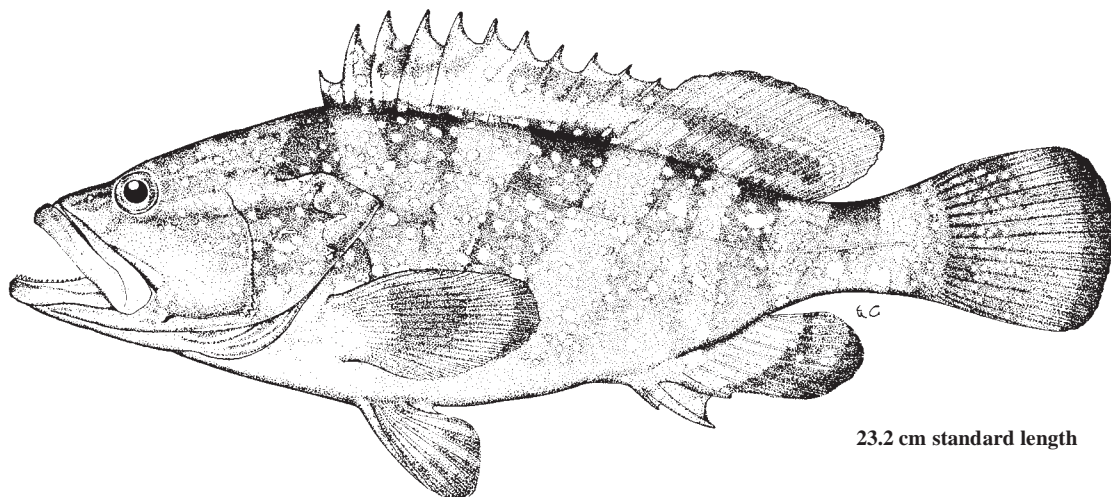


Epinephelus akaara (Temminck and Schlegel, 1842)

(Plate II, 11)

Frequent synonyms / misidentifications: None / None.**FAO names:** En - Redspotted grouper; Fr - Mérou rouge tacheté; Sp - Mero de pintas rojas.

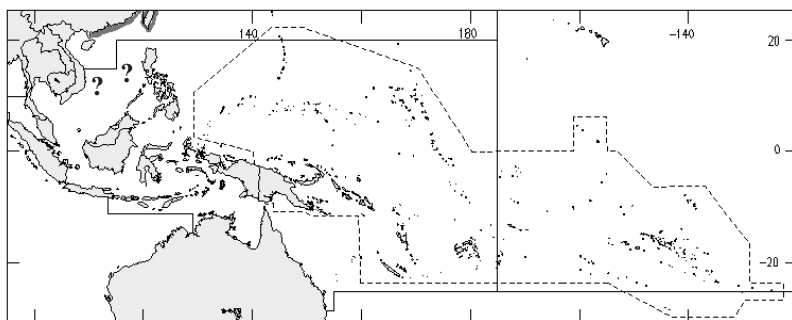
23.2 cm standard length

Diagnostic characters: Body depth less than head length, 2.7 to 3.2 times in standard length (for specimens 11 to 38 cm standard length); head length 2.3 to 2.6 times in standard length. **Preopercle with enlarged serrae at angle; upper edge of operculum straight;** nostrils subequal; maxilla reaching about to vertical at rear edge of eye; midside of lower jaw with 2 rows of teeth. First gill arch with 23 to 25 gill rakers, of which 8 or 9 on upper limb and 15 to 17 on lower limb. Dorsal fin with XI spines and 15 to 17 soft rays, the third to sixth spines longest, 2.4 to 3.8 times in head length, the interspinous membranes incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral-fin rays 17 to 19, the fin length 1.5 to 2.1 times in head length; **pelvic fins not reaching anus, 1.9 to 2.3 times in head length.** Lateral body scales rough, with auxiliary scales in adults; lateral-line scales 50 to 54; lateral scale series 92 to 106. **Colour:** head and body pale brownish grey, covered (except ventrally) with small red, orange, or gold spots; 6 faint oblique dark bars usually visible on body (at least dorsally), the first bar on nape, the third bar confluent with a dark brown or black blotch on body at base of last 3 dorsal-fin spines, and the last bar on caudal peduncle; dark body bars extend only onto base of dorsal fin; **dorsal-fin margin yellow or orange; a row of dusky yellow or orange spots (1 per membrane) along middle of spinous dorsal fin and another row along base of fin;** soft dorsal, caudal, and anal fins with faint red or orange spots basally, the distal parts of these fins dusky with small faint white spots.

Size: Maximum total length 51 cm.

Habitat, biology, and fisheries: In Japanese waters, this species is common in rocky areas. Spawning of pairs in shallow culture ponds has been reported, but the high mortality of larvae has hampered its use in aquaculture. The redspotted grouper is of considerable commercial importance in Hong Kong and Japan where it brings a high price in markets, and live specimens are sold for an even better price.

Distribution: Western Pacific: from southern China, Taiwan Province of China, East China Sea, Korea, and southern Japan (Kyushu to about 38°N on both coasts of Honshu). Reported from Viet Nam, but the illustration appears to be the rock grouper (*Epinephelus fasciatus*). Records of *E. akaara* from the Philippines and India are unsubstantiated. May occur in the area.

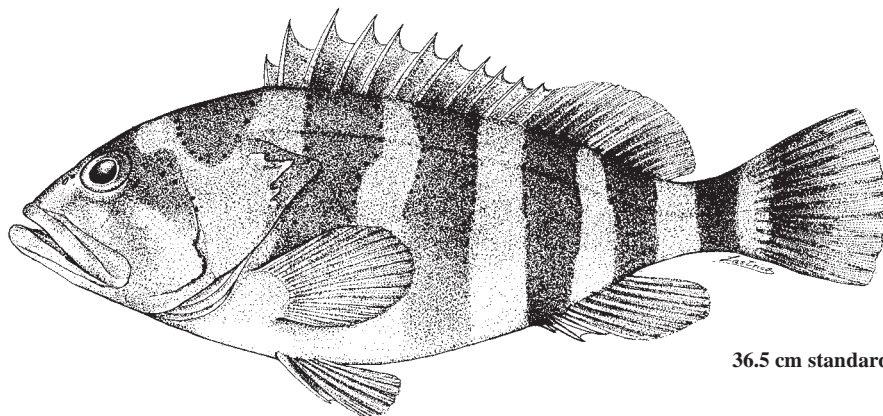


Epinephelus amblycephalus (Bleeker, 1857)

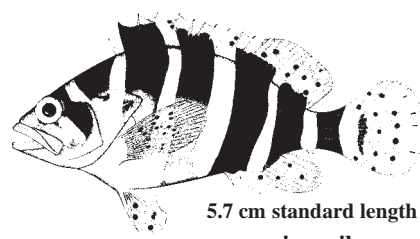
(Plate II, 12)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Banded grouper; Fr - Mérou bande; Sp - Cabrilla venda.



36.5 cm standard length



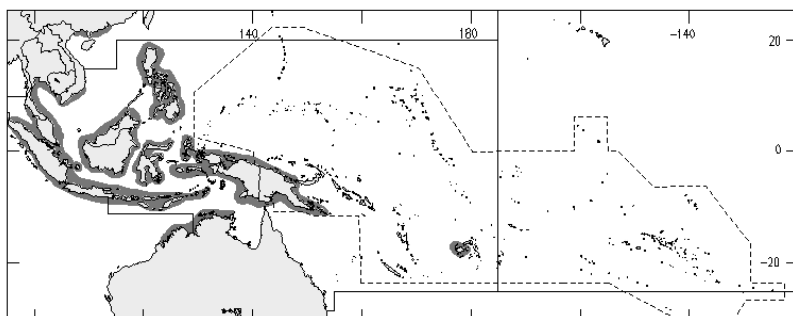
5.7 cm standard length
juvenile

Diagnostic characters: Body depth less than head length, 2.5 to 3.0 times in standard length (for specimens 12 to 35 cm standard length); head length 2.1 to 2.4 times in standard length. **Preopercle with 3 to 6 enlarged serrae at the "corner"**; upper edge of operculum slightly convex; nostrils subequal or posterior nostril larger than anterior; maxilla scaly, reaching about to vertical at rear edge of eye; midside of lower jaw with 2 rows of teeth. First gill arch with 22 to 24 gill rakers, of which 8 on upper limb and 14 to 16 on lower limb. Dorsal fin with XI spines and 15 or 16 soft rays, the third or fourth spine longest, 2.7 to 3.2 times in head length, the interspinous membranes only slightly incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral fins with 18 or 19 rays, the fin length equal to pelvic fins, 1.7 to 2.3 times in head length. Lateral body scales ctenoid, with a few auxiliary scales in adults; lateral-line scales 47 to 52; lateral scale series 90 to 121. **Colour:** head, body, and median fins pale grey; **body with 4 broad dark brown bars, the first 2 extending into spinous part of dorsal fin, the third and fourth bars extending into soft dorsal and anal fins; a fifth dark bar at base of caudal fin; small black spots on dorsal parts of body bars (mainly along the edges of the bars); dark brown saddle blotch on nape, with small black spots mainly along edge of this blotch;** cheeks, snout, interorbital area, jaws, and chest mostly dark brown, with 2 or 3 white bands radiating from eye; irregular black bar on middle of caudal fin; maxillary groove yellow; ventral parts of head and body often with a pinkish tinge. **Small juveniles (6 cm standard length) white, with black bars on body as described for adults, the fins pale yellow with small black spots.**

Size: Maximum total length 50 cm.

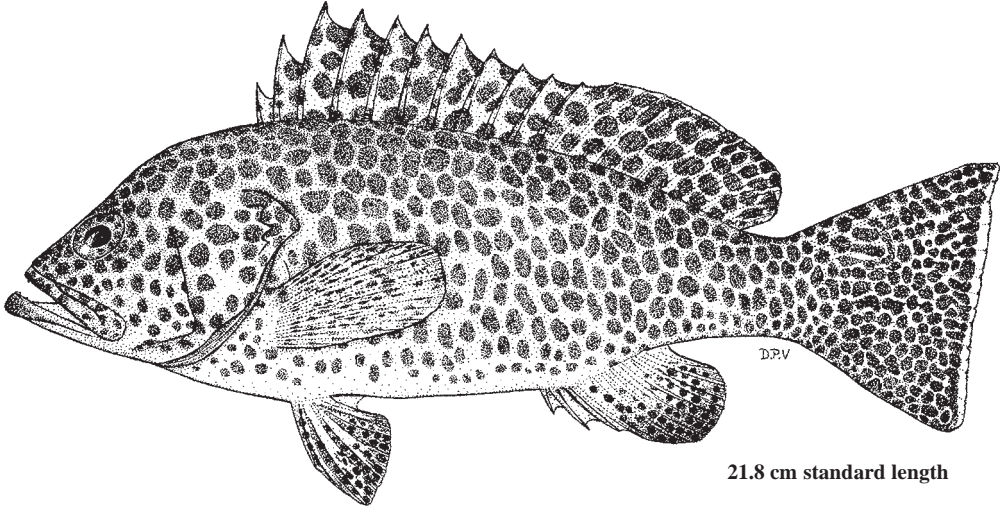
Habitat, biology, and fisheries: Usually found on offshore coral and rocky reefs in depths of 80 to 130 m. The banded grouper is a popular and commercially important species in Hong Kong, but in Singapore it is not a popular grouper in the market. Caught with hand lines. Sold fresh.

Distribution: Eastern Indian Ocean and central western Pacific from the Andaman Sea to southern Japan, Taiwan Province of China, China, Philippines, Viet Nam, Malaysia, Thailand, Indonesia, New Guinea, and north-western Australia; but unknown east of New Guinea except for one record from Fiji.



Epinephelus areolatus (Forsskål, 1775)

(Plate II, 13)

Frequent synonyms / misidentifications: None / *Epinephelus chlorostigma* (non Valenciennes, 1828).**FAO names:** En - Areolate grouper; Fr - Mérouaréolé; Sp - Mero areolado.

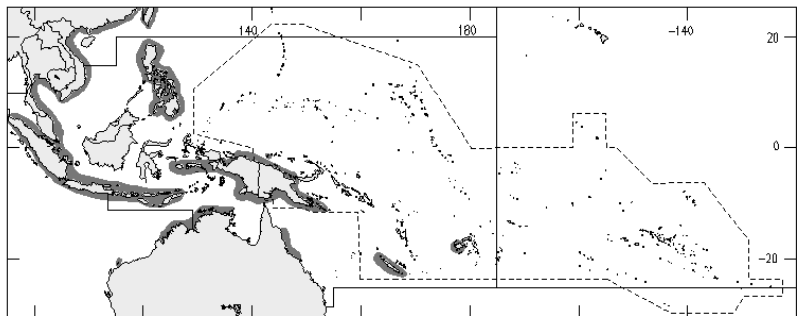
21.8 cm standard length

Diagnostic characters: Body depth less than head length, 2.8 to 3.3 times in standard length (for specimens 14 to 31 cm standard length); head length 2.4 to 2.8 times in standard length. Interorbital area convex; preopercle angular, with 2 to 7 enlarged serrae at the angle; upper edge of operculum straight or slightly convex; nostrils subequal; maxilla extending to below rear half of eye, the lower edge with a distinct step posteriorly; maxilla, lower jaw, and gular area scaly; midlateral part of lower jaw with 2 rows of teeth. **First gill arch with 23 to 25 gill rakers, of which 8 to 10 on upper limb and 14 to 16 on lower limb.** Pyloric caeca 11 to 17. **Dorsal fin with XI spines and 15 to 17 soft rays**, the third or fourth spines longest and about equal to longest soft ray, the interspinous membranes moderately incised; anal fin with III spines and 8 soft rays, the margin rounded or angular; **caudal fin slightly convex in juveniles, truncate or slightly emarginate in adults**; pectoral-fin rays 17 to 19; pectoral fins longer than pelvic fins, 1.5 to 1.8 times in head length; pelvic fins 1.7 to 2.1 times in head length, reaching to or nearly to anus. Lateral body scales rough; adults with auxiliary scales. **Lateral-line scales 49 to 53**; lateral scale series 97 to 116. **Colour:** head, body, and fins pale, covered with numerous close-set brown, brownish yellow or greenish yellow spots, the largest about size of pupil, those on front of head smaller than those on operculum. Pectoral fins pale, with small dark spots on the rays. Posterior edge of caudal fin with a distinct white margin.

Size: Maximum total length about 40 cm.

Habitat, biology, and fisheries: Usually found in seagrass beds or on fine sediment bottoms near rocky reefs, dead coral, or alcyonarians. It has been taken in depths of 6 to 200 m. At New Caledonia, the areolate grouper was reported to feed on penaeid prawns. Common in the markets of Hong Kong, Singapore, and probably throughout its range. Caught with hook-and-line, traps, and in trawls.

Distribution: Indo-West Pacific from South Africa to Fiji, including Andaman Islands, Thailand, Malaysia, Viet Nam, Indonesia, Philippines, Hong Kong, China, Taiwan Province of China, Japan, northern Australia (and nearby islands), Papua New Guinea, and New Caledonia. It appears to be absent from Micronesia, Polynesia, and most islands of the western Indian Ocean.

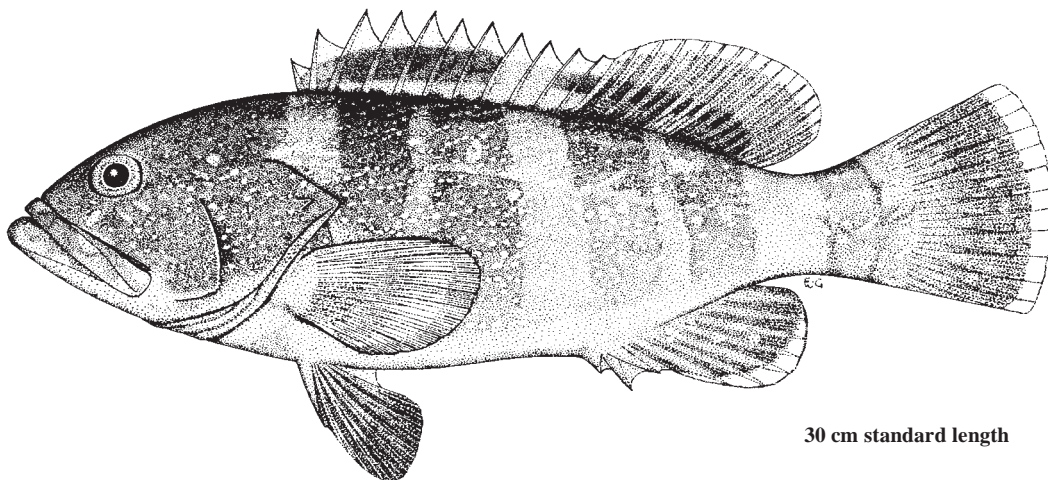


Epinephelus awoara (Temminck and Schlegel, 1842)

(Plate II, 14)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Yellow grouper; Fr - Mérrou jaune; Sp - Mero amarillo.



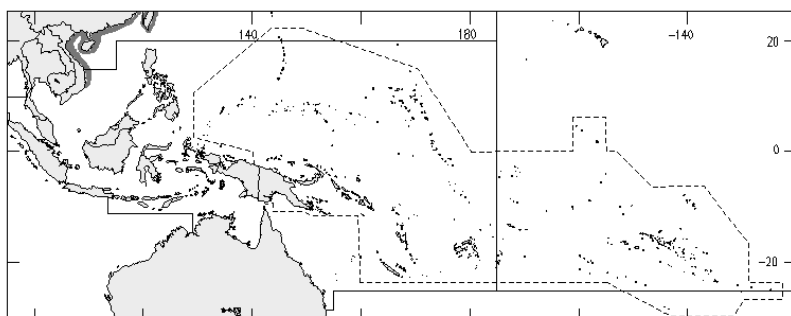
30 cm standard length

Diagnostic characters: Body depth 2.7 to 3.3 times in standard length (for specimens 13 to 31 cm standard length); **head length 2.3 to 2.6 times in standard length**. Interorbital area convex; dorsal head profile strongly convex; **preopercle subangular, with 2 to 5 strong spines at the angle; upper edge of operculum straight, the uppermost spine rudimentary**; maxilla reaches about to vertical at rear edge of eye; midlateral part of lower jaw with 2 rows of small, subequal teeth. **First gill arch with 22 to 26 gill rakers, of which 8 or 9 on upper limb and 16 to 18 on lower limb**. Pyloric caeca 12, in 3 bundles. Dorsal fin with XI spines and 15 or 16 soft rays, the third or fourth spine longest but shorter than the longest soft ray, the interspinous membranes deeply incised; anal fin with III spines and 8 soft rays; caudal fin convex; pectoral-fin rays 17 to 19, the fin longer than pelvic fins, 1.6 to 1.9 times in head length. Lateral body scales distinctly rough, with auxiliary scales in specimens larger than 30 cm standard length; lateral-line scales 49 to 55; lateral scale series 92 to 109. **Colour:** head and body pale greyish brown dorsally, usually golden yellow ventrally; **4 broad dark bars on dorsal part of body, 1 on caudal peduncle and another often visible on nape; head and body with numerous small yellow spots; body and median fins also with small greyish white spots; soft dorsal, caudal, and sometimes the anal fin with prominent yellow margin**; paired fins dusky yellow. Dark bars on body may be faint or absent in large adults.

Size: Maximum total length at least 60 cm.

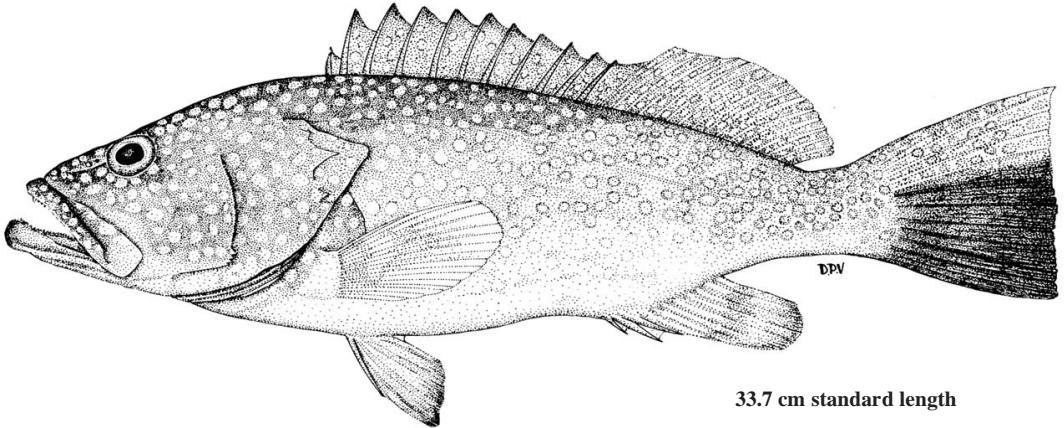
Habitat, biology, and fisheries: Occurs in rocky areas as well as on sandy-mud bottoms; juveniles are common in tidepools, and adults are caught in depths of 10 to 50 m. In captivity, the yellow grouper is an aggressive fish, spending much of its time chasing and biting other fishes, especially members of its own species. Valuable food fish, caught with trawls or hook-and-line. Eggs have been artificially fertilized, with the longest survival time for the larvae of 15 days.

Distribution: Western North Pacific: Korea, Japan, Taiwan Province of China, China, Viet Nam, and islands in the South China Sea.



Epinephelus bleekeri (Vaillant, 1877)

(Plate II, 15)

Frequent synonyms / misidentifications: None / None.**FAO names:** En - Duskytail grouper; Fr - M rou demideuil; Sp - Mero medioluto.

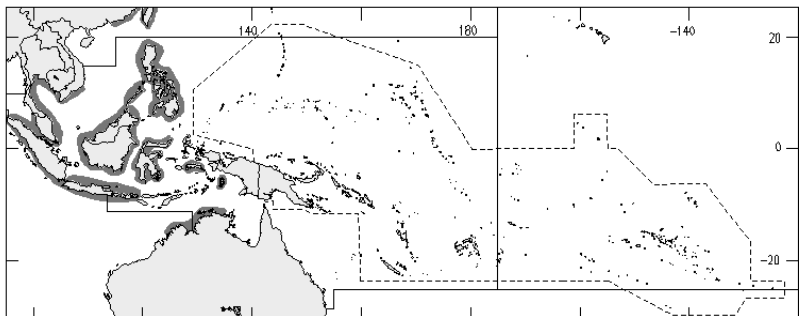
33.7 cm standard length

Diagnostic characters: Body elongate, its depth 3.0 to 3.5 times in standard length (for specimens 11 to 52 cm standard length); head length 2.4 to 2.7 times in standard length. Interorbital area flat to slightly convex; **preopercle angle with 2 to 9 enlarged serrae; adults with a notch above preopercle angle; upper edge of operculum straight;** maxilla scaly, reaching to or beyond vertical at rear edge of eye; midlateral part of lower jaw with 2 rows of subequal teeth. First gill arch with 25 to 28 gill rakers, of which 9 to 11 on upper limb and 16 to 18 on lower limb. Dorsal fin with XI spines and 16 to 18 soft rays, third to fifth spines longest, the interspinous membranes incised; anal fin with III spines and 8 or 9 (rarely 9) soft rays; **caudal fin truncate or slightly convex;** pectoral-fin rays 17 to 19, the fin length 1.6 to 2.1 times in head length; pelvic fins 1.9 to 2.5 times in head length. Lateral body scales rough; adults with a few small auxiliary scales; **lateral-line scales 49 to 53;** lateral scale series 99 to 104. **Colour:** head and body brownish, reddish brown or purplish grey, covered (except ventrally) with numerous reddish orange, gold, or yellow spots; dorsal fin and upper third of caudal fin with spots like those on body; lower two-thirds of caudal fin dusky; spots on body of some fish with a faint dark margin; pectoral and pelvic fins and distal part of anal fin dusky; dark streak along maxillary groove. Juveniles (less than 11 cm standard length) with 7 faint dark bars dorsally on body, the first 2 on nape, the last on caudal peduncle; all bars more or less demarcated by small dark spots; no dark spots on head or fins.

Size: Maximum total length about 76 cm.

Habitat, biology, and fisheries: Occurs on shallow rocky banks, but not reported from well-developed coral reefs. Depth range reported as 30 to 104 m. An excellent eating fish, but apparently not abundant. Caught with hook-and-line, longlines, and trawls.

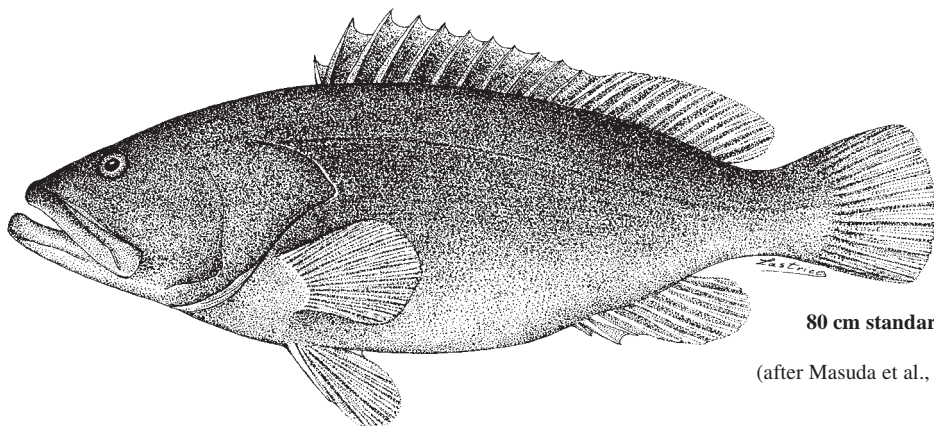
Distribution: An Indo-West Pacific species occurring from the Persian Gulf to Thailand, Cambodia, Indonesia, Borneo, Philippines, China (including Hong Kong and Taiwan Province), and north coast of Australia. It is not known from Japan, New Guinea, or any of the islands of Micronesia or Polynesia.



***Epinephelus bruneus* Bloch, 1793**

Frequent synonyms / misidentifications: *Serranus moara* Temminck and Schlegel, 1842 / None.

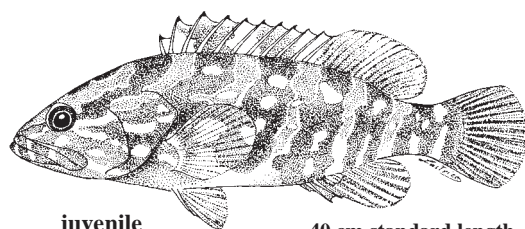
FAO names: En - Longtooth grouper; Fr - M  rou longues dents; Sp - Mero diente largo.



80 cm standard length

(after Masuda et al., 1984)

Diagnostic characters: Body elongate, its depth 3.0 to 3.6 times in standard length; head length 2.3 to 2.5 times in standard length. Interorbital area convex; **preopercle angular, with the serrae at angle distinctly enlarged**; upper spine on opercle inconspicuous; upper edge of operculum convex; maxilla reaches past vertical at rear edge of eye; tiny embedded scales on maxilla; no step on ventral edge of maxilla; **midlateral part of lower jaw with 2 rows of well-developed canines, those along sides of upper jaw slightly smaller**; nostrils small, subequal. Gill rakers shorter than gill filaments; first gill arch with 24 to 27 rakers, of which 9 to 11 on upper limb and 16 to 18 on lower limb. **Dorsal fin with XI spines and 13 to 15 soft rays**, the third or fourth spine longest, but shorter than the longest soft ray, the interspinous membranes deeply incised; anal fin with III spines and 8 soft rays; caudal fin rounded; pectoral-fin rays 17 to 19, the fin length 1.9 to 2.5 times in head length; pelvic fins 2.2 to 2.6 times in head length and ending well short of anus. Midlateral body scales rough; no auxiliary scales on body; **lateral-line scales 64 to 72; some anterior lateral-line scales on adults with branched tubes**; lateral scale series 93 to 126. **Colour:** juveniles pale yellowish brown, the body with 6 irregular, oblique dark bars containing irregular pale spots; first bar extends from nape to eye, the last on caudal peduncle; 3 dark brown bands radiating from lower part of eye; some specimens with distal part of interspinous membranes greenish yellow. Adults (larger than 40 cm standard length) dark greyish brown, the bars and bands replaced by faint dorsal blotches or absent altogether, the body covered with small pale grey spots forming short horizontal lines and a mottled pattern; lower margin of anal fin and lower corner of caudal fin with white edge.



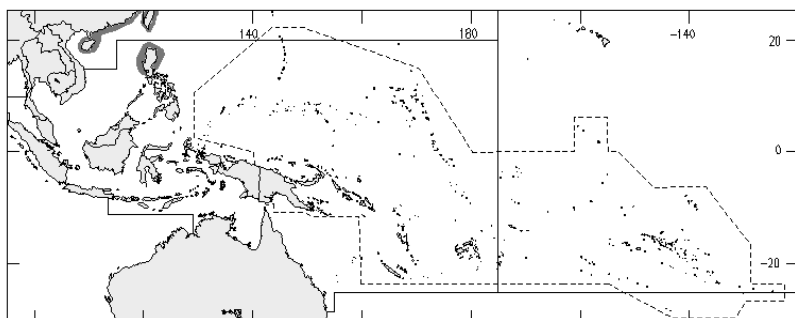
juvenile

40 cm standard length

Size: Maximum total length about 100 cm.

Habitat, biology, and fisheries: Rocky reefs and mud bottom; adults found in depths of 20 to 200 m; juveniles occur in shallow water. An excellent eating fish. In 1968, *Epinephelus bruneus* was one of the most abundant species in Hong Kong waters. Caught with handlines, longlines, and trawls.

Distribution: Known only from Korea, Japan (north to Hegura-jima Island, 37°50'N), China (south to Hong Kong and Hainan Island), Taiwan Province of China, and Luzon, Philippines. May be more widespread in the area.

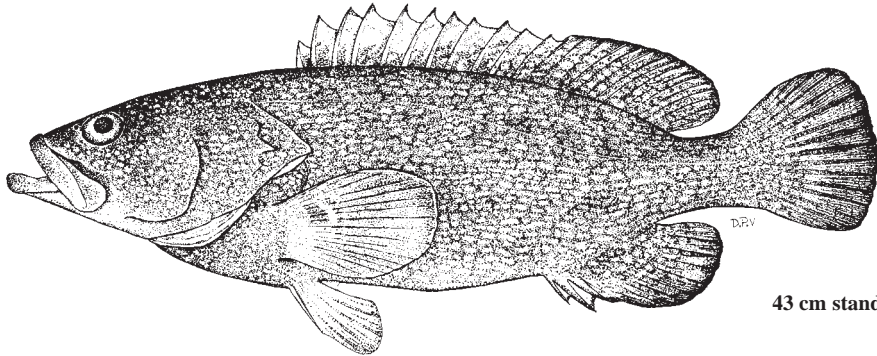


Epinephelus caeruleopunctatus (Bloch, 1790)

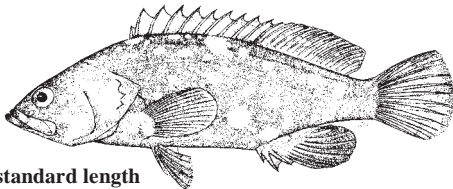
(Plate II, 16)

Frequent synonyms / misidentifications: None / *Epinephelus ongus* (non Bloch, 1790); *E. summana* (non Forsskål, 1775); *E. corallicola* (non Valenciennes, 1828).

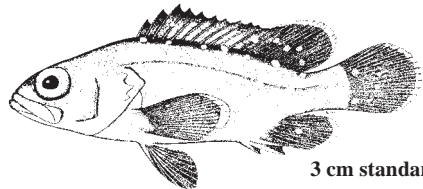
FAO names: En - Whitespotted grouper; Fr - Vielle taches blanches; Sp - Mero nevero.



43 cm standard length



17 cm standard length



3 cm standard length

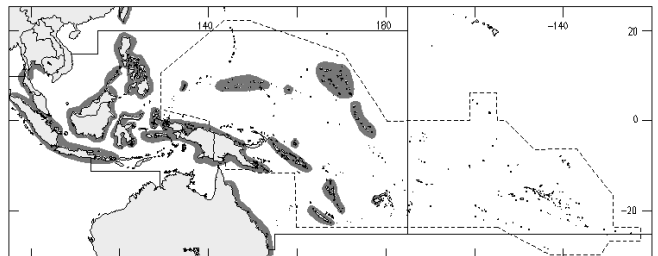
juveniles

Diagnostic characters: Body depth distinctly less than head length, 2.9 to 3.4 times in standard length (for specimens 11 to 47 cm standard length); head length 2.3 to 2.5 times in standard length. **Head pointed and the dorsal profile almost straight; preopercle rounded, finely serrate; opercular spines inconspicuous; upper edge of operculum straight, sinuous or slightly convex; maxilla naked, mostly covered by upper lip; canines at front of jaws small or absent; midlateral part of lower jaw with 3 to 5 rows of small teeth. In specimens more than 45 cm, the rear nostrils become vertically elongate, its length 5 or 6 times greater than diameter of anterior nostrils.** First gill arch with 8 to 10 gill rakers on upper limb, 13 to 17 on lower limb (juveniles); specimens larger than 25 cm with only 4 to 8 developed rakers on lower limb, the rudiments difficult to count because of intercalated bony tooth plates; gill rakers shorter than gill filaments, the raker at angle of gill arch about twice as long as adjacent rakers. Dorsal fin with XI spines and 15 to 17 soft rays, the third or fourth spines longest, 2.7 to 3.6 times in head length, the interspinous membranes incised; anal fin with III spines and 8 soft rays; caudal fin rounded; **pectoral fins large and fleshy, with 17 to 19 rays, the fin length 1.5 to 2.1 times in head length;** pelvic fins end well short of anus, their length 2.0 to 2.7 times in head length. Lateral body scales rough (1 specimen, 50 cm, with "mostly smooth" lateral body scales), with auxiliary scales; lateral-line scales 51 to 61; lateral scale series 86 to 109. **Colour:** adults brownish grey, the body covered with small pale spots overlain with large pale blotches; oblique black saddle on rear half of peduncle; 4 or 5 indistinct black blotches at base of dorsal fin; prominent black streak on maxillary groove. Large adults brownish, covered with small, indistinct, contiguous pale spots. Juveniles (less than 25 cm) dark grey to black, covered with prominent pupil-size white spots and smaller white dots.

Size: Largest specimen examined 59 cm total length; reported to 76 cm.

Habitat, biology, and fisheries: Coral reefs, usually in or near caves; juveniles found in tidepools. Caught with hook-and-line, spear, and in traps. Probably of some importance to fisheries in areas where it is common.

Distribution: Indo-West Pacific, from South Africa to Fiji, including Thailand, Indonesia, Philippines, Taiwan Province of China, Japan, Papua New Guinea, Australia (Queensland to New South Wales), Palau, Solomon Islands, New Caledonia, Vanuatu Caroline Islands, Marshall Islands, and Gilbert Islands.

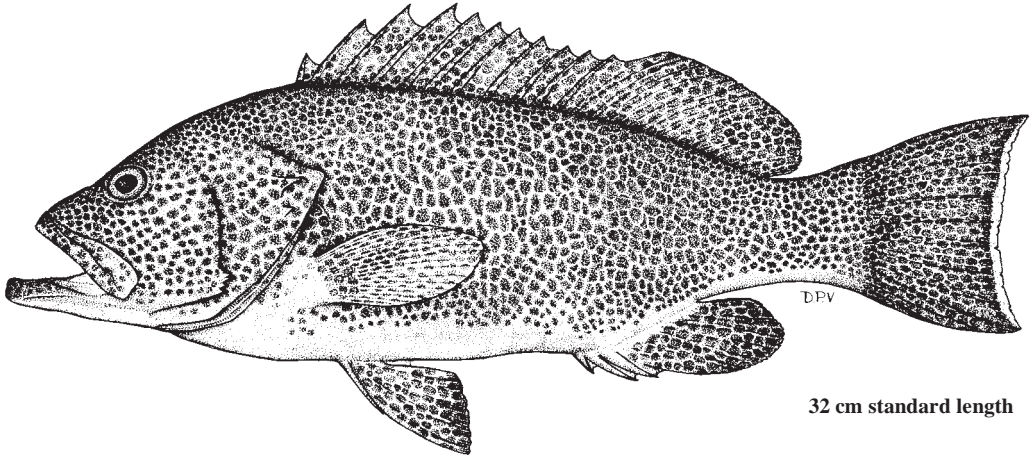


Epinephelus chlorostigma (Valenciennes, 1828)

(Plate III, 17)

Frequent synonyms / misidentifications: None / *Epinephelus areolatus* (non Forsskål, 1775).

FAO names: En - Brownspeckled grouper; Fr - Mérou pintade; Sp - Mero pintado.

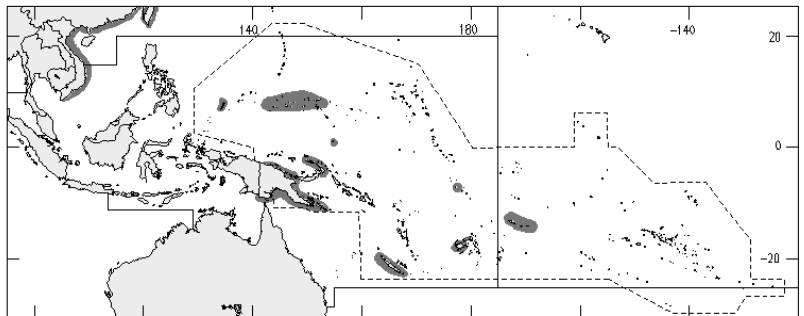


Diagnostic characters: Body depth 2.8 to 3.3 times in standard length (for specimens 12 to 51 cm standard length); body width 1.8 to 2.2 times in body depth; head length 2.4 to 2.7 times in standard length; caudal peduncle depth 3.0 to 3.6 times in head length. Interorbital slightly convex; **preopercle angular, with 4 to 7 enlarged serrae at angle; upper edge of operculum straight;** maxilla reaches about to vertical at rear edge of eye; maxilla scaly, with a low step on posterior part of ventral edge; midlateral part of lower jaw with 2 to 4 rows of teeth, the inner ones about twice size of outer teeth; rear nostrils not noticeably larger than anterior nostrils. **First gill arch with 23 to 29 gill rakers, of which 8 to 11 on upper limb and 15 to 18 on lower limb;** gill rakers longer than gill filaments. Pyloric caeca 26 to 52. **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 slightly to moderately incised; **anal fin rounded or angular,** with III spines and 8 soft rays, the third spine longer than second; **caudal fin truncate or slightly emarginate;** pectoral-fin rays 17 to 19; pectoral fins usually slightly longer than pelvic fins, 1.6 to 2.0 times in head length; pelvic fins 1.8 to 2.3 times in head length. Lateral body scales rough, with auxiliary scales; **lateral-line scales 48 to 53;** lateral scale series 96 to 122. **Colour:** head, body, and fins with small, irregular, close-set dark brown spots, the ground colour forming a pale network; caudal fin usually with white line along rear margin; spots on pectoral fins mainly confined to rays.

Size: Maximum total length at least 75 cm; maximum weight 7 kg.

Habitat, biology, and fisheries: Coral reefs and also (in the South China Sea) on mud bottoms; depth range 4 to 280 m. Feeds on fishes and crustaceans (mainly stomatopods and crabs). Females are mature at 23 to 29 cm total length, and sexual transition occurs between 35 and 45 cm, but all females do not change sex. Common in markets of Singapore and Hong Kong. Caught with hook-and-line, spear, traps, and trawls.

Distribution: Red Sea to South Africa and eastwards to southern Japan, Papua New Guinea, New Caledonia, New Ireland, Caroline Islands, American Samoa, and Fiji. The wide distribution of *Epinephelus chlorostigma* has some puzzling gaps. There are no verifiable records from the Comoros, the continental shelf between Oman and Cambodia, Indonesia, Philippines, Taiwan Province of China, and Australia. Records from the Persian Gulf are apparently misidentifications of *E. polylepis*.

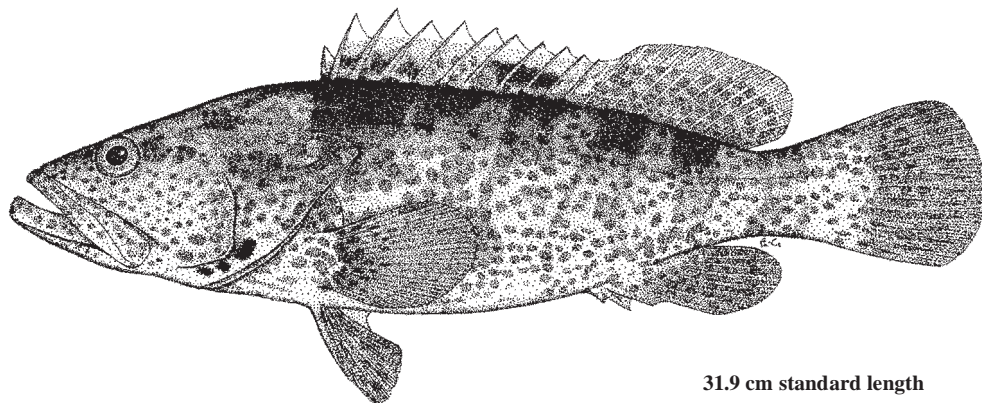


Epinephelus coioides (Hamilton, 1822)

(Plate III, 18)

Frequent synonyms / misidentifications: *Epinephelus suillus* (Valenciennes, 1828) / *Epinephelus malabaricus* (non Bloch and Schneider, 1801); *E. tauvina* (non Forsskål, 1775).

FAO names: **En** - Orangespotted grouper; **Fr** - Mérou taches oranges; **Sp** - Mero de pintas naranjas.



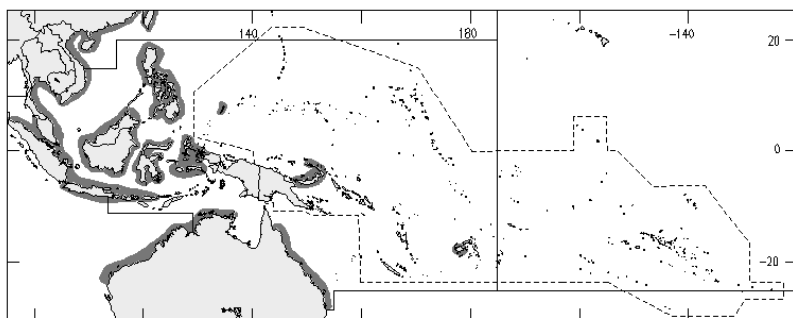
31.9 cm standard length

Diagnostic characters: Body elongate, its depth 2.9 to 3.7 times in standard length (for specimens 10 to 78 cm standard length); body width 1.4 to 2.0 times in body depth; head length 2.3 to 2.6 times in standard length. **Interorbital width 5.0 to 6.2 times in head length;** preopercle with enlarged serrae at angle and a broad shallow notch just above angle; upper edge of operculum straight or somewhat convex; maxilla reaches to or slightly past a vertical at rear edge of eye; **upper jaw length 17 to 20% of standard length;** midlateral part of lower jaw with 2 or 3 rows of subequal teeth; nostrils subequal. First gill arch with 23 to 26 gill rakers, of which 8 to 10 on upper limb and 14 to 17 on lower limb; adults with small bony platelets on lateral side of first gill arch. Pyloric caeca 50 to 60. Dorsal fin with XI spines and 14 to 16 soft rays, the third or fourth spines longest, 2.9 to 4.0 times in head length; anal fin with III spines and 8 soft rays, the third spine usually longer than the second; caudal fin rounded; pectoral-fin rays 18 to 20. **Lateral body scales rough, with minute auxiliary scales; lateral-line scales 58 to 65; lateral-line tubes of anterior scales branched in adults;** lateral scale series 100 to 118. **Colour:** head and body tan dorsally, shading to whitish ventrally; **numerous small brownish orange or reddish brown spots on head, body, and median fins; body with 5 faint, irregular, oblique, dark bars which bifurcate ventrally;** first dark bar below anterior dorsal-fin spines, last bar on caudal peduncle; 2 dark spots on interopercle and another 1 or 2 at junction of sub- and interopercles. Orange spots turn brown on exposure to air and become fainter (more diffuse) in preservative.

Size: Maximum length at least 95 cm.

Habitat, biology, and fisheries: Estuaries and offshore to depths of 100 m. Feeds on fishes, shrimps, crabs, and cephalopods. Females mature at 25 to 30 cm (2 to 3 years old), and sexual transition occurs at 55 to 75 cm. The subject of much recent research in aquaculture, the orangespotted grouper is often misidentified as "*Epinephelus tauvina*" or "*E. malabaricus*" in the literature. Common and expensive in markets of the region; sold fresh and kept alive at restaurants in Hong Kong and Taiwan Province of China. Caught with hook-and-line, traps, trawls, and lift nets.

Distribution: Continental shores and large islands from Red Sea to South Africa and east to the western Pacific, where it ranges from the Ryukyu Islands of Japan to Australia and out to the islands of Palau and Fiji.

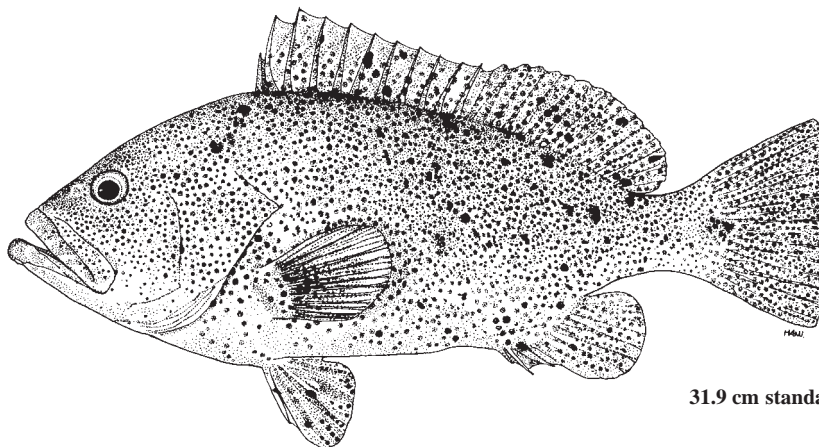


Epinephelus cyanopodus (Richardson, 1846)

(Plate III, 19)

Frequent synonyms / misidentifications: *Epinephelus hoedtii* (Bleeker, 1855); *E. kohleri* Schultz, 1953 / None.

FAO names: En - Speckled grouper; Fr - M rou bleu; Sp - Mero azul.



31.9 cm standard length

Diagnostic characters: Body deep and compressed, its depth subequal to head length, 2.4 to 2.7 times in standard length (for specimens 11 to 43 cm standard length); body width 1.9 to 2.8 times in body depth. Dorsal head profile steep, the interorbital area distinctly convex; preopercle subangular, finely serrate, serrae at rounded corner slightly enlarged; opercular spines inconspicuous; upper edge of operculum straight; maxilla reaches about to vertical at rear edge of eye; midlateral part of lower jaw with 2 to 4 rows of teeth; rear nostrils of adults 2 or 3 times larger than anterior nostrils. **First gill arch with 24 to 27 gill rakers**, of which 9 or 10 on upper limb and 15 to 17 on lower limb. Pyloric caeca very numerous. **Dorsal fin with XI spines and 16 or 17 soft rays, the third or fourth spines longest, 2.2 to 2.8 times in head length, the interspinous membranes not or only slightly incised;** anal fin with III spines and 8 soft rays; **caudal fin truncate or slightly emarginate;** pectoral fins thin (not fleshy), with 18 to 20 rays, subequal to pelvic fins, their length 1.7 to 2.0 times in head length. Lateral body scales rough, with auxiliary scales; **lateral-line scales 63 to 75; lateral scale series 128 to 147.** **Colour:** adults usually pale bluish grey, covered with black dots and a few scattered, irregular black spots; broad black submarginal band on caudal fin of some large juveniles; pelvic fins usually black tipped. Juveniles with yellow fins; body of small juveniles (to 12 cm standard length) mainly yellow, the head and front part of body with a wash of bluish grey and faint dark dots.

Size: Maximum length 120 cm.

Habitat, biology, and fisheries: Usually found on isolated coral heads in lagoons or bays, but also caught at depths to 150 m on outer reef area. Swims out in the open, several metres above the bottom, and is readily caught by anglers at night. Feeds on fishes and calappid crabs. In the 1960's, the speckled grouper was abundant at Macclesfield Bank and Pratas Reef in the South China Sea. It is caught with trawls, handlines, and longlines. Marketed fresh.

Distribution: Western Pacific, from southern Japan to southern Queensland and east to Fiji and islands of Micronesia; also known from Taiwan Province of China, Hong Kong, Viet Nam, Gulf of Thailand, Indonesia, Philippines, Papua New Guinea, New Caledonia, and Lord Howe Island. The only record from the Indian Ocean (a specimen in the Vienna Museum, NMW 40520, 29.3 cm standard length, from Western Australia) is dubious; the species is not known from Western Australia, and there are no specimens from there in the Western Australian Museum.

