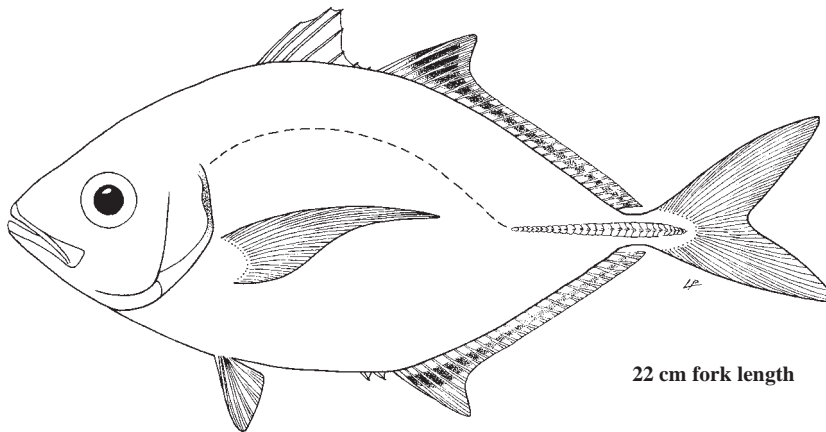


Carangoides equula (Temminck and Schlegel, 1844)

Frequent synonyms / misidentifications: *Caranx equula* Temminck and Schlegel, 1844; *Kaiwarinus equula* (Temminck and Schlegel, 1844); *Carangoides acutus* Kotthaus, 1974; ? *Caranx dasson* Jordan and Snyder, 1907 (see **Remarks**) / None.

FAO names: **En** - Whitefin trevally; **Fr** - Carangue aile blanche; **Sp** - Jurel aliblanco.



Diagnostic characters: Body compressed, almost rhomboidal; dorsal and ventral profiles about equally convex, dorsal profile of snout and nape almost straight. Eye diameter slightly smaller than snout length. Both jaws with narrow bands of small teeth, the outer teeth slightly larger; **vomerine tooth patch anchor-shaped, with a distinct posteromedian extension. Gill rakers (including rudiments) 7 to 10 on upper limb and 18 to 23 on lower limb of first gill arch (total 27 to 32).** Two separate dorsal fins, the first with VII spines, the second with I spine and 23 to 25 soft rays; anal fin with II detached spines followed by I spine and 21 to 24 soft rays; **spinous dorsal fin moderately high, longest spine height about equal to length of soft dorsal-fin lobe.** Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between twelfth and fifteenth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.5 to 0.8 times in straight part; straight part of lateral line with 0 to 6 scales followed by 22 to 32 scutes. **Breast completely scaly or with a very small naked area anteroventrally.** Vertebrae 10+14. **Colour:** in life, head and body bluish grey to green dorsally, silvery white below; juveniles with 5 to 7 dark bands on sides; **second dorsal and anal fins with a submarginal brown to blackish band, white distally;** caudal fin dusky yellow; pectoral and pelvic fins pale yellowish to white.

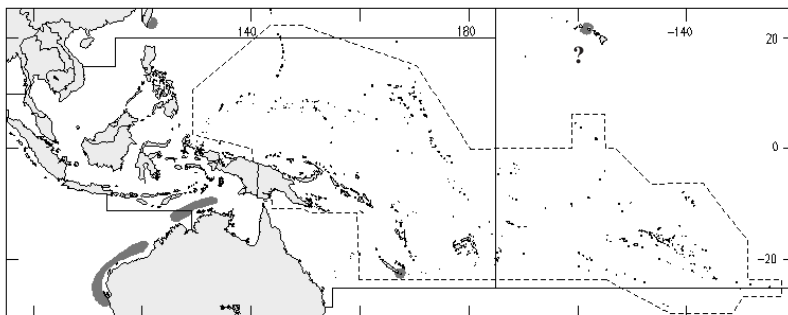
Size: Largest specimen examined 34.5 cm fork length, 37.5 cm total length.

Habitat, biology, and fisheries: In northern Australian waters largely restricted to shelf slope habitats in depths of 100 to 200 m. Feeds on a variety of fishes, crustaceans, and cephalopods. Taken primarily with bottom trawls.

Distribution: In the Indian Ocean known only from South Africa, off Somalia, and the Gulf of Oman; elsewhere in the Indo-West Pacific definitely known from Okinawa, southern Japan, and Australia. If *Carangoides dasson* is conspecific (see **Remarks**), the species also occurs at Hawaii and Easter Island.

Remarks: Specimens from Hawaii and Easter Island (for which the name *C. dasson* is available) have more slender bodies and larger eyes than do specimens from other localities but share all the diagnostic features of *C. equula*.

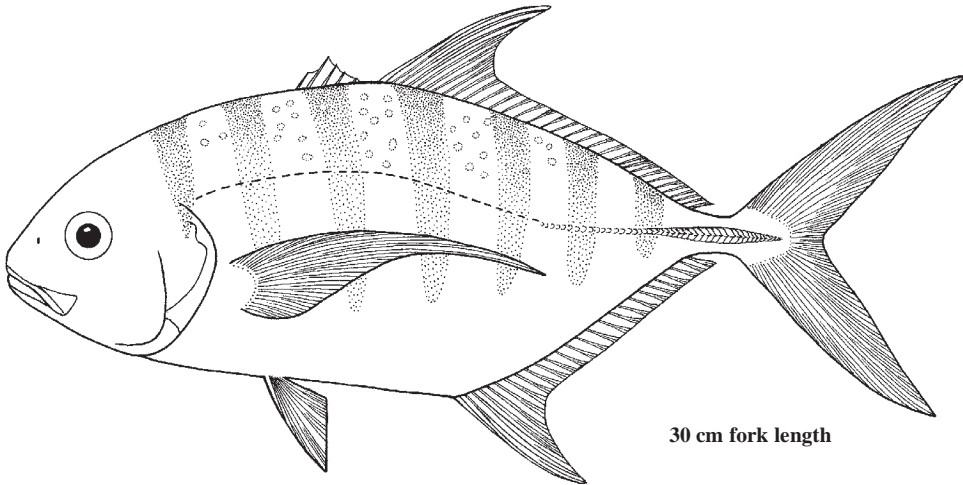
Additional study is required to determine if *C. equula* and *C. dasson* represent 2 closely related allopatric species.



Carangoides ferdau (Forsskål, 1775)

Frequent synonyms / misidentifications: *Caranx ferdau* (Forsskål, 1775); *Carangoides hemigymnostethus* Bleeker, 1851; *Caranx gilberti* Jordan and Seale, 1906 / None.

FAO names: En - Blue trevally; Fr - Carangue tachetée; Sp - Jurel manchado.

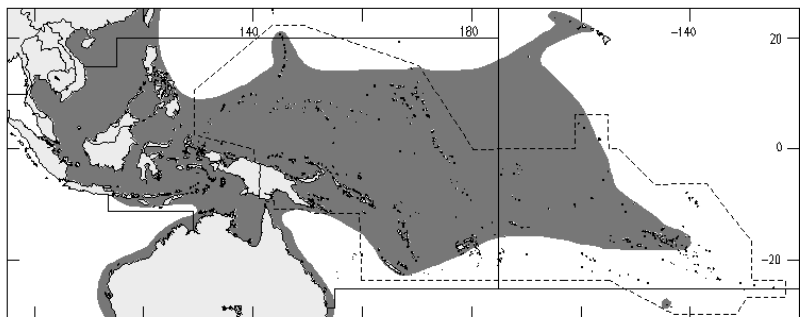


Diagnostic characters: Body oblong and compressed; dorsal profile more convex than ventral profile; **snout bluntly rounded**. Upper jaw highly protractile; **lips of large adults not noticeably fleshy**, both jaws with narrow bands of villiform teeth, becoming obsolescent with age; vomerine tooth patch ovate, without a posteromedian extension. Gill rakers (including rudiments) 7 to 10 on upper limb and 17 to 20 on lower limb of first gill arch (total 24 to 29). **Two separate dorsal fins**, the first with VIII spines, **the second with I spine and 26 to 34 soft rays**; anal fin with II detached spines followed by I spine and 21 to 26 soft rays; lobe of second dorsal fin falcate, especially in small adults, but usually shorter than head length. Lateral line anteriorly with a very slight arch, with junction of curved and straight parts below vertical from between fifteenth to twentieth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.6 to 0.85 times in straight part; straight part of lateral line with 10 to 30 scales followed by 21 to 37 small scutes. Breast naked ventrally to origin of pelvic fins; laterally, naked area of breast separated from naked base of pectoral fins by a moderate band of scales. Vertebrae 10+14. **Colour:** adults typically with 5 or 6 dusky bands on sides that usually persist in market specimens; in life, head and body generally silvery, blue-green above paler below; **numerous, inconspicuous golden spots often present on sides mainly above level of pectoral fins**; leading edge and tips of dorsal- and anal-fin lobes dark blue to dusky, rest of fin pale yellow-green except distal margin of anal fin whitish. Caudal fin yellow-green with trailing edge and lobe tips dark; pelvic fins hyaline to whitish; caudal fin yellow-green with trailing edge and lobe tips dark; pelvic fins hyaline to whitish.

Size: Largest specimen examined 47 cm fork length and 53 cm total length; reported to attain 70 cm total length. South African spearfishing record 8 kg.

Habitat, biology, and fisheries: Reported to prefer coastal waters adjacent to sandy beaches but also found to depths of 60 m, often near reefs. Feeds primarily on prawns, crabs, and small fishes. Caught mainly on hook-and-line; also with gill nets and traps.

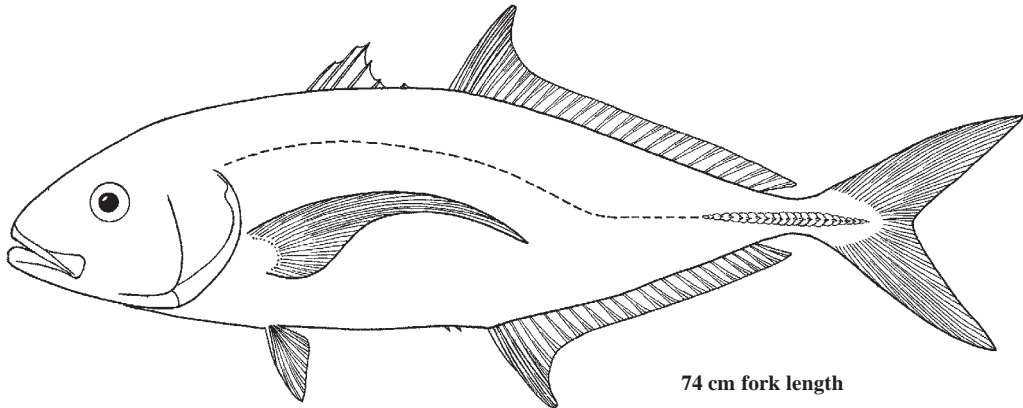
Distribution: Broadly distributed throughout the Indian Ocean, and western and Central Pacific ocean from southern Japan to Australia and eastward to Hawaii.



Carangoides fulvoguttatus (Forsskål, 1775)

Frequent synonyms / misidentifications: *Caranx fulvoguttatus* (Forsskål, 1775); *Turrum emburyi* Whitley, 1932 / *Carangoides gymnostethus* (Cuvier, 1833).

FAO names: **En** - Yellowspotted trevally; **Fr** - Carangue pailleeté; **Sp** - Jurel centellante.

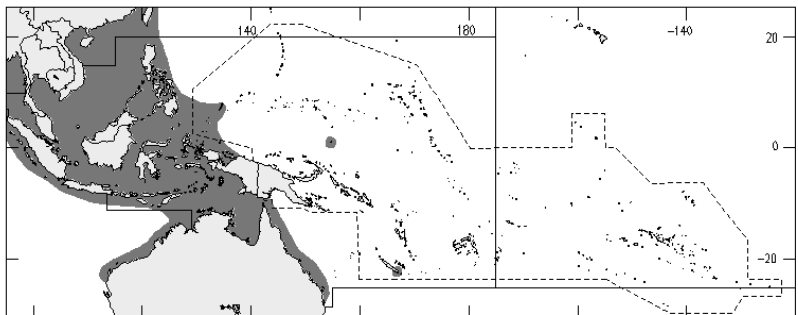


Diagnostic characters: Body subovate and compressed, becoming elongate-ovate and slightly subcylindrical with age; **profile of head and nape slightly angular becoming more steep with age. In adults mouth cleft distinctly below level of eye.** Eye diameter smaller than snout length. Both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch ovate, without a posteromedian extension. **Gill rakers (including rudiments)** 6 to 8 on upper limb and 17 to 21 on lower limb of first gill arch (**total 22 to 27**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 25 to 30 soft rays; **anal fin with II detached spines followed by I spine and 21 to 26 (rarely 25 or 26 soft rays);** lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a low regular arch, with junction of curved and straight parts below vertical from between thirteenth to sixteenth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.7 to 0.95 times in straight part; straight part of lateral line with 18 to 27 scales followed by 15 to 21 small scutes. **Breast naked ventrally to distinctly behind origin of pelvic fins; breast squamation variable laterally, either separated from naked base of pectoral fins by a moderate to very narrow band of scales or naked area of breast uninterrupted to naked base of pectoral fins** (only 23 of 47 specimens examined for this character had the uninterrupted pattern of breast squamation). **Vertebrae 10+14.** **Colour:** adults iridescent blue-green dorsally, shading to silvery on sides, with **many small golden or brassy spots mainly above midline; large individuals often with 3 irregular black blotches (sometimes very indistinct or absent) on flanks, the first below dorsal-fin lobe, the second at inflection point of lateral line, and the third slightly anterior to midpoint of straight part of lateral line;** opercular spot dusky and inconspicuous; dorsal and anal fins dusky yellow, the latter with leading edge and distal margin whitish blue; caudal fin olive-yellow with upper leading edge and trailing edges dusky; pelvic fins whitish blue.

Size: Largest specimen examined 80 cm fork length, 87.5 cm total length, and 6.4 kg. South African spearfishing record 10 kg. Reliably reported to attain 100 cm fork length.

Habitat, biology, and fisheries: Prefers rocky and coral reefs, but is occasionally found over offshore banks in depths to 100 m. Feeds mainly on small invertebrates and fishes. Caught mainly on hook-and-line and by spearing. Also with general types of artisanal gear, including gill nets and traps. A good sportsfish.

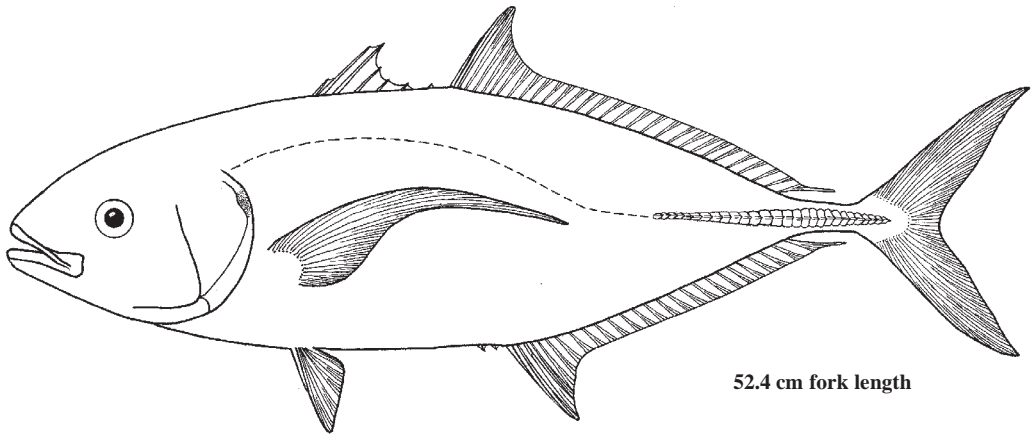
Distribution: Broadly distributed through the Indian and western Pacific oceans, including Okinawa, Palau, and Australia.



***Carangoides gymnostethus* (Cuvier, 1833)**

Frequent synonyms / misidentifications: *Caranx gymnostethus* (Cuvier, 1833); *Carangoides gymnostethoides* Bleeker, 1851 / *Carangoides fulvoguttatus* (Forsskål, 1775).

FAO names: En - Bludger; Fr - Carangue balo; Sp - Jurel balo.

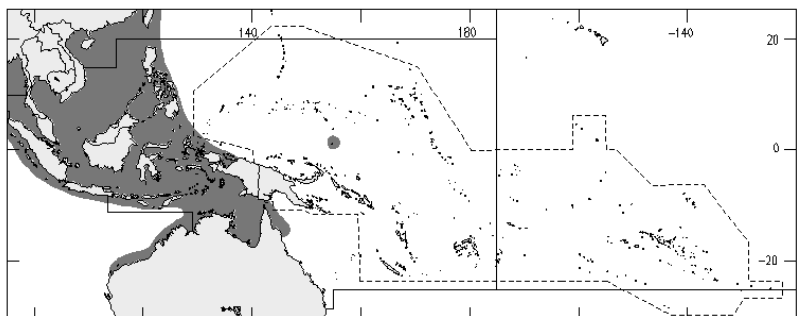


Diagnostic characters: Body ovate and compressed, becoming elongate-ovate and slightly subcylindrical with age; **profile of head and nape gently convex becoming less steep with age. In adults mouth cleft at level with lower margin of eye.** Diameter of eye smaller than snout length. Both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch ovate without a posteromedian extension. **Gill rakers (including rudiments)** 7 to 9 on upper limb and 19 to 22 on lower limb of first gill arch (**total 27 to 31**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 28 to 32 soft rays; **anal fin with II detached spines followed by I spine and 24 to 26 (usually 25) soft rays;** lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a low regular arch, with junction of curved and straight parts below vertical from between sixteenth to twentieth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.65 to 0.9 times in straight part; straight part of lateral line with 14 to 25 scales followed by 20 to 31 small scutes. Breast naked ventrally to distinctly behind origin of pelvic fins; **laterally, naked area of breast extends diagonally to naked base of pectoral fins, the naked area somewhat constricted below pectoral-fin base. Vertebrae 10+15. Colour:** in life, adults olive-green above, silvery white below with a few brown or golden spots sometimes present midlaterally; opercular spot dusky and inconspicuous; dorsal, anal, and caudal fins pale olive-green to greenish grey, leading edge and distal margin of anal fin white; pelvic and pectoral fins pale green to hyaline.

Size: Largest specimen examined 76.5 cm fork length, 83 cm total length, and 7.2 kg. South African spearfishing record 14.5 kg. Reported to attain at least 90 cm total length.

Habitat, biology, and fisheries: Most common over slightly deeper offshore reefs. Larger individuals tend to be solitary, while juveniles form small schools. Feeds mainly on small prey, including shrimps. Caught mainly on hook-and-line and with several types of artisanal gear, including gill nets and traps. A good sportsfish.

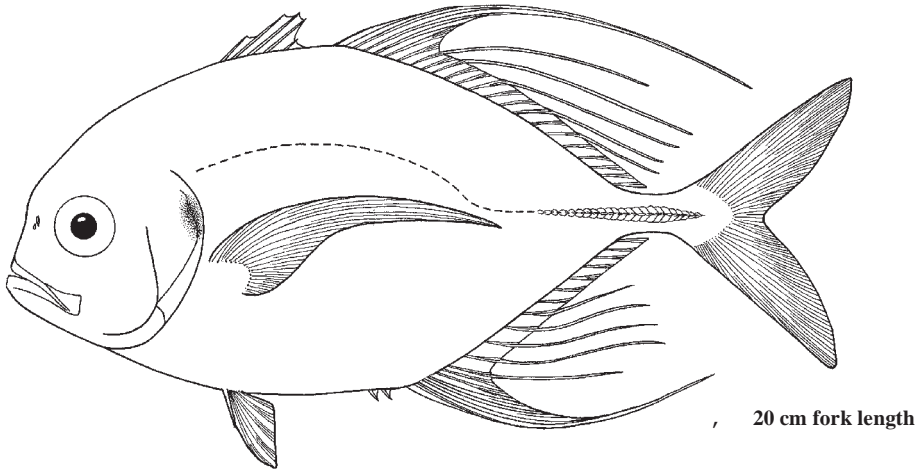
Distribution: Broadly distributed throughout the Indian and western Pacific oceans, including the Ryukyu Islands, Australia, and Kapingamangi Atoll.



***Carangoides hedlandensis* (Whitley, 1933)**

Frequent synonyms / misidentifications: *Caranx hedlandensis* (Whitley, 1933); *C. plumbeus* of authors / *Carangoides armatus* (Rüppell, 1830).

FAO names: **En** - Bumpnose trevally; **Fr** - Carangue nez bossu; **Sp** - Jurel hocicón.



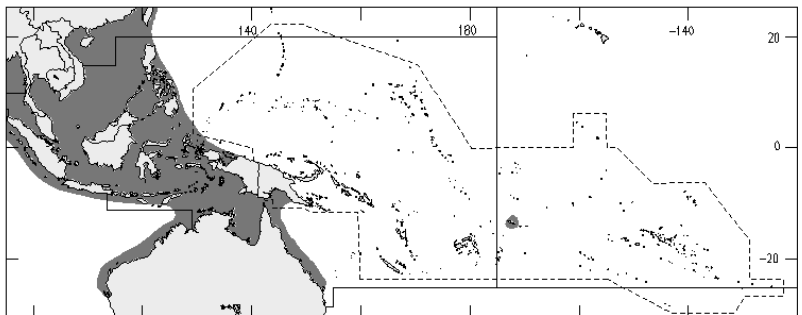
20 cm fork length

Diagnostic characters: Body strongly compressed and deep; **head profile extremely steep in adults, and with a distinct break in contour “bump” in the interorbital region which becomes more pronounced with increasing size.** Eye diameter about equal to or larger than snout length. Both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch wedge-shaped without a posteromedian extension. **Gill rakers (including rudiments)** 6 to 11 on upper limb, and 14 to 17 on lower limb of first gill arch (**total 20 to 27**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 20 to 22 soft rays; anal fin with II detached spines followed by I spine and 16 to 18 soft rays; **lobe of second dorsal fin elongate and filamentous, longer than head length; dorsal fin sexually dimorphic, in mature males (only) larger than 16.5 cm fork length, 3 to 8 of the central rays produced into filaments of greatly varying lengths.** Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between tenth and 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 0.9 times in straight part; straight part of lateral line with 17 to 29 weak scutes and 29 to 41 total elements (including anterior scales). **Breast naked ventrally to behind origin of pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fins.** Vertebrae 10+14. **Colour:** greenish blue above with dusky tinge, shading to silvery grey below; blackish blotch on upper margin of opercle; spinous dorsal fin, elongated dorsal-fin rays and edges of caudal fin blackish; filamentous lobe of anal fin either blackish or pale brownish, elongated rays always pale brownish; pelvic fins generally black in specimens smaller than 10 cm fork length, at larger than 15 cm fork length pelvic fins variable in colour from pale to dusky blackish.

Size: Largest specimen examined 28 cm fork length.

Habitat, biology, and fisheries: A coastal demersal species. Caught on hook-and-line, with bottom trawls and several types of artisanal gear.

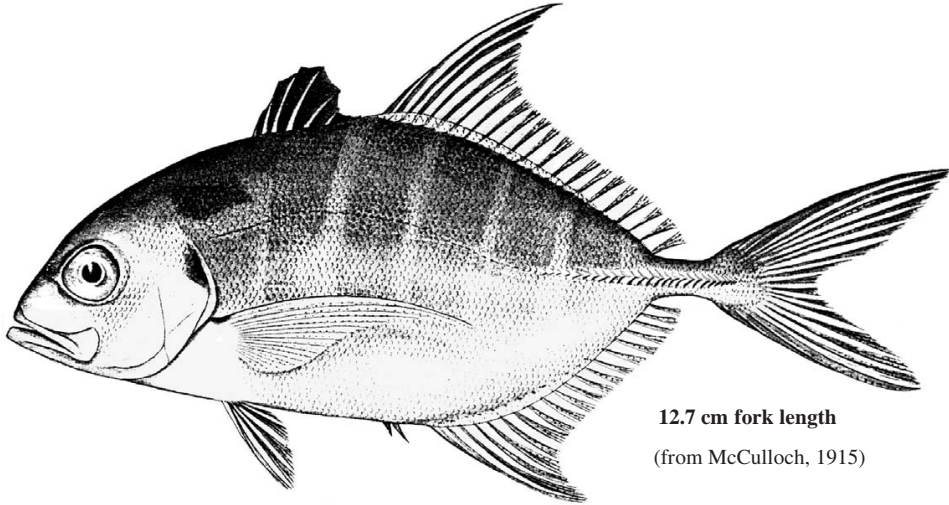
Distribution: In the western Indian Ocean, known from Durban (South Africa), the Seychelles, southern India and Sri Lanka; elsewhere reliably reported from the Bay of Bengal, Gulf of Thailand, Taiwan Province of China, Okinawa, Japan, the Philippines, Indonesia, Australia, New Guinea, and Samoa.



Carangoides humerosus (McCulloch, 1915)

Frequent synonyms / misidentifications: *Caranx humerosus* McCulloch, 1915 / None.

FAO names: En - Epaulet trevally.

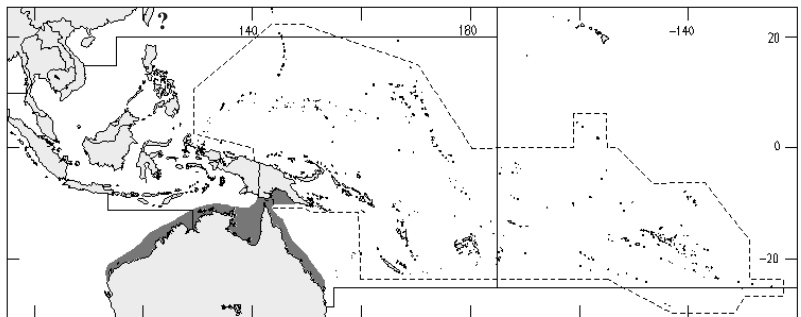


Diagnostic characters: Body oblong to elongate oval, compressed; dorsal profile more convex than ventral profile; head profile gently sloping to convex, in large males profile with a distinct bulge that is absent in females and juveniles of both sexes. Eye diameter larger than snout length. Both jaws with bands of small teeth, the bands widest anteriorly; upper jaw also with an irregular outer series of moderately large teeth (in large specimens outer row teeth may be enlarged in both jaws); vomerine tooth patch triangular, without a posteromedian extension. Gill rakers (including rudiments) 6 to 10 on upper limb and 16 to 20 on lower limb of first gill arch (total 23 to 30). **Two separate dorsal fins**, the first with VIII spines, **the second with I spine and 20 to 22 (rarely 19) soft rays**; anal fin with II detached spines followed by I spine and 17 to 19 soft rays; lobe of second dorsal fin falcate, slightly longer than to slightly shorter than head length, in adults shorter than the length of second dorsal-fin base. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between eleventh to thirteenth soft rays of second dorsal fin; chord of curved part of lateral line slightly longer than straight part of lateral line, contained 0.7 to 0.9 times in straight part; straight part of lateral line with 0 to 10 scales followed by 22 to 33 scutes. **Breast naked posteroventrally to well behind origin of pelvic fins; laterally, naked area of breast extends uninterrupted to naked base of pectoral fins.** Vertebrae 10+14. **Colour:** in life, head and body greenish above, silvery below, **small blue to black blotches on dorsum between bases of second dorsal-fin rays**; adults and juveniles often with 5 or 6 broad, dark bands separated by narrow interspaces, and a **large black spot on shoulder**; **axil of pectoral fins black**; opercular spot diffuse; distal parts of branchiostegal rays black in adult males, white in females and juveniles; **spinous dorsal fin black**, second dorsal fin, and caudal fins dusky; pectoral and pelvic fins white to hyaline.

Size: Relatively small species, largest specimen examined 25 cm fork length.

Habitat, biology, and fisheries: In Australia in depths shallower than 50 m. Feeds on a variety of demersal or bottom associated fishes, crustaceans, and cephalopods. Caught primarily with bottom trawls.

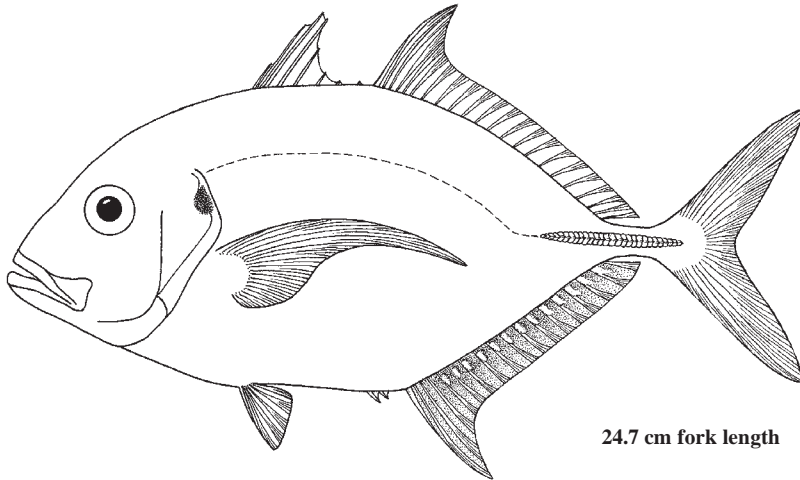
Distribution: Known from Australia, Exmouth Gulf (22°05'S) to Bustard Head, Queensland (24°08'S), southern Papua New Guinea, and reported (based on questionable collection records) from Taiwan Province of China.



Carangoides malabaricus (Bloch and Schneider, 1801)

Frequent synonyms / misidentifications: *Caranx malabaricus* (Bloch and Schneider, 1801); *Carangoides rectipinnis* Williams, 1958; *C. rhomboides* Kotthaus, 1974 / *Carangoides talamparoides* Bleeker, 1852.

FAO names: En - Malabar trevally; Fr - Carangue monique; Sp - Jurel malabárico.

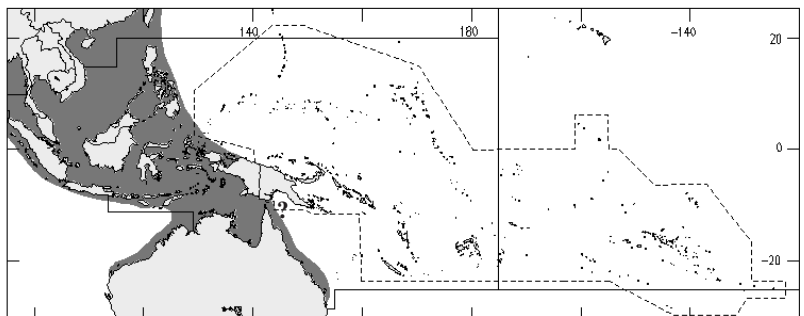


Diagnostic characters: Body strongly compressed, almost ovate; dorsal profile of head strongly elevated to nape, almost straight. Eye diameter distinctly smaller than snout length. Both jaws with bands of small villiform teeth, anteriorly some outer teeth conical; vomerine tooth patch roughly triangular, without a posteromedian extension. **Gill rakers (including rudiments)** 8 to 12 on upper limb and 21 to 27 on lower limb of first gill arch (**total 32 to 38**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 20 to 23 soft rays; anal fin with II detached spines followed by I spine and 17 to 19 soft rays; lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between twelfth and fourteenth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.5 to 1 times in straight part; straight part of lateral line with 19 to 36 weak scutes and 31 to 55 total elements (including anterior scales). **Breast naked ventrally to distinctly behind pelvic fins often to origin of second anal fin; laterally, naked area of breast extends diagonally to naked base of pectoral fins, including small area anteriorly just above pectoral-fin base.** Vertebrae 10+14. **Colour:** in life, generally silvery with bluish grey above, silvery white below; opercle with a small black spot on upper margin; **tongue greyish brown to brown;** caudal fin, soft dorsal and anal fins pale greenish yellow to dusky; interradiar membranes of soft anal-fin rays often with a white spot basally.

Size: Largest specimen examined 24 cm fork length.

Habitat, biology, and fisheries: Frequents coral and rocky reefs but may also be found in shallow sandy bays (mainly the juveniles). Moderately tolerant of turbid waters. Feeds on crustaceans, small squids, and fishes. Caught on hook-and-line, bottom trawls, gill nets, and traps.

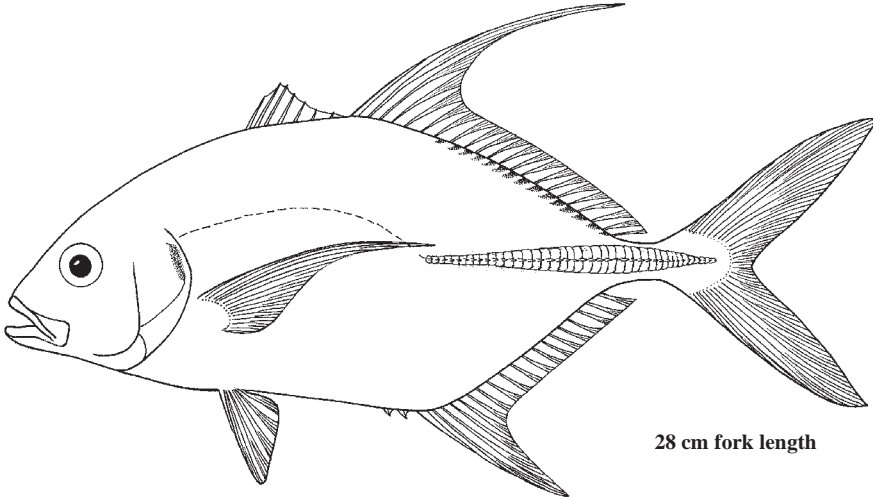
Distribution: In the western Indian ocean broadly distributed in coastal waters, from South Africa to Sri Lanka, including the west coast of the Malagasy Republic; elsewhere in the Indo-West Pacific known from Straits of Malacca, Gulf of Thailand, Okinawa, Japan (rare), Indonesia, and Australia.



Carangoides oblongus (Cuvier, 1833)

Frequent synonyms / misidentifications: *Caranx oblongus* Cuvier, 1833; *Carangichthys oblongus* (Cuvier, 1833); *Caranx gracilis* (Ogilby, 1915); *C. tanakai* Wakiya, 1924 / None.

FAO names: **En** - Coachwhip trevally; **Fr** - Carangue postillon; **Sp** - Jurel postillón.

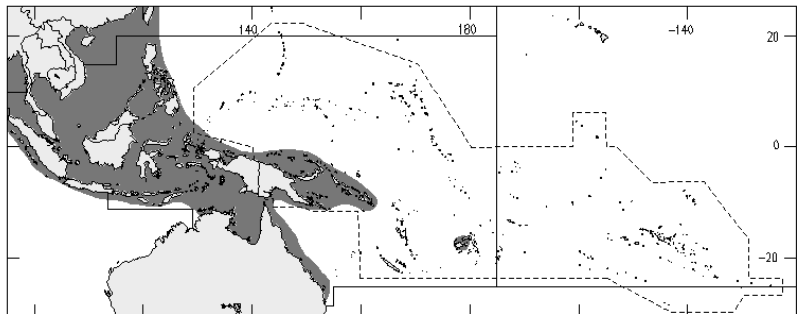


Diagnostic characters: Body oblong, compressed; dorsal profile more convex than ventral profile; head profile gently convex. Eye diameter smaller than snout length. Both jaws with bands of small teeth, the bands widest anteriorly; **upper jaw also with an irregular outer series of moderately large teeth (in large specimens outer row teeth may be enlarged in both jaws)**; vomerine tooth patch triangular, without a posteromedian extension. Gill rakers (including rudiments) 7 to 9 on upper limb and 17 to 21 on lower limb of first gill arch (total 26 to 30). **Two separate dorsal fins**, the first with VIII spines, **the second with I spine and 20 to 22 soft rays**; anal fin with II detached spines followed by I spine and 18 or 19 soft rays; lobe of second dorsal fin elongate, longer than head length, in adults about equal or exceeding the length of second dorsal-fin base. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between eighth or ninth soft rays of second dorsal fin; **chord of curved part of lateral line slightly shorter than straight part of lateral line**, contained 1 to 1.3 times in straight part; **straight part of lateral line with 0 to 2 scales followed by 37 to 45 scutes**. **Breast naked ventrally to origin of pelvic fins; laterally, naked area of breast separated from naked base of pectoral fins by a moderate to narrow band of scales**. Vertebrae 10+14. **Colour:** in life, head and body bluish green above, silvery below, **small blue to black blotches on dorsum between bases of second dorsal-fin rays**; opercular spot diffuse or absent; spinous dorsal fin pale to dusky; second dorsal-fin lobe and upper lobe of caudal fin dusky blue; anal fin and remainder of dorsal and caudal fins yellowish; pectoral and pelvic fins pale yellow.

Size: Largest specimen examined 41 cm fork length; 46 cm total length.

Habitat, biology, and fisheries: Caught on hook-and-line, with bottom trawls and various kinds of artisanal gear.

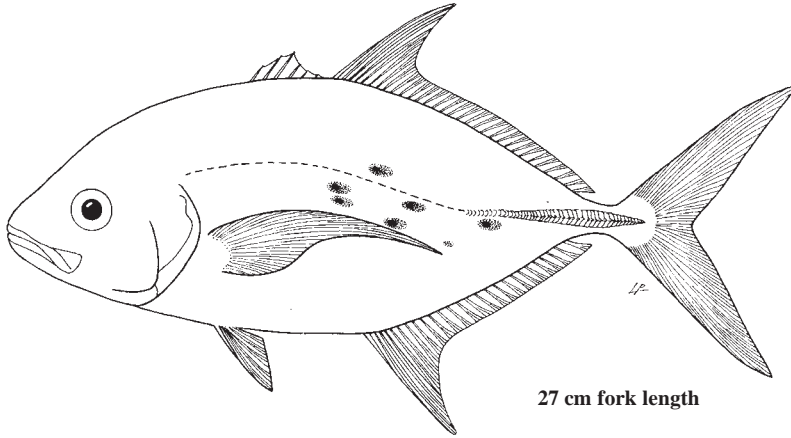
Distribution: Broadly distributed throughout the western Indian Ocean, but no records from the Persian Gulf to the west coast of India; elsewhere in the Indo-West Pacific known from Thailand, Japan, Indonesia, the Philippines, Australia, New Guinea, Solomon Islands, and Fiji.



***Carangoides orthogrammus* Jordan and Gilbert, 1881**

Frequent synonyms / misidentifications: *Carangoides gymnostethoides evermanni* Nichols, 1921; *C. jordani* Nichols, 1922; *C. nitidus* J.L.B. Smith, 1972; *Caranx ferdau jordani* of authors / *Carangoides ferdau* (Forsskål, 1775).

FAO names: En - Island trevally; Fr - Carangue des îles; Sp - Jurel isleño.

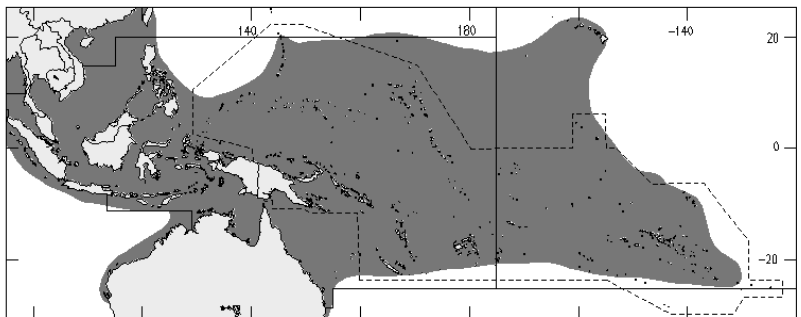


Diagnostic characters: Body oblong and compressed; dorsal profile more convex than ventral profile; **snout usually slightly angular**. Upper jaw highly protractile, **lips noticeably fleshy in large adults**. Both jaws with narrow bands of villiform teeth, becoming obsolescent with age; vomerine tooth patch ovate, without a posteromedian extension. Gill rakers (including rudiments) 8 to 10 on upper limb and 20 to 23 on lower limb of first gill arch (total 28 to 32). **Two separate dorsal fins**, the first with VIII spines, **the second with I spine and 28 to 31 soft rays**; anal fin with II detached spines followed by I spine and 24 to 26 soft rays; lobe of second dorsal fin falcate, especially in small adults, but usually shorter than head length. Lateral line anteriorly with a very slight arch with junction, of curved and straight parts below second dorsal fin between fifteenth to nineteenth soft rays; chord of curved part of lateral line slightly longer to about equal straight part of lateral line, contained 0.8 to 1 times in straight part; straight part of lateral line with 21 to 34 scales followed by 19 to 31 small scutes. **Breast naked ventrally to origin of pelvic fins, occasionally with a small patch of prepelvic scales; laterally, naked area of breast separated from naked base of pectoral fins by a moderate band of scales.** Vertebrae 10+14. **Colour:** in life, head and body generally silvery, brassy to greenish blue above, paler below; **adults with several relatively large, elliptical yellow spots, often with dusky centres, present on sides; dusky bands usually not present on sides, especially in postmortem specimens**; leading edge and tips of dorsal- and anal-fin lobes dark to dusky, rest of fin pale brownish except distal margin of anal fin whitish; caudal fin dusky brown with trailing edge and lobe tips darker; pelvic fins whitish.

Size: Largest specimen examined 63 cm fork length and 70 cm total length; commonly exceeds 40 cm fork length.

Habitat, biology, and fisheries: This species has a nearly ubiquitous occurrence at oceanic islands and is virtually absent from inshore, neritic areas. Inhabits lagoon and seaward reefs to depths exceeding 50 m. Occurs in pairs or in schools of up to a few dozen individuals and frequents sandy channels where it feeds on sand-dwelling crustaceans. Caught on hook-and-line, with trawls, and various kinds of artisanal gear.

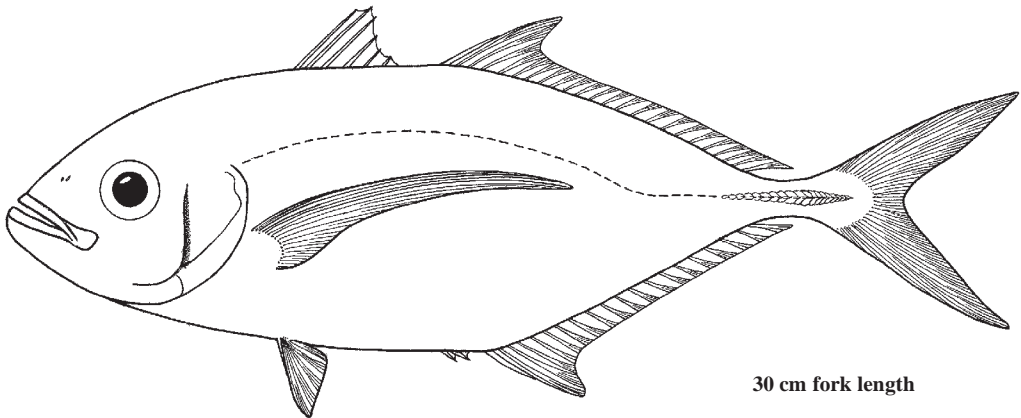
Distribution: In the Indian Ocean known from Kenya, Aldabra, Seychelles, Chagos Archipelago, and Cocos-Keeling Islands; elsewhere in the Indo-West Pacific known from Okinawa, Indonesia, Australia, and eastward to Hawaii and the Marquesas Islands, and the Revillagigedo Islands in the eastern Pacific Ocean.



***Carangoides plagiotaenia* Bleeker, 1857**

Frequent synonyms / misidentifications: *Caranx plagiotaenia* (Bleeker, 1857); *C. vomerinus* Playfair, 1867; *C. compressus* Day, 1870; *C. brevicarinatus* Klunzinger, 1871 / None.

FAO names: **En** - Barcheek trevally; **Fr** - Carangue grímée; **Sp** - Jurel maquillado.

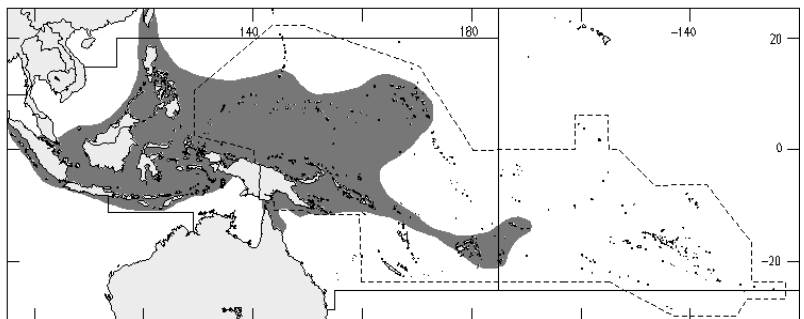


Diagnostic characters: Body oblong and compressed; dorsal and ventral profiles equally convex, but in large adults dorsal profile of head almost straight; **lower jaw somewhat enlarged and projecting beyond upper jaw**. Upper jaw with a narrow band of small teeth; lower jaw with an irregular row of small teeth, except a narrow band anteriorly; vomerine tooth patch triangular, without a posteromedian extension. Gill rakers (including rudiments) 8 to 14 on upper limb and 19 to 27 on lower limb of first gill arch (total 27 to 40). Two separate dorsal fins, the first with VIII spines, the second with I spine and 22 to 24 soft rays; anal fin with II detached spines followed by I spine and 18 to 20 soft rays; lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a relatively low arch, with junction of curved and straight parts below vertical from between thirteenth and fifteenth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.5 to 0.6 times in straight part; straight part of lateral line with 20 to 26 scales followed by 11 to 18 relatively small scutes. **Breast completely scaly**. Vertebrae 10+14. **Colour:** in life, generally silvery, greyish above, paler below; **no opercular spot but adults with posterior margin of preopercle distinctly dark to black**; sides sometimes with 6 or 7 dusky oblique bands, mostly above midline; large adults occasionally with scattered dark blotches or a few small yellow spots on sides; caudal, second dorsal, and anal fins dusky to dark; leading edge of pelvic fins and distal margin of anal fin with a narrow white border; pectoral fins pale.

Size: Largest specimen examined 39 cm fork length and 41.5 cm total length.

Habitat, biology, and fisheries: Appears to be largely confined to outer reef areas and is often taken while bottom fishing. No information available on dietary preferences. Caught on hook-and-line, with trawls, and several types of artisanal gear.

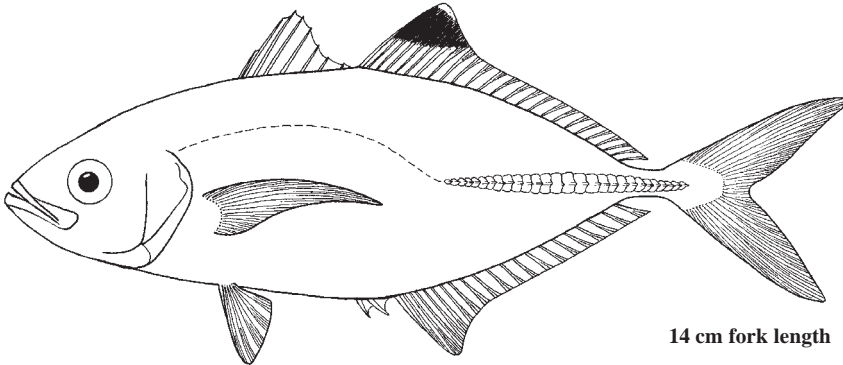
Distribution: Widespread in the Indian Ocean, except absent from Persian Gulf; elsewhere in Indo-West Pacific known from southern Japan to eastern Australia and eastward to the Marshall Islands, Fiji, and Samoa.



Carangoides praeustus (Bennett, 1830)

Frequent synonyms / misidentifications: *Caranx praeustus* Bennett, 1830; *C. ire* Cuvier, 1833; *C. melanostethos* Day, 1865 / None.

FAO names: **En** - Brownback trevally; **Fr** - Carangue à dos brun; **Sp** - Jurel pardo.



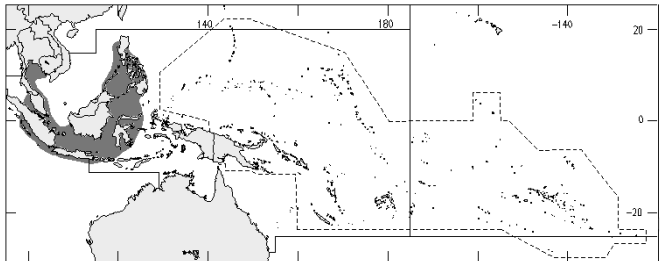
Diagnostic characters: Body elongate and compressed; dorsal and ventral profiles similar and gently convex, dorsal profile of head nearly straight. Eye diameter slightly smaller than snout length. Both jaws with an irregular row of small conical teeth; upper jaw with a narrow band of teeth anteriorly, the outer series slightly enlarged; **vomerine tooth patch anchor-shaped with a distinct posteromedian extension**. Gill rakers (including rudiments) 9 to 11 on upper limb and 22 to 26 on lower limb of first gill arch (total 32 to 37). Two separate dorsal fins, the first with VIII spines, the second with I spine and 21 to 24 soft rays; anal fin with II detached spines followed by I spine and 18 to 20 soft rays; **spinous dorsal fin moderately high, longest spine nearly equal height of soft dorsal-fin lobe**. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between seventh and eleventh soft rays of second dorsal fin; chord of curved part of lateral line slightly longer than, to slightly shorter than straight part of lateral line, contained 0.9 to 1.2 times in straight part; straight part of lateral line with 4 to 12 scales followed by 23 to 34 scutes. **Breast usually completely scaly or nearly so (see "Remarks")**; **laterally, naked area of breast separated from naked base of pectoral fins by a broad band of scales (naked area of breast scarcely visible in lateral view)**. Vertebrae 10+14. **Colour:** in life, bluish grey above, silvery white below; no dark opercular spot; **distal half of second dorsal-fin lobe abruptly black, sometimes with a white margin, widest anteriorly**; remainder of fin pale dusky; caudal fin pale yellowish, other fins hyaline to whitish.

Size: A relatively small species, largest specimen examined 19.5 cm fork length and 22 cm total length; commonly to about 16 cm fork length.

Habitat, biology, and fisheries: Inhabits coastal waters throughout its range. Caught on hook-and-line, with bottom trawls, and several types of artisanal gear.

Distribution: In the Indian Ocean from the Persian Gulf to the Bay of Bengal; elsewhere in the Indo-West Pacific known from the Gulf of Thailand, Indonesia, Borneo, and the Philippines.

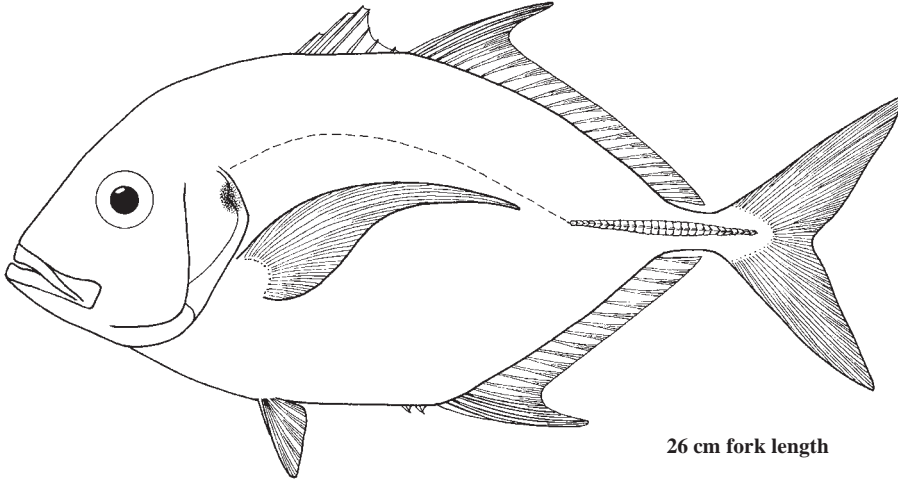
Remarks: This species, as currently recognized, consists of 2 populations that occur in different geographic regions (Persian Gulf to Bay of Bengal versus WCP area - see distribution map) that differ in gill-raker counts and also tend to have different patterns of breast squamation as follows (condition in non-WCP population in parentheses): total gill rakers on first gill arch 32 to 37 (40 to 47), of which 9 to 11 (11 to 15) on upper limb and 22 to 26 (28 to 32) on lower limb; squamation pattern: breast usually completely scaly or nearly so, if partially naked midventrally naked area rarely extending entire length of breast (breast typically with narrow naked midventral area extending entire length of breast). If future studies show that these 2 "geographic races" are actually represented by different sister species, the oldest available name for the Indian Ocean species is *Carangoides ire* (Cuvier).



***Carangoides talamparoides* Bleeker, 1852**

Frequent synonyms / misidentifications: None / *Carangoides malabaricus* (Bloch and Schneider, 1801).

FAO names: En - Imposter trevally; Fr - Carangue cavallys; Sp - Jurel impostor.

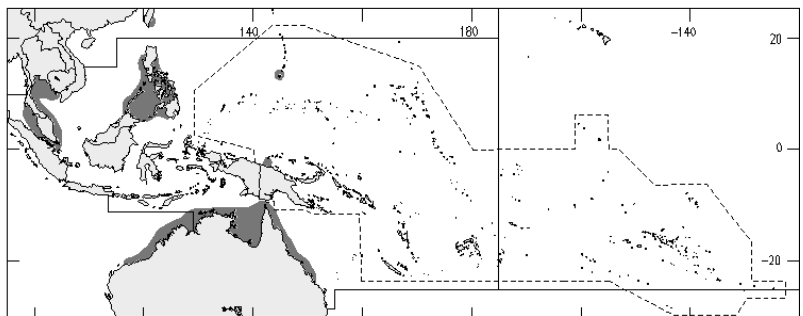


Diagnostic characters: Body strongly compressed, almost ovate; dorsal profile of head strongly elevated to nape, almost straight in profile. Eye diameter distinctly smaller than snout length. Both jaws with bands of small villiform teeth, anteriorly some outer teeth conical; vomerine tooth patch roughly triangular, without a posteromedian extension. **Gill rakers (including rudiments)** 6 to 9 on upper limb and 19 to 22 on lower limb of first gill arch (**total 27 to 31**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 20 to 23 soft rays; anal fin with II detached spines followed by I spine and 17 to 19 soft rays; lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below vertical from between twelfth and fourteenth soft rays of second dorsal fin; chord of curved part of lateral line longer than straight part of lateral line, contained 0.5 to 0.8 times in straight part; straight part of lateral line with 20 to 32 weak scutes, and 32 to 52 total elements (including anterior scales). **Breast naked ventrally to distinctly behind pelvic fins, often to origin of second anal fin; laterally, naked area of breast extends diagonally to naked base of pectoral fins, including small area anteriorly just above pectoral-fin base.** Vertebrae 10+14. **Colour:** in life, generally silvery, bluish grey above, silvery white below; opercle with a small black spot on upper margin; **tongue white to pale grey**; soft dorsal and anal fins dusky; caudal fin with central rays dusky yellow with black distal margin.

Size: Largest specimen examined 28 cm fork length.

Habitat, biology, and fisheries: Inhabits coastal waters throughout its range. Caught on hook-and-line, with bottom trawls and several types of artisanal gear.

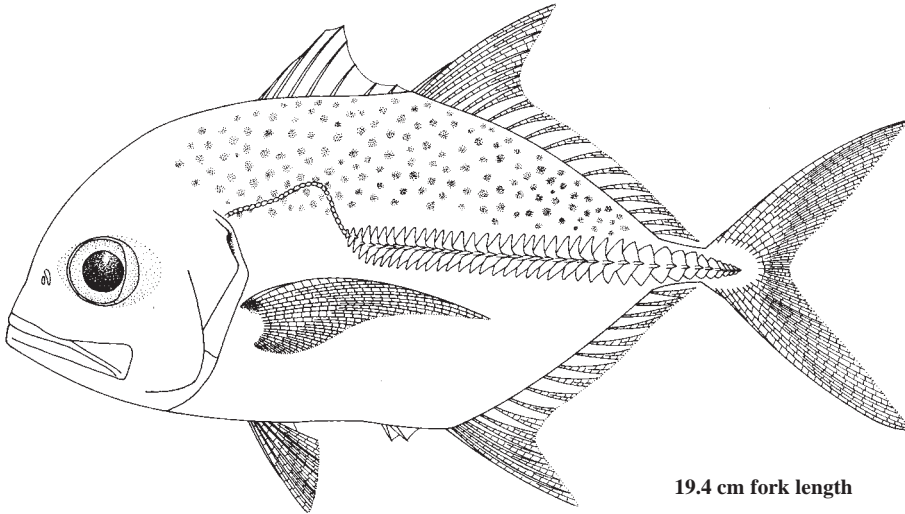
Distribution: In the western Indian Ocean known from the Gulf of Oman eastward to Sri Lanka; elsewhere in the Indo-West Pacific known from the Gulf of Thailand, Sumatra, Borneo, Philippines, Guam, and Australia.



Caranx bucculentus Alleyne and Macleay, 1877

Frequent synonyms / misidentifications: None / None.

FAO names: En - Bluespotted trevally.

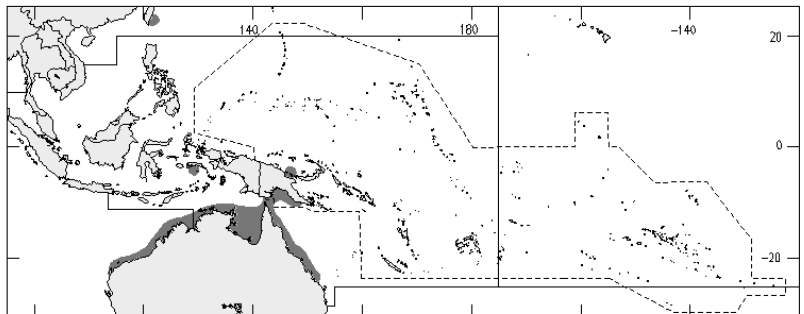


Diagnostic characters: Body oblong, compressed; dorsal profile strongly convex anteriorly, ventral profile only slightly convex. Adipose eyelid moderately developed, small anteriorly, posterior adipose eyelid extends onto eye to near rear border of pupil. End of upper jaw extends to posterior edge of pupil or a little beyond. Upper jaw with outer row of strong canines widely spaced in adults, and an inner band of small villiform teeth, widest at symphysis; lower jaw with a single row of strong conical teeth widely spaced in adults. Gill rakers (including rudiments) 7 to 10 on upper limb and 17 to 21 on lower limb of first gill arch (total 26 to 31). Two separate dorsal fins, the first with VIII spines, the second with I spine and 18 or 19 soft rays; anal fin with II detached spines followed by I spine and 15 to 17 soft rays; total soft dorsal- and anal-fin rays 34 to 36; dorsal-fin lobe contained 3.4 to 5.1 times in fork length in specimens larger than 15 cm fork length. **Curved part of lateral line short and strongly arched, chord of curved part contained 2.5 to 3.3 times in straight part** (to caudal-fin base); straight part of lateral line with no anterior scales and 33 to 39 strong scutes. **Breast naked posteroventrally to distinctly behind origin of pelvic fins and diagonally to naked base of pectoral fins.** Vertebrae 10+14. **Colour:** in life pale olive green above, silvery white below; **adults with small blue spots on upper half of body**; large dark spot at upper end of opercle and conspicuous black spot at upper base of pectoral fins; fins pale yellow-green.

Size: Largest specimen examined 56 cm fork length and 65 cm total length.

Habitat, biology, and fisheries: Feeds primarily on fishes. Caught on hook-and-line and commonly taken in trawls.

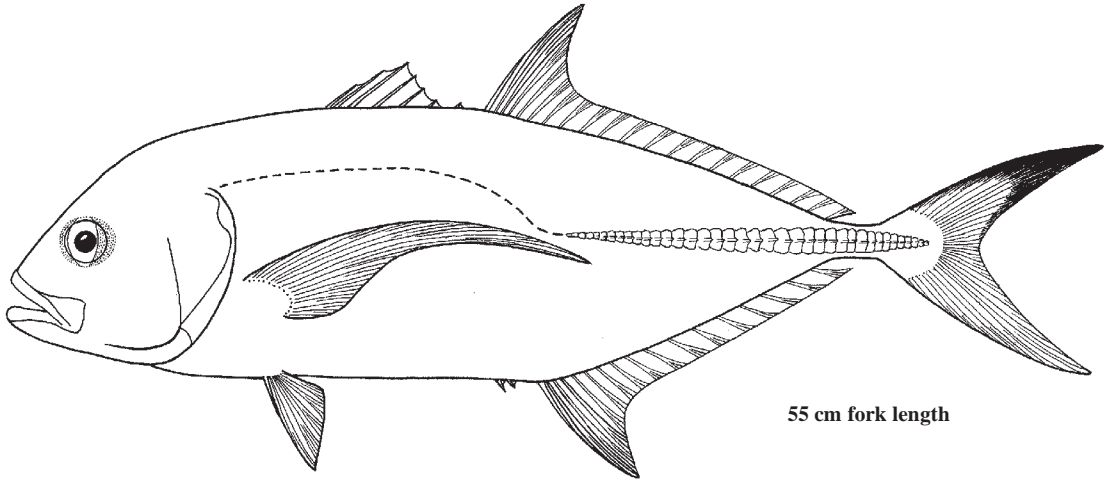
Distribution: Known from Taiwan Province of China, Indonesia (Ambon), Australia, and Papua New Guinea.



Caranx heberi (Bennett, 1830)

Frequent synonyms / misidentifications: *Caranx sem* Cuvier, 1833; *C. williamsi* J.L.B. Smith, 1968; *C. sansun* of authors / None.

FAO names: **En** - Blacktip trevally; **Fr** - Carangue cocole; **Sp** - Jurel cocolí.

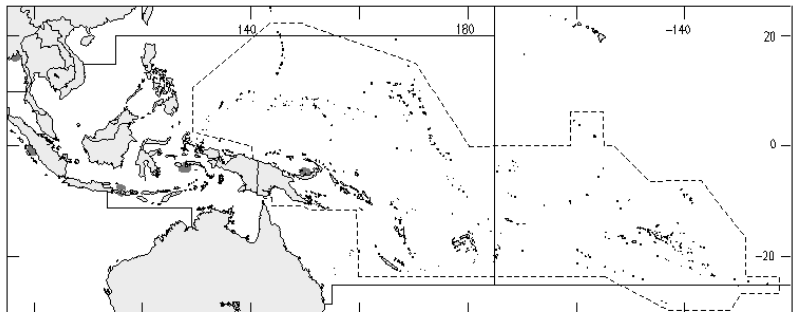


Diagnostic characters: Body oblong, compressed; dorsal profile strongly convex to second dorsal fin, ventral profile only slightly convex. Adipose eyelid moderately developed, small anteriorly, posterior adipose eyelid extends onto eye to rear border of pupil. End of upper jaw extends to posterior edge of pupil or a little beyond. Upper jaw with outer row of strong canines widely spaced in adults, and an inner band of small villiform teeth, widest at symphysis; lower jaw with a single row of strong conical teeth widely spaced in adults. **Gill rakers (including rudiments)** 6 to 8 on upper limb and 17 to 19 on lower limb of first gill arch (**total 24 to 27, but rarely 24**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 19 to 21 soft rays; anal fin with II detached spines followed by I spine and 15 to 17 soft rays; total soft dorsal- and anal-fin rays 34 to 38; dorsal-fin lobe contained 5.3 to 7.4 times in fork length in specimens larger than 15 cm fork length. Straight part of lateral line with 0 to 4 anterior scales followed by 30 to 40 strong scutes. **Breast squamation variable, completely scaly (uncommon) to naked ventrally and typically with a small to large patch of prepelvic scales.** Vertebrae 10+14. **Colour:** in life, adults with head and body dark bronze to yellow-green above, silvery bronze to yellow-green below; no dark spot on upper margin of opercle; caudal fin bright yellow or olive-yellow to dusky, typically with distal half of fin darker or black (especially in juveniles); other fins bright yellow to yellow-olive, sometimes dusky without any yellow hue; in juveniles and young adults black pigment in upper caudal-fin lobe typically present.

Size: Maximum verified size 78 cm fork length; weight to 7.7 kg.

Habitat, biology, and fisheries: Prefers clean, open coastal waters; adults are particularly common in small aggregations over rocky reefs and are seldom found in turbid or estuarine waters. Feeds primarily on fishes and crustaceans. Caught mainly on hook-and-line; also with gill nets and other artisanal gear.

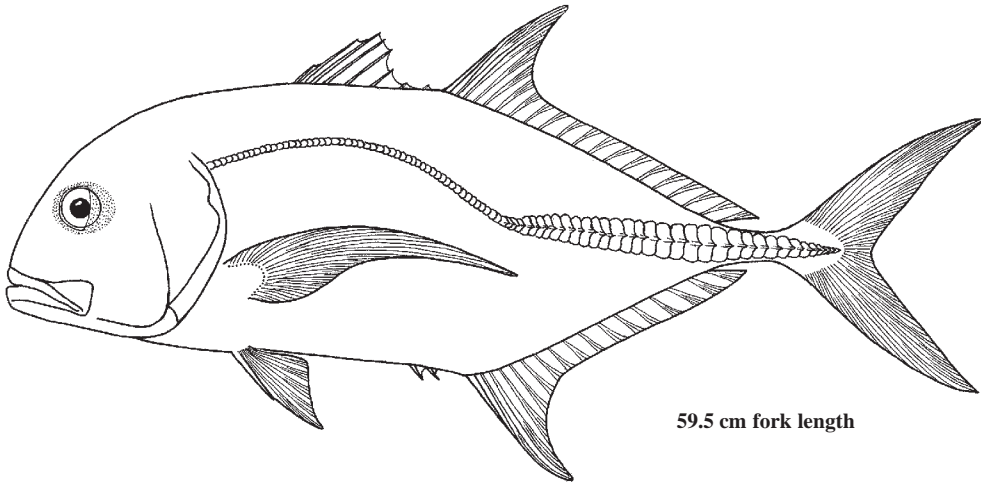
Distribution: Broadly distributed in coastal waters throughout most of the Indian Ocean, including the Persian Gulf, but no verified records from the Red Sea; elsewhere in the Indo-West Pacific known from Indonesia, the Arafura Sea, Ambon, New Guinea, and New Britain.



Caranx ignobilis (Forsskål, 1775)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Giant trevally; Fr - Carangue tête; Sp - Jurel gigante.



Diagnostic characters: Body oblong, compressed; dorsal profile strongly convex anteriorly, ventral profile only slightly convex. Adipose eyelid moderately developed, small anteriorly, posterior adipose eyelid extends onto eye to rear border of pupil. End of upper jaw extends to posterior edge of pupil or a little beyond. Upper jaw with outer row of strong canines widely spaced in adults, and an inner band of small villiform teeth, widest at symphysis; lower jaw with a single row of strong conical teeth widely spaced in adults. **Gill rakers (including rudiments)** 5 to 7 on upper limb and 15 to 17 on lower limb of first gill arch (**total 20 to 24**). Two separate dorsal fins, the first with VIII spines, the second with I spine and 18 to 21 soft rays; anal fin with II detached spines followed by I spine and 15 to 17 soft rays; total soft dorsal- and anal-fin rays 34 to 38; dorsal-fin lobe contained 4.4 to 6.2 times in fork length in specimens larger than 15 cm fork length. Straight part of lateral line with 0 to 4 anterior scales followed by 26 to 38 strong scutes. **Breast naked ventrally, typically with a small to large patch of prepelvic scales.** Vertebrae 10+14. **Colour:** in life, adults with head and body silvery grey to black above, usually paler below; fins usually uniformly grey to black, except leading edge and tips of dorsal- and anal-fin lobes paler; no dark spot on upper margin of opercle; mature males usually darker than females, sometimes head and fins completely black; juveniles and young adults generally with more silvery bodies and paler fins, fish from turbid coastal waters often with yellow fins, the anal fin usually brightest.

Size: Maximum verified size 146 cm total length and 52.6 kg; commonly to about 80 cm fork length. World angling record (IGFA) 66 kg (145 lb 8 oz).

Habitat, biology, and fisheries: Abundant in all marine habitats; juveniles often encountered in estuaries. Feeds primarily on fishes. Caught mainly on hook-and-line and by spearing; also with gill nets and other artisanal gear. An excellent sports fish.

Distribution: Broadly distributed throughout the Indian Ocean; elsewhere in the Indo-West Pacific from southern Japan to Australia, and eastward to Hawaii and the Marquesas Islands.

