

On Some Rare Fishes from Izu-Oshima, Japan

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Through the courtesy of Mr. Shozi IGARASHI, Tokyo Fisheries Experimental Station, a number of specimen of fish obtained near Izu-Oshima from 1952 to 1957, have of late come under my examination. Among them four species described below seem to be new to the fauna of Japan. The writer wishes to offer his gratitude to Prof. Kiyomatsu MATSUBARA for his kindness extended to him in various ways and is also greatly indebted to Mr. Shozi IGARASHI.

Family Serranidae

1. *Plectranthias anthioides* (GÜNTHER)

Plectropoma anthioides GÜNTHER, 1871 : 655 (Celebes)—BLEEKER, 1873 : 237 (Celebes).

Plectranthias anthioides BLEEKER, 1873~76 : 21 (Celebes)—BOULENGER, 1895 : 332 (Sea of Celebes and Arafra Sea)—WEBER and BEAUFORT, 1929 : 108, fig. 16 (after BOULENGER).

Anthias megalepis GÜNTHER, 1880 : 37, pl. 16, fig. E (Arafra Sea).

Selenanthias analis (not TANAKA) SCHMIDT, 1931 : 61, fig. 8 (Tokyo market).

Material described : 1 specimen, 102 mm (119 mm), off Izu-Oshima, January 12, 1955.

Description : D. X, 17 ; A. III, 6 ; P. 15 ; pored scales in lateral line 33 ; gill-rakers on first arch 6+11=17. Head length 2.37 in body length ; greatest body depth 2.55 ; distance between origin of ventral and that of anal 3.00. Snout length 3.91 in head length ; upper jaw length 2.10 ; eye diameter 4.10 ; interorbital space 8.60 ; post-orbital part of head 1.95 ; length of caudal peduncle 2.05 ; depth of the same 3.31 ;

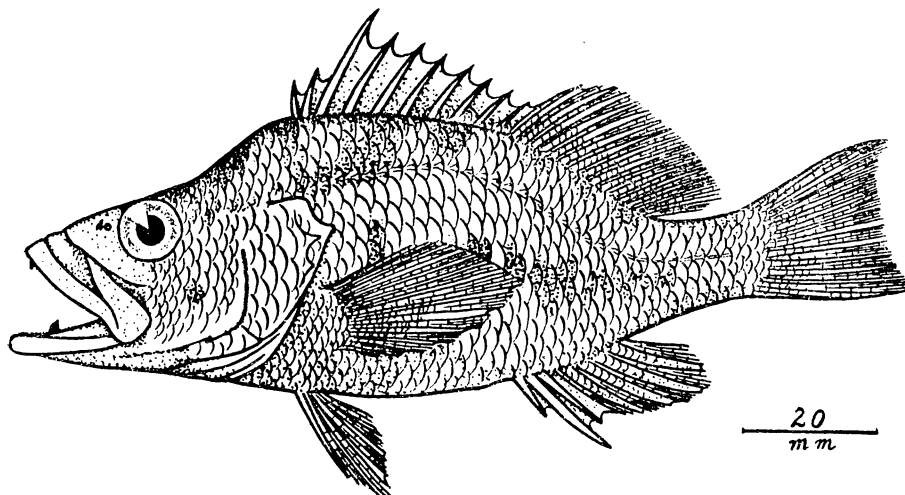


Fig. 1. *Plectranthias anthioides* (GÜNTHER)

pectoral fin length 1.43 ; ventral fin length 1.95 ; length of ventral spine 3.07 ; length of longest dorsal spine (3rd one) 2.69 ; length of last dorsal spine 7.16 ; length of longest soft dorsal ray (3rd one) 3.07 ; length of first anal spine 5.37 ; length of second anal spine 2.53 ; length of third anal spine 3.31 ; length of longest anal ray (3rd one) 2.27 ; caudal fin length 1.87. Length of longest gill-raker on first arch 2.76 ; length of longest gill-lamella of the same arch 3.18.

Body oblong, strongly compressed ; dorsal outline almost straight from tip of snout to origin of dorsal, bluntly and evenly curved posteriorly ; ventral outline evenly curved. Mouth large, oblique and protractile ; lower jaw slightly projecting beyond the upper when mouth is closed. Maxillary expanded distally, extending to below posterior border of eye pupil, with a rudimentary supplemental bone. Interorbital region slightly convex and narrow, half as wide as eye diameter. Nostrils two, close together, directly in front of eye ; anterior nostril smaller, with an elevated rim and produced posterior flap ; the posterior one a little larger, ovoid in shape. Jaws with minute teeth ; a pair of canines in upper jaw at symphysis ; one or two strong backwardly directed canines in each side of lower jaw anterior to its middle ; a narrow band of villiform teeth on palatines ; similar teeth on vomer, but in \wedge -shaped band ; tongue smooth. Preopercle with round angle, the posterior border finely serrated ; the lower border with two strong antrorse spines ; opercle with three spines, the middle one strongest ; subopercle and interopercle not serrated along their margins ; branchiostegals 7, the last one broad. Gill-rakers short and widely separated with each other, the longest one shorter than gill-lamella. Dorsal inserted above upper end of gill cleft ; dorsal spine strong ; the third one longest, the spines become shorter posteriorly, the last being about half as long as soft rays ; anal spines strong, the second one much stouter and longer than the third one ; pectoral subsymmetrical, the rays mostly branched ; ventral inserted in front of lower base of pectoral, not reaching to vent ; caudal weakly emarginated, the upper rays slightly produced, branched rays 15. Scales moderately large, ciliated, 4 in a series from origin of dorsal to lateral line, 3 in a series from middle part of spinous dorsal to lateral line, and 14 from origin of anal to lateral line ; head closely scaled except for snout, preorbital, lips, maxillary, mandible and throat ; soft dorsal and anal covered with small scales basally ; caudal and pectoral scaled. Lateral line normally curved, not forming an angle under last several dorsal rays.

Coloration ; In spirit, body white, irregular, grayish orange patches on top of head and upper part of body along base of dorsal and an irregular longitudinal band of the same color runs along middle of sides of body ; snout reddish yellow ; preorbital yellow ; cheek with a large yellow blotch ; opercle with 2 or 3 similar but smaller blotches ; tip of lower jaw reddish yellow ; spinous part of dorsal reddish yellow, soft dorsal yellow ; caudal yellow, the upper and the lower margins reddish ; anal yellow, with reddish tint ; pectoral reddish yellow with an orange blotch at the base ; ventral pale.

Remarks : SCHMIDT (1931 : 61) reported *Selenanthias analis* based on a specimen taken from Tokyo, but it agrees fairly well with a present specimen in description in

having naked maxillary and mandible, narrow interorbital space, short ventral, and in number of scales in lateral line and color of anal fin.

Range : Arafra Sea ; Celebes : Izu-Oshima, Japan.

2. *Holanthias borbonius* (CUVIER and VALENCIENNES)

Serranus borbonius CUVIER and VALENCIENNES, 1828 : 263 (Île de France).

Anthias borbonius GÜNTHER, 1859 : 89 (Mauritius).

Odontanthias borbonius BLEEKER, 1874 : 16, pl. 5, fig. 1 (Madagascar).

Anthias (Odontanthias) borbonius SAUVAGE, 1891 : 134, pl. 17, fig. 2 (Madagascar).

Holanthias borbonius BOULENGER, 1895 : 318 (Mauritius and Bourbon)—SMITH, 1955: 344.

Serranus delisii BENNETT, 1831 : 126.

Aylopon mauritanus GUICHENOT, 1868 : 86.

Material examined : 1 specimen, 93 mm (127 mm), near Torishima, February 27, 1957.

Description : D. X, 17 ; A. III, 7 ; P. 16 ; pored scales in lateral line 41 ; gill-rakers on first arch 11+26=37. Head length 2.74 in body length ; greatest body depth 2.07 ; distance between origin of ventral and that of anal 3.20 ; length of longest soft dorsal ray (2nd one) 2.21 ; caudal fin length (upper rays) 2.25. Snout length 4.86 in head length ; upper jaw length 2.13 ; eye diameter 3.23 ; interorbital space 3.40 ; post-orbital part of head 2.13 ; length of caudal peduncle 1.89 ; depth of the same 2.88 ; pectoral fin length 1.13 ; ventral fin length 1.13 ; length of ventral spine 1.94 ; length of longest dorsal spine (4th one) 1.79 ; length of last dorsal spine 2.83 ; length of first anal spine 3.78 ; length of second anal spine 1.89 ; length of 3rd anal spine 2.26 ; length of longest anal ray (2nd one) 1.62. Length of longest gill-raker on first arch 1.75 in eye diameter ; length of longest gill-lamella of the same arch 2.62.

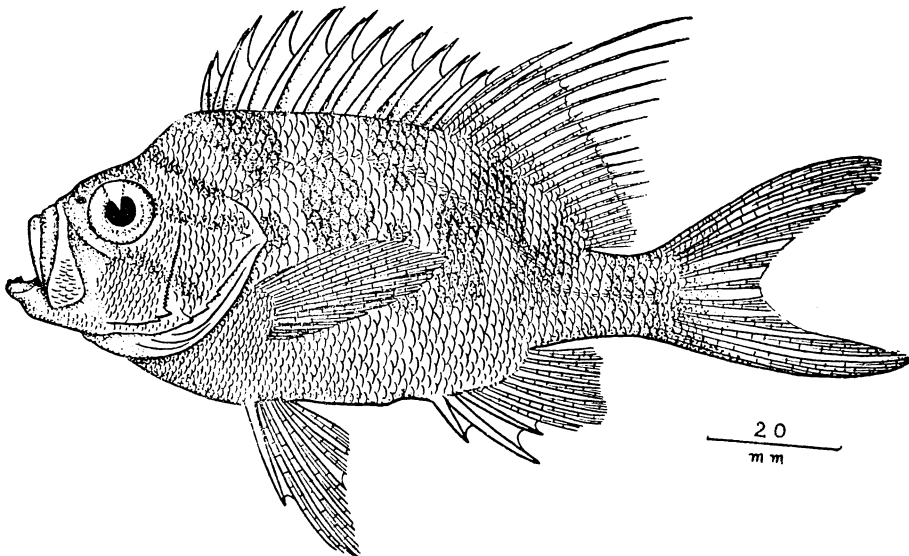


Fig. 2. *Holanthias borbonius* (CUVIER and VALENCIENNES)

Body ovoid, strongly compressed ; dorsal outline between snout and 1st dorsal spine nearly straight ; ventral outline gently and evenly curved, Mouth rather large, oblique and protractile ; lower jaw slightly projecting beyond the upper when mouth is closed. Maxillary expanded distally, extending to below posterior of pupil ; supplemental bone absent. Interorbital space broad and convex, about as wide as eye diameter. Nostrils two, close together, just in front of eye ; anterior nostril small, with a produced posterior flap ; the posterior one larger, elliptical in shape. Upper jaw with a band of villiform teeth, outermost ones much larger and canine-like ; one canine on sides near tip, and behind it at symphysis one or two canines ; teeth on lower jaw also villiform, posterior ones canine-like ; a pair of canines on tip of lower jaw, and one or two canines posteriorly on each jaw ; vomer, palatine, pterygoid and tongue with broad band of teeth, the band of vomer \diamond -shaped. Posterior border of preopercle serrated along their margin. Gill-rakers elongate, pointed and close-set, the longest one longer than gill-lamellae.

Dorsal inserted above slightly before upper end of gill opening ; dorsal spines strong, the fourth one longest ; anterior six soft rays filamentous ; anal spines stout, the 2nd spine slightly longer than the 3rd one ; pectoral subsymmetrical, pointed and reaching to origin of anal ; ventral inserted slightly before lower base of pectoral ; caudal emarginated, branched rays 13. Scales moderately large, ciliated ; 8 in a series from origin of dorsal to lateral line and 22 from origin of anal to lateral line ; 3 from base of middle part of spinous dorsal to lateral line ; head closely scaled except for lips, preorbital and throat ; soft portion of dorsal scaled basally. Lateral line high, concurrent with back, forming an angle under last several dorsal rays.

Coloration : In spirit, body pinkish, with many large yellowish dark brown blotches on sides ; an oblique bright yellow stripe begins at tip of snout, running below eye and extends to base of pectoral ; same color stripe runs from posterior border of eye to opercular margin above middle spine of opercle ; a yellowish dark brown saddle stripe at predorsal ; tip of spinous dorsal pink ; anterior part of soft dorsal yellow ; pectoral yellow ; ventral yellow, the anterior margin pink ; anal pink ; caudal yellow, the upper and the lower margin reddish.

Remarks : There does not appear to be any significant difference between the Mauritius specimen and the present specimen except for the length of the third dorsal spine. In the Mauritius specimen the third spine much elongate, but in the present specimen does not elongate. It seems to me that the length of the third dorsal spine varies due to sex. The Mauritius specimen may be the male specimen.

Range : Madagascar ; Mauritius ; Izu-Oshima, Japan.

Family Acanthoclinidae

3. *Ernogrammoides fasciatus* CHEN and LIANG.

Ernogrammoides fasciatus CHEN and LIANG, 1948 : 32, fig. 1 (Keelung)—MATSUBARA, 1955 : 640.

Calliblennius rubescens AOYAGI, 1954 : 213, fig. 1 (Kowan, Okinawa).

Material examined : 1 specimen, 30 mm (37.5 mm) Izu-Oshima, July 26, 1955.

Description : D. XVIII, 5 ; A. X, 5 ; P. 18 ; V. I, 3 ; lateral series of scales about 39 ; L.1. 36/25/34 ; Tr. 2/13. Head length 3.33 in body length ; greatest body depth 4.28 ; distance between origin of ventral and that of anal 3.26 ; length of ventral 3.00. Snout length 4.50 in head length ; upper jaw length 3.00 ; eye diameter 3.60 ; interorbital space 6.92 ; postorbital part of head 1.80 ; length of caudal peduncle 3.21 ; depth of the same 2.25 ; pectoral fin length 1.50 ; length of ventral spine 2.25 ; length of 1st dorsal spine 3.60 ; length of longest dorsal spine (last one) 1.80 ; length of longest soft dorsal ray 1.76 (2nd one) ; length of 1st anal spine 4.50 ; length of longest anal spine (last one) 1.87 ; length of longest soft anal ray (2nd one) 1.73.

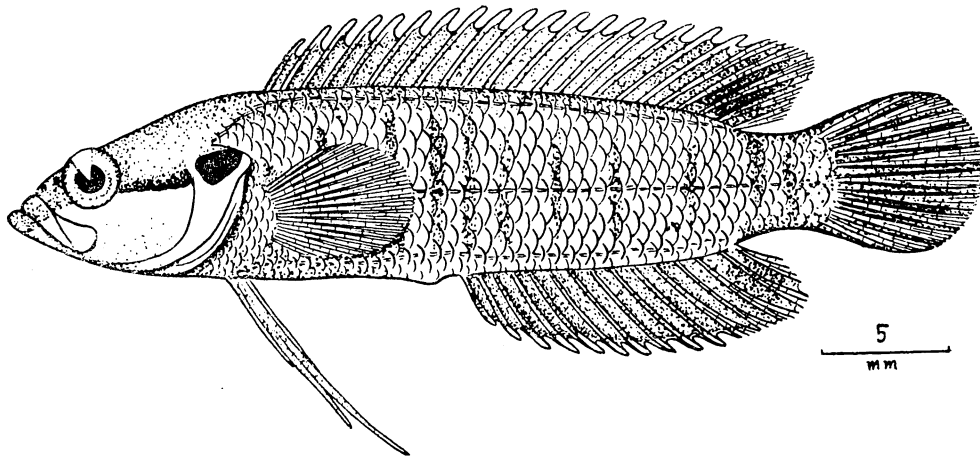


Fig. 3. *Ernogrammoides fasciatus* CHEN and LIANG

Coloration : In preservative, body dark brown, dorsal side of head pale, with ten narrow blackish brown cross bars ; a pale-ringed black ocellus on operculum ; a dark line from eye back to opercular ocellus ; spinous dorsal and anal dark brown, with a whitish margin ; soft dorsal and anal more blackish ; caudal blackish brown ; pectoral pale ; tip of ventral blackish.

Remarks : *Calliblennius rubescens* of AOYAGI is apparently synonym of this species as described by MATSUBARA (1955; 640). AOYAGI described "V. 2" in *Calliblennius rubescens*. But the present specimen has one spine and three soft rays as the original description. The first soft ray is long, thick and bifid. The second and the third ones are rather short. CHEN and LIANG described "maxillary with supplemental bone" in their original description. But in the present specimen the bone is absent.

Range : Keelung, Formosa ; Okinawa ; Izu-Oshima.

Family Pseudogrammidae

4. *Pseudogramma polyacantha* (BLEEKER)

Pseudochromis polyacanthus BLEEKER, 1856 : 375 (Ternate)—GÜNTHER, 1860 : 258 (copied)—FOWLER, 1900 : 523 (Tahiti) ; 1928 : 189 (Honolulu, Marcus Island and Tahiti). *Pseudogramma polyacanthus* (in part) BLEEKER, 1875 : 24, pl. 3, fig. 2 ; 1877, vol. 9, pl.

389, fig. 3—GÜNTHER, 1876 : 159, pl. 98, fig. A.—WEBER, 1913 : 266 (Solar and Celebes)—FOWLER, 1931 (Philippines, Dutch East Indies, Celebes and Tahiti)—WEBER and BEAUFORT, 1931 : 120, fig. 21 (Timor, Lamakera, Ambon, Ceram, Ternate, Batjan, Kabala dua, Celebes, New Guinea, Seychelles, Amirante, Tahiti, Fiji, Hawaii and Marcus Islands)—FOWLER, 1934 : 412—HERRE, 1936 : 168 (Tahiti and Fiji)—AOYAGI, 1938 : 111, fig. 28 (Hatoma Island, Riu-Kiu Island)—SCHULTZ, 1943 : 114 (Rose Island)—HARRY 1953 : 77 (Raroia Atoll, Tuamotu Archipelago)—SMITH, 1953 : 549, fig. 1 (East Africa, Zanzibar and Pemba).

Pseudogramma polyacantha SCHULTZ, 1953 : 395 (Bikini Atoll, Rongelap Atoll, Rongerik Atoll, Eniwetok Atoll, Kwajalein Atoll, Likiep Atoll)—Randall 1955 : 63 (Gilbert Islands)—SMITH, 1955 : 10, fig. 11 (Mozambique).

Gnathypops samoensis FOWLER and SILVESTER, 1922 : 118, fig. 1 (Aua Village, Samoa).

Material examined : 1 specimen 23 mm (29.8 mm), Izu-Oshima, August, 1952.

Description : D. VII, 20 ; A. III, 17 ; P. 14 ; lateral series of scales 49 ; pored scales in lateral line 24 ; Tr. 4/23. Head length 2.50 in body length ; greatest body depth 3.28 ; distance between origin of ventral and that of anal 3.06. Snout length 6.13 in head length ; upper jaw length 2.30 ; eye diameter 5.11 ; interorbital space 7.67 ; postorbital part of head 1.84 ; length of caudal peduncle 4.60 ; depth of the same 2.87 ; pectoral fin length 1.48 ; ventral fin length 3.06 ; length of longest dorsal spine (3rd one) 4.60 ; length of longest soft dorsal ray (15th one) 3.06 ; length of 1st anal spine 9.20 ; length of second anal spine 4.60 ; length of 3rd anal spine 9.20 ; length of longest anal ray (9th one) 3.06 ; length of caudal fin 1.58.

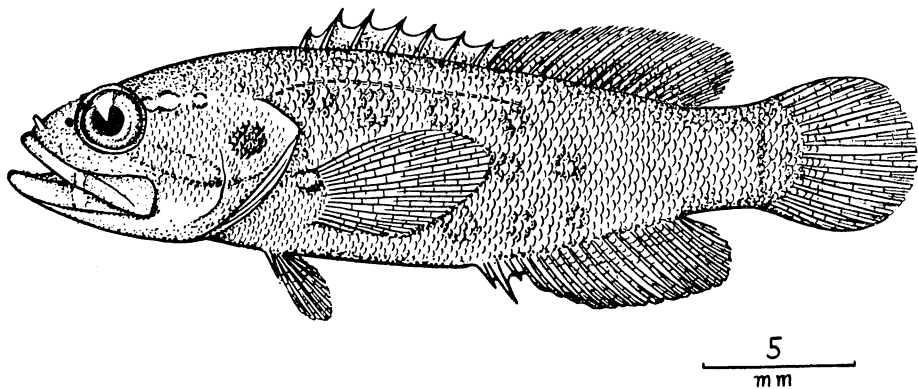


Fig. 4. *Pseudogramma polyacantha* (BLEEKER)

Coloration : In preservative, body brown, with many pale mottlings. A dark blotch, less than eye diameter, on the opercle ; a pale streak runs from below the eye to the base of pectoral and another streak from posterior of the eye to the upper cleft of the gill-opening ; boundaries of the stripes marked with somewhat darker, pelvics light, other fins dusky.

Range : East coast of Africa to the Philippines, Micronesia, Polynesia and southern Japan.