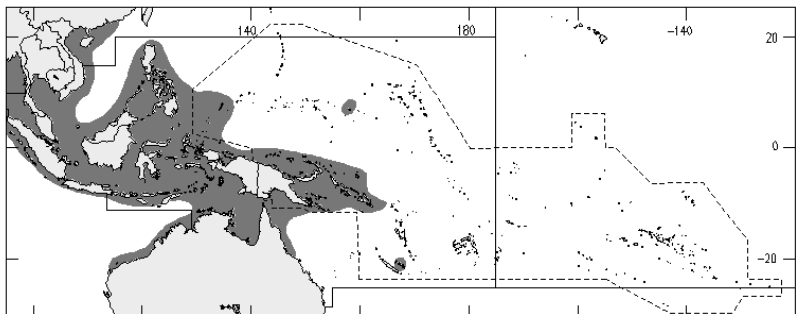


Diagnostic characters: Body elongate and moderately compressed, with lower profile slightly more convex than upper. **Eye very large, shorter than snout length and with a well developed adipose eyelid completely covering eye except for a vertical slit centred on pupil.** Upper jaw moderately broad posteriorly and extending to below anterior margin of pupil. Teeth small and recurved, upper jaw with a narrow band, tapering posteriorly; lower jaw with an irregular single row. Gill rakers (including rudiments) 8 to 12 on upper limb and 25 to 29 on lower limb of first gill arch. **Shoulder girdle (cleithrum) margin with a deep furrow, a large papilla immediately above it and a smaller papilla near upper edge.** Dorsal fin with VIII spines, followed by I spine and 23 to 25 soft rays; anal fin with II spines separated from rest of fin, followed by I spine and 19 to 21 soft rays; **dorsal and anal fins without a detached terminal finlet;** pectoral fins shorter than head. Scales moderately small and cycloid (smooth to touch), covering body except for a small area behind pectoral fins, **scutes relatively large,** maximum height contained 1.3 to 1.6 times in eye diameter; **chord of the curved part of lateral line contained 2.1 to 3 times in straight part** (to caudal-fin base); **scales in curved part of lateral line 21 to 24;** 0 to 4 scutes in curved part; straight part with no anterior scales and 37 to 46 scutes; total scales and scutes in lateral line (excluding scales on caudal fin) 62 to 69. Vertebrae 10+14. **Colour:** in fresh fish, upper third of body and top of head bluish green to green; lower two-thirds of body and head silvery or whitish; **a narrow, yellowish stripe may be present from edge of opercle to upper part of caudal peduncle;** blackish areas above and below pupil with a reddish area sometimes present; a small elongated, blackish opercular spot on edge near upper margin; first dorsal fin dusky on margins with rest of fin clear; second dorsal, anal, and caudal fins pale green with dusky margins; pectoral fins pale green to hyaline; pelvic fins white.

Size: Maximum length reported 26 cm total length; attains at least 24 cm fork length.

Habitat, biology, and fisheries: Co-occurs with *Selar crumenophthalmus* on continental shelf waters of northern Australia where common between 20 and 100 m; also one confirmed record from off Portugal where trawled in 366 to 439 m. Feeds primarily on planktonic or benthic invertebrates, including shrimps, crabs, and foraminifers; also on fishes. Caught on hook-and-line, with beach seines, trawls, purse seines, and traps.

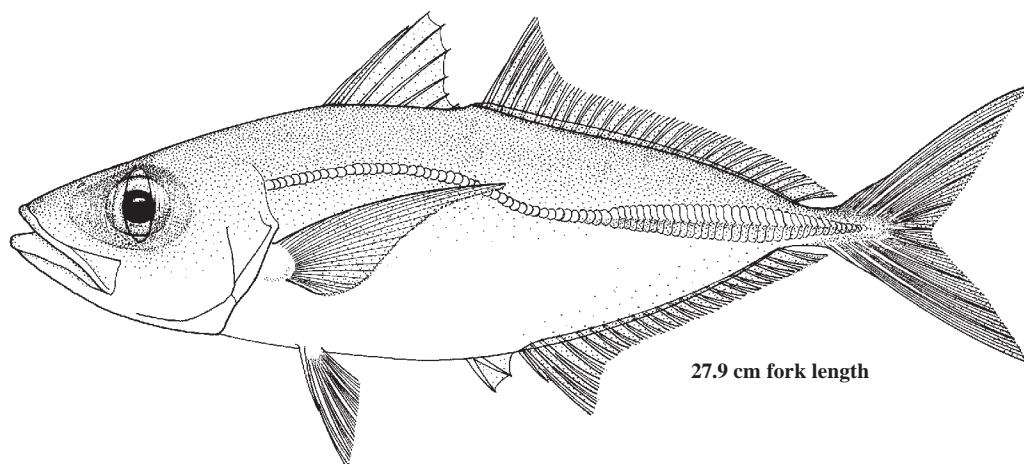
Distribution: Restricted to the Indo-West Pacific except for one confirmed record from Sezimbra Bay, Portugal; elsewhere recorded from the Philippines, Palau, Indonesia, and northern Australia.



Selar crumenophthalmus (Bloch, 1793)

Frequent synonyms / misidentifications: *Trachurops crumenophthalmus* (Bloch, 1793) / None.

FAO names: En - Bigeye scad; Fr - S lar coulisou; Sp - Chicharro oj n.

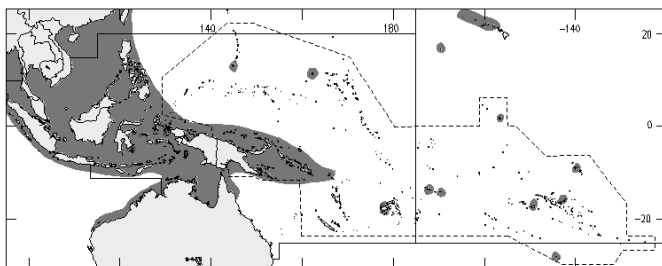


Diagnostic characters: Body elongate and moderately compressed, with lower profile slightly more convex than upper. **Eye very large, shorter than snout length and with a well-developed adipose eyelid completely covering eye except for a vertical slit centred on pupil.** Upper jaw moderately broad posteriorly and extending to below anterior margin of pupil. Teeth small and recurved, upper jaw with a narrow band, tapering posteriorly; lower jaw with an irregular single row. Gill rakers (including rudiments) 9 to 12 on upper limb and 27 to 31 on lower limb of first gill arch. **Shoulder girdle (cleithrum) margin with a deep furrow, a large papilla immediately above it and a smaller papilla near upper edge.** Dorsal fin with VIII spines, followed by I spine and 24 to 27 soft rays; anal fin with II spines separated from rest of fin, followed by I spine and 21 to 23 soft rays; **dorsal and anal fins without a detached terminal finlet;** pectoral fins shorter than head. Scales moderately small and cycloid (smooth to touch), covering body except for a small area behind pectoral fins, **scutes relatively small,** maximum height contained 2.1 to 2.9 times in eye diameter; **chord of the curved part of lateral line contained 0.7 to 1.2 times in straight part** (to caudal-fin base); **scales in curved part of lateral line 48 to 56;** 0 to 4 scutes in curved part; straight part with 0 to 11 anterior scales and 29 to 42 scutes; total scales and scutes in lateral line (excluding scales on caudal fin) 84 to 94. Vertebrae 10+14. **Colour:** in fresh fish, upper third of body and top of head metallic blue or bluish green; tip of snout dusky or blackish; lower two-thirds of body and head silvery or whitish; **a narrow, yellowish stripe may be present from edge of opercle to upper part of caudal peduncle;** blackish areas above and below pupil with a reddish area sometimes present; a small elongated, blackish opercular spot on edge near upper margin; first dorsal fin dusky on margins with rest of fin clear; second dorsal fin dusky over most of fin with dorsal lobe blackish; anal fin clear or slightly dusky along base; caudal fin dusky with tip of upper lobe dark; pectoral fins clear or slightly dusky near base and with a yellowish tint sometimes present; pelvic fins clear.

Size: Maximum length not well established, but unverified report of 60 cm standard length; documented record of 27 cm standard length; commonly to about 24 cm fork length and 0.23 kg.

Habitat, biology, and fisheries: Found in small to large schools, mainly inshore or in shallow water; at times over shallow reefs and in turbid water, but ranging in depth to about 170 m. Feeds primarily on planktonic or benthic invertebrates, including shrimps, crabs, and foraminifers; also on fishes. Caught on hook-and-line, with beach seines, trawls, purse seines, and traps.

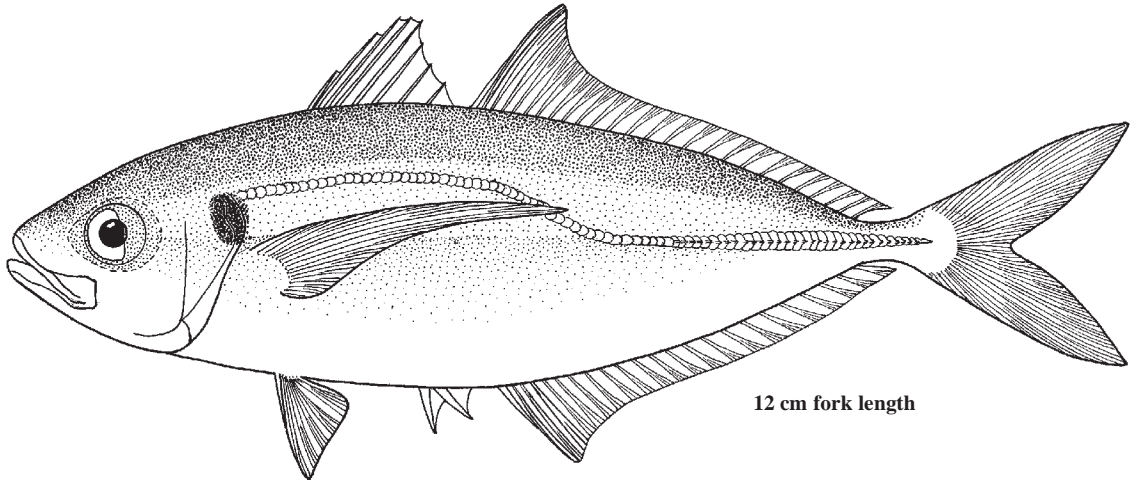
Distribution: Worldwide in tropical and subtropical marine waters; broadly distributed throughout the Indo-West Pacific from Japan to Australia and eastward to Hawaii where an important commercial species.



***Selaroides leptolepis* (Cuvier, 1833)**

Frequent synonyms / misidentifications: None / None.

FAO names: **En** - Yellowstripe scad; **Fr** - Sélar à bande dorée; **Sp** - Chicharro banda dorada.

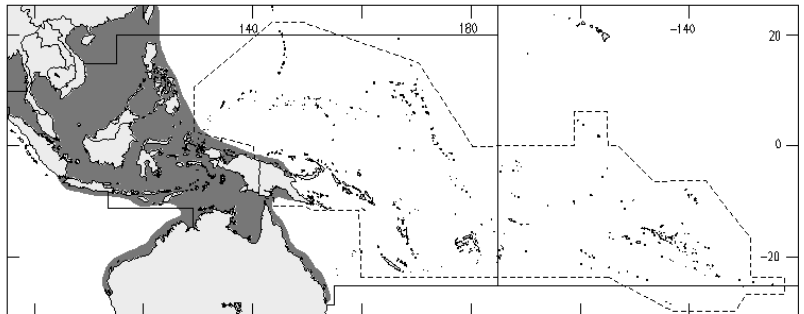


Diagnostic characters: Body elongate, oblong and compressed; dorsal and ventral profiles equally convex. Eye diameter about equal to slightly smaller than snout length, with **adipose eyelid moderately developed on posterior half of eye**. **Upper jaw strongly protractile with posterior end of jaw concave above, concave and produced below**. Upper jaw without teeth; lower jaw with a series of minute teeth. Gill rakers (including rudiments) 10 to 14 on upper limb and 27 to 32 on lower limb of first gill arch (total 40 to 46). **Shoulder girdle (cleithrum) margin smooth, without papillae**. Two separate dorsal fins, the first with VIII spines, the second with I spine and 24 to 26 soft rays; anal fin with II detached spines followed by I spine and 21 to 23 soft rays; spinous dorsal fin moderately high, longest spine height about equal length of soft dorsal-fin lobe. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from tenth to twelfth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.6 to 0.8 times in straight part; straight part of lateral line with 13 to 25 scales followed by 24 to 29 relatively small scutes. Breast completely scaly. Vertebrae 10+14. **Colour:** in life, **metallic blue above, silvery white below, with a broad yellow stripe from upper margin of eye to caudal peduncle; prominent black opercular spot encroaching onto shoulder**; dorsal, anal, and caudal fins pale to dusky yellow; pelvic fins white.

Size: A small species, largest specimens examined 18.5 cm fork length.

Habitat, biology, and fisheries: Occurs in large demersal schools over soft bottom habitats at depths shallower than 50 m. Females attain sexual maturity by about 11 cm fork length. Ostracods, gastropods, and euphausiids are common prey but it also feeds on small fishes. Reported to feed at night. Caught with seines and bottom trawls; also with traps and gill nets.

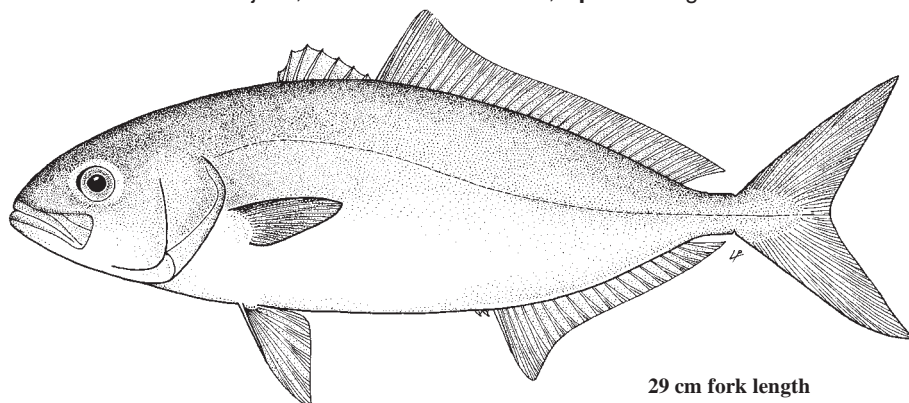
Distribution: In the Indian Ocean confined to coastal waters from the Persian Gulf to the Bay of Bengal; elsewhere in the Indo-West Pacific known from the Gulf of Thailand, Okinawa, Japan, the Philippines, Indonesia, and Australia.



Seriola dumerili (Risso, 1810)

Frequent synonyms / misidentifications: Australia: *Seriola simplex* Ramsey and Ogilby, 1886; Japan: *S. purpurescens* Temminck and Schlegel, 1844; Indonesia: *S. tapeinometapon* Bleeker, 1853 / None.

FAO names: En - Greater amberjack; Fr - Sériele couronnée; Sp - Medregal coronado.

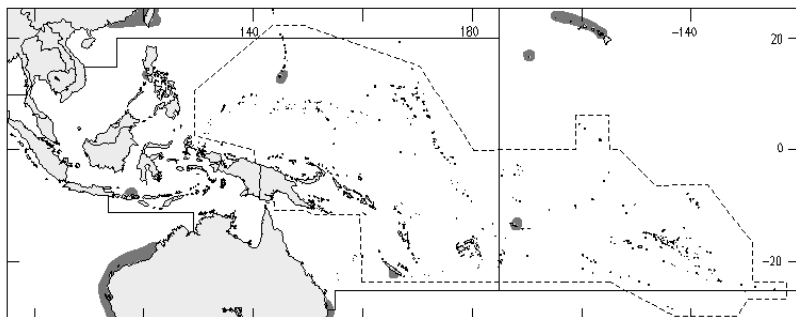


Diagnostic characters: Body elongate, moderately shallow and slightly compressed, with upper profile slightly more convex than lower. **Upper jaw very broad posteriorly (with very broad supramaxilla), and extending to below posterior margin of pupil.** Teeth minute, in a broad band in both jaws. **Gill rakers (excluding rudiments) decreasing in number with growth, 5 or 6 on upper limb, 15 or 16 on lower limb, and 20 to 24 total on first gill arch at sizes 2 to 7 cm fork length; in specimens larger than about 20 cm fork length, total gill rakers 11 to 19.** **Dorsal fin with VII spines (first spine minute or missing in large fish), followed by I spine and 29 to 35 soft rays; anal fin with II detached spines (these spines reduced or completely embedded in large fish), followed by I spine and 18 to 22 soft rays;** in adults, length of dorsal-fin lobe about equal to, or slightly longer than, pectoral fins and 13 to 18% of fork length; anal-fin base contained 1.4 to 1.7 times in second dorsal-fin base; pelvic fins longer than pectoral fins. No scutes; **caudal peduncle with dorsal and ventral grooves present.** First pterygiophore of anal fin moderately curved in specimens larger than about 10 cm fork length. Vertebrae 10+14. **Colour:** bluish grey or olivaceous above, sides and belly silvery white, sometimes brownish or with a pinkish tinge; usually a darker nuchal bar through eye to dorsal-fin origin; often an amber stripe from eye along middle of body; caudal fin dark or dusky with a lighter narrow posterior margin, extreme tip of lower caudal-fin lobe sometimes light or white; small juveniles (2 to 17 cm fork length) with a prominent dark nuchal bar extending from eye to dorsal-fin origin; 5 dark body bars, becoming irregularly split vertically, that do not extend into the membranes of the second dorsal and anal fins, and a sixth bar at end of caudal peduncle; **papillae surrounding broad bands of teeth in both jaws not engorged with blood, appearance of teeth white.**

Size: Maximum total length 188 cm; weight to 80.6 kg. Verified angling record of 150 cm fork length and 67.6 kg; commonly to 100 cm fork length and 15 kg.

Habitat, biology, and fisheries: Occurs both epibenthically and pelagically. Smaller fish (less than 3 kg) may be taken in shallow water (less than 10 m). Larger fish usually occur in 18 to 72 m and have been taken as deep as 360 m; they are often found on reefs or at deep offshore holes or drop-offs, usually in small or moderate-sized schools, but may be solitary. In some areas large individuals have reported to cause cases of ciguatera when eaten. Small juveniles associate with floating plants or debris in oceanic and offshore neritic waters. Known to feed primarily on fishes and also invertebrates, and to take live, dead, and artificial bait. Caught with pelagic and bottom trawls, as well as on hook-and-line.

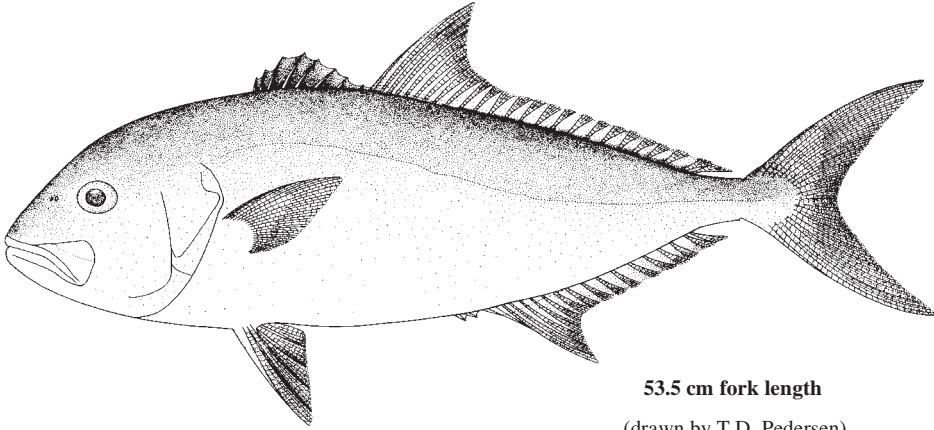
Distribution: In the Indo-West Pacific known from Japan, Australia, Johnston Island, and Hawaii. Also known from the Indian Ocean, both sides of the Atlantic Ocean, and the Mediterranean Sea; absent from the eastern Pacific Ocean.



***Seriola hippos* Günther, 1876**

Frequent synonyms / misidentifications: None / None.

FAO names: En - Samson fish.



53.5 cm fork length

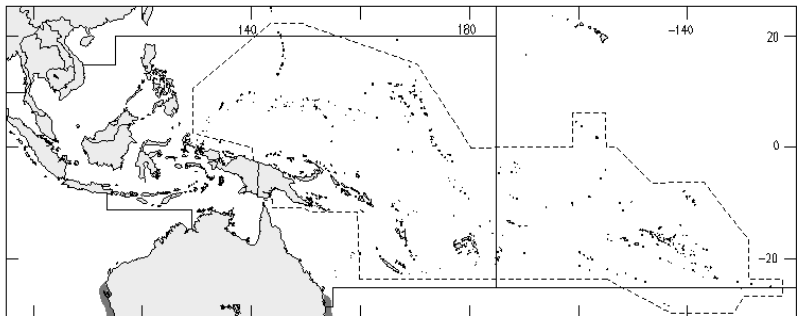
(drawn by T.D. Pedersen)

Diagnostic characters: Body elongate, moderately shallow and slightly compressed, with upper profile slightly more convex than lower; juveniles with very blunt head, becoming less pronounced with age. **Upper jaw very broad posteriorly (with very broad supramaxilla), extending to below posterior margin of pupil.** Teeth minute, in a broad band in both jaws. **Gill rakers (excluding rudiments) decreasing in number with growth,** 2 to 5 on upper limb, 9 to 12 on lower limb, and 11 to 17 total on first gill arch at sizes 2 to 7 cm fork length; **in specimens larger than about 20 cm fork length, total gill rakers (excluding rudiments) 10 to 12.** **Dorsal fin with VIII spines** (first spine minute or missing in large fish), followed by I spine and **22 to 25 soft rays**; **anal fin with II detached spines** (these spines reduced or completely embedded in large fish), followed by I spine and **15 to 17 soft rays**; in adults, length of dorsal-fin lobe about equal to, or slightly longer than, pectoral fins and 14 to 18% of fork length; anal-fin base contained 1.6 to 1.7 times in second dorsal-fin base; pelvic fins longer than pectoral fins. No scutes; **caudal peduncle with dorsal and ventral grooves present.** First pterygiophore of anal fin moderately curved in specimens larger than about 10 cm fork length. Vertebrae 10+14. **Colour:** in fresh adults, generally silvery to bluish green above, sides and belly silvery white, on death changing to brownish, paler below; an amber stripe from eye along middle of body may be present or absent; spinous and second dorsal fins dusky to dark, and anal and caudal fins generally dark; juveniles with 5 broad, dark bands on body and a dark blotch on head above and behind eye; **papillae surrounding broad bands of teeth in both jaws often engorged with blood giving teeth a red appearance.**

Size: Maximum total length 173 cm; weight to 53 kg.

Habitat, biology, and fisheries: Occurs in small schools or pairs around rocky reefs or wrecks in depths to 70 m. Feeds primarily on other fishes. It is an especially inquisitive fish and will frequently follow another hooked fish to the side of the boat. An excellent sport fish mainly caught by anglers using handlines or strong rods.

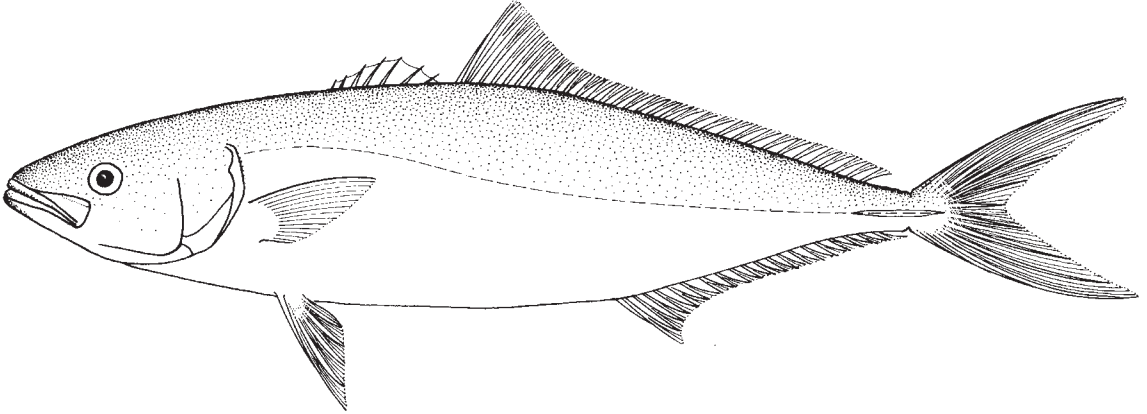
Distribution: A temperate species known from the southern half of Australia, Shark Bay, Western Australia (25°21'S) to Moreton Bay, Queensland (27°39'S), Norfolk Island, and northern New Zealand.



Seriola lalandi Valenciennes, 1833

Frequent synonyms / misidentifications: South Africa: *Seriola pappei* (Castelnau, 1861) and *S. banisteri* Smith, 1959; Japan: *S. auerovittata* Temminck and Schlegel, 1844; Australia: *S. grandis* Castelnau, 1872; eastern Pacific: *S. dorsalis* (Gill, 1864) / None.

FAO names: **En** - Yellowtail amberjack; **Fr** - Sériole chicard; **Sp** - Medregal rabo amarillo.

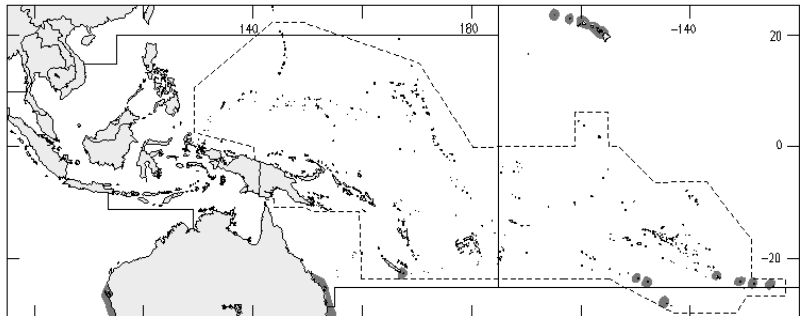


Diagnostic characters: Body elongate, moderately slender and slightly compressed, with upper and lower profiles similar. **Upper jaw moderately slender posteriorly (with moderately slender supramaxilla), extending to below about anterior margin of pupil.** Teeth minute, in a broad band in both jaws. Gill rakers (excluding rudiments) 7 to 10 on upper limb and 15 to 20 on lower limb of first gill arch (total 22 to 29). Dorsal fin with VII spines (first spine minute or missing in large fish), followed by I spine and 30 to 35 soft rays; anal fin with II detached spines (these spines reduced or completely embedded in large fish), followed by I spine and 19 to 22 soft rays; **in adults, length of dorsal-fin lobe subequal or slightly shorter than pectoral fins** and 11 to 13.4% of fork length, anal-fin base contained 1.6 to 1.8 times in second dorsal-fin base; pelvic fins longer than pectoral fins. No scutes; **caudal peduncle with a slight lateral fleshy keel on each side**, and dorsal and ventral grooves present. First pterygiophore of anal fin moderately curved in specimens larger than about 10 cm fork length. **Vertebrae 11+14.** **Colour:** usually blue to olivaceous above, sides and belly silver to white, sometimes with a rosy tinge; a narrow bronze stripe from snout extending through eye and along midside of body, darker on head, becoming yellow posteriorly; spinous dorsal fin dusky; second dorsal fin and anal fin dusky olive basally, yellow distally; **caudal fin olivaceous yellow, pectoral and pelvic fins yellowish;** juveniles (to about 20 cm fork length) with many irregular dusky body bars, slightly wider than paler interspaces that do not extend into the membranes of the second dorsal and anal fins.

Size: Maximum size not well established but known to attain at least 150 cm fork length and 50 kg. If *Seriola banisteri* is conspecific, as believed, then the maximum verified size is 193 cm total length and 58.4 kg.

Habitat, biology, and fisheries: Congregates in large offshore shoals in depths of 50 m, but occasional fish will venture into surf zones in pursuit of prey. Feeds primarily on small fishes and squids. An excellent sport fish. Caught with seines, bottom trawls, and on hook-and-line.

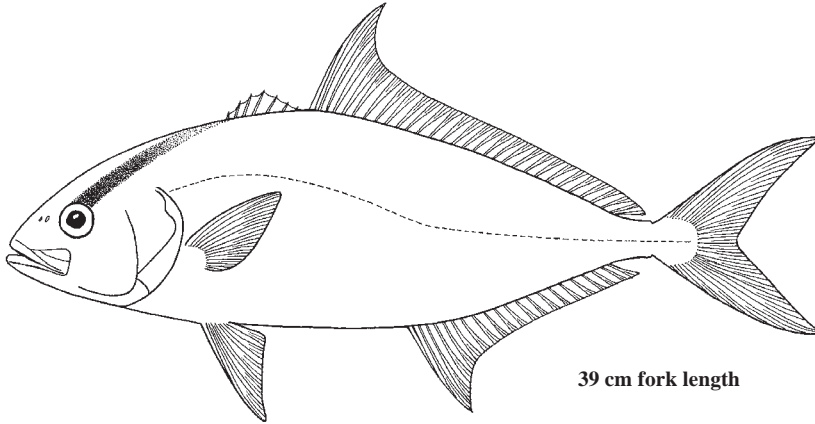
Distribution: A circumglobal species restricted to subtropical waters, and consisting of a series of apparently disjunct populations, many of which until recently were considered to represent distinct species. In the Indo-Pacific known from South Africa, Walters Shoals, Amsterdam Island, Japan, Australia, New Zealand, New Caledonia, Rapa, Pitcairn Island, Easter Island, and Hawaii.



Seriola rivoliana Valenciennes, 1833

Frequent synonyms / misidentifications: South Africa: *Seriola songoro* Smith, 1959; Mozambique: *S. bovinoculata* Smith, 1959; eastern Pacific: *S. colburni* Evermann and Clark, 1928; western Atlantic: *S. falcata* Cuvier, 1833 / None.

FAO names: En - Almaco jack; Fr - Sériole limon; Sp - Medregal limón.



39 cm fork length

Diagnostic characters: Body elongate, moderately deep and slightly compressed, with upper profile more convex than lower. **Upper jaw very broad posteriorly (with very broad supramaxilla), extending to below posterior midpoint of pupil.** Teeth minute in a broad band in both jaws. **Gill rakers (excluding rudiments) decreasing slightly in number with growth, 6 to 9 on upper limb, 18 to 20 on lower limb, and 24 to 29 total on first gill arch at sizes of 2 to 7 cm fork length; in specimens larger than about 20 cm fork length, total gill rakers 22 to 26.** Dorsal fin with VII spines (first spine minute or missing in large fish), followed by I spine and 27 to 33 soft rays; anal fin with II detached spines (these spines reduced or completely embedded in large fish), followed by I spine and 18 to 22 soft rays; in adults, **length of dorsal-fin lobe about 1.3 to 1.6 times longer than pectoral fins and 18 to 22% of fork length;** anal-fin base contained 1.5 to 1.6 times in second dorsal-fin base; pelvic fins longer than pectoral fins. No scutes; **caudal peduncle with dorsal and ventral grooves present. First pterygiophore of anal fin straight in specimens larger than about 10 cm fork length.** Vertebrae 10+14. **Colour:** brown or olivaceous to bluish green above, sides and belly lighter, sometimes with brassy or lavender reflections; the nuchal bar often persistent in adults, and a faint amber lateral stripe extending backward from eye frequently present; caudal fin dark with a lighter narrow posterior margin; juveniles (from 2 to 18 cm fork length) with a dark nuchal bar extending from the eye to the dorsal-fin origin; 6 dark body bars, each with a light narrow irregular area through their centre vertically, that do not extend into the membranes of the second dorsal and anal fins, and a seventh bar at the end of caudal peduncle; tip of anal fin white; pectoral, pelvic, and caudal fins dusky.

Size: Maximum weight 24 kg, data on maximum length not available. Verified angling record of 103 cm total length and 15.7 kg; commonly to 65 cm fork length and 4.6 kg.

Habitat, biology, and fisheries: Adults are pelagic and epibenthic, possibly more oceanic than other *Seriola* species, and rarely caught in inshore waters. Juveniles are pelagic and occur offshore, under floating plants and debris when small. Known to feed on fishes, to strike trolled artificial bait and bottom-fished dead bait. Caught mainly with seines, bottom trawls, and on hook-and-line.

Distribution: Circumtropical in marine waters, entering temperate waters in some areas. Broadly distributed in the Indian Ocean, except unrecorded from the Persian Gulf; elsewhere in the Indo-West Pacific from southern Japan, Australia, and eastward to Hawaii.

