

Epinephelus retouti Bleeker, 1868

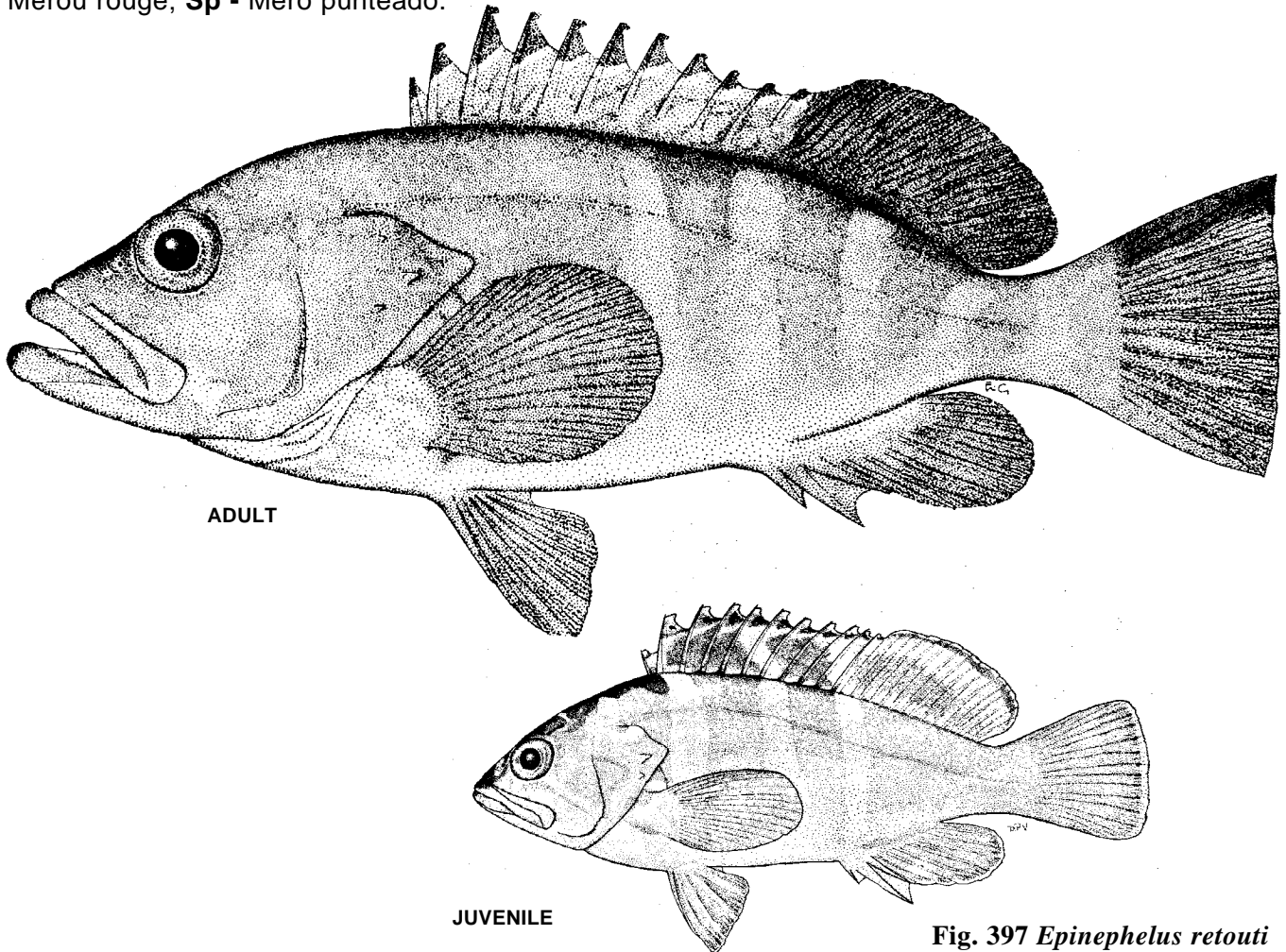
Fig. 397; Pl. XXIF

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Epinephelus Retouti Bleeker, 1868:339 (type locality: Réunion).

Synonyms: *Epinephelus truncatus* Katayama, 1957:158, fig. 4 (type locality: Torishima, Izu Islands). *Epinephelus rubra* (non Bloch) Baissac, 1962:162 (*nomen nudum*). *Epinephelus mauritanus* Baissac, 1962:188 (type locality: Mauritius).

FAO Names: **En** - Red-tipped grouper (formerly: Brownback grouper); **Fr** - Mérou à bout rouge (formerly: Mérou rouge); **Sp** - Mero punteado.

Fig. 397 *Epinephelus retouti*

(adult 286 mm standard length, juvenile 100 mm standard length)

Diagnostic Features: Body depth contained 2.5 to 3.1 times in standard length (for fish 12 to 35 cm standard length). Head length contained 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 contained 3.5 to 3.9 times in head length; nostrils subequal; 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. Gill rakers 6 to 8 on upper limb, 15 to 17 on lower limb, total 21 to 24. Dorsal fin with XI spines and 16 or 17 rays, the third to fifth spines longest, their length contained 2.4 to 3.1 times in head length; anal fin with III spines and 8 rays; pectoral fins fleshy, with 19 or 20 rays; pectoral-fin length contained 1.5 to 1.8 times, pelvic-fin length contained 1.8 to 2.2 times in head length; caudal fin truncate to slightly convex. Lateral-body scales ctenoid, with numerous auxiliary scales; lateral-line scales 64 to 76; lateral-scale series 120 to 141. Pyloric caeca numerous (more than 40). **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 fin where they are dark brown; dorsal fin greenish brown, the soft-rayed part darker than the rest of fin, the outer triangular part of interspinous membranes dark red, set off from rest of fin by an orange-yellow stripe; dorsal-fin 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.

Geographical Distribution:

E. retouti is known from islands of the tropical Indo-Pacific region: Bassas da India (Mozambique Channel), Madagascar, Réunion, Mauritius, Chagos, Christmas Island (eastern, Indian Ocean), Indonesia (Bali Sea off Lombok), Taiwan, Japan (Okinawa, Izu Islands), Palau, New Caledonia, Line Islands, American Samoa, Society Islands, and Tuamotu Islands (Fig. 398).

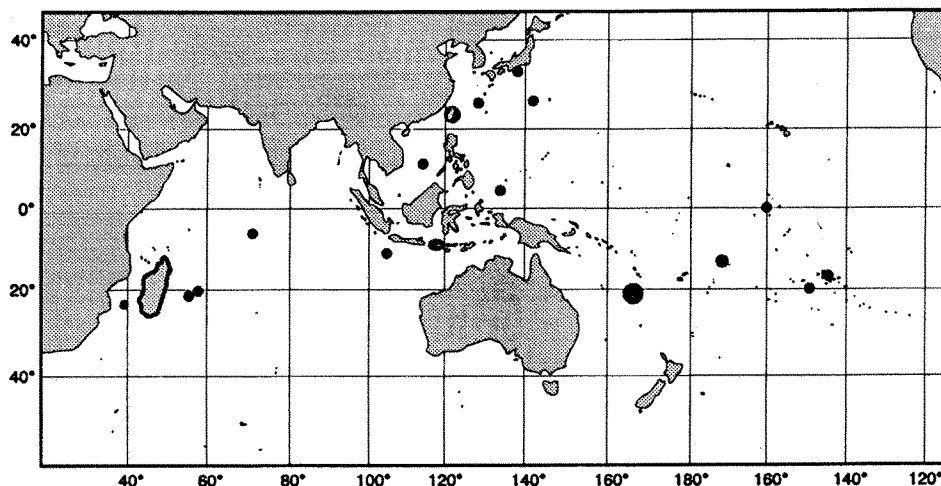


Fig. 398

Habitat and Biology:

Adults are found on coral reefs and outer reef slopes in depths of 70 to 220 m; juveniles occur in depths of 20 to 40 m.

Size: According to Postel et al. (1963), *E. retouti* attains 50 cm total length and 2 kg in weight.

Interest to Fisheries: This species is too rare to be of commercial importance. It is caught with handlines and vertical longlines.

Local Names: JAPAN: Akahata-modok; MAURITIUS: Vieille rouge; NEW CALEDONIA: Loche rouge du large; REUNION: Rouge du large.

Literature: Randall and Heemstra (1991).

Remarks: *E. retouti* is a member of the *E. fasciatus* species-complex; the other 3 species of this complex are *E. fasciatus*, *E. rivulatus* and *E. irroratus*. These 4 species share similar distinctive features of their colour patterns: 1) Margin of spinous dorsal fin black or dark red (brown or gold in *E. rivulatus*), 2) dark brown or dark red line along crease at base of dorsal fin, 3) body scales with a white, pale blue or greenish grey spot or centre, and 4) orbit edged with black, red or pale blue. These 4 species also have similar meristic and morphometric features.

E. fasciatus differs from *E. retouti* in having a shorter snout (length contained 4.3 to 5.1 times in head length), fewer lateral-line scales (except for *E. fasciatus* from Oceania, which have high counts like *E. retouti*), the tips of the interspinous dorsal-fin membranes are black (not dark red, except in specimens from Western Australia), the soft dorsal fin and upper caudal-fin rays are not darker than the rest of these fins, and the caudal-fin margin is convex or moderately rounded (except in central Pacific specimens).

In *E. rivulatus* the conspicuous body scale spots are white or pale blue, there is a semicircular red or reddish brown blotch at the base of the pectoral-fin rays and a similar spot anteriorly on isthmus, and the snout is shorter (length contained 4.0 to 5.0 times in head length).

In *E. irroratus*, there are no dark bars on the body, the scale spots are white, and the second dorsal-fin spine is distinctly elongated in adults.

Epinephelus rivulatus (Valenciennes, 1830)

Fig. 399; Pl. XXIIA

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Serranus rivulatus Valenciennes in Cuv. and Val., 1830:515 (type locality: Réunion).

Synonyms: *Serranus rhyncholepis* Bleeker, 1852c:749 (type locality: Bulucomba, Celebes). *Serranus viridipinnis* De Vis, 1885a:144 (type locality: Moreton Bay, Queensland, Australia). *Epinephelus grammatorphus* Boulenger, 1903:64, pl. 3 (type locality: Natal, South Africa). *Epinephelus raymondi* Ogilby, 1908:93 (type locality: Cape Moreton, Queensland, Australia). *Epinephelus matterni* Fowler, 1918:31, fig. 13 (type locality: Philippine Islands). *Epinephelus homosinensis* Whitley, 1944:267 (type locality: Broome, Western Australia). *Epinephelus spiramen* Whitley, 1945:25 (type locality: 30 miles north of Carnarvon, Western Australia).

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

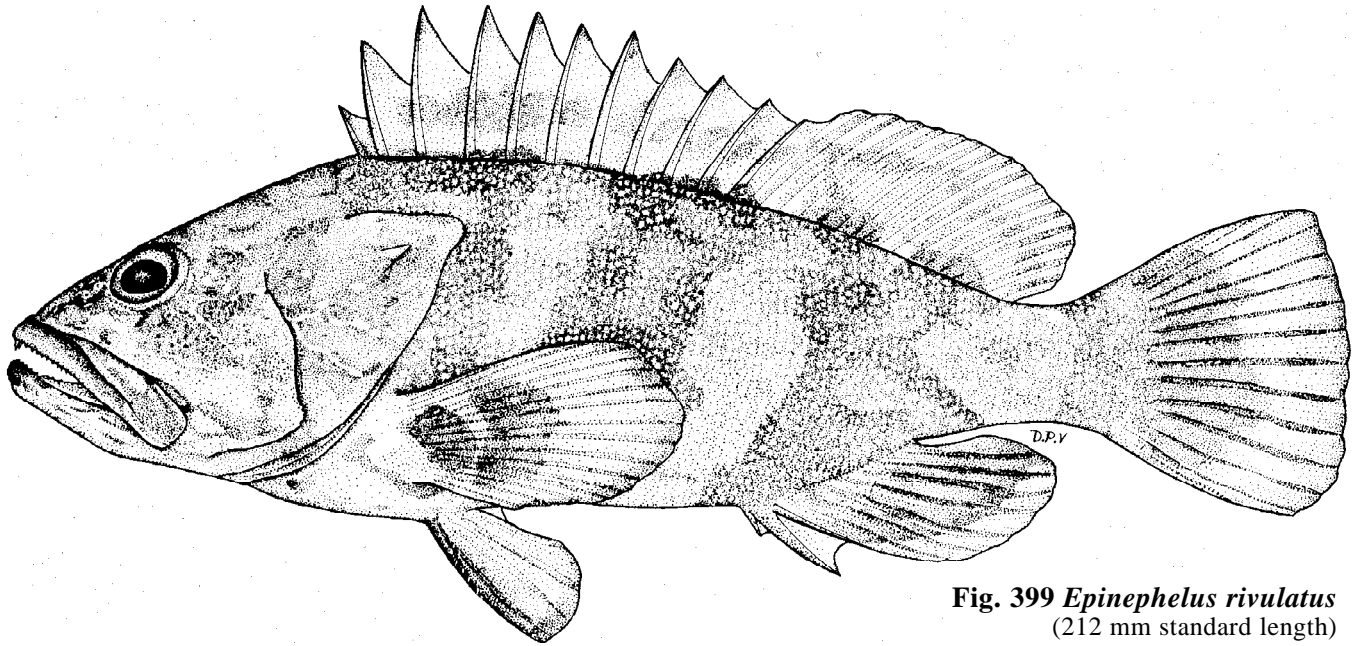


Fig. 399 *Epinephelus rivulatus*
(212 mm standard length)

Diagnostic Features: Body depth contained 2.7 to 3.2 times in standard length (for fish 12 to 35 mm standard length). Head length contained 2.3 to 2.6 times in standard length; interorbital area flat to slightly convex, the dorsal head profile convex; snout length contained 4.0 to 5.0 times in head length; preopercle angular, with enlarged serrae at angle; upper edge of operculum straight, almost horizontal; nostrils subequal; maxilla reaches to or past vertical at rear edge of eye, the ventral edge with a slight step at distal expansion; midlateral part of lower jaw with 2 or 3 rows of teeth. Gill rakers 6 to 8 on upper limb, 14 to 16 on lower limb, 20 to 24 total. Dorsal fin with XI spines and 16 to 18 rays, the third or fourth spine longest, its length contained 2.4 to 3.2 times in head length and subequal to the longest dorsal-fin ray; the interspinous membranes distinctly incised; anal fin with III spines and 8 rays; pectoral fins fleshy, with 17 to 19 rays; pectoral-fin length contained 1.5 to 1.9 times, pelvic-fin length contained 1.9 to 2.4 times in head length; caudal fin rounded. Lateral-body scales ctenoid, with numerous auxiliary scales; nape and dorsoposterior part of head densely covered with minute auxiliary scales; lateral-line scales 48 to 53; lateral-scale series 86 to 98. Pyloric caeca 26. **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 thorax 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, the dorsal usually with a dark brown to black streak along the base (may be restricted to 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.

Geographical Distribution: *E. rivulatus* is widely distributed from the western Indian Ocean to the western Pacific and southward into temperate waters of South Africa, Australia, and New Zealand. We have examined specimens, from Yemen, Kenya, Zanzibar, Mozambique, South Africa (south to Knysna), Madagascar, Reunion, Mauritius, Indonesia, Philippines, Taiwan, Japan (Okinawa, Honshu), Australia (Western Australia, Queensland, New South Wales), Lord Howe Island, Norfolk Island, New Zealand (North Island, Bay of Islands), and New Caledonia. Additional records include the Comoro Islands, Viet Nam, Papua New Guinea, and Hong Kong (Fig. 400). Not known from the Red Sea or Persian Gulf.

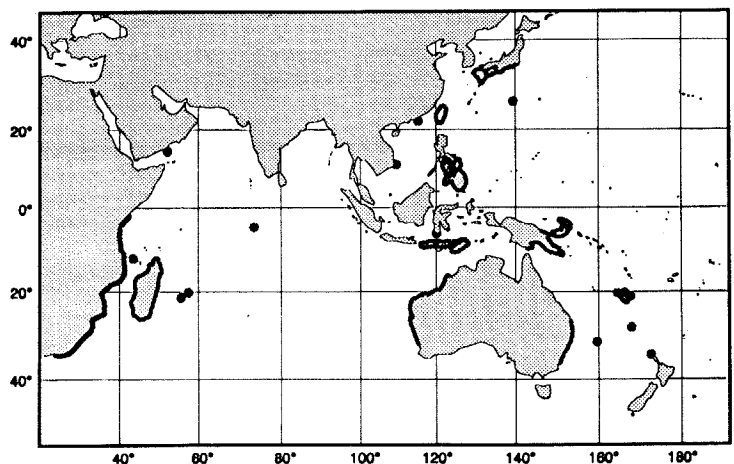


Fig. 400

Habitat and Biology: *E. rivulatus* occurs on rocky bottoms or coral reefs in depths of 10 to 150 m. On the North Kenya Banks, Morgans (1982) found that females were mature at 22 cm standard length (200 g) and the smallest mature male was 25 cm standard length (500 g). Stomach contents comprised small fishes (including *Cyprinocirrhites polyactis* and an eel) and crabs.

Size: Attains at least 37 cm standard length (1.4 kg).

Interest to Fisheries: Probably of some importance in areas where it is common. Caught with handlines, longlines, gillnets, traps, and spear.

Local Names: AUSTRALIA: Chinaman rockcod; HONG KONG: White-dotted grouper, Paak-dim-paan; JAPAN: Shimofurihata; NEW CALEDONIA: Loche brique; REUNION: Cabot sale, Rouge sale.

Literature: Randall and Heemstra (1991).

Remarks: *E. rivulatus* is a member of the *E. fasciatus* species-complex; the other 3 species of this complex are *E. fasciatus*, *E. irroratus*, and *E. retouti*. See the account of *E. retouti* for a discussion of this complex. *E. rivulatus* is distinguished from the other members of this complex by the dark reddish blotch at the base of the pectoral fins, the dark bands on the thorax, and the margin of the interspinous dorsal-fin membranes is brown or gold (rather than dark red or black).

Epinephelus septemfasciatus (Thunberg, 1793)

Fig. 401; Pl. XXII B

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Perca 7-fasciata Thunberg, 1793a56, pl. 1, upper fig. (type locality: Japan).

Synonyms: *Plectropoma susuki* Cuvier in Cuv. and Val., 1828:404 (type locality: Japan). *Serranus octocinctus* Temminck and Schlegel, 1842:7, pl. 4, fig. 2 (type locality: Japan).

FAO Names: En - Convict grouper; Fr - Mérou bagnard; Sp - Mero carcelario.

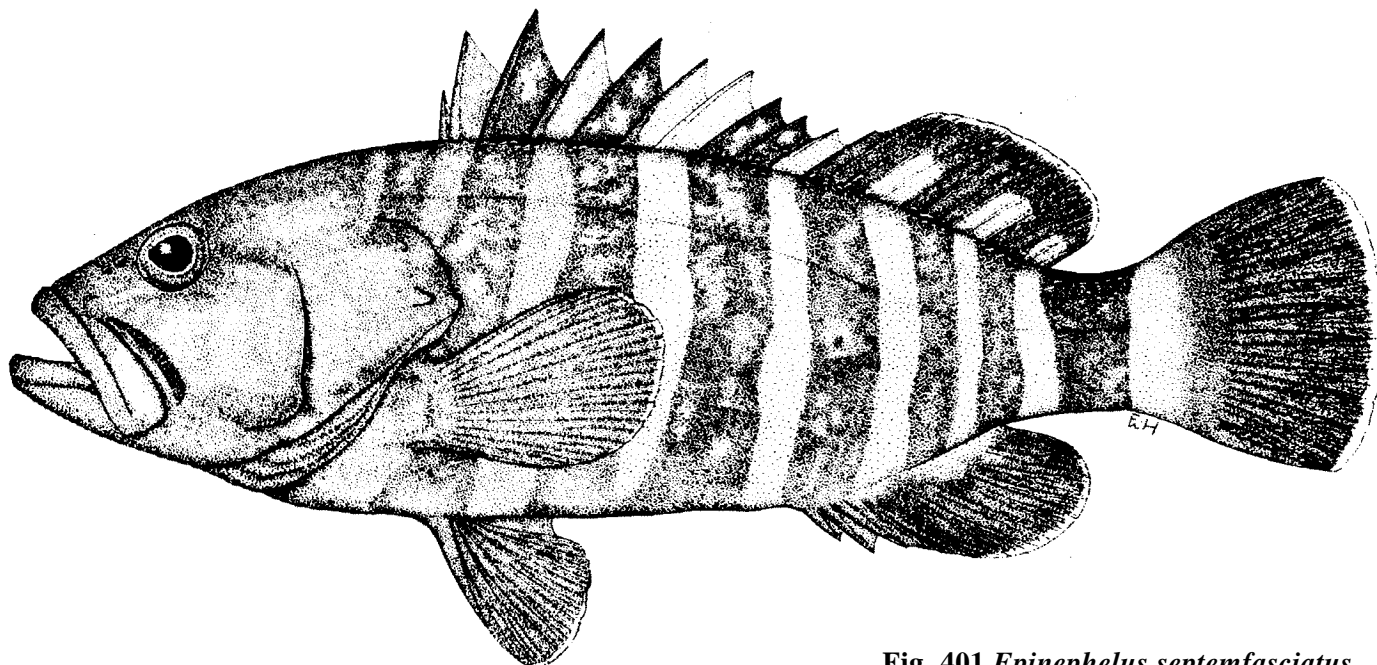


Fig. 401 *Epinephelus septemfasciatus*
(600 mm standard length)

Diagnostic Features: Body depth contained 2.5 to 3.1 times in standard length (for fish 10 to 47 cm standard length). Head length contained 2.4 to 2.6 times in standard length; interorbital distinctly convex, the dorsal head profile also convex; diameter of rear nostrils of adults 3 or 4 times that of anterior nostrils and greater than distance from rear nostril to edge of orbit; preopercle angular, the serrae at angle enlarged; lower edge of preopercle with 1 or 2 small spines anterior to angle; lower edge of subopercle and rear edge of interopercle serrate or smooth; upper edge of operculum convex; maxilla reaches to below rear half of eye; no distinct step on lower edge of maxilla; midlateral part of lower jaw with 2 rows of teeth. Gill rakers 7 to 9 on upper limb, 15 to 17 on lower limb. Dorsal fin with XI spines and 14 or 15 rays, the interspinous membranes deeply incised, the third or fourth spine longest, its length contained 2.1 to 2.7 times in head length and subequal to longest dorsal-fin rays; anal fin with III spines and 9 rays; pectoral-fin rays 17 to 19; pelvic fins shorter than pectoral fins, pelvic-fin length contained 1.8 to 2.0 times in head length; caudal-peduncle depth contained 1.2 to 1.5 times in its length; caudal fin rounded. Lateral-body scales ctenoid, with a few auxiliaries; lateral-line scales 63 to 70;

lateral-scale series 105 to 118. Pyloric caeca numerous, in 3 or 4 dendritic bundles with more than 80 terminal branches. **Colour:** Body buff with 7 or 8 dark bars, first on nape, often merging with dark colour of head, second dark bar below third and fourth dorsal-fin spines, sixth and seventh dark bars narrower than other bars and closer together, extending from middle rays of soft dorsal fin to anal-fin base; 3 pale interspaces below soft dorsal fin; last dark bar covers most of caudal peduncle and extends to base of last 2 or 3 dorsal-fin rays; pelvic fins blackish brown; median fins blackish brown distally with narrow pale margin: dark maxillary streak usually hidden by maxilla. Gill rakers and gill arches pale, without minute melanophores.

Geographical Distribution: *E. septemfasciatus* is known with certainty only from Japan, Korea, and China (Fig. 402); reports of this species from other areas appear to be based on misidentifications of *E. octofasciatus*.

Habitat and Biology: Rocky reefs in shallow water; common in depths of 5 to 30 m. Kitajima et al. (1991) described the development of eggs, larvae and juveniles reared from artificially fertilized eggs. The newly hatched larvae (1.85 mm) have an oil globule at the posterior end of the yolk. The yolk was mostly absorbed and melanophores were visible on the dorsal surface of the abdominal cavity and midventrally at the middle of the tail by the third day after hatching (total length 2.6 mm). Rudiments of the second dorsal- and pelvic-fin spines appeared at 13 days (3.45 mm total length). At 23 days (4.25 mm total length) 2 spines appeared on the preopercle and the dorsal surface of the abdominal cavity was covered with melanophores. In the 25 - day larva (4.8 mm total length), the second dorsal- and pelvic-fin spines are elongated and serrate, and the notochord is still straight. In a postlarva of 28

days (6.8 mm total length), the notochord was flexed, the second dorsal- and pelvic-fin spines were greatly elongated, rudiments of the median fin rays were visible, and the largest spine on the preopercle was about equal to the diameter of the eye. At 33 days (8.1 mm total length), the second dorsal- and pelvic-fin spines were fully elongated (90% and 65% of standard length respectively), thereafter they decreased with growth. In the 38-day (10.5 mm total length) postlarva, all of the fin rays are differentiated. At 60 days (30 mm total length) pigmentation developed rapidly all over the body, the second dorsal- and pelvic-fin spines had decreased to adult proportions, and the juveniles descended to the bottom of the rearing tank.

Size: According to Katayama (1988) *E. septemfasciatus* attains 90 cm standard length.

Interest to Fisheries: This species is of some commercial importance in Japan and probably also in Korea and China.

Local Names: JAPAN: Mahata.

Literature: Randall and Heemstra (1991).

Remarks: *E. septemfasciatus* is very similar to *E. octofasciatus*; both species are known from Japan, but *E. septemfasciatus* appears to be more common in shallow water. *E. octofasciatus* differs in having a deeper body (depth contained 2.2 to 2.7 times in standard length), deeper peduncle (peduncle depth contained 0.9 to 1.3 times in its length), pelvic fins subequal to or longer than pectoral fins, the diameter of the rear nostrils is not greater than distance from nostril to orbit, and in the configuration of the dark bars on body (only 5 bars wholly below dorsal fin, the last one broader than others and extending from middle 5 to 7 dorsal-fin rays to rear half of anal fin; 2 pale interspaces below soft dorsal fin).

E. mystacinus (of the western Atlantic and Galapagos) has the dark body bars narrower than the pale interspaces, and the broad dark bar covering the peduncle does not extend over the bases of the last 2 or 3 dorsal-fin rays.

E. ergastularius, which is known only from the east coast of Australia, is another similar species. Adults have a truncate or emarginate caudal fin and fine dermal ridges on the body at the base of the dorsal fin; also, the fins have white margins. Juveniles can be distinguished by the spacing of the dark brown bars on the body: on *E. ergastularius* the pale space separating the second and third dark bars and that between the fourth and fifth bars are distinctly narrower than the interspaces between the third and fourth or fifth and sixth bars; on *E. septemfasciatus* all the pale interspaces are about the same width, except for the one between the fifth and sixth dark bars, which is distinctly narrower than the others.

Katayama (1975) stated that *E. septemfasciatus* has only 7 or 8 pyloric caeca, but the two specimens (20 and 47 cm standard length) that we dissected both had about 80 caeca in 3 or 4 multifurcate bundles.

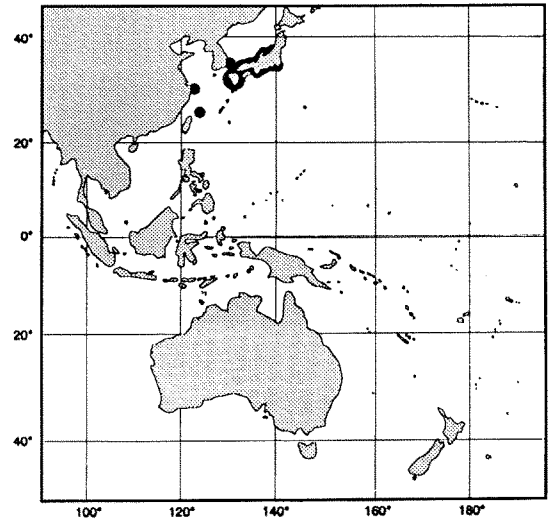


Fig. 402

Epinephelus sexfasciatus (Valenciennes, 1828)

Fig. 403; Pl. XXIIIC

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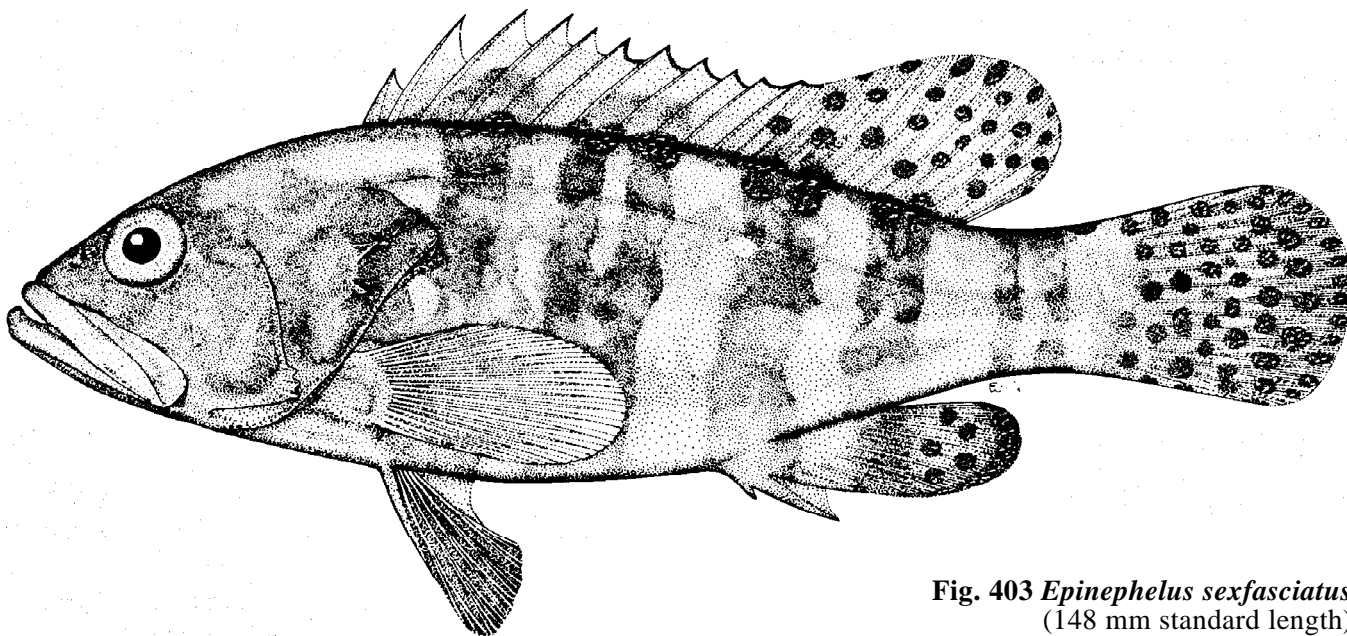
Serranus sexfasciatus Valenciennes in Cuv. and Val., 1828:360 (type locality: Java).**Synonyms:** None.**FAO Names:** **En** - Sixbar grouper; **Fr** - M  rou six raies; **Sp** - Mero de seis bandas.

Fig. 403 *Epinephelus sexfasciatus*
(148 mm standard length)

Diagnostic Features: Body depth contained 2.7 to 3.2 times in standard length (for fish 9 to 21 cm standard length). Head length contained 2.4 to 2.6 times in standard 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; nostrils subequal; maxilla reaches to or slightly past vertical at rear edge of eye; midlateral part of lower jaw with 2 rows of subequal teeth, Gill rakers 7 or 8 on upper limb, 13 to 15 on lower limb, 20 to 23 total; longest gill raker shorter than longest gill filaments. Dorsal fin with XI spines and 14 to 16 rays, the third or fourth spine longest, its length contained 2.3 to 2.7 times in head length and about equal in length to longest dorsal-fin ray, the interspinous membranes distinctly incised; anal fin with III spines and 8 rays; pectoral fins not fleshy, with 17 to 19 rays; pectoral-fin length contained 1.5 to 1.7 times, pelvic-fin length contained 1.8 to 2.2 times in head length; caudal fin rounded; caudal-peduncle depth contained 2.6 to 3.4 times in head length. Lateral-body scales ctenoid, with a few auxiliary scales; lateral-line scales 46 to 51; lateral-scale series 82 to 96. Pyloric caeca 7 or 8. **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.

Geographical Distribution: *E. sexfasciatus* is known only from the 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) (Fig. 404)

Habitat and Biology: *E. sexfasciatus* is 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.

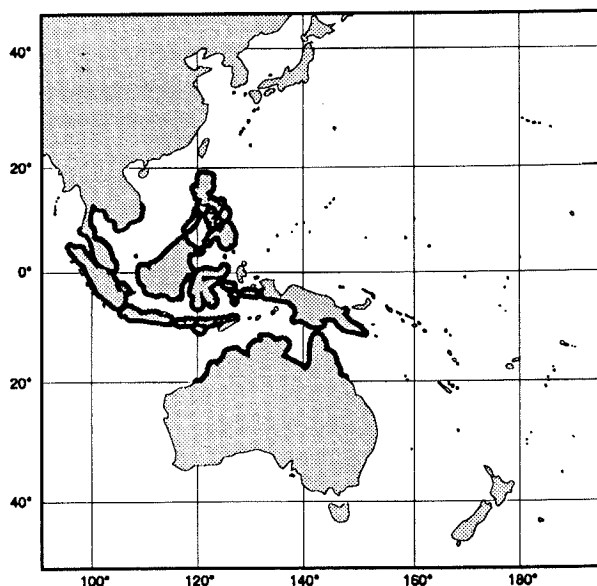


Fig. 404

Size: According to Schroeder (1980), *E. sexfasciatus* attains 30 cm standard length, but the largest specimen that we have seen is only 21 cm standard length.

Interest to Fisheries: Although *E. sexfasciatus* is a small species, it is common and readily caught in trawls; consequently it is often seen in local markets.

Local Names: JAPAN: Kokuten-hirehata; MALAYSIA: Kerapo-bebeh (Malay); Balang (Sundan); PHILIPPINES: Gaot (Visayan); SINGAPORE: Lu gu hou.

Literature: Randall and Heemstra (1991).

Remarks: *E. sexfasciatus* is closely related to *E. diacanthus*, which also has 5 dark bars on the body, greatly enlarged serrae at the angle of the preopercle, and similar morphological features. *E. diacanthus*, the northern Indian Ocean sister species of *E. sexfasciatus*, also prefers mud and silty sand habitats. It differs from *E. sexfasciatus* in having no spots on the median fins, more scales (lateral-line 52 to 60; lateral-scale series 103 to 121), a larger head (length contained 2.2 to 2.4 times in standard length), and a narrower caudal peduncle (peduncle depth contained 3.7 to 4.7 times in head length).

Epinephelus socialis (Günther, 1873)

Fig. 405; Pl. XXIID

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Serranus socialis Günther, 1873:7, pl. 8, fig. B (type locality: Tahiti, Society Islands; lectotype BMNH 1873:4.3.1, designated by Randall, 1964).

Synonyms: None.

FAO Names: En - Surge grouper; Fr - Mérrou houleux; Sp - Mero oleado.

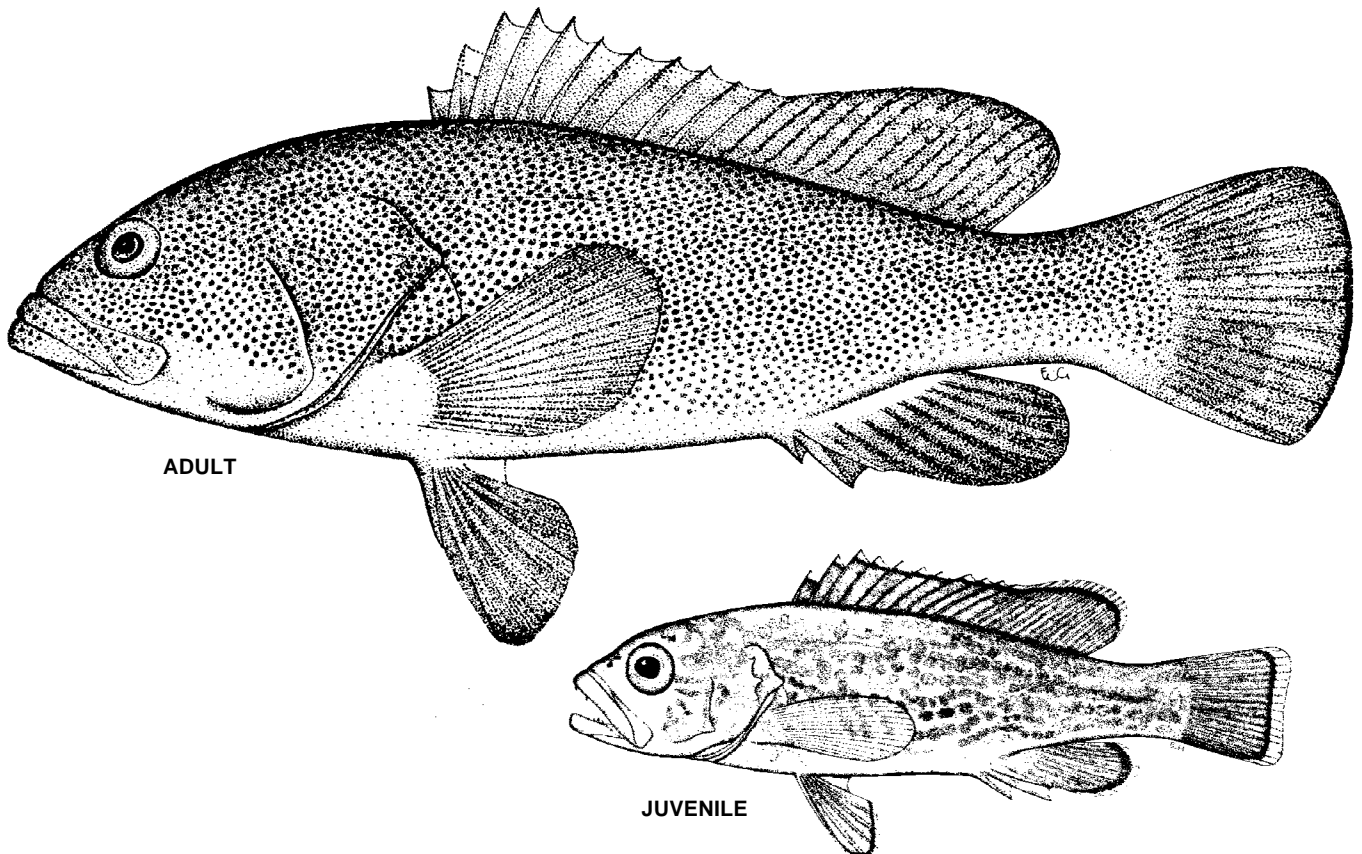


Fig. 405 *Epinephelus socialis*
(adult 339 mm standard length, juvenile 34 mm standard length)

Diagnostic Features: Body depth contained 2.9 to 3.4 times in standard length (for fish 10 to 34 cm standard length). Head length contained 2.4 to 2.6 times in standard length; interorbital area flat or slightly convex, the dorsal head profile convex; preopercle rounded, finely serrate; upper edge of operculum sinuous; nostrils subequal; maxilla reaches past vertical at rear edge of eye; midlateral part of lower jaw

with 3 or 4 rows of teeth. Gill rakers 8 to 10 on upper limb, 16 to 20 on lower limb, total 25 to 28. Dorsal fin with XI spines and 14 to 16 rays, the third or fourth spine longest, its length contained 2.6 to 3.6 times in head length, the interspinous membranes moderately incised; anal fin with III spines and 8 rays; pectoral fins fleshy, with 18 or 19 rays; pectoral-fin length contained 1.6 to 1.9 times and pelvic-fin length contained 1.8 to 2.2 times in head length; caudal fin rounded. Lateral-body scales of juveniles (less than 20 cm standard length) ctenoid; lateral-body scales of subadults (20 to 30 cm standard length) weakly ctenoid, with auxiliary scales; in adults (greater than 30 cm standard length) the body scales are smooth (mostly embedded) with numerous auxiliary scales; lateral-line scales 64 to 70; lateral-scale series 97 to 111. Pyloric caeca about 20. **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 coloured like body basally, becoming dark greyish brown distally, the soft dorsal, caudal and anal fins with small white spots, the margin of these fins white, usually with 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.

Geographical Distribution:

E. socialis is known only from the islands of Oceania: Marcus Island, Marshall Islands, Phoenix Islands, American Samoa, Cook Islands, Line Islands, Society Islands, Rapa, Tuamotus, and the Pitcairn Group (Fig. 406). It is widely distributed over the Pacific Plate, but it is not known at Hawaii, the Marquesas, the Caroline Islands, or at any of the Melanesian islands. *E. socialis* has been found at two localities off the Pacific Plate: Ogasawara (Bonin) Islands (Zama and Fujita, 1977:108, pl. 6, fig. A [as "*Epinephelus* sp."]) and Mariana Islands (Myers, 1989:106, pl. 32, fig. D).

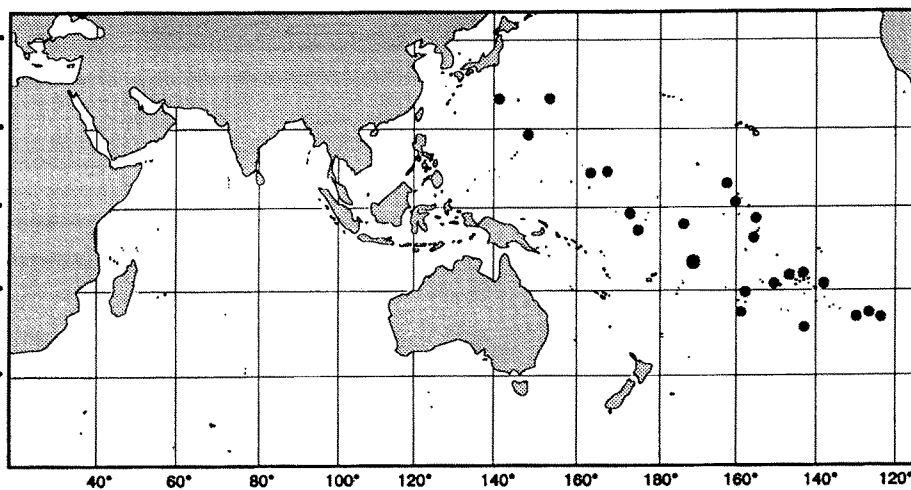


Fig. 406

Habitat and Biology: *E. socialis* is a shallow-water species of coral reefs: it is more common on atolls than high islands, and is usually found in outer reef areas exposed to heavy surge. Juveniles and occasionally adults are collected from tidepools. It feeds on crustaceans, (mainly grapsid crabs), octopuses, and fishes.

Size: Attains at least 42 cm standard length (52 cm total length).

Interest to Fisheries: *E. socialis* is of some importance at islands where they are abundant (e.g. the Tuamotus). Caught with spears and handlines.

Local Names: GAMBIER ISLANDS: Hapuku; SOCIETY ISLANDS: Atara; TUAMOTU -ISLANDS: Apia, Garea.

Literature: Bagnis et al. (1972); Randall and Heemstra (1991).

Remarks: Adults of *E. socialis* and *E. ongus* are superficially similar. Although *E. ongus* is basically dark with white spots and *E. socialis* whitish with dark spots, their colour patterns become similar in adults when the spots merge to form narrow undulating dark and light longitudinal bands; also, both have dark median fins with white spots and margins and blackish submarginal bands. Randall (1980a:fig. 19) illustrated a specimen of *E. ongus* as *E. socialis*. *E. ongus* differs in having a distinct black maxillary streak, white spots on spinous part of the dorsal fin, the upper edge of the operculum distinctly convex, 15 to 17 pectoral-fin rays, and 48 to 53 lateral-line scales.