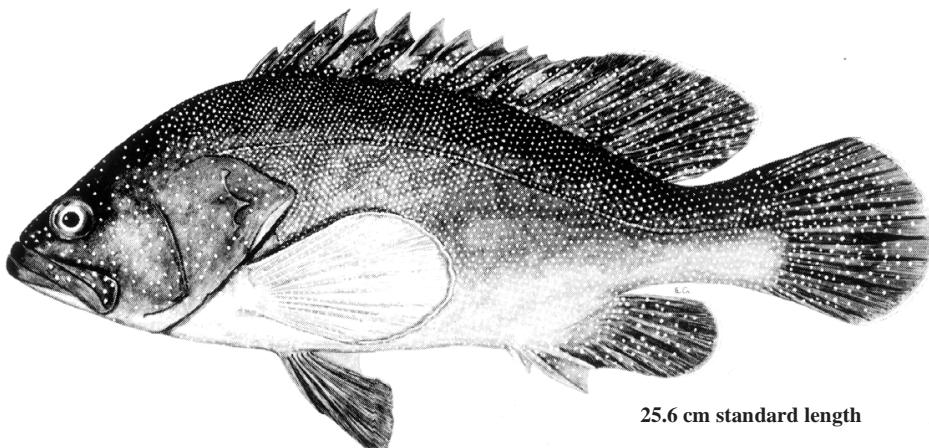


***Epinephelus polystigma* (Bleeker, 1853)**

(Plate V, 35)

Frequent synonyms / misidentifications: *Epinephelus rahanus* Popta, 1918 / None.**FAO names:** En - Whitedotted grouper; Fr - Mérou points blancs; Sp - Mero punteado blanco.

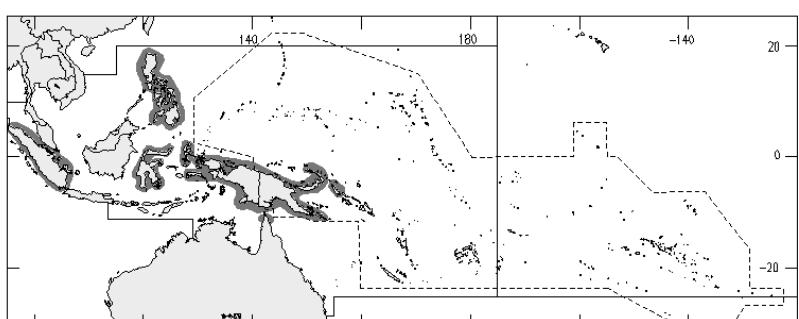
Diagnostic characters: Body depth 2.6 to 2.9 times in standard length. Interorbital area flat; **snout short**, its length subequal to eye diameter; preorbital depth less than greatest width of upper lip; preopercle rounded, finely serrate; upper edge of operculum mostly straight. Anterior nostrils funnel shaped, the rear margin expanded as a flap reaching rear nostril; rear nostril diameter 2 to 4 times larger than front nostril

diameter; maxilla reaches past vertical at rear edge of eye, the lower edge with a rounded step at front of widest part; midlateral part of lower jaw with 2 or 3 rows of small subequal teeth; 2 short stout canines at front of both jaws. First gill arch with 21 to 24 gill rakers, of which 8 or 9 on upper limb and 13 to 16 on lower limb; gill rakers shorter than gill filaments. Pyloric caeca 8. Dorsal fin with XI spines and 15 or 16 soft rays, the **third or fourth spines longest**, **2.7 to 3.3 times in head length and distinctly shorter than longest dorsal-fin rays**, the interspinous membranes distinctly incised; anal fin with III spines and 8 soft rays; caudal fin well rounded; pectoral-fin rays 16 to 18, the fin length 1.6 to 1.8 times in head length; pelvic fins 2.0 to 2.2 times in head length. Lateral body scales rough, with auxiliary scales. Lateral-line scales 49 to 55; **lateral scale series 81 to 91**. **Colour:** head, body, and fins dark brown, covered (except on pelvic fins) with white or pale yellow dots (dots may be absent in preserved specimens); soft dorsal, anal, caudal, and pectoral fins with a narrow orange-red margin. Juveniles (8 to 9 cm standard length) with some larger, dark-edged, round or horizontally elongate, white spots on body (in addition to white dots); a smaller juvenile (2.2 cm standard length) taken in the same collection has dark-edged white spots, as large or larger than pupil, in about 3 irregular rows on body.

Size: Maximum total length at least 48 cm total length.

Habitat, biology, and fisheries: Known only from brackish or fresh-water areas; the usual habitat seems to be mangrove-lined estuaries. A female of 19 cm standard length contained ripe ovaries. Appears to be a rare species; consequently, of little interest to fisheries. Caught with hook-and-line, spears, and traps.

Distribution: Known only from the western Pacific: Philippines, Indonesia, Papua New Guinea, New Ireland, Solomon Islands, and Cape York, Queensland.

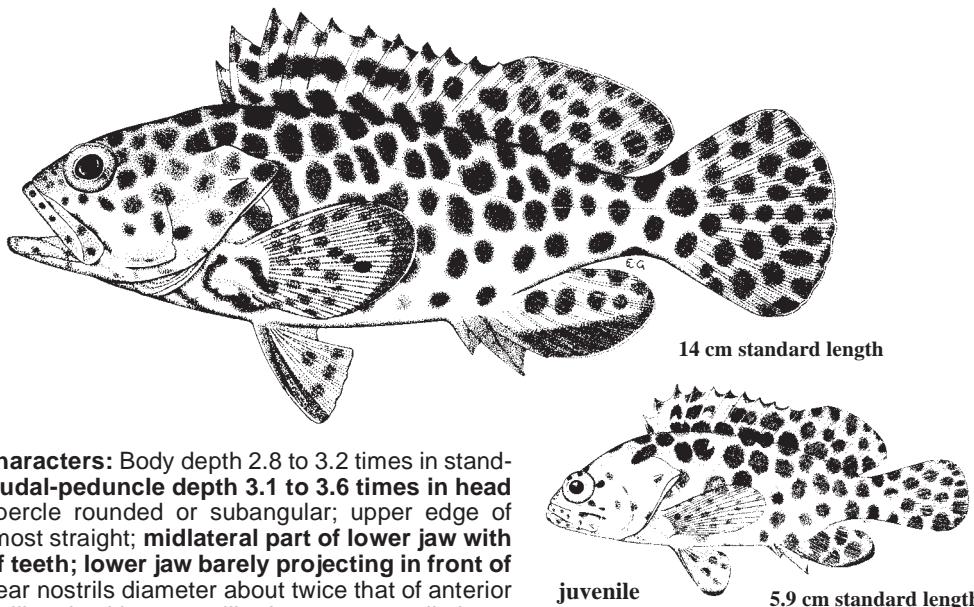


***Epinephelus quoyanus* (Valenciennes, 1830)**

(Plate V, 36)

Frequent synonyms / misidentifications: *Epinephelus megachir* (Richardson, 1846) / *Epinephelus macrospilos* (non Bleeker, 1855); *E. hexagonatus* (non Forster, 1801); *E. faveatus* (non Valenciennes, 1828); *E. spilotoceps* non Schultz, 1853.

FAO names: En - Longfin grouper; Fr - Mérou longues ailes; Sp - Mero aleta larga.

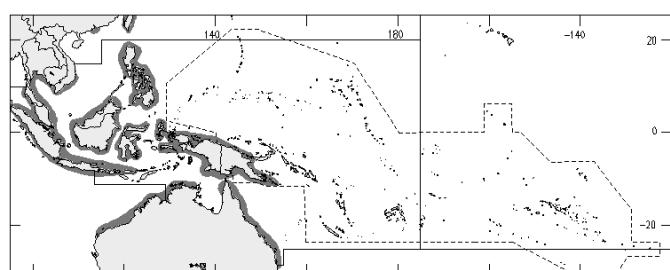


Diagnostic characters: Body depth 2.8 to 3.2 times in standard length; **caudal-peduncle depth 3.1 to 3.6 times in head length**. Preopercle rounded or subangular; upper edge of operculum almost straight; **midlateral part of lower jaw with 2 or 3 rows of teeth; lower jaw barely projecting in front of upper jaw**. Rear nostrils diameter about twice that of anterior nostrils. First gill arch with 6 to 8 gill rakers on upper limb, 14 to 16 on lower limb. Pyloric caeca 21. Dorsal fin with XI spines and 16 to 18 soft rays, the fourth spine usually longest, 2.3 to 3.0 times in head length and shorter than longest dorsal-fin rays; anal fin with III spines and 8 soft rays, the **second and third spines subequal, 2.8 to 3.8 times in head length, subequal to depth of peduncle**; caudal fin rounded, middle rays 1.35 to 2.0 times in head length; pectoral-fin rays 17 to 19, middle rays **26 to 35% of standard length, 1.2 to 1.7 times in head length; pelvic fins 1.6 to 2.1 times in head length**. Lateral body scales rough; auxiliary scales present; lateral-line scales 48 to 52; lateral scale series 80 to 96. **Colour:** head and body pale, with large, close-set, hexagonal to roundish, dark brown spots (some spots reddish brown or black), dorsally the spots are so close together that the pale interspaces form a reticulum, but ventrally the spots are more separated and their margins more diffuse; similar dark spots on median fins; chest with 2 dark brown bands joining below pectoral-fin bases and nearly joined anteriorly to enclose a large pale area ventrally and another pale area between upper dark band and dark blotch on pectoral-fin base; dark spots on head smaller anteriorly, but still 3 or 4 times larger than nostrils; **ventral edge of anal and caudal fins and leading edge of pelvic fins with white line and blackish submarginal band; pectoral fins mostly dusky with faint dark spots (more distinct on Australian fish)**.

Size: Maximum total length 40 cm.

Habitat, biology, and fisheries: Usually found on inshore silty reefs; no records below 50 m. The enlarged fleshy pectoral fins appear to be related to its habit of sitting on the substrate, with its pectoral fins in contact with the bottom. Feeds on crustaceans, fishes, and worms. Of some economic importance at Hong Kong and Taiwan Province of China. Usually caught with gill nets and handlines.

Distribution: Western Pacific; from southern Japan to tropical coast of Australia, including China (also Taiwan Province of China and Hong Kong), Philippines, Viet Nam, Thailand, Indonesia, New Guinea. Not known from islands of Micronesia, Melanesia, or the Central Pacific.

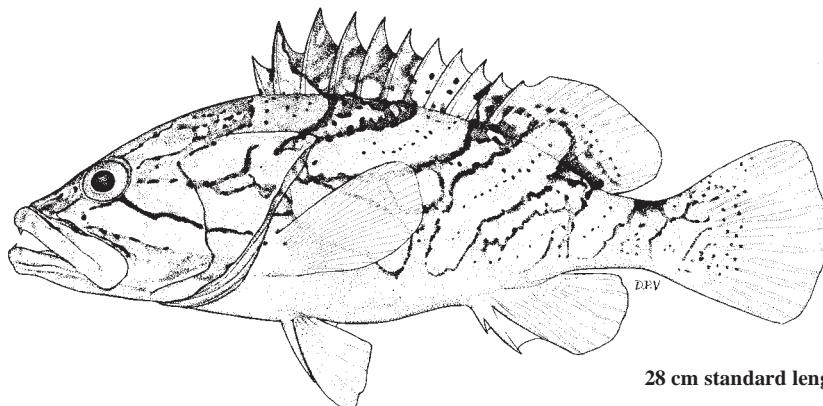


***Epinephelus radiatus* (Day, 1867)**

(Plate V, 37)

Frequent synonyms / misidentifications: *Epinephelus döderleinii* Franz, 1910 / *Epinephelus morrhua* (non Valenciennes, 1833); *E. poecilonotus* (non Temminck and Schlegel, 1842).

FAO names: **En** - Obliquebanded grouper; **Fr** - Mérou zébré; **Sp** - Mero acebrado.



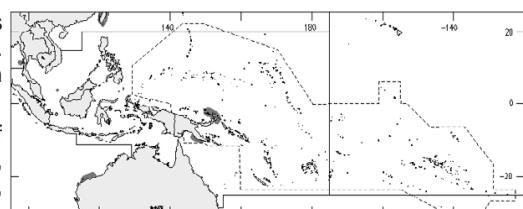
28 cm standard length

Diagnostic characters: Body depth 2.6 to 3 times in standard length; head length 2.1 to 2.3 times in standard length. **Preopercle angle with 2 to 5 enlarged serrae;** upper edge of operculum almost straight; midlateral part of lower jaw with 2 rows of teeth. Adults with rear nostril diameter 2 or 3 times that of front nostrils. First gill arch with 8 or 9 gill rakers on upper limb, 16 to 18 on lower limb; longest gill raker shorter than longest gill filaments. Dorsal fin with XI spines and **13 to 15 soft rays, the third spine longest, 2.6 to 3.0 times in head length and longer than soft rays**, the interspinous membranes deeply incised; anal fin with III spines and 8 soft rays, second and third spines subequal; caudal fin convex to moderately rounded; pectoral-fin rays 17 or 18, the fin almost transparent, its length 1.7 to 2.2 times in head length; pelvic fins 2.1 to 2.8 times in head length. Lateral body scales rough, without auxiliary scales; lateral-line scales 52 to 66; lateral scale series 102 to 120. **Colour:** small adults (25 to 50 cm) buff, with **5 oblique dark-edged pale bands as follows:** first band from upper half of eye, curving and broadening on nape; second band branching from first band just behind eye, bifurcating on operculum, the upper branch continuing dorsally, broadening on body and extending more broadly over middle of spinous dorsal fin; third band continued as lower branch of second band, curving dorsally from end of operculum and expanding at base of last 2 spines and first 3 or 4 soft rays of dorsal fin (this band with a ventral extension from an included pale circle covered by tip of pectoral fin); fourth band runs from rear end of dorsal fin, branching at midside, with 1 branch going towards anal-fin origin, the other to rear end of anal-fin base; fifth band on caudal peduncle (sometimes divided into 2 short branches at lower edge of peduncle); dark bands include small black spots and pale blotches, especially dorsally; pale interspaces (between dark bands) with small dark brown spots, mainly in a row along middle of interspaces; dark brown line from lower edge of eye to edge of subopercle; faint dark band from maxillary groove and continuing to edge of interopercle. Large adults (50 to 65 cm) with dark-edged bands replaced by series of dark spots (except for dark line running posteriorly from lower edge of eye); no spots on ventral third of body; dorsal fin and most of caudal fin covered with small dark spots. Juveniles (12 to 25 cm) dark brown with black-edged pale brown bands (= white markings on smaller fish) enclosing numerous small black spots. Small juveniles (5 to 10 cm) dark greenish brown, with dark-edged immaculate white bands represent in the pale interspaces on larger specimens; fins translucent white, except spinous dorsal fin coloured like body.

Size: Maximum total length about 70 cm.

Habitat, biology, and fisheries: Adults occur in depths of 80 to 383 m; juveniles found in depths of 18 to 20 m. Apparently rare but of some commercial importance in Japan. Caught with handlines and vertical longlines.

Distribution: From Red Sea to Japan, including Gulf of Aden, Gulf of Oman, India, Sri Lanka, Réunion, Mauritius, Chagos, northwestern Australia, Papua New Guinea, Philippines, Taiwan Province of China, and Japan.

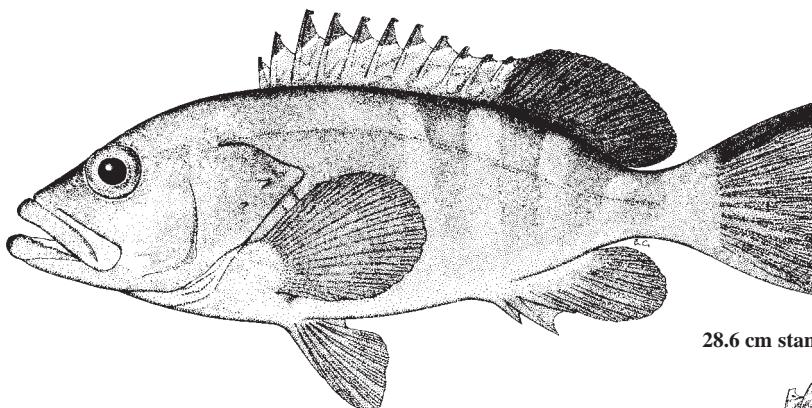


***Epinephelus retouti* Bleeker, 1868**

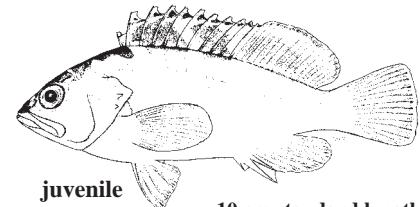
(Plate V, 38)

Frequent synonyms / misidentifications: *Epinephelus truncatus* Katayama, 1957 / *Epinephelus fasciatus* (non Forsskål, 1775); *E. irroratus* (non Forster, 1801).

FAO names: En - Redtipped grouper; Fr - Mérou à bout rouge; Sp - Mero punteado.



28.6 cm standard length



juvenile

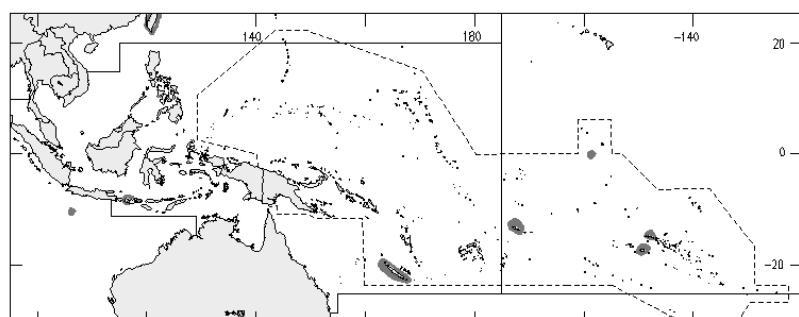
10 cm standard length

Diagnostic characters: Body depth 2.5 to 3.1 times in standard length; head length 2.4 to 2.6 times in standard length. Interorbital flat to slightly convex, the dorsal head profile slightly convex; preopercle rounded, finely serrate; upper edge of operculum sinuous; snout length 3.5 to 3.9 times in head length; maxilla reaches below rear half of eye; midlateral part of lower jaw with 3 or 4 rows of teeth; a pair of short fixed canines at front of both jaws. Nostrils subequal. First gill arch with 21 to 24 gill rakers, of which 6 to 8 on upper limb and 15 to 17 on lower limb. Pyloric caeca numerous (more than 40). Dorsal fin with XI spines and 16 or 17 soft rays, the third to fifth spines longest, 2.4 to 3.1 times in head length; anal fin with III spines and 8 soft rays; caudal fin truncate to slightly convex; pectoral fins fleshy, with 19 to 20 rays, the fin length 1.5 to 1.8 times in head length; pelvic fins 1.8 to 2.2 times in head length. Lateral body scales rough, with numerous auxiliary scales; lateral-line scales 64 to 76; lateral scale series 120 to 141. **Colour:** adults dull yellowish orange to brownish red, each scale on dorsolateral part of body with a dark greenish grey spot; usually 5 faint dark bars on body, the second and third bars extending onto spinous dorsal where they are dark brown; dorsal fin greenish brown, the soft-rayed part darker than rest of fin, the outer triangular part of interspinous membranes dark red, set off from rest of fin by an orange-yellow stripe; dorsal margin of caudal fin dark greenish brown; dark red or brown line along base of dorsal fin; orbit narrowly edged, except anteriorly, with dark red (pale in preservative); pale blue line adjacent to red rim of orbit and completely surrounding eye. Juveniles with dorsal part of first 3 dark bars on body black, the second and third bars extending into dorsal fin; dorsal part of head also black, with 4 irregular transverse whitish bands across dorsal surface.

Size: Maximum total length 50 cm; maximum weight about 2 kg.

Habitat, biology, and fisheries: Adults are found on coral reefs and outer reef slopes in depths of 70 to 220 m; juveniles occur in 20 to 40 m. Apparently rare, but may be of importance to artisanal fisheries. Caught with handlines and vertical longlines.

Distribution: Islands of tropical Indo-Pacific region: from western Indian Ocean to Tuamotus, including Christmas Island (eastern Indian Ocean), Indonesia (Bali Sea off Lombok), South China sea, Taiwan Province of China, Japan (Okinawa, Izu Islands), Palau, New Caledonia, Line Islands, American Samoa, and Society Islands.

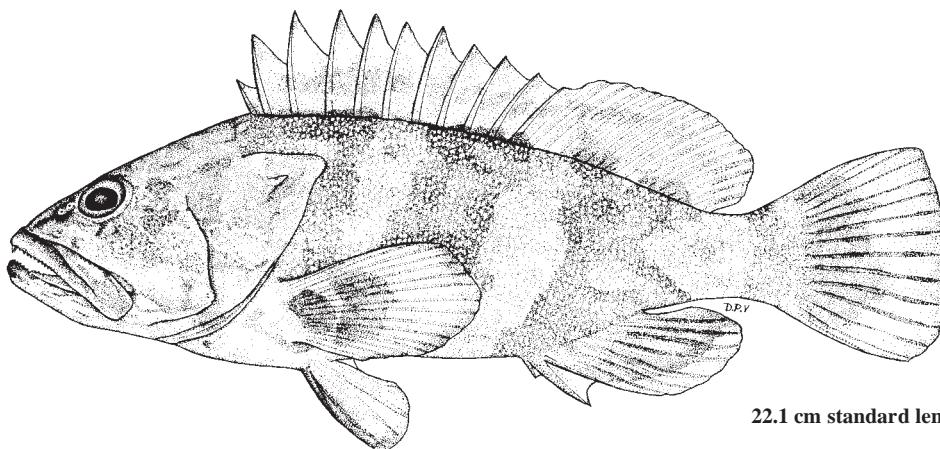


***Epinephelus rivulatus* (Valenciennes, 1830)**

(Plate V, 39)

Frequent synonyms / misidentifications: *Epinephelus rhyncholepis* (Bleeker, 1852); *E. grammatorphorus* Boulenger, 1903; *E. homosinensis* Whitley, 1944; *E. spiramen* Whitley, 1945 / None.

FAO names: En - Halfmoon grouper; Fr - Mérou demi-lune; Sp - Mero medialuna.

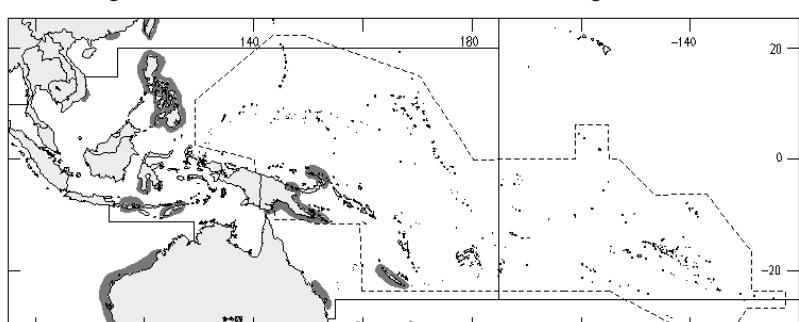


Diagnostic characters: Body depth 2.7 to 3.2 times in standard length; head length 2.3 to 2.6 times in standard length. Preopercle angular, with enlarged serrae at angle; upper edge of operculum straight, almost horizontal; ventral edge of maxilla with a slight step at distal expansion; midlateral part of lower jaw with 2 or 3 rows of teeth. Nostrils subequal. First gill arch with 20 to 24 gill rakers, of which 6 to 8 on upper limb and 14 to 16 on lower limb. Pyloric caeca 26. Dorsal fin with XI spines and 16 to 18 soft rays, the third or fourth spines longest, 2.4 to 3.2 times in head length, the interspinous membranes distinctly incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral fins fleshy, with 17 to 19 rays, the fin length 1.5 to 1.9 times in head length; pelvic fins 1.9 to 2.4 times in head length. Lateral body scales rough, with auxiliary scales; **nape and front of body above lateral line with minute auxiliary scales and numerous pores;** lateral-line scales 48 to 53; lateral scale series 86 to 98. **Colour:** body generally reddish to greenish brown, with a small white or pale blue spot (about size of nostrils) on each scale; 4 irregular dark bars usually visible on body and extending onto base of dorsal fin, and a fifth dark bar on peduncle, the third and fourth bars run from soft dorsal fin to anal fin and are usually joined midlaterally; pectoral fins dusky, with a dark red or reddish brown semicircular blotch on base of rays; 2 dark red or reddish brown bands on chest and a dark brown spot on front of isthmus. Head mostly dark brown or pale reddish, with irregular pale blotches and pale blue or violet vermiculations; 4 white or pale spots along lower part of head (2 on side of lower jaw and upper lip, 1 just behind end of maxilla and last on interopercle); fins greenish yellow or greyish brown; dorsal fin usually with dark brown to black streak along base (may be only along base of spinous part); margin of interspinous dorsal-fin membranes yellow to reddish next to spine, becoming transparent posteriorly, with a pale stripe below triangular part of fin. Some fish with white dots on operculum like those on body.

Size: Maximum total length at least 45 cm; maximum weight at least 2 kg.

Habitat, biology, and fisheries: Rocky bottoms or coral reefs in depths of 10 to 150 m. Females mature at 22 cm, males at 25 cm standard length. Feeds on small fishes and crabs. Caught with handlines, longlines, gill nets, traps, and spear.

Distribution: South Africa to tropical western Pacific and temperate waters of Australia and New Zealand, including Indonesia, Philippines, Taiwan Province of China, and Japan.

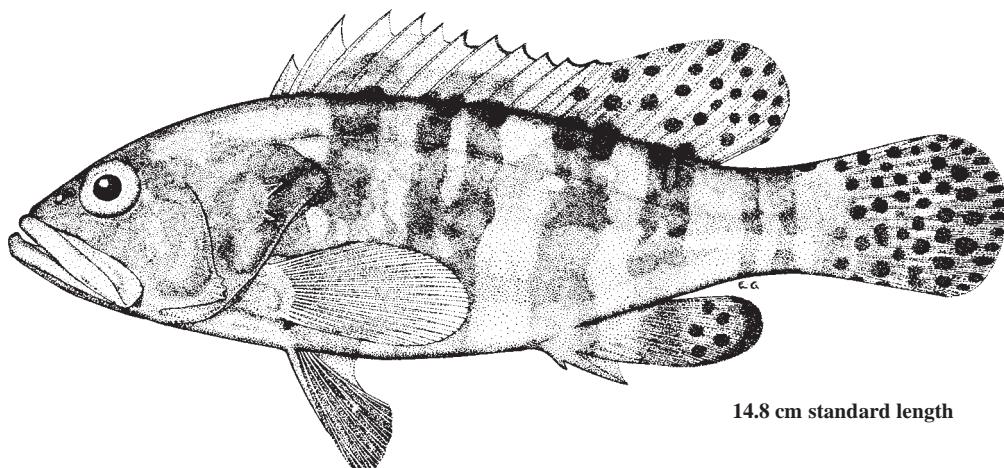


Epinephelus sexfasciatus (Valenciennes, 1828)

(Plate V, 40)

Frequent synonyms / misidentifications: None / *Epinephelus diacanthus* (non Valenciennes, 1828).

FAO names: En - Sixbar grouper; Fr - Mérou six raies; Sp - Mero de seis bandas.



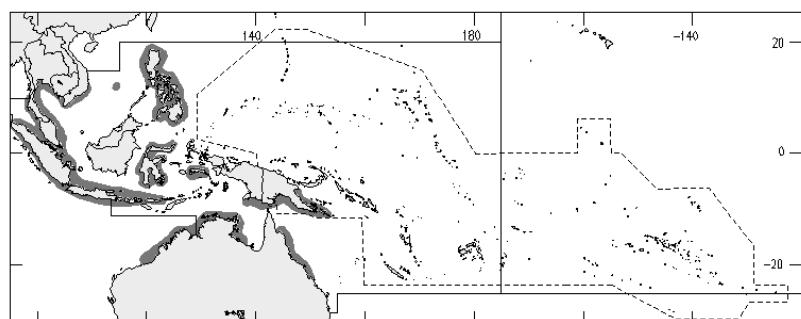
14.8 cm standard length

Diagnostic characters: Body depth 2.7 to 3.2 times in standard length; head length 2.4 to 2.6 times in standard length; caudal peduncle depth 2.6 to 3.4 times in head length. Interorbital area flat or slightly convex, the dorsal head profile convex; preopercle with 2 to 4 greatly enlarged serrae at the angle; upper edge of operculum straight; maxilla reaches to or slightly past vertical at rear edge of eye; midlateral part of lower jaw with 2 rows of subequal teeth. Nostrils subequal. First gill arch with 20 to 23 gill rakers, of which 7 or 8 on upper limb and 13 to 15 on lower limb; longest gill raker shorter than longest gill filaments. Pyloric caeca 7 or 8. Dorsal fin with XI spines and 14 to 16 soft rays, the third or fourth spines longest, 2.3 to 2.7 times in head length and about equal to longest soft ray, the interspinous membranes distinctly incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral fins not fleshy, with 17 to 19 rays, the fin length 1.5 to 1.7 times in head length; pelvic fins 1.8 to 2.2 times in head length. Lateral body scales rough, with a few auxiliary scales; lateral-line scales 46 to 51; lateral scale series 82 to 96. **Colour:** head and body pale greyish brown; 5 dark brown bars on body and 1 on nape (dark bars usually more or less divided vertically by a narrow pale bar); scattered pale spots may be present on body, and some faint small brown spots are often visible on the edges of the dark bars; soft dorsal, caudal, and pelvic fins dusky grey, the pectoral fins greyish or dusky orange-red; jaws and ventral parts of head sometimes pale reddish brown.

Size: Maximum total length 28 cm.

Habitat, biology, and fisheries: Usually found on silty sand or muddy bottoms at depths of 10 to 80 m. This preference for soft-bottom habitats may account for its restricted distribution and absence at oceanic islands. Females are mature at 13 cm standard length. Feeds on small fishes and crustaceans. Although the sixbar grouper is a small species, it is common and readily caught in trawls; consequently, it is often seen in local markets.

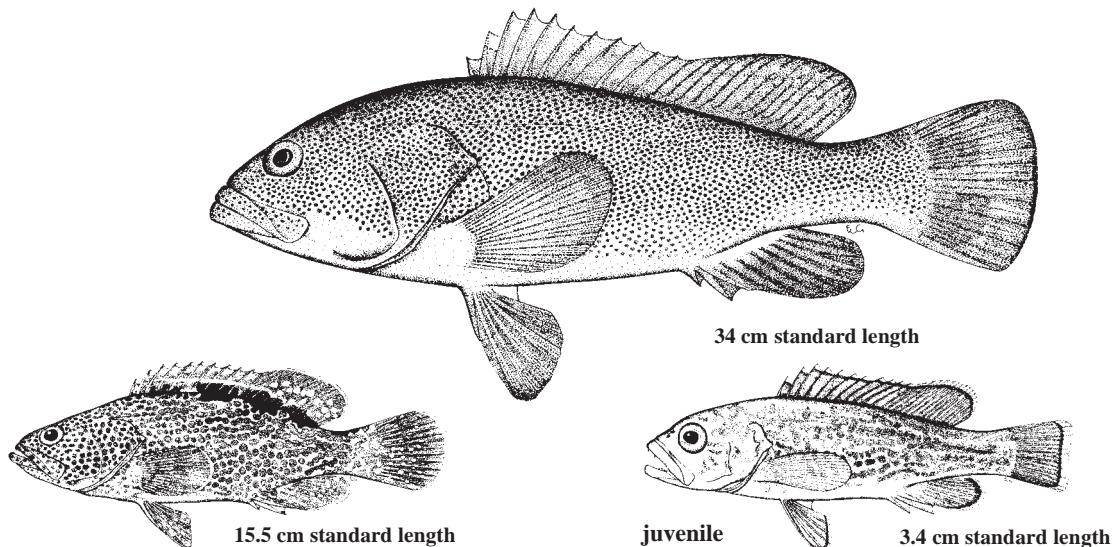
Distribution: Tropical western Pacific Ocean: Indonesia (Sumatra, Java, Bali, Lombok, Celebes, Moluccas), Singapore, Malaysia, Thailand, Viet Nam, Philippines, Papua New Guinea, Louisiade Archipelago, and Australia (north coast from Western Australia to Queensland).



***Epinephelus socialis* (Günther, 1873)**

Frequent synonyms / misidentifications: None / *Epinephelus ongus* (non Bloch, 1790).

FAO names: En - Surge grouper; Fr - Mérou houleux; Sp - Mero oleado.

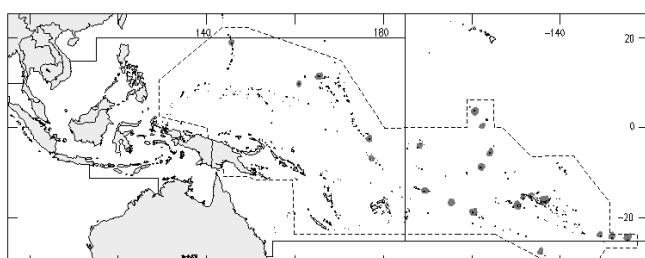


Diagnostic characters: Body depth 2.9 to 3.4 times in standard length; head length 2.4 to 2.7 times in standard length. Interorbital area flat or slightly convex, the dorsal head profile convex; preopercle rounded, finely serrate; upper edge of operculum sinuous; maxilla reaches past vertical at rear edge of eye; midlateral part of lower jaw with 3 or 4 rows of teeth. Nostrils subequal. First gill arch with 25 to 28 gill rakers, of which 8 to 10 on upper limb and 16 to 20 on lower limb. Pyloric caeca about 20. Dorsal fin with XI spines and 14 to 16 soft rays, the third or fourth spines longest, 2.6 to 3.6 times in head length, the interspinous membranes moderately incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral fins fleshy, with 18 or 19 rays, the fin length 1.6 to 1.9 times in head length; pelvic fins 1.8 to 2.2 times in head length. Lateral body scales of juveniles rough; lateral body scales of subadults not so rough and with some auxiliary scales; body scales of adults smooth (mostly embedded) with numerous auxiliary scales; lateral-line scales 64 to 70; lateral scale series 97 to 111. **Colour:** head and body whitish, covered (except ventral part of head, chest, and abdomen) with small close-set blackish brown spots, those on rear part of body often coalesced to form irregular longitudinal bands; the dark spots become relatively smaller with growth, and on a fish of 21 cm they are black dots about the size of the rear nostrils; 4 large blackish blotches usually visible on body at base of dorsal fin and a fifth black saddle blotch on peduncle. Median fins colored like body basally, becoming dark greyish brown distally, the soft dorsal, caudal and anal fins with a white margin, small white spots, and usually a black submarginal band; pectoral fins dark greyish brown with a white margin posteriorly and small whitish spots; pelvic fins dark greyish brown, with a white leading edge.

Size: Maximum total length at least 52 cm.

Habitat, biology, and fisheries: A shallow-water species of coral reefs; more common on atolls than high islands, and usually in outer reef areas exposed to heavy surge. Juveniles and occasionally adults occur in tidepools. Feeds on crustaceans, (mainly grapsid crabs), octopuses, and fishes. Caught with spears, traps, and handlines.

Distribution: Central-West Pacific: Marcus Island, Marshall Islands, Phoenix Islands, American Samoa, Cook, Line and Society islands, Rapa, Tuamotus, and the Pitcairn Group. Widely distributed over Pacific Plate, but not known at Hawaii, Marquesas, Caroline Islands, or at any Melanesian islands. Reported from 2 localities off the Pacific Plate: Ogasawara (Bonin) Islands, and Mariana Islands.

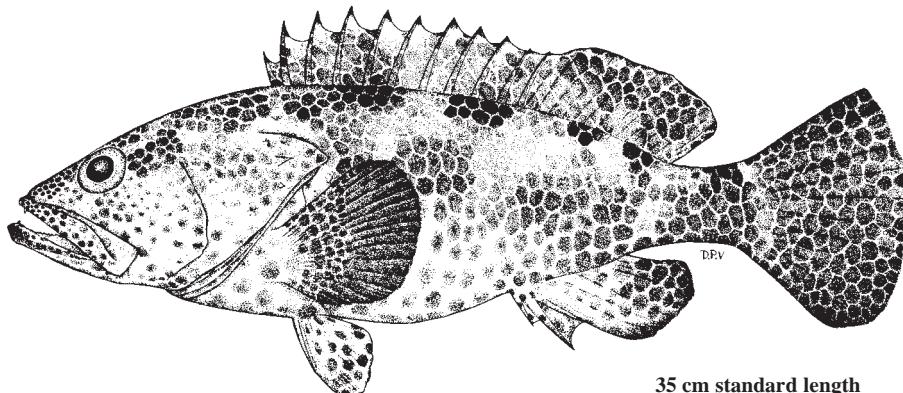


***Epinephelus spilotoceps* Schultz, 1953**

(Plate VI, 41)

Frequent synonyms / misidentifications: *Epinephelus salonotus* Smith and Smith, 1963 / *Epinephelus hexagonatus* (non Forster, 1801); *E. macrospilos* (non Bleeker, 1855); *E. melanostigma* non Schultz, 1953; *E. merra* non Bloch, 1793; *E. quoyanus* (non Valenciennes, 1830).

FAO names: En - Foursaddle grouper; Fr - Mérou quatre selles; Sp - Mero cuatro monturas.



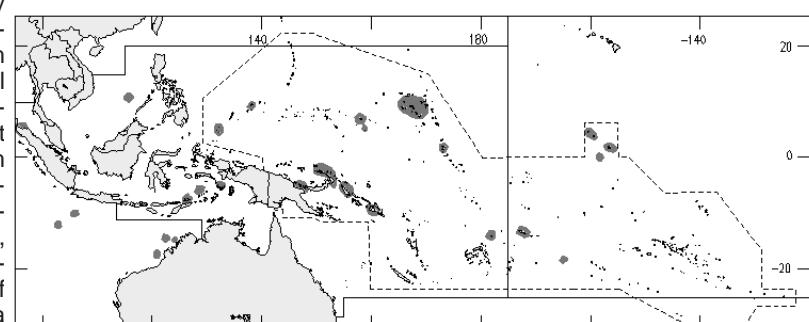
35 cm standard length

Diagnostic characters: Body depth 3.1 to 3.6 times in standard length; caudal-peduncle depth 3.7 to 4.3 times in head length. Preopercle rounded, with a shallow notch, below which the serrae are enlarged but covered with skin; upper edge of operculum almost straight; midlateral part of lower jaw with 2 to 4 rows of teeth. Nostrils subequal. First gill arch with 6 to 9 gill rakers on upper limb, 16 to 18 on lower limb. Dorsal fin with XI spines and 14 to 16 soft rays, the third or fourth spine longest, 2.8 to 3.6 times in head length and distinctly shorter than longest dorsal-fin rays; anal fin with III spines and 8 soft rays, the second spine usually longest, 2.4 to 3.7 times in head length and usually more than caudal-peduncle depth; caudal fin rounded, middle caudal-fin rays 1.7 to 2.0 times in head length; pectoral-fin rays 17 to 19, middle rays 21 to 24% of standard length, 1.7 to 2.1 times in head length; pelvic fins 1.9 to 2.4 times in head length. Lateral body scales rough, with auxiliary scales; lateral-line scales 59 to 69; lateral scale series 86 to 100. **Colour:** head, body, and median fins pale, mostly covered with close-set dark brown, olive, or reddish brown polygonal spots, the pale interspaces forming a white reticulum; spots on ventral part of head and body more rounded, more separated and often more reddish; large blackish brown saddle-blotch at base of last 4 dorsal-fin spines; 2 similar but smaller dark blotches at base of soft dorsal-fin rays and a third on rear end of peduncle; these dark saddle-blotches uniformly pigmented (on juveniles) or comprising a group of extra dark spots separated by the white reticulum (on adults); spots on head progressively smaller and darker anteriorly, those on snout blackish brown and about size of nostrils, with 3 or 4 irregular rows along front of upper lip; pectoral fins with close-set reddish brown spots, larger and more distinct towards base of fin, distal part of fin dull yellowish green; tips of dorsal-fin spines blackish, with a short white filament.

Size: Maximum total length 31 cm.

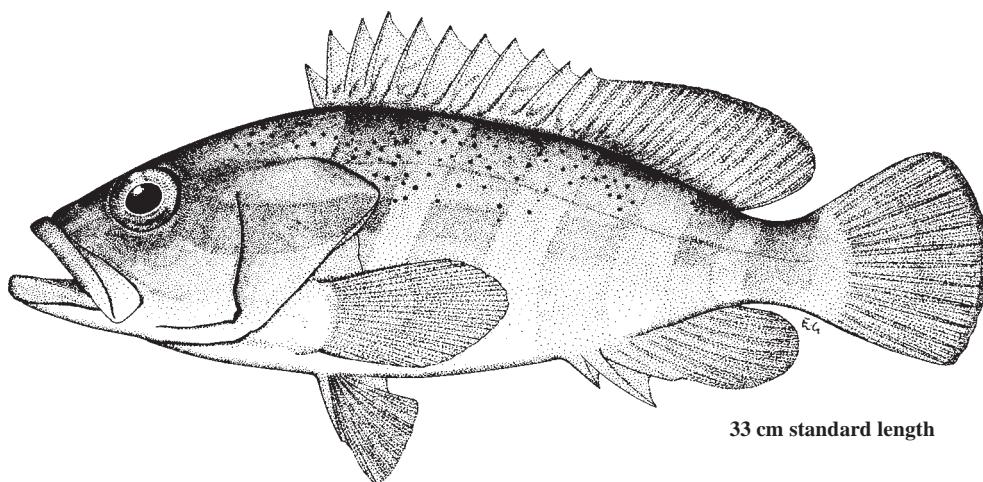
Habitat, biology, and fisheries: A shallow-water coral-reef species. No information on biology or fishery statistics available for this species.

Distribution: Most (probably all) islands of tropical Indo-West Pacific region, from Mozambique to the Central Pacific (Line Islands). Primarily an insular species; except for a single specimen from Hong Kong, there are no records from the Asian mainland, nor from the Red Sea, Persian Gulf, Sri Lanka, Philippines, Taiwan Province of China, Japan, or Australia (though it is found at Rowley Shoals off Western Australia).



***Epinephelus stictus* Randall and Allen, 1987**

(Plate VI, 42)

Frequent synonyms / misidentifications: None / *Epinephelus diacanthus* (non Valenciennes, 1828).**FAO names:** En - Blackdotted grouper; Fr - Mérou pointe noirs; Sp - Mero punteado negro.

Diagnostic characters: Body depth 2.9 to 3.4 times in standard length; head length 2.2 to 2.4 times in standard length; caudal-peduncle depth 3.8 to 4.2 times in head length. Preopercle with 1 to 4 distinctly enlarged serrae at the angle; upper edge of operculum straight; maxilla reaches to or slightly past vertical at rear edge of eye; midlateral part of lower jaw with 2 rows of teeth. Nostrils subequal. First gill arch with 7 or 8 gill rakers on upper limb, 14 to 16 on lower limb. Pyloric caeca 12. Dorsal fin with XI spines and 15 or 16 soft rays, the third or fourth spines longest, 2.7 to 3.4 times in head length and shorter than longest soft rays, the interspinous membranes incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral fins not fleshy, with 18 to 20 rays, the fin length 1.7 to 1.9 times in head length; pelvic fins 2.1 to 2.6 times in head length. Lateral body scales rough, without auxiliary scales; lateral-line scales 48 to 51; lateral scale series 84 to 96. **Colour:** body and head yellowish brown dorsally; belly and rear part of body whitish ventrally; chest and ventral parts of head pale reddish orange; body with 5 faint oblique dark bars (may be lost in preservative); midlateral part of each bar may be darker, representing a series of squarish dark blotches continued from the dark band running from eye to end of operculum; numerous dark brown to black dots on dorsolateral parts of head and body, sometimes concentrated within dark bars and bands. Fins pale, the rays darker than membranes; soft dorsal and caudal fins with narrow dark brown margin; pelvic and anal fins often darker than other fins; anal fin may also have a narrow dark margin; dark line along base of dorsal fin (indistinct anteriorly).

Size: Maximum total length 41 cm.

Habitat, biology, and fisheries: Mud or sand bottom in depths of 60 to 142 m. Although one of the most common species of grouper caught by trawlers in the vicinity of Hong Kong in the 1960's, the black-dotted grouper was not of much commercial importance. The low price in the markets is a result of the small size and poor edible quality of this species.

Distribution: Southern Japan, Hong Kong, Hainan Island, Viet Nam, "South China Sea", and northwest Australia. The Japanese records as "*Epinephelus diacanthus*" may be based on the single specimen reported from Kochi City in 1954. The 1960 record from Taiwan Province of China is dubious, as this species has not been found there in recent surveys of Taiwanese serranids.

