

A LIST OF FISHES COLLECTED IN TAHITI BY
MR. HENRY P. BOWIE.

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In a brief visit to Tahiti in the months of January and February, 1905, Mr. Henry P. Bowie, of San Mateo, California, made a small collection of the shore fishes of Tahiti, 34 species being taken. Most of these belong to forms characteristic of the South Seas, but among the number are 3 very rare species, which are figured in the present paper, the plates being the work of Mr. William Sackston Atkinson. A series of duplicates has been sent to the United States National Museum.

1. MYRIPRISTIS INTERMEDIUS Gunther.

Tips of soft dorsal and anal black, otherwise scarcely different from *Myripristis murdjan*, of which it may be a color variation.

2. HOLOCENTRUS SAMMARA (Forskål).

3. HOLOCENTRUS BOWIEI Jordan and Snyder, new species.

Head, 2.8 in length to base of caudal; depth, 2.9; depth of caudal peduncle, 4 in head; eye, 4; snout, 3.2; interorbital space, 8.5; maxillary, 3.1; D. XI, 16; A. IV, 11; scales in lateral series, 45; between lateral line and beginning of dorsal, 4; between lateral line and origin of anal, 9.

Dorsal contour of head nearly straight, interorbital space slightly convex; snout pointed, lower jaw projecting; maxillary extending to edge of orbit; eye of medium size, its upper edge even with dorsal contour of head. Villiform teeth on jaws, palatines, and vomer. Pseudobranchiæ large; gillrakers long, pointed, 13 on lower limb of arch; the one above preceded by 3 or 4 small knobs. Lower margin of preorbital concave, with large serrations; suborbital very narrow, its edge finely serrated; length of preopercular spine equal to vertical diameter of eye, edge of preopercle denticulate; opercle striated, its edge strongly denticulated, the angle with 2 flat spines; interopercle striate, its edge with 4 small spines. Scales on cheek below eye, a single row along anterior portion of preopercle, the three upper ones

being enlarged; scales smooth or scarcely ctenoid on breast and anterior parts of body, gradually growing rougher posteriorly; a row along base of anal with their lower edges elongate and spine like; bases of both soft dorsal and anal with a sheath of scales. Lateral line but little curved, passing somewhat above middle of caudal peduncle. Spinous dorsal high, the longest (third) spine 2 in head; the following ones growing successively smaller, the last about one-fifth the length of the third; fourth or fifth ray slightly longer than third spine. Third anal spine heavy, its length, 1.9 in head; its posterior concavity deep enough to receive the fourth spine; longest ray, 1.6 in head. Ventrals pointed, nearly reaching vent. Pectorals pointed, 1.6 in head. Caudal deeply forked, the lobes rounded; 1.7 in head. Color in spirits plain gray. Each row of scales with a faint longitudinal light stripe, the edges of which are darker; a dusky spot

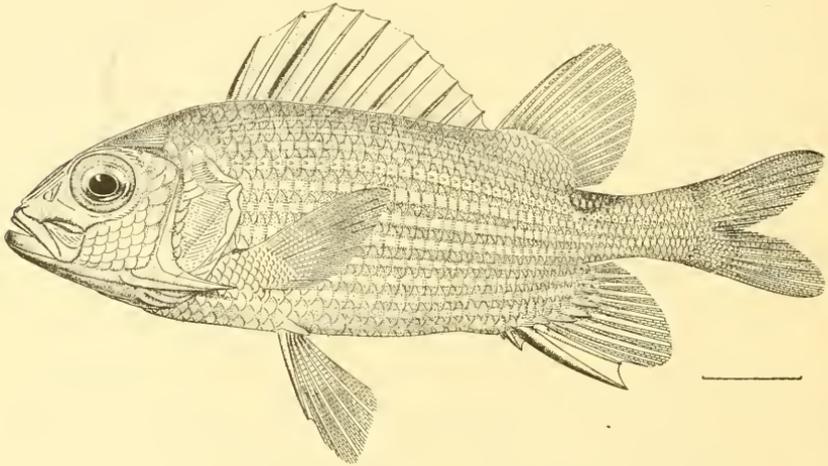


FIG. 1.—*HOLOCENTRUS BOWIEI*.

slightly larger than pupil on caudal peduncle at base of anal, this having been metallic gray in life; opercle somewhat dusky; fins immaculate. No black anywhere. In life, doubtless nearly plain red, with faint, paler streaks and darker edges.

One example, measuring 212 mm., type No. 53044, U. S. National Museum. Collected in Tahiti by Mr. Henry P. Bowie, for whom the species is named.

4. *CARANX IGNOBILIS* (Forskål).
5. *KUHLIA MALO* (Cuvier and Valenciennes).
6. *KUHLIA RUPESTRIS* (Lacépède).
7. *EPINEPHELUS MERRA* (Bloch).
8. *PSEUDUPENEUS MOANA* Jordan and Snyder.

(*Upeneus trifasciatus* Günther, not *Mullus trifasciatus* Lacépède, which is the same as *Mullus bifasciatus* Lacépède.)

9. *MULLOIDES SAMOENSIS* Günther.
10. *ABUDEFDUF CÆLESTINUS* (Lacépède).
11. *PLATAX ORBICULARIS* (Forskål).
12. *CHÆTODON VAGABUNDUS* Linnæus.
13. *CHÆTODON SETIFER* Bloch.
14. *CHÆTODON LUNULA* Lacépède.
15. *CHÆTODON TRIFASCIATUS* Park.
16. *CHÆTODON ORNATISSIMUS* Solander.
17. *CHÆTODON UNIMACULATUS* Bloch.
18. *CHÆTODON RETICULATUS* Cuvier and Valenciennes.
19. *CHÆTODON ULIETENSIS* Cuvier and Valenciennes.
20. *CHÆTODON EPHIPIUM* Cuvier and Valenciennes.
21. *CHÆTODON TRICHOUS* Günther.

A specimen 120 mm. long, apparently belonging to this species, differs considerably in many details of color from Garrett's figure as

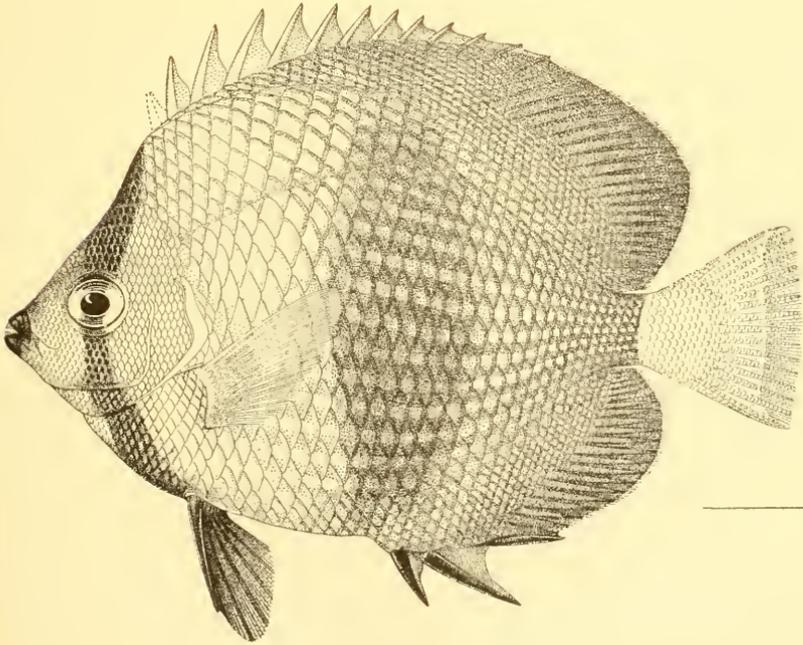


FIG. 2.—*CHÆTODON TRICHOUS*.

reproduced by Günther. The tip of the snout is black. The band passing through eye narrows on the cheek where it is but little broader than the pupil, then widens again as it extends backward.

The median, dark, vertical lenticular blotch extending from back to belly is indistinct on its edges and somewhat broken, tending to fade in spirits, many of the scales in the region having a light, central spot. The blotch is also diffused backward, the whole posterior part of the body, including the soft dorsal and anal fins, being nearly black, slightly shaded with yellowish. The scales posterior to the blotch have white centers as have also those anterior to it, only in a less marked degree. Following the longitudinal rows of scales, the corresponding rows of spots approach the character of stripes, converging and growing narrower on caudal peduncle. Anterior to the blotch the body was yellow in life, the caudal fin bright yellow, some of the color still persisting in spirits. The entire body may have been washed with yellow. The ventrals are black. The soft dorsal and anal have a black border, narrowly edged with white or yellow.

In Günther's plate, the soft dorsal and anal are shown as pale; they are, in fact, almost black.

22. *FORCIPIGER LONGIROSTRIS* (Broussonnet).

23. *HOLOCANTHUS IMPERATOR* (Bloch).

One young specimen with the pale bands broad and only about 12 in number.

24. *HENIOCHUS PERMUTATUS* (Linnæus).

(*Heniochus acuminatus* of authors.)

25. *ZANCLUS CANESCENS* (Linnæus).

26. *ZEBRASOMA FLAVESCENS RHOMBEUM* Kittlitz.

27. *HEPATUS LINEATUS* (Gmelin).

28. *ACANTHURUS LITURATUS* (Forster).

29. *CTENOCHÆTUS STRIATUS* Quoy and Gaimard.

30. *BALISTAPUS UNDULATUS* (Park).

31. *OSTRACION TUBERCULATUM* Linnæus.

32. *TETRAODON HISPIDUS* Linnæus.

33. *TETRAODON OPHRYAS* Cope.

(? *Oroides setosus* R. Smith.)

One example measuring 180 mm. The entire body, dorsal, anal, and caudal fins are closely covered with small white spots, none of which are quite as large as the pupil. They are largest on upper part of snout, below and behind eye, around base of pectoral, on bases of dorsal and anal, and on caudal peduncle. On occiput and middle of back they are reduced to mere specks. The pectorals are whitish, each ray being dusky. Eye 8 in head; interorbital space 1.8; length of head

contained 2 times in space between tip of snout and base of dorsal. Interorbital space slightly convex. Dorsal contour of snout convex. The prickles are very short, most evident on nape and abdomen.

This species has been hitherto known only from a single young specimen from Samoa. The species on the offshore islands of the west coast of Mexico, called *Tetraodon* or *Oroides setosus* Rosa Smith,

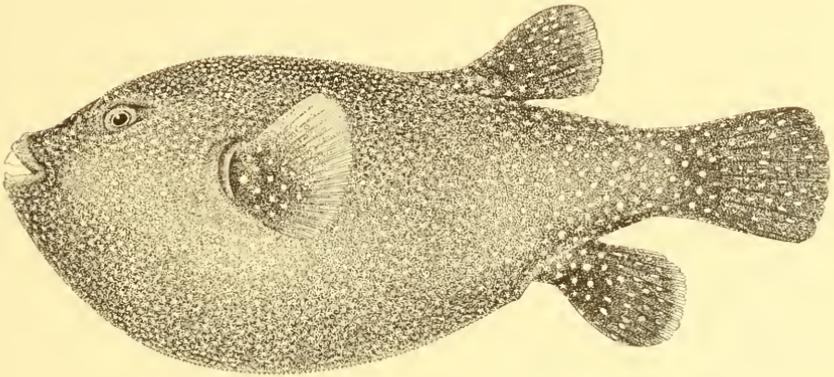


FIG. 3.—TETRAODON OPHYRAS.

does not differ much, if at all, from *Tetraodon ophryas*. *Tetraodon setosus* has normally much the same color as this specimen, but it is subject to very great variations, blue forms and yellow varieties occurring together with the normal brown type.

34. SCORPÆNOPSIS CACOPSIS Jenkins.

One fine specimen not distinguishable from others from Hawaii.