larger than front ones on fish more than 60 cm standard length; midlateral part of upper jaw with 1 to 4 enlarged fixed canines. Developed gill rakers on lower limb 2 to 9, gill raker at angle slightly shorter than gill filaments at angle. Dorsal fin with VII or VIII slender spines and 10 to 12 rays, the third or fourth spine longest, its length contained 3.2 to 4.2 times in head length, the longest ray contained 2.3 to 3.2 times in head length; base of spinous part of dorsal fin subequal to that of soft-rayed part; anal fin with III slender spines and 8 rays, the first 1 or 2 spines embedded and difficult see in large fish; pectoral-fin rays 16 to 18; pectoral fins subequal to pelvic fins, pectoral-fin length contained 2.0 to 2.4 times in head length; caudal fin truncate to slightly emarginate, the caudal concavity contained 7 to 16 times in head length. Lateral-line scales 88 to 95. Pyloric caeca 3, large and thick. **Colour:** Adults brown to reddish or purplish brown, often irregularly mottled with pale olive-green, orange, or white; no small blue spots, broad dark bars, or wedge-shaped blotches on body; pectoral fins dark brown; pelvic and anal fins sometimes with a bluish band or row of blue spots distally. Body of juveniles (7 to 12 cm standard length) brownish dorsally, with numerous round or oval pale spots (about half eye diameter in size); interspinous membranes between first 5 dorsal-fin spines black; subadults (14 to 20 cm standard length) with numerous horizontal pale streaks and elongate pale spots (about an eye diameter in length) on head and body.

Geographical Distribution: ***P. punctatus*** is known only from the western Indian Ocean, but not the Red Sea, Persian Gulf or continental coast from Arabia to India. We have examined specimens or verified records from Kenya, Zanzibar, Mozambique, South Africa, Comoros, Madagascar, Aldabra, Seychelles, Mauritius, St. Brandon's Shoals, Nazareth Bank, and Chagos (Fig. 512).

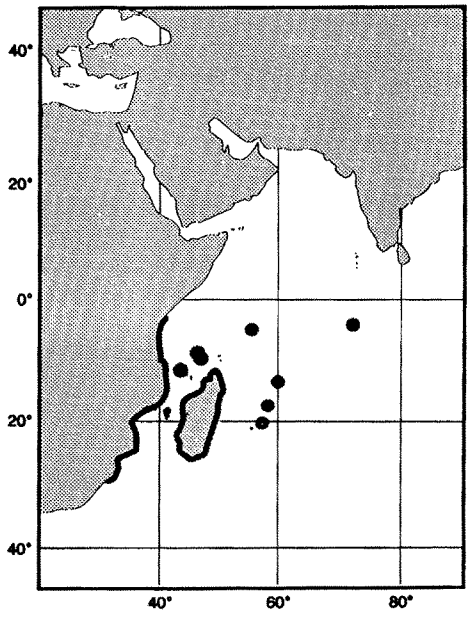

Fig. 512

Habitat and Biology: ***P. punctatus*** is usually found in shallow water (less than 10 m), however, Kyushin et al. (1977) reported 3 specimens from the Nazareth Bank (northeast of St. Brandon's Shoals) that were caught on a vertical longline at depths of 45 to 62 m. According to Morgans (1982), this species feeds exclusively on fishes, including parrotfishes, wrasses, holocentrids, acanthurids, a triggerfish, and a juvenile Sphyraena.

Size: Attains at least 96 cm total length (12.2 kg).

Interest to Fisheries: According to Morgans (1982), ***P. punctutus*** was common in the markets of Zanzibar in the 1950's. It probably is (or was) also of commercial importance in the Seychelles and Mauritius. Caught with hook-and-line, trolling, spear, and on benthic longlines.

Local Names: KENYA: Njomo; SEYCHELLES and MAURITIUS: Vieille babonne; TANZANIA: Njomo.

Literature: Wheeler and Ommanney (1953, as "***plectropoma maculatum***"); Morgans (1982, as "***P. marmoratus***"); Randall and Hoese (1986); Randall and Heemstra (1991).

Remarks: Wheeler and Ommanney (1953) reported this species from Aldabra and the Chagos Archipelago.

Saloptia Smith, 1964

SERRAN Salop

Saloptia Smith, 1964:719; type species, ***Saloptia*** powelli Smith, by original designation and monotypy.

Synonyms: None.

Species: The genus ***Saloptia*** comprises a single species.

Remarks: We agree with Leis (1986) and J.L.B. Smith (1964) that ***Saloptia*** is closely related to ***Plectropomus.*** The species of these two genera are the only groupers with a single supraneural bone, a dorsal fin with VIII spines and 11 rays (10 to 12 rays in ***Plectropomus***), 3 large antrorse spines on lower edge of preopercle and only 13 branched caudal-fin rays. ***Saloptia*** differs from all of the ***Plectropomus*** species in having conspicuous (robust) anal-fin spines, dorsal-fin spines strong and not much shorter than anterior soft rays, and no enlarged canine teeth at midside of lower jaw.

Saloptia powelli Smith, 1964 | Fig. 513; PI. XXXIB | **SERRAN Salop 1**

Saloptia powelli Smith, 1964:719, pt. 21 (type locality: Cook Islands).

Synonyms: None.

FAO Names: En - Golden grouper; **Fr -** Mérou d'or; **Sp -** Mero dorado.

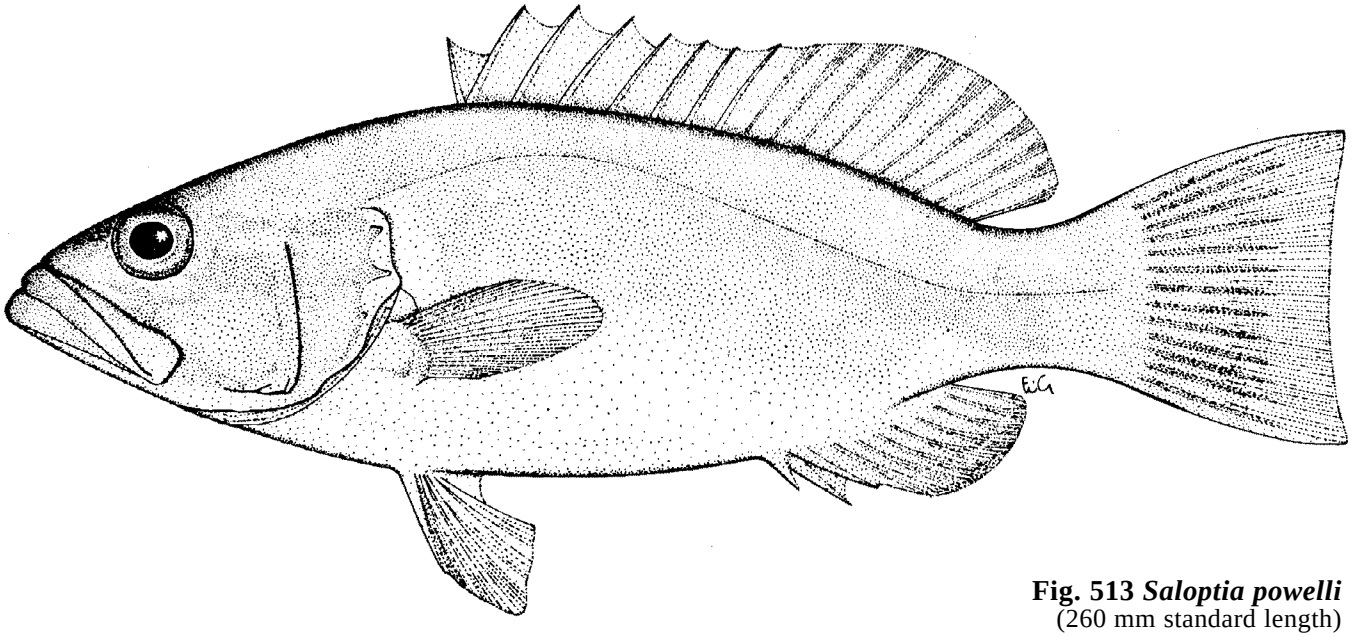

Fig. 513 ***Saloptia powelli***
(260 mm standard length)

Diagnostic Features: Body oblong, robust, the depth less than head length and contained 2.6 to 3.0 times in standard length (for fish 24 to 39 cm standard length); body width contained 2.2 times in the depth. Head length contained 2.5 to 2.6 in standard length; snout distinctly longer than eye diameter; interorbital area flat; the dorsal head profile slightly convex; preorbital depth contained 0.4 to 0.5 times eye diameter and 13 times in head length; preopercle subangular, with 3 large curved spines (mostly hidden by skin) on lower edge, the rear edge with minute serrae near the angle; subopercle and interopercle serrate; opercle with 3 flat, equidistant spines; upper edge of operculum distinctly convex; nostrils set in a shallow groove running forward from eye, the posterior nostrils about twice size of anterior nostrils; maxilla not reaching past eye; posterior part of maxilla evenly expanded (no step, hook or knob on ventral edge); supramaxilla well developed; a pair of canines at front of both jaws; lower jaw with 2 rows of teeth, but no enlarged canines at midside of jaw; palatines with teeth. Gill rakers 8 or 9 on upper limb, 16 or 17 on lower limb. Dorsal fin with VIII spines and 11 rays, the dorsal-fin origin close behind vertical at rear end of operculum; dorsal-fin membranes slightly incised between the spines, the third to eighth spines subequal; length of dorsal-fin base less than 50% of standard length; anal fin with III spines and 8 rays; dorsal- and anal-fin spines strong, the anal spines quite distinct; pectoral fins short and rounded, with 14 or 15 rays, the middle rays longest, subequal to pelvic fins, pectoral-fin length contained 2.2 to 2.4 in head length; no scaly flap of skin joining upper pectoral-fin rays to body; caudal fin emarginate, with 7 branched rays and 11 procurrent rays in upper part and 6 branched rays and 10 procurrent rays in lower part. Body scales small, distinctly ctenoid, even on belly; no auxiliary scales; lateral-line scales 70 to 78; lateral-scale series 115 to 133. A single curved supraneural bone anterior to tip of first neural spine; epipleural ribs on vertebrae 1 to 9; dorsal fin with 2, anal fin with 3 trisegmental pterygiophores; rear edge of first dorsal-fin pterygiophore incised at tip of third neural spine; cranium not'examined. **Colour:** Head, body, and fins yellow to orange-yellow, shading ventrally to white or pink, the snout, lips, and dorsal part of head suffused with red; dorsal-fin spines sometimes streaked with red.

Geographical Distribution: Western Pacific to French Polynesia: Okinawa, Taiwan, South China Sea, Mariana Islands, Society Islands, Cook Islands, American Samoa, Fiji, and the Tuamotus (Fig. 514).

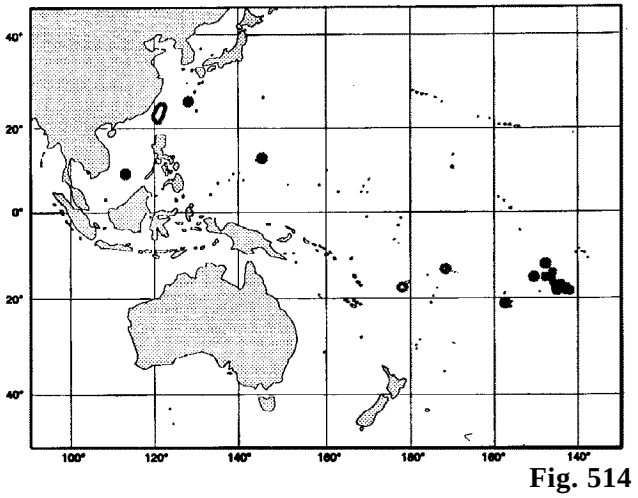

Fig. 514

Habitat and Biology: Deep water (140 to 367 m) on coral reefs or rocky substrata.

Size: Attains at least 47 cm total length (39 cm standard length).

Interest to Fisheries: Although ***Saloptia*** is not an abundant species it is an important food fish in the Ryukyu Islands of southern Japan. According to Polovina (1987), it is one of the most common deepwater groupers that are caught with handlines at the Marianas.

Local Names: JAPAN: Yamabukihata; TUAMOTU ISLANDS: Paru hoa.

Literature: Wrobel (1988); Randall and Heemstra (1991).

Remarks: Bagnis et al. (1974) reported this species from French Polynesia as ***"Epinephelus truncatus."***

Triso Randall, Johnson, and Lowe, 1989 **SERRAN Triso**

Genus: ***Triso*** Randall, Johnson and Lowe, 1989:415; type species, ***Serranus dermopterus*** Temminck and Schlegel, by original designation and monotypy).

Synonyms: None, although the type species was assigned to the genus ***Trisotropis*** Gill (a synonym of ***Mycteroperca***) by Jordan and Richardson (1910).

Species: The genus ***Triso*** comprises a single species.

Triso dermopterus (Temminck and Schlegel, 1842) Fig. 515; Pl. XXXIC **SERRAN Triso 1**

Serranus dermopterus Temminck and Schlegel, 1842:10 (type locality: Nagasaki, Japan).

Synonyms: ***Altiserranus woorei*** Whitley, 1951:396, fig. 5 (type locality: Laurieton, New South Wales Australia).

FAO Names: En - Oval grouper; **Fr -** Mérou ovale; **Sp -** Mero ovalado.

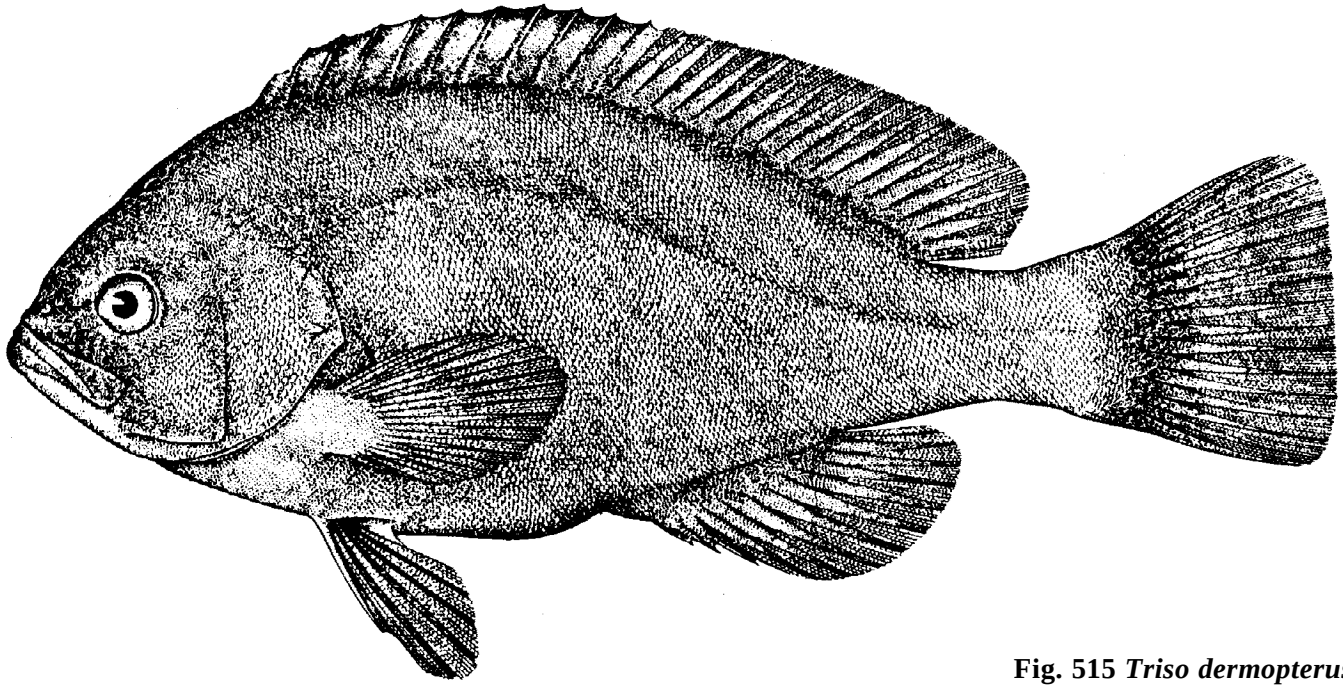

Fig. 515 *Triso dermopterus*

Diagnostic Features: Body oval (in lateral view), compressed, the depth contained 2.4 to 2.7 times in the standard length (for fish 13 to 56 cm standard length); body width contained 2.0 to 2.8 times in the depth. Head length contained 3.0 to 3.4 times in standard length; dorsal head profile distinctly convex; snout length distinctly longer than eye diameter; interorbital region notably broad and convex, its width contained 1.5 to 2.2 times orbit diameter for fish of 20 to 56 cm; preorbital depth contained 0.6 to 0.9 times eye diameter and 7 to 10 times in head length; preopercle subangular, finely serrate, the serrae at the angle slightly enlarged,

the lower edge smooth; subopercle and interopercle also smooth; opercle with 3 flat spines, the upper edge of operculum convex; nostrils subequal in juveniles, the diameter of rear nostrils twice that of front nostrils in a 56 cm adult; mouth small, oblique, the maxilla not reaching past vertical at middle of eye; maxilla scaly, with slender supramaxilla and no hook or step on ventral edge; lower jaw projecting, with 2 or 3 small exserted canines on each side of symphysis; midside of lower jaw with about 5 rows of villiform teeth; a pair of short canines at front of each premaxilla; palatines and vomer with teeth. Gill rakers 8 or 9 on upper limb, 16 to 18 on lower limb, no rudiments, the longest raker slightly shorter than the longest filaments on first arch. Dorsal fin with XI spines and 18 to 21 rays, the fin origin above opercle; dorsal-fin membranes not (or only slightly) incised between the spines, the 4th to 11 th spines subequal; dorsal-fin base about 60% of standard length; anal fin with III spines and 9 to 12 rays, the third spine longest; pectoral fins asymmetrical, with 18 to 20 rays, the upper rays longest, their length contained 1.4 to 1.6 times in head length; a well-developed scaly flap of skin joining upper pectoral-fin rays to body; pelvic-fin length contained 1.4 to 1.7 times in head length; caudal fin truncate to emarginate, the corners rounded; caudal fin with 8 branched rays and 10 procurrent rays in upper part and 7 branched rays and 10 procurrent rays in lower part. Small ctenoid scales on head and body; no auxiliary scales; lateral-line scales 67 to 76; lateral-scale series 131 to 145. Esophagus with 1 to 3 pouch-like swellings on each side just anterior to stomach; pyloric caeca 14 to 16. Two large supraneural bones, the first supraneural expanded distally and shaped like a hockey stick; no trisegmental pterygiophores in the dorsal and anal fins; cranium short; anterior part of parasphenoid bent upward just below basisphenoid; frontoparietal crests well developed, inclined laterally and extending to front edge of orbits; interorbital area of frontals distinctly convex; medial process of epioccipitals shorter than lateral process. **Colour:** Dark brown or violet-black, the fins darker.

Geographical Distribution: Anti-tropical in the eastern Indian Ocean and western Pacific. ***Triso dermopterus*** is in the Northern Hemisphere known from Korea, Japan, Taiwan, Hong Kong, and the Fujian Province of China; in the Southern Hemisphere it occurs off the coast of Western Australia (south of 19 30ºS) and off eastern Australia between 25º and 32ºS (Fig. 516).

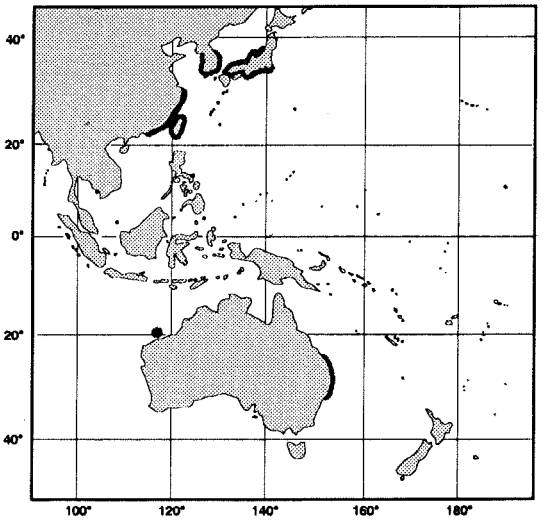

Fig. 516

Habitat and Biology: ***T. dermopterus*** has been seen or caught on rocky or soft (silty-sand or mud) bottoms at depths of 22 to 103 m. Juveniles feed in the water column on zooplankton. Feeding by adults has not been observed.

Size: Attains at least 68 cm total length.

Interest to Fisheries: ***T. dermopterus*** is of minor importance in the commercial fishery of Japan and Hong Kong. No data are available on the landings of this species. Caught with hook-and-line and trawls.

Local Names: HONG KONG: Melon-seed grouper, Kwah-tsee paan; JAPAN: Tobihata.

Literature: Randall et al. (1989); Randall and Heemstra (1991).

Remarks: Randall et al. (1989) suggested that ***Triso*** is most closely related to the American groupers of the genus ***Paranthias.*** The senior author of the present work (P.C. Heemstra) is sceptical of this proposed relationship. A detailed criticism of this hypothesis is inappropriate for this world catalogue and will be presented in another paper.

Variola Swainson, 1839

SERRAN Vari

Variola Swainson, 1839:202; type species, ***Variola longipinna*** Swainson (=***Variola louti***), by monotypy.

Synonyms: ***Pseudoserranus*** Klunzinger, 1870:687; type species, ***Perca louti*** Forsskål, by monotypy.

Diagnostic Features: Body oblong, the depth less than head length and contained 2.8 to 3.2 times in standard length; body width contained 1.6 to 2.3 in the depth. Head length contained 2.5 to 2.8 in standard length; interorbital area of adults convex; dorsal head profile slightly convex; snout distinctly longer than eye diameter; preorbital depth contained 0.6 to 1.4 times eye diameter and 6 to 10 times in head length; preopercle rounded, finely serrate, the lower edge fleshy; opercle with 3 flat spines; upper edge of operculum almost straight; subopercle and interopercle smooth; posterior nostrils not much bigger than anterior nostrils;

maxilla of adults with a distinct step on ventral edge; supramaxilla well developed; both jaws with a pair of large canines at the front; 1 to 3 large canines at midside of lower jaw; palatines with teeth. Dorsal fin with IX spines and 13 to 15 rays, the dorsal-fin origin over rear end of operculum; dorsal-fin membranes not or slightly indented between the spines, the third to ninth spines subequal, the 11 th or 12th ray elongated: anal fin with III distinct spines and 8 rays; rear margin of dorsal and anal fins falcate, the antepenultimate rays greatly elongated; pectoral fins rounded, with 16 to 19 rays, the middle rays longest, their length contained 1.4 to 1.8 in head length; upper pectoral-fin rays joined to body by a scaly flap of skin; first two pelvic-fin rays elongated, usually much longer than pectoral fins and reaching to or beyond anal fin origin; caudal fin lunate (the lobes produced), with 8 branched rays and 10 procurrent rays in upper part and 7 branched rays and 10 procurrent rays in lower part. Midlateral-body scales ctenoid, without auxiliary scales. Second supraneural bone about half length of first; epipleural ribs on first 9 or 10 vertebrae; dorsal fin with 4 to 6, anal fin with 4 trisegmental pterygiophores; rear edge of first dorsal-fin pterygiophore slightly excavated at tip of third neural spine; posterior part of parasphenoid deflected slightly ventrally; greatest width of cranium about 0.5 times its length; least interorbital width of frontals about 0.4 times postorbital width of frontals; parietal crest well developed, continued onto frontals where it joins the lateral crest to form a low ridge running anteromedially to meet its fellow of the opposite side; frontals rugose, not excavated anteriorly (no supraethmoid pit or depression); median supraoccipital crest low, not extending onto frontals; exoccipitals with a small notch in lateral edge of foramen magnum.

Habitat and Biology: Both species of ***Variola*** occur on coral reefs at depths of 4 to 200 m. They are usually seen swimming well above the reef and seem to prefer clear-water areas such as islands and offshore reefs. They feed primarily on fishes.

Geographical Distribution: The species of ***Variola*** are known from the tropical Indo-Pacific region, from the Red Sea to South Africa and eastward to the islands of the central Pacific.

Interest to Fisheries: As the larger and more common species, ***V. louti*** is more important in artisanal fisheries, although it is often the cause of ciguatera poisoning.

Remarks: This distinctive genus comprises two very similar species. ***V. albimarginata*** is less common and was usually misidentified as ***V. louti.***

Key to the Species of *Variola*

1a. Rear margin of caudal fin with a black submarginal line and narrow white edge; dorsal, anal, and pectoral fins without a distinct yellow posterior border; lower gill rakers 13 to 16; pelvic fins usually not reaching anus; juveniles without a dark stripe on body dorsally and no dark spot at base of upper caudal-fin rays (Fig. 517, Plate XXXI) (western Indian Ocean to central Pacific Ocean) ..... ***V. albimarginata***

1b. Caudal, dorsal, anal, and pectoral fins with a broad yellow rear margin; lower gill rakers 15 to 18; pelvic fins reach beyond anus; juveniles with irregular dark brown stripe along dorsal part of body and a dark spot at base of upper caudal-fin rays (Fig. 518, Plate XXXI) (Red Sea to central Pacific Ocean) ..... ***V. louti***

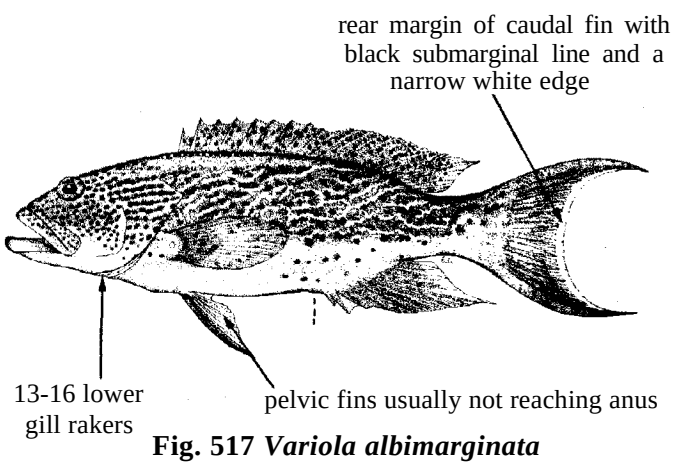

Fig. 517 *Variola albimarginata*

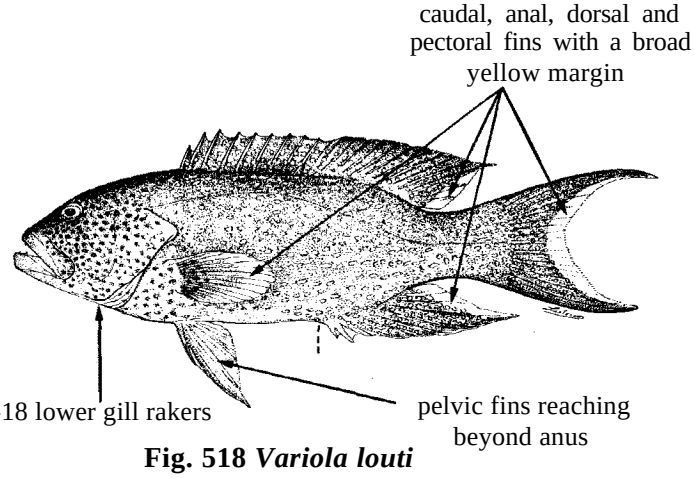

Fig. 518 *Variola louti*

Variola albimarginata Baissac, I952 Fig. 519; PI. XXXID **SERRAN Vari 2**

Variola albimarginata Baissac, 1952:214 (type locality: Mauritius).

Synonyms: None. Often misidentified as ***V. louti.***

FAO Names: En - White-edged lyretail; **Fr -** Croissant queue blanche; **Sp -** Mero rabiblanco.

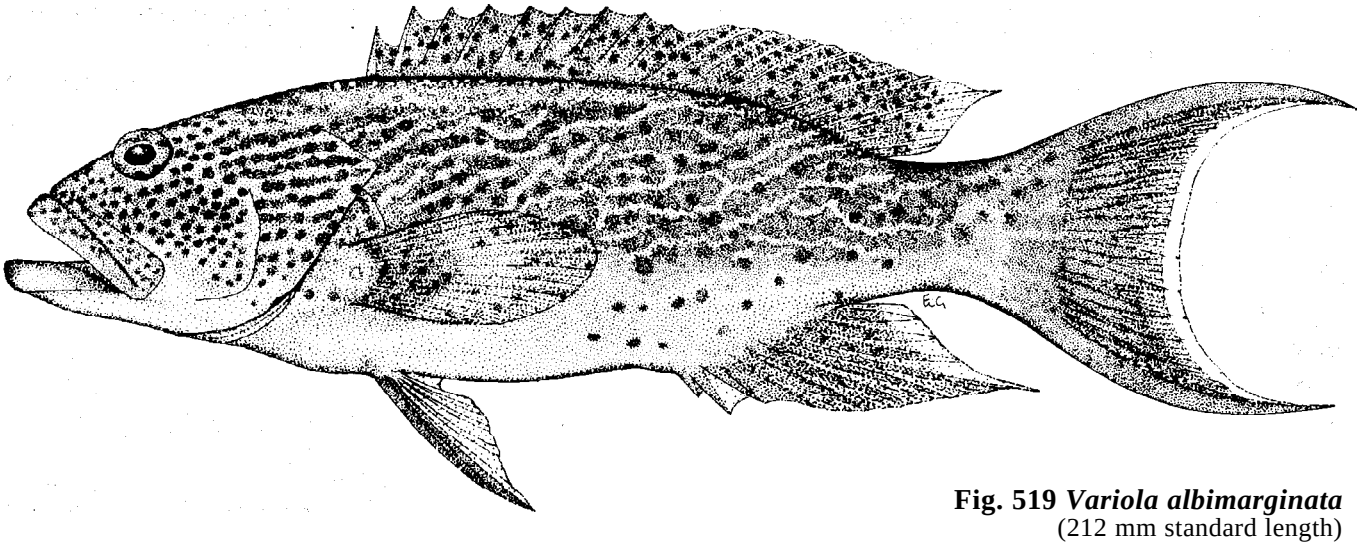

Fig. 519 ***Variola albimarginata***
(212 mm standard length)

Diagnostic Features: Body oblong, the depth less than head length and contained 2.8 to 3.5 times in standard length (for fish 19 to 25 cm standard length). Head length contained 2.6 to 2.8 times in standard length. Gill rakers 7 to 9 on upper limb, 13 to 16 on lower limb (including 4 to 7 rudiments on each limb). Dorsal fin with IX spines and 14 rays; anal fin with III spines and 8 rays; pectoral-fin rays 17 to 19, the middle rays longest, their length contained 1,6 to 1.8 times in head length; pelvic fins usually not reaching anus, pelvic-fin length contained 1.4 to 1.8 times in head length; caudal fin lunate, the upper and lower lobes produced, about twice the length of middle rays. Midlateral-body scales ctenoid, without auxiliary scales; lateral-line scales 66 to 76; lateral-scale series 109 to 127. **Colour:** Body brownish orange or reddish purple, with irregular red bands alternating with yellow lines, the red bands containing small irregular pale blue to pink spots; head orange-yellow, densely spotted with red; median fins with small pink and red spots; rear margin of caudal fin usually dusky, with a narrow white edge: rear margin of dorsal and anal fins hyaline, without trace of yellow; pectoral fins yellow, the basal half of rays often reddish or dark brown. Juveniles similar in colour to adults, but with relatively fewer and larger pale blue or pink spots.

Geographical Distribution: ***V. albimarginata*** is known from the east coast of Africa (Zanzibar and Mafia Island, Tanzania) to Samoa. We have verified records from Mauritius, Reunion, Maldives, Chagos, Sri Lanka, South China Sea, Indonesia, Philippines, Taiwan, Ryukyu Islands, tropical coast of Australia, Papua New Guinea, New Ireland, New Caledonia, Guam, Palau Islands, Mariana Islands, Fiji, and Samoa (Fig. 520).

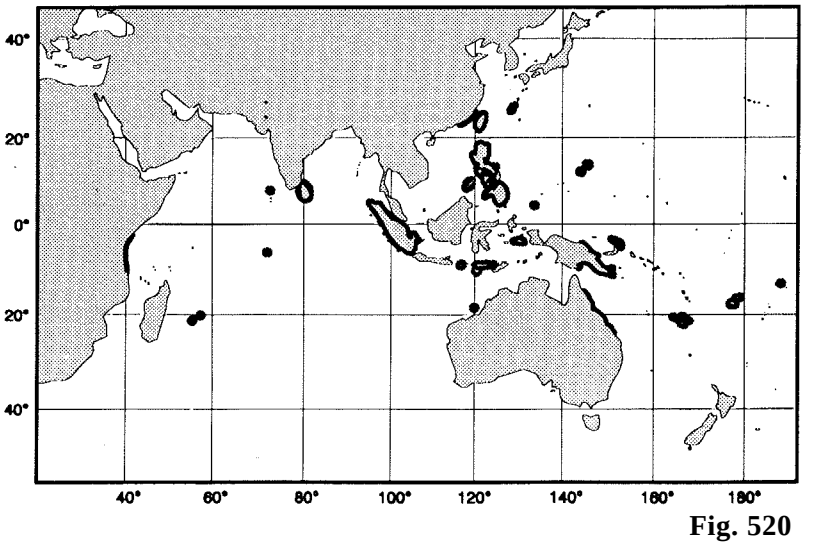

Fig. 520

Habitat and Biology: ***V. albimarginata*** occurs on coral reefs at depths of 4 to 200 m. The stomach contents from 3 specimens comprised only fishes. According to Morgans (1982), females are mature at 32 cm standard length.

Size: Appears to be smaller than ***V. louti,*** the largest known specimen was 33 cm standard length (47 cm total length); probably does not grow larger than 55 cm total length (1 kg).

Interest to Fisheries: Because of its small size and rarity, ***V. albimarginata*** is of little interest to fisheries. It is, however, abundant during the dry season (southern winter) at Reunion. Flesh excellent. Caught with handline, traps, and spear.

Local Names: AUSTRALIA: Lyretail trout; JAPAN: Ojiro-barahata; MAURITIUS: Vieille mulâtresse, Croissant queue blanche; PHILIPPINES: Painted coral trout, Lunar-tailed grouper, Lapu-lapung seiiorita, Sunolawian, Mambo; REUNION: Tire bourre; SINGAPORE: Moontail seabass.

Literature: Postel et al. (1963); Morgans (1982); Randall and Heemstra (1991).

Remarks: Although it was described in 1952, ***V. albimarginata*** was overlooked or misidentified as ***V. louti*** by most recent authors. ***V. albimarginata*** was recognized as a valid species by Postel et al. (1963), Morgans (1982), Randall and Ben-Tuvia (1983) and Heemstra and Randall (1984).

Variola louti (Forsskål, 1775) Fig. 521; PI. XXXIE, F **SERRAN Vari 1**

Perca louti Forsskål, 1775:40 (type localities, Lohaja, Jeddah, Red Sea).

Synonyms: ***Labrus punctulatus*** Lacepède, 1801:431, 477, pl. 17, fig. 2 (type locality: Indian Ocean). ***Serranus roseus*** Valenciennes in Cuv. and Val., 1828:306 (type locality: Tahiti). ***Serranus luti*** Valenciennes in Cuv. and Val., 1828:363 (unjustified emendation of ***Perca louti*** Forsskål). ***Serranus flavimarginatus*** Rüppell, 1830:109 (type locality: Mohila, Red Sea). ***Serranus phaenistomus*** Swainson, 1839:201 (on ***Serranus louti:*** Rüppell, 1828). ***Variola longipinna*** Swainson, 1839:202 (on ***Serranus louti:*** Rüppell, 1828). ***Variola melanotaenia*** Bleeker, 1857a:33 (type locality: Ambon, Indonesia). ?***Serranus cernipedis*** Miranda Ribeiro, 1915:31 (307) (no locality).

FAO Names: En - Yellow-edged lyretail (formerly: Moontail seabass); **Fr -** Croissant queue jaune; **Sp -** Mero luna creciente.

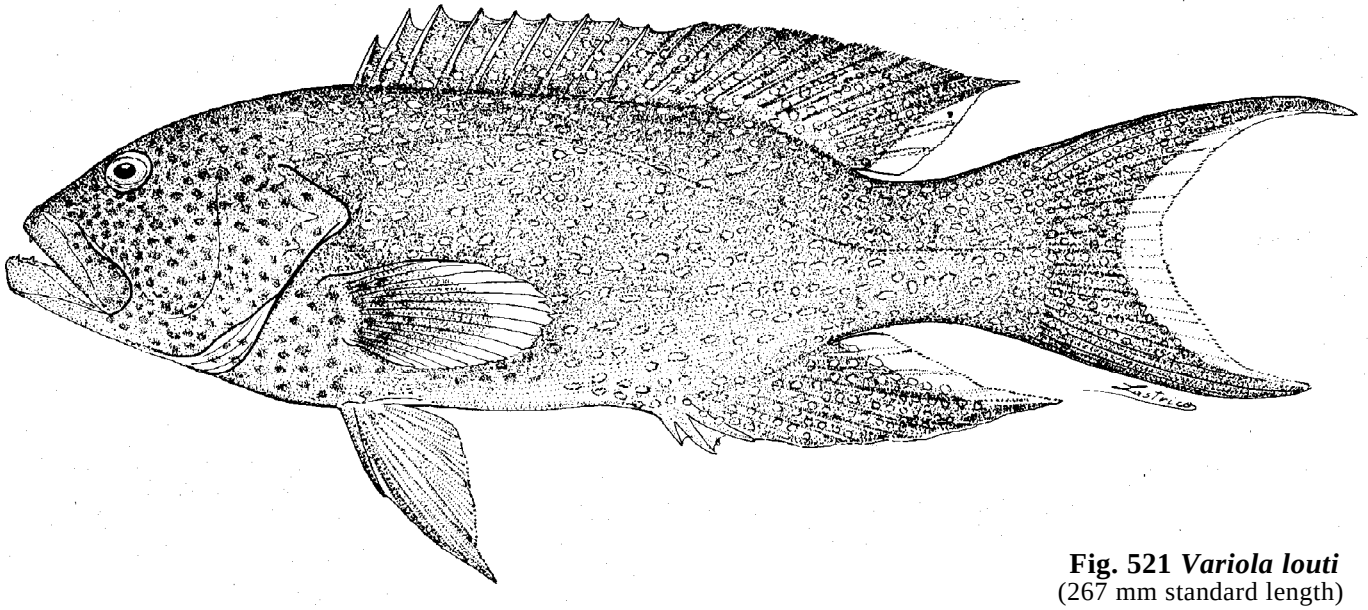

Fig. 521 *Variola louti*
(267 mm standard length)

Diagnostic Features: Body oblong, the depth less than head length and contained 2.8 to 3.3 times in standard length (for fish 12 to 40 cm standard length). Head length contained 2.5 to 2.8 times in standard length. Gill rakers 7 to 10 on upper limb, 15 to 18 on lower limb (including 6 to 8 rudiments on each limb). Dorsal fin with IX spines and 13 or 14 rays; anal fin with III spines and 8 rays; pectoral-fin rays 16 to 19, the middle rays longest, their length contained 1.6 to 1.8 times in head length; pelvic fins of adults reach past anus, pelvic-fin length contained 1 .0 to 1.7 times in head length; caudal fin lunate, the upper and lower lobes produced, about twice length of middle rays. Midlateral-body scales ctenoid, without auxiliary scales; lateral-line scales 66 to 77; lateral-scale series 113 to 135. **Colour:** Head, body, and median fins yellowish brown to orange-red (fish from deep water more reddish) with numerous small round or elongate spots of blue to lavender or pink; rear margin of median fins broadly yellow; pectoral-fin rays red to brown, the distal third abruptly yellow. Large juveniles (8 to 18 cm standard length) with irregular black band along dorsal part of body ending below rear of dorsal fin and continuing on head (up to eye) as 3 irregular black spots;

irregular black blotch at base of upper caudal-fin rays; head and body (including black band) with small pale blue to pink spots; a pale yellow or white stripe middorsally on head from tip of lower jaw to dorsal-fin origin. Small juveniles (less than 7 cm standard length) lack the black band and black spots on dorsal part of head and body (see Burgess et al., 1988:pl. 146)

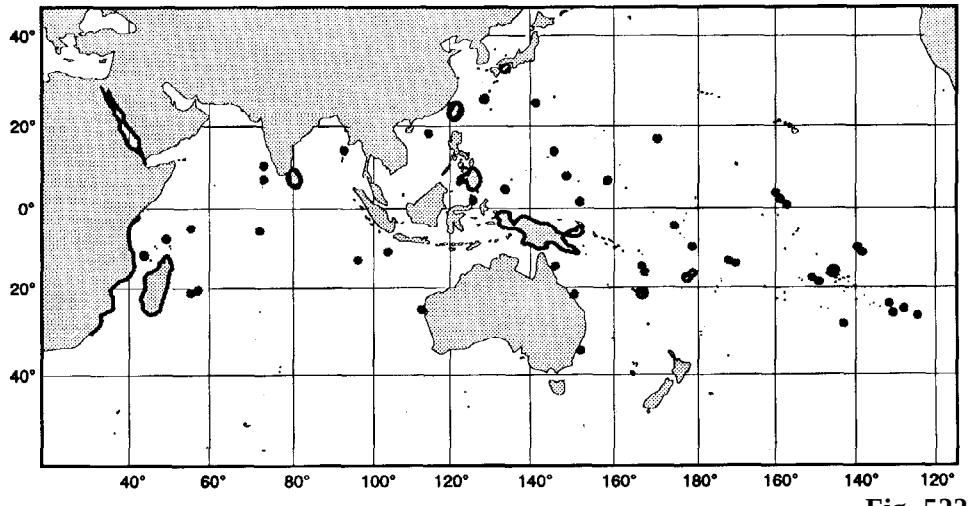

Fig. 522

Geographical Distribution: ***V. louti*** occurs throughout the tropical Indo-Pacific region from the Red Sea to the Pitcairn Islands of eastern Oceania. It is found along the east coast of Africa south to Durban and along the western coast of Australia to Shark Bay. This common and widely distributed grouper is known from most of the tropical islands of the Indian and west central Pacific oceans. In the western Pacific it ranges from Japan (southern Honshu) to New South Wales, Australia (Fig. 522). It has not been found in the Persian Gulf or at the Hawaiian Islands.

Habitat and Biology: Coral reefs at depths of 3 to 240 m; usually seen in clear-water areas at depths below 15 m. ***V. louti*** prefers islands and offshore reefs, rather than continental shores. It feeds primarily on fishes, including a variety of coral-reef species; crustacean prey comprises crabs, shrimps, and stomatopods. Morgans (1982) reported mature females of 33 cm standard length, and spawning. occurred between December and February.

Size: Attains at least 81 cm total length (5.5 kg). According to Postel et al. (1963), ***V. louti*** attains a weight of 12 kg, and van der Elst (1981) gave a maximum length of 100 cm for this species.

Interest to Fisheries: ***V. louti*** is an important food fish of the Indo-Pacific region, but it often causes ciguatera fish poisoning. Although it is apparently not toxic at Reunion, it is forbidden to be sold at the nearby island of Mauritius. Caught with handlines, spear, and traps.

Local Names: AUSTRALIA: Coronation trout, Lunar-tailed rock-cod; HONG KONG: Lunar-tailed coral-trout, Cheung-may-paan; JAPAN: Bara-hata; MADAGASCAR: Vivano, Mampagnony, Sampamale; MARQUESAS: Pere, Mataiti, Preie; MAURITIUS: Croissant queue jaune; NEW CALEDONIA: Saumonee hirondelle; REUNION: Grand queue; TAHITI: Ho'a; TUAMOTU ISLANDS: Mokohoko.

Literature: Randall (1980a); Morgans (1982); Randall and Heemstra (1991).

Remarks: Although the two species ***Variola*** have only recently been distinguished, ***V. louti*** seems much more common than ***V. albimarginata.***