DESCRIPTIONS OF FIFTEEN NEW SPECIES OF FISHES FROM THE HAWAIIAN ISLANDS.

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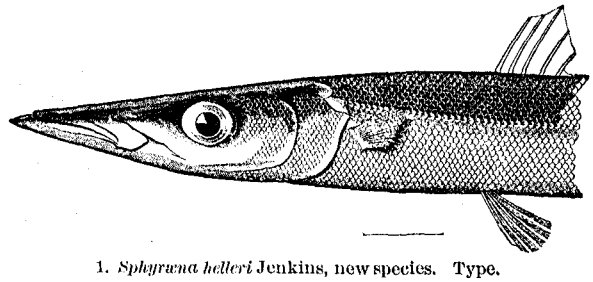
The fishes herein described are from the collections designated in a former paper by the writer in the U. S. Fish Commission Bulletin for 1899, pp. 45–65: "Descriptions of new species of fishes from the Hawaiian Islands, belonging to the families of *Labridæ* and *Scaridæ*." The species in the following list belong to the families *Sphyrænidæ*, *Serranidæ*, *Lutianidæ*, *Pomacentridæ*, *Chætodontidæ*, *Ostraciidæ*, *Tetraodontidæ*, *Tropidichthyidæ*, *Scorpænidæ*, *Percophidæ*, and *Brotulidæ*.

In the tables of measurements the numbers in decimals represent parts in length to base of caudal.

Family SPHYRÆNIDÆ.

Sphyræna helleri Jenkins, new species. Fig. 1.

Head a little greater than 3 in length of body; depth 8.5 in length. D. v, 10; A. 10. Head long and tapering, the snout being long, and the lower jaw, which projects beyond the upper, terminating in a tapering fleshy appendage. Eye 4.5 in head, slightly ovate, wider end anterior. Interorbital flat, 3.33 in snout, somewhat narrower than vertical diameter of eye. The maxillary does not reach front of orbit, being separated from it by a distance equal to about one-fifth of its own length. Scales on suborbital not extending forward beyond posterior border of eye. Scales on cheeks in about 12 vertical series, about 9 vertical rows on opercle, a few scales on subopercle, rest of head naked. Opercle without spines. Two teeth in front of lower jaw, about fifteen back of these in each ramus. Distance from occiput to first dorsal fin, from first dorsal to second dorsal, from second dorsal to last vertebra equal, and each equal to distance from tip of snout to posterior margin of eye. Insertion of ventrals below front of first dorsal fin, back of tips of pectorals. Front of anal opposite front of second dorsal. (Fin rays all broken in specimen described, pectoral apparently very short, perhaps 11 in length of body.)



1. *Sphyræna helleri* Jenkins, new species. Type.

Color in life: Upper parts plumbeous, lower parts silvery; top of head and fleshy tip of lower jaw blackish; fins plain.

This species is structurally very similar to *Sphyræna jello* Cuvier & Valenciennes,[1] of the Indian

[1] *Sphyræna jello* Cuvier & Valenciennes, Hist. Nat. Poiss., III, p. 349; Günther, Cat. Fishes Brit. Mus., II, p. 337.

Ocean, differing from that species in being of a uniform plumbeous color above and silvery below, with no undulating line on the side, such as is characteristic of *S. jello*. Cuvier & Valenciennes describe the color of *S. jello* thus: "The black of the back and the silvery color of the ventral surface are separated by a festooned or serpentine line on the side of the body close to the lateral line." *S. helleri* is related also, perhaps, to *S. idiastes* Snodgrass & Heller,[1] of the Galapagos Islands, differing from this species in the smaller number of scales on the opercles and body.

This species is named for Mr. Edmund Heller, who, with Mr. Robert E. Snodgrass, has made valuable contributions to the knowledge of the fishes of the Galapagos Islands.

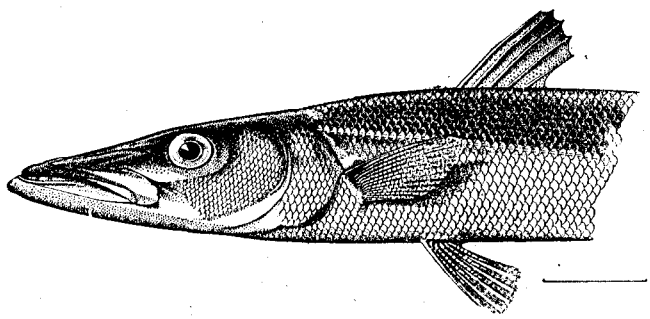
One specimen collected by me at Honolulu. Type No. 49692, U. S. National Museum.

The following gives the measurements and the numbers of fin rays and scales of the specimen:

Sphyræna helleri.	No. 1.	Sphyræna helleri.	No. 1.
Length in millimeters	330	Interorbital	.045
Head in length	.31	Distance between dorsals	.20
Depth	.12	Dorsal spines	V
Pectoral	.09(?)	Second dorsal rays	10
Ventral	.07(?)	Anal rays	10
Eye	.07	Scales (longitudinal)	123
Snout	.13	Scales (transverse)	12-15

Sphyræna snodgrassi Jenkins, new species. Fig. 2.

Head 3.25 in length of body; depth 6 in length. D. v, 10; A. 9. Shape of head and body regularly fusiform. Lower jaw projecting beyond upper a distance a little less than diameter of pupil; tip simply bluntly conical, not terminated by fleshy appendage. Eye somewhat ovate, larger end anterior, longitudinal diameter 4.75 in head. Interorbital space slightly concave, about equal to vertical diameter of eye. Maxillary reaches to front of eye. Suborbital scaled, 15 vertical rows of scales from eye to edge of preopercle, 10 rows on opercle, those of opercle enlarged; rest of head naked. Opercle without spines. (Some specimens have one or even two very weakly developed flat points on the opercle.) Upper jaw with two slender elongate teeth anteriorly on each side, along sides of jaw a single series of very small teeth. Lower jaw with two large anterior median teeth, and back of them a series of fifteen small ones in each ramus. Palatines and pterygoids with a long series of teeth, those of the palatines long and slender like those in the front of the jaws. Distance from occiput to front of first dorsal equal to distance from first dorsal to second dorsal, and to distance from second dorsal to base of caudal rays, which distance is 1.66 in head. Dorsal rays v, 10. First and second dorsal spines longest, 3 in head; fifth spine a little more than half of first. Second, third, and fourth rays of second dorsal longest, one-half longer than first spine. Anal rays 9. Anal fin very slightly behind soft dorsal, of same shape and size. Caudal deeply forked, lobes equal, longest rays 1.5 in head. Pectoral 8.5 in length. Ventral 9.5 in length. Lateral line slightly decurved on body before second dorsal, posterior part straight.



2. *Sphyræna snodgrassi* Jenkins. Type.

Color in life: Above lateral line plumbeous, below silvery, top of head blackish; a large dusky blotch on middle rays of second dorsal and of anal; tips of second dorsal and of caudal white; other parts of caudal dusky.

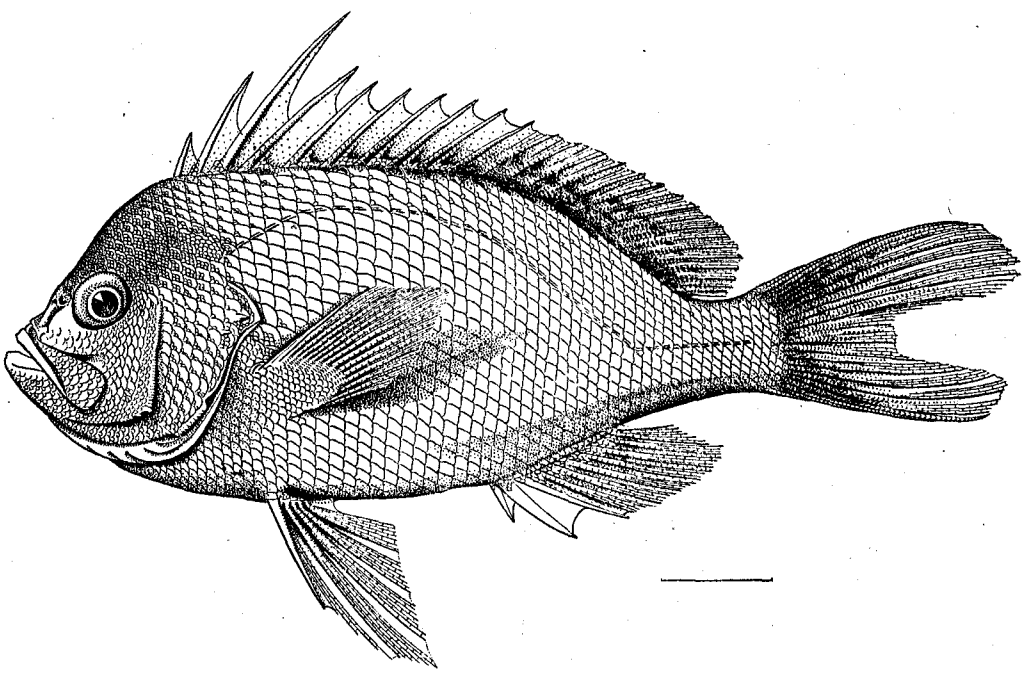
This species is most closely related to *Sphyræna commersonii* Cuvier & Valenciennes,[2] of the eastern part of the Indian Ocean. It differs from *S. commersonii* in being less slender, in having a somewhat longer pectoral fin, and in having the black blotches on the soft dorsal and anal fins.

[1] *Sphyræna idiastes* Snodgrass & Heller, MS., Fishes of Tropical Islands of Eastern Pacific.

[2] *Sphyræna commersonii* Cuv. & Val., His. Nat. Poiss., III, p. 352; Günther, Cat. Fishes Brit. Mus., II, p. 338.

Five specimens taken by me at Honolulu and several secured by Dr. T. D. Wood.
Type No. 49693, U. S. N. M.
This species is named for Mr. R. E. Snodgrass, who has made various contributions to ichthyology.
The following are the measurements and the numbers of fin rays and scales of four specimens:

Sphyræna snodgrassi.	No. 1.	No. 2.	No. 3.	No. 4.	Sphyræna snodgrassi.	No. 1.	No. 2.	No. 3.	No. 4.
Length in millimeters...	257	225	222	207	Interorbital	.05	.05	.05	.05
Depth	.15	.14	.16	.15	Space between dorsal fins.	.20	.16	.19	.19
Head	.31	.31	.30	.33	First dorsal spines.....	V	VI	V	V
Pectoral	.12	.11	.12	.12	Second dorsal rays	10	10	10	10
Ventral.....	.11	.10	.10	.11	Anal rays.....	9	9	9	9
Eye.....	.065	.06	.06	.065	Scales (longitudinal)	80	82	82	80
Snout.....	.14	.15	.15	.15	Scales (transverse)	9-10	9-10	9-10	9-10



3. *Anthias fuscipinnis* Jenkins, new species. Type.

Family SERRANIDÆ.

Anthias fuscipinnis Jenkins, new species. Fig. 3.

Depth of body 2.5 in length; head 2.8 in length. D. x, 17; A. III, 7. Pectoral 1.31 in head. Ventral about equal to head. Eye 4 in head. Interorbital slightly wider than eye. Maxillary reaching to below middle of eye. Narrowest part of preorbital a little less than 2 in eye. Branchiostegals, 7; gillrakers on lower arm of first branchial arch, 34. Mouth very oblique. Lower jaw somewhat projecting, just entering profile. Upper profile of head reëntrant before the nostrils; from here to nape steep and almost straight, in one specimen rather prominently convex before the eyes; strongly bulging at nape in front of dorsal spines. Profile of back straight from front of first dorsal to anterior rays of soft dorsal; from here descending to caudal peduncle, the upper edge of which is on a level with the tip of the snout. Ventral profile less convex and less angular than the upper. Opercle with two flat spines, the upper the larger; lower part of edge of opercle serrated. Angle of preopercle with one or two small spines; both vertical and horizontal margins of preopercle serrated. Preorbital entire, edge of suborbital hidden by scales. Teeth in sides of jaw minute, in villiform bands; two small canines in front of upper jaw, two to six in front of lower jaw.

First dorsal spine short, less than eye; second more than twice as long as the first; third nearly twice the second, prominently longer than the succeeding spines; fourth spine 1.66 in the third; spines from fourth to tenth decrease regularly in length, tenth 1.25 in fourth. Soft dorsal somewhat rounded, longest rays equal to fifth spine. First anal spine a little shorter than the first dorsal; third anal spine equal to second dorsal, slender and a little longer than the second anal spine. Soft anal short, median rays longest, a little longer than longest rays of soft dorsal. Caudal rather large, deeply forked, longest rays equal to length of head, longer than longest dorsal spine; lower lobe a little smaller than upper. Ventrals longer than pectorals, about equal to head, acute, second ray longest. Pectorals pointed, median rays longest. All parts of the head and body except the preorbital and jaws scaled. Scales ctenoid and ciliated. Lateral line strongly arched anteriorly, beginning above upper end of gill cleft on eighth scale below the dorsal spines; at the highest part it is on the fourth row from the back and on the twentieth from the ventral median line.

Color in alcohol: Plain pale reddish-yellow (probably red in life), dusky on scaly part of base of soft dorsal and of posterior part of spinous dorsal and about base of caudal.

This fish is related to *Anthias margaritaceus* Hilgendorf of Japan, differing from descriptions of that species in having a greater number of scales in a vertical row on the body and a greater number of gillrakers on the lower arm of the first branchial arch, in having the ventral fins longer than the pectorals, in having no filamentous prolongations on any of the dorsal or caudal rays, and in being of a uniform coloration on the head and body, *A. margaritaceus* being spotted with large white blotches. The alcoholic specimens may not, however, be reliable on this last point.

(*Fuscus*, dusky; *pinnis*, fin.)

Three adult specimens obtained by Dr. Wood at Honolulu. Type No. 49695, U. S. N. M.

The following are measurements of the three specimens and numbers of fin rays and scales:

Anthias fuscipinnis.	No. 1.	No. 2.	No. 3.	Anthias fuscipinnis.	No. 1.	No. 2.	No. 3.
Length in millimeters ..	179	157	146	Third dorsal spine	.26	.21	.23
Depth	.41	.41	.42	First dorsal	X	X	X
Head	.32	.36	.38	Second dorsal	17	17	17
Pectoral	.25	.24	.26	Second anal	7	7	7
Ventral	.30	.32	.32	Scales in lateral line	44	47	50
Eye	.08	.08	.09				

Family LUTIANIDÆ

Aphareus flavivultus Jenkins, new species. Fig. 4.

Head equal to depth of body; depth of body 3 in length. D. x, 11; A. III, 8. Scales 10–73–18. Pectoral 1.33 in head; ventral 1.66 in head. Eye a little shorter than the snout, equal to width of interorbital. Maxillary reaching the posterior margin of pupil. Preorbital and opercles entire, no spine on opercle. Preorbital transversely fluted. Nostrils very small, the posterior circular, exposed; anterior a vertical slit with a dermal flap attached to its posterior edge covering it. Teeth all minute, villiform, in bands in the jaws, in the upper jaw an outer row of very slightly enlarged teeth. Head naked except cheeks, opercle, subopercle, and sides of top of head. Profile of head and body almost regularly fusiform. Caudal fin large, deeply forked, lobes equal, longest rays a little shorter than head. Dorsal fin rather low, third spine longest; first short, 2.5 in eye; second a little shorter than third, which is 2.5 in head, following spines successively shorter, tenth 1.33 in third spine. Anterior soft rays of dorsal same length as last spine, the posterior rays slightly decreasing in length, but the last ray elongated, about 2 in head and three times the length of the penultimate ray. Anal spines weak, the third longest, equaling the sixth dorsal spine. Soft anal similar to soft dorsal but shorter, last ray prolonged, as is last dorsal. Pectorals and ventrals pointed, upper rays of pectorals and outer rays of ventrals longest. Pectoral a little lunate at base, the lower rays very slightly produced. (Not correctly shown in the figure, as the tips were broken in the specimens drawn.) Pectoral 1.5 in head; ventral a little shorter than head. Scales rather large, cycloid. Lateral line almost imperceptibly convex dorsally, anteriorly; straight posteriorly.

Color in alcohol: Dusky-silvery, vertical fins brownish, bare parts of head brown. In life a broad brilliant yellow area on face, or little narrower than interorbital, reaching from occiput to tip of snout.

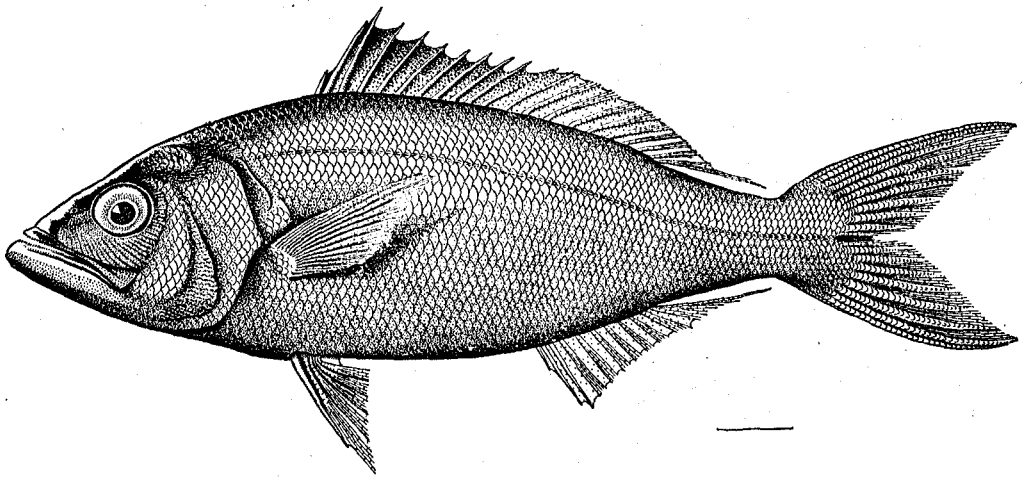
This species is closely allied to *Aphareus furcatus* (Lacépède),[1] of the Red Sea and westward to Japan, differing from descriptions and figures of the latter species in the presence of the bright yellow facial area.

(*Flavus*, yellow; *vultus*, face.)

One adult specimen collected by me at the Hawaiian Islands and two young ones secured by Dr. Wood at Honolulu. Type No. 49691, U. S. N. M.

The following are the comparative measurements and the numbers of fin rays and scales:

Aphareus flavivultus.	No. 1.	No. 2.	No. 3.	Aphareus flavivultus.	No. 1.	No. 2.	No. 3.
Length in millimeters	110	113	310	Interorbital	.09	.10	.08
Head	.30	.31	.30	Dorsal spines	X	X	X
Depth	.33	.33	.31	Second dorsal rays	11	11	11
Pectoral	.24	.24	.23	Second anal rays	8	8	8
Ventral	.22	.22	.18	Scales on lateral line	75	71	73
Eye	.10	.10	.08				



4. *Aphareus flavivultus* Jenkins, new species. Type.

Family POMACENTRIDÆ.

Eupomacentrus marginatus Jenkins, new species. Fig. 5.

Head 2.66 in length of body; depth 2. D. XIII, 16; A. II, 12. Scales 3–29–11. Tubes on lateral line 20. Eye 3.5 in head. Interorbital about equal to snout, 3 in head. Profile of head evenly and gently rounded from tip of snout to front of dorsal, profile from snout to base of ventrals less convex than that to the dorsal; from front of dorsal fin to middle of second dorsal gently convex, abruptly descending from here to caudal peduncle; ventral outline from base of ventrals to caudal peduncle evenly convex. Caudal peduncle short, 3 in head. Preorbital narrow, width below front of eye about equal to eye. A few small serrations on suborbital beneath posterior half of eye. Posterior limb of preopercle serrated, inclined somewhat back of perpendicular. First three dorsal spines a little shorter than the others, which are of about equal length and 2 in head. Median soft rays longest, 1.5 in head, posterior rays two-thirds of anterior. First anal spine short, second about equal to dorsal spines. Soft anal similar in shape to soft dorsal, median rays equal to median soft dorsal rays. Lobes of caudal rounded, the upper the larger. Scales 3–29–11, those on anterior part of body larger than those on posterior part. Lateral line on first 20 transverse rows of scales on body follows fourth longitudinal row, but on account of the difference in size of the scales it is much nearer the back posteriorly and

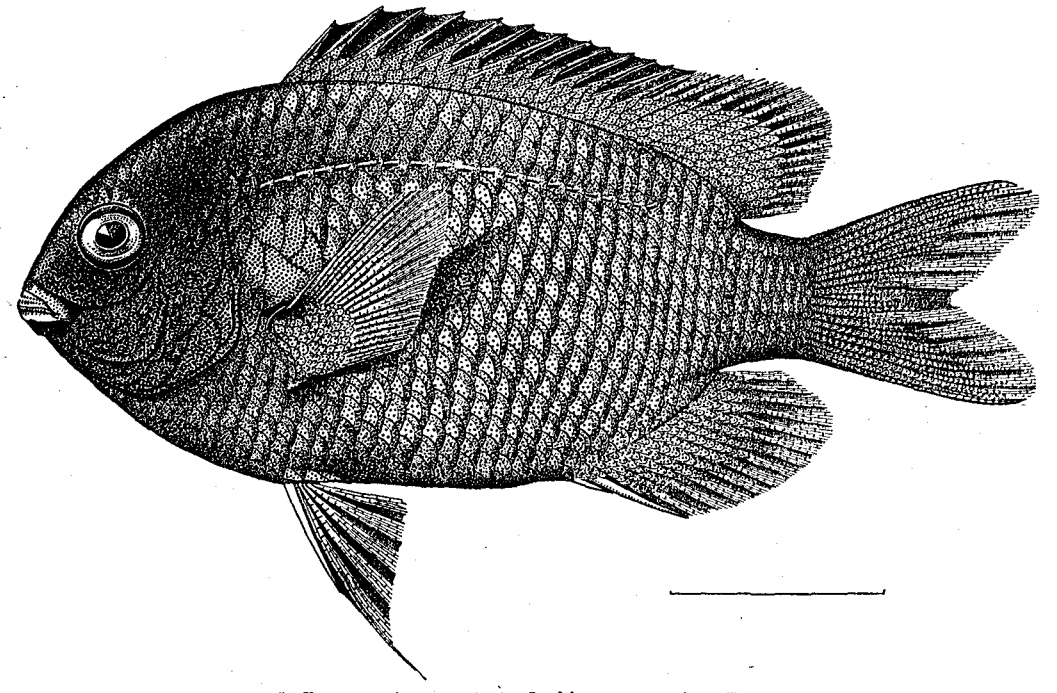
[1] *Labrus furcatus* Lacépède, Hist. Nat. Poiss., III, pp. 424, 477, pl. 21, fig. 1.

Aphareus furcatus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, p. 487, pl. 167 *b*; Günther, Cat. Fishes Brit. Mus., I, p. 386; Fische der Südsee, p. 17; Bleeker, Atlas Ichthy., VIII, p. 80, pl. 299, fig. 2.

anteriorly. Pectoral fin equal to head, upper rays longest. Ventral fin equal to pectoral, outer rays somewhat prolonged into tapering filament. Teeth one-rowed, truncate at top.

Color in life: Ground-color dark-drab; central portion of scales olivaceous, each one with black on lower part of posterior edge forming vertical bands on body; axil black; outer border of dorsal fin above scaled part black; pectoral dusky olivaceous, black at base; ventral and anal black; caudal dusky with posterior border lighter; iris bright yellow.

It is probable that the specimens here described belong to the species called *Pomacentrus nigricans*[1] by Quoy & Gaimard, from the Hawaiian Islands. They differ from Quoy & Gaimard's description, however, in having the dorsal fin edged with black, and in being of a general slate color with indistinct dusky vertical bands as described above and not "uniform brownish black." The numerous specimens examined by me all show these mentioned color characteristics. The original *nigricans* of Lacépède, with the eyes blue instead of bright yellow, is from an unknown locality and can not be the same.



5. *Eupomacentrus marginatus* Jenkins, new species. Type.

(*Marginatus*, in reference to black margin of dorsal fin.)

Numerous specimens taken by me at Honolulu and others by Dr. Wood and by Dr. Jordan. Type No. 49700, U. S. N. M.

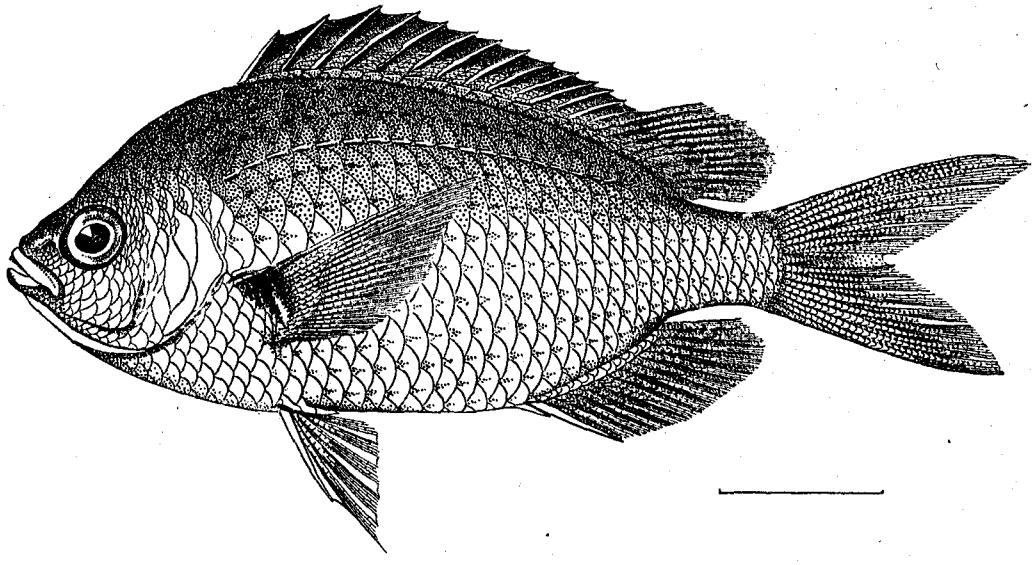
The following are the measurements and numbers of fin rays and scales of four specimens:

Eupomacentrus marginatus.	No. 1.	No. 2.	No. 3.	No. 4.	Eupomacentrus marginatus.	No. 1.	No. 2.	No. 3.	No. 4.
Length in millimeters..	96	92	80	73	Snout	.10	.10	.09	.09
Head	.30	.29	.29	.....	Dorsal spines	XIII	XIII	XIII	XIII
Depth	.47	.52	.50	.49	Second dorsal rays	16	16	16	16
Pectoral	.28	.30	.30	.31	Second anal rays	12	12	12	12
Ventral	.27	.30	.30	.31	Scales (longitudinal)	29	29	29	27
Eye	.08	.08	.09	.10	Scales (transverse)	3-10	3-11	3-11	3-11
Interorbital	.09	.10	.10	.10	Tubes on lateral line	20	20	20	20

[1] *Pomacentrus nigricans* Quoy & Gaimard, Voyage Uranus, Zoölogie, p. 399, Sandwich Islands; Cuvier & Valenciennes, Hist. Nat. Pois., v, p. 425, 1830; Günther, Cat. Fishes Brit. Mus., iv, p. 34, 1862, not *Holocentrus nigricans* Lacépède, Hist. Nat. Poiss., iv, pp. 332, 367, 1803; locality unknown; collected by Commerson.

Chromis velox Jenkins, new species. Fig. 6.

Head 3.5 in length of body; depth 2.33 in length. D. xiv, 11; A. ii, 11 or 12. Profile of head and body regularly and symmetrically rounded above and below, except the head before eyes where it is slightly concave; in some the nape appears somewhat bulging, due to the depression below. Length of caudal peduncle a little less than 2 in head, depth at middle equal to its length. Eye elliptical, 3 in head, equal to interorbital space. Interorbital convex. Snout 4 in head. Preorbital at narrowest part 3 in eye, its edge entire. Edge of suborbital concealed by scales. Preopercle entire, its angle rounded. Opercular margin entire, without spines. Teeth conical, in a single series in each jaw. First dorsal ray equal to eye, two-thirds of third; third and fourth longest, 2 in head; following spines successively shorter, last slightly shorter than second. Soft dorsal rounded; first rays abruptly longer than last spine, equal to third and fourth spines, last ray equal to fourth spine. First anal ray very short, the second equal to tenth spine. Soft anal longer than soft dorsal, rounded, median rays equal soft dorsal rays. Caudal deeply forked, upper lobe the longer, longest rays 3 in length of body. Pectoral large, pointed, upper rays longest, 3 in length of body. Ventrals a little shorter than head, slightly greater than 4 in length of body. All parts of head and body, except lips and a minute ridge from nostril to eye, scaled, and scales on opercle enlarged. Scales on body 4–29–9. Lateral line arched, beginning above upper end of gill cleft, extending over first 20 rows of scales.



6. *Chromis velox* Jenkins, new species. Type.

Color in alcohol: Brownish or dusky olive above, below silvery yellowish; base of pectoral black, color not extending to axil on body; about eight indistinct longitudinal dusky streaks along sides of body, below dorsal dark region, following rows of scales; membrane of spinous dorsal black; soft anal and dorsal dusky; caudal dusky brown.

(*Velox*, swift.)

Three specimens taken by me at Honolulu, two secured by Dr. Wood. Type No. 49698, U. S. N. M.

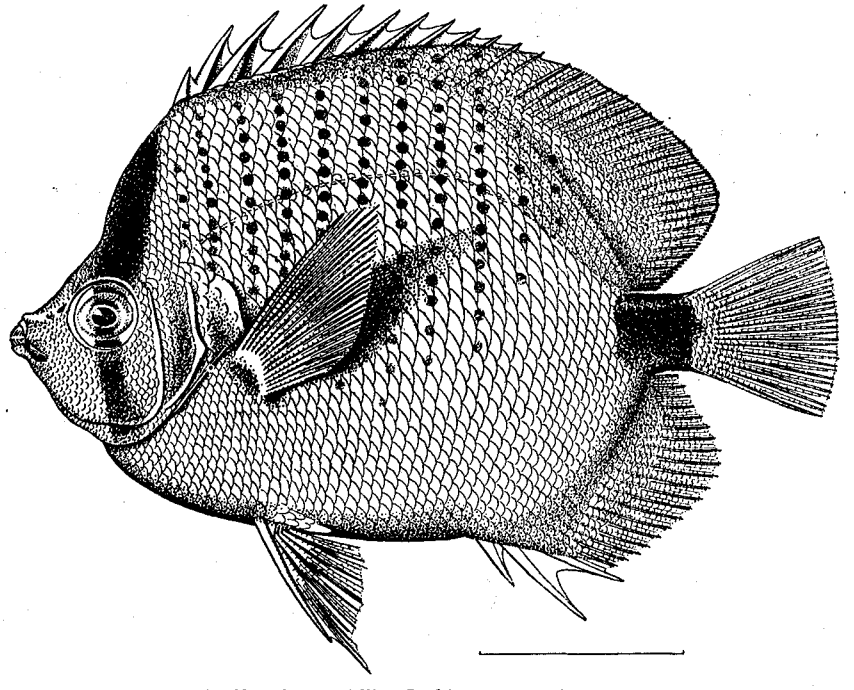
The following are the measurements and numbers of fin rays and scales of four specimens:

Chromis velox.	No. 1.	No. 2.	No. 3.	No. 4.	Chromis velox.	No. 1.	No. 2.	No. 3.	No. 4.
Length in millimeters..	118	123	119	115	Snout.....	.08	.07	.07	.07
Head.....	.27	.28	.28	.28	Dorsal spines.....	XIV	XIV	XIV	XIV
Depth.....	.43	.43	.44	.44	Second dorsal rays	11	11	11	11
Pectoral.....	.33	.35	.35	.34	Second anal rays.....	11	12	11	12
Ventral.....	.24	.23	.24	.22	Scales (longitudinal)...	28	28	28	28
Eye.....	.09	.08	.09	.09	Scales (transverse).....	4-9	4-9	4-9	4-9
Interorbital	.10	.09	.10	.09	Tubes on lateral line...	20	19	19	20

Family CHÆTODONTIDÆ.

Chætodon mantelliger Jenkins, new species. Fig. 7.

Head 3.5 in length of body; depth 1.5 in length. D. XII, 22; A. III, 19. Body ovate, greatest depth through middle of pectoral fin; anterior upper profile of head concave. Snout prominently projecting, a little less than eye, 3.75 in head. Eye circular, 3 in head. Lower margin of suborbital not visible. Margin of preopercle entire, angle rounded, posterior limb vertical, lower horizontal. Interorbital slightly less than eye. First dorsal spine 2 in second, second three-fourths of third, following spines about same length, last slightly shorter than others. Soft dorsal rounded, median rays longest, a little longer than longest spine, first same length as last spine, last equal to first spine. First anal spine about two-fifths of second; second and third about equal, 1.5 in head. Soft anal a little shorter than soft dorsal, otherwise similar to it, median rays equal to median dorsal rays. Pectorals and ventrals about equal, a little shorter than head. Caudal peduncle short, length equal to interorbital, about three-fourths of its depth. Edge of caudal fin straight, oblique, upper rays longest, 1.33 in head. Scales, 9–57–22. Scales on anterior part of body, except those of nape and on the ventral region between the head, pectorals, and ventrals, much larger than those of posterior part of body. Lateral line strongly arched, beginning above upper end of gill cleft and ending just below fifth ray from end of soft dorsal.



7. *Chætodon mantelliger* Jenkins, new species. Type.

Color in life: General color light yellow; chin and front part of snout red; ocular band only a little narrower than eye above orbit, a little wider than pupil below, inclined somewhat obliquely backward from eye above and below; interorbital yellow; a yellow stripe on level of pupil running across the snout from one eye to the other; about eight vertical rows of black spots, each smaller than pupil, on sides of body, extending from front of dorsal fin to middle of body and reaching from back to level of pectoral, occurring on every third vertical row of scales; caudal peduncle black, the black extending in small amount for a short distance along bases of dorsal and anal fins; caudal fin bright yellow, the general yellow color of body becoming a bright sulphur yellow on posterior parts of dorsal and anal fins; extreme margin of soft dorsal and anal fins, especially posteriorly, black; ventrals yellow; iris nearly white with upper and lower parts dark where ocular band passes through eye.

This species is closely related to *Chætodon miliaris* Quoy & Gaimard,[1] of the East Indies, differing from it in having the spots in rows on every third vertical series of scales instead of on each scale.

(*Mantellum*, mantle, in reference to arrangement of spots on the body.)

Numerous specimens collected by me at Honolulu, two secured by Dr. Wood. Type No. 49699, U. S. N. M.

The following are the comparative measurements and the numbers of the fin rays and scales of three specimens:

Chætodon mantelliger.	No. 1.	No. 2.	No. 3.	Chætodon mantelliger.	No. 1.	No. 2.	No. 3.
Length in millimeters ..	82	80	65	Snout	.08	.10	.10
Head.....	.30	.30	.30	Dorsal spines.....	XIII	XIII	XIII
Depth	.65	.60	.72	Second dorsal rays	22	22	22
Pectoral.....	.26	.27	.27	Second anal rays.....	19	18	20
Ventral	.24	.27	.25	Scales (longitudinal) ...	57	53	51
Eye	.10	.10	.10	Scales (transverse).....	9-22	8-18	9-24
Interorbital.....	.09	.09	.09	Tubes on lateral line....	36	42	38

Chætodon sphenospilus Jenkins, new species. Fig. 8.

Head 3.33 in length; depth 1.33 in length. D. XIII, 23; A. III, 19. Profile of head from snout to first dorsal very steep, first dorsal spine being situated over posterior edge of opercle. Snout very slightly obtuse. Profile of head slightly reëntrant before eye. Profile of body from the nape almost regularly ovate to caudal peduncle. Eye elliptical, longer diameter longitudinal, 3 in head. Interorbital very slightly wider than length of eye, equal to snout. Preorbital four-fifths of vertical diameter of eye. Posterior edge of preopercle vertical, angle regularly rounded and minutely serrated. Posterior border of opercle slightly notched, without spines. Deep pit below lower end of premaxilla and another just back of lower end of maxilla. Dorsal spines back of second of approximately uniform length, third 1.5 in head, second a little shorter than third, first less than half of second; posterior spines successively slenderer. First soft rays equal to last spine, median rays longest, last very short, about one-third of median rays, so that border of fin is rounded and posterior margin receding. Soft anal of same size and shape as soft dorsal. Second and third anal spines of equal length, equal to third dorsal spine; first one-half of second. Posterior edge of caudal fin about straight, a little oblique, upper rays being longest. Pectoral equal to head, upper rays longest. Ventral equal to pectoral, outer rays longest. All parts of head and body scaled except maxillaries and symphysis of lower jaw. Scales on head and fins very small, those on body mostly larger, those of anterior half of body back of bases of pectorals and ventrals much larger. Scales on body 7-56-21. Lateral line not concurrent with dorsal profile, begins back of upper part of eye, curves upward to black spot on upper part of side of body, then downward to base of last dorsal ray, where it terminates.

Color in life: Fins and upper part of body yellow, especially bright on ventral and anal fins; ocular band black, passing vertically through eye, width on side of head equal to eye, on top of head covers space from above front of eye to first dorsal spine; face in front of ocular band white; tip of snout dusky; lower part of body, below end of pectoral fin, white; large black spot on upper part of side of body below the eighth to the tenth spines, extending vertically from the third scale below the dorsal fin to about the tenth scale from the anal spines; upper part of spot forming large round black blotch, lower part, below eleventh scale from dorsal, abruptly tapering and much paler than the upper part, so as to form a long slender downward wedge-shaped prolongation, comparatively faintly colored from an upper very black round spot; in front of lower part of lateral spot, above pectoral fin, seven light-yellow oblique bands (inclined from below upward and backward); a black band around middle of caudal peduncle bordered before and behind by a white band; soft dorsal and anal fins with a submarginal black band, widest posteriorly on horizontal rays of each, tapering to a narrow line on median and anterior rays, within this a white band, and beyond it a very narrow marginal line of white.

This species is very closely related to *Chætodon unimaculatus* Bloch,[2] differing from it mainly in the

[1] *Chætodon miliaris* Quoy & Gaimard, Zoölogie du Voyage de Freycinet, p. 380, pl. 62, fig. 5; Cuvier & Valenciennes, Hist. Nat. Poiss., VII, p. 26; Günther, Cat. Fishes Brit. Mus., II, p. 31; Günther, Fische der Südsee, p. 46, pl. 35, fig. A.

[2] *Chætodon unimaculatus* Bloch, pl. 201, fig. 1; Bloch & Schneider, p. 221; Cuvier & Valenciennes, Hist. Nat. Poiss., VII, p. 72; Günther, Cat. Fishes Brit. Mus., II, p. 11.

Tetragonopterus unimaculatus Bleeker, Atlas Ichthy., IX, p. 45, pl. 375 (Chæt., pl. 13), fig. 5.

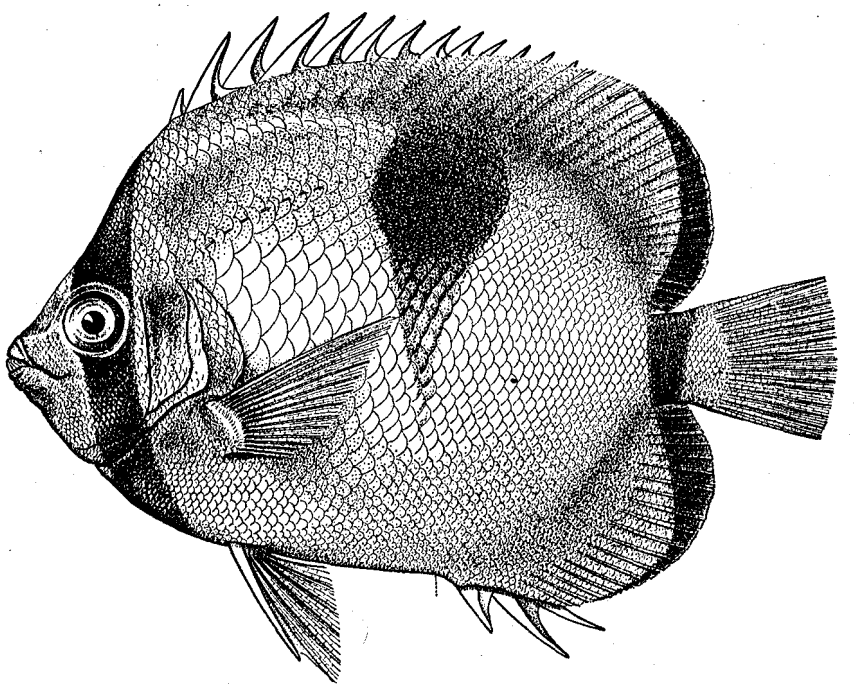
shape of the black spot on the upper part of the side of the body. In all descriptions and figures of *C. unimaculatus* this mark is represented as an ocellated spot having a definite circular outline without any ventral tapering prolongation. On all of the Hawaiian specimens (preserved in formalin and alcohol) examined by me the ventral prolongation of the spot is distinctly marked and could not possibly be overlooked.

(*Σφήν*, a wedge; *σπίλος*, spot.)

Numerous specimens secured by me at Honolulu. Type No. 49705, U. S. N. M.

The following are the measurements and the numbers of fin rays and scales of four specimens:

Chætodon sphenospilus.	No. 1.	No. 2.	No. 3.	No. 4.	Chætodon sphenospilus.	No. 1.	No. 2.	No. 3.	No. 4.
Length in millimeters..	96	92	86	77	Dorsal spines.....	XIII	XIII	XIII	XIII
Head.....	.28	.29	.32	.30	Second dorsal rays	22	23	23	23
Depth	.62	.71	.70	.73	Second anal rays.....	19	19	19	19
Eye.....	.09	.09	.10	.11	Scales (longitudinal)...	54	56	58	50
Interorbital	.11	.10	.11	.11	Scales (transverse)	7-23	7-21	7-21	7-20
Snout.....	.10	.10	.12	.11					



8. *Chætodon sphenospilus* Jenkins, new species. Type.

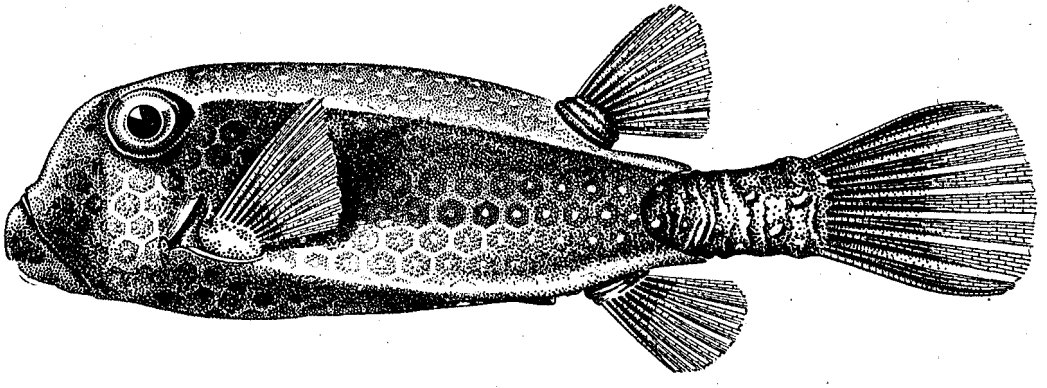
Family OSTRACIIDÆ.

Ostracion camurum Jenkins, new species. Fig. 9.

Body four-sided, back rounded, interorbital flat, profile before eye prominently convex. Head 3.75 in length of body; depth 3 in length. Interorbital space at front of eyes equal to head, wider posteriorly. Eye 2.66 in middle of interorbital, 2 in snout. Dorsal profile of snout very steep; forming a reentrant angle just above tip of snout (this angle not very conspicuous in the smaller specimens). Sides of body concave. Greatest dorsal width 3 in length, equal to depth; greatest ventral width 2.6 in length. Carapace forming wide bridge back of dorsal fin; length of part back of dorsal fin 2 in

snout. Posterior lateral edges of carapace deeply reentrant. Caudal peduncle, measured on side, equal to snout. Pectoral 5.5 in length. Longest dorsal rays 1.66 in head. Longest anal rays a little shorter than head. Caudal rounded, median rays equal to length of head. Carapace formed of hexagonal plates; plates varying a little in size, the larger ones about 3.5 in width of front part of interorbital, 13 plates in longitudinal series from interorbital band to front of dorsal, 10 on side of body from above posterior edge of pectoral to end of carapace, 13 along median ventral line from chin to anus. Plates above pectoral not distinctly defined. Surface of carapace covered with small, even-sized tubercles evenly distributed or somewhat grouped at the center of the plates. Five specimens in the collection present but little structural variation. The hump on the forehead below the level of the upper rim of the eye is very conspicuous on all.

Color in life: General color dark, nearly black, lighter patch below each eye, belly dark blue; irregular golden band between eyes on top of head; back covered with many small white dots; sides with golden dots; caudal peduncle black with row of golden spots on side, white dots on dorsal surface; axil blue; fins dusky, posterior half of caudal lighter; iris white with orange spots. The color of different specimens varies considerably. The spots on the back do not correspond with the plates of the carapace and are more numerous than the plates. Two specimens apparently had the sides blue



9. *Ostracion camurum* Jenkins, new species. Type.

in life, one with dark centers to the plates, the other with a dark spot in the center of the upper plates of the side, and a white spot surrounded by a black ring on each of the lower lateral plates. In alcohol all the specimens have a brownish color, dusky in places; a yellowish interorbital stripe and a large area below the eye of the same color; the basal half of the caudal fin dark brown, contrasting conspicuously with the colorless distal half, the two regions being separated by a crescentic line, concave posteriorly.

Four specimens obtained by me at Honolulu and two by Dr. Wood are identical structurally with one in the Stanford University collection taken by Messrs. Snodgrass and Heller, at Clipperton Island, off Mexico. The latter, however, has black spots on the back instead of white spots, and a row of white spots just below the upper lateral edge of the carapace.

Type No. 49697, U. S. N. M.

The following are the measurements and the numbers of fin rays of five Hawaiian specimens:

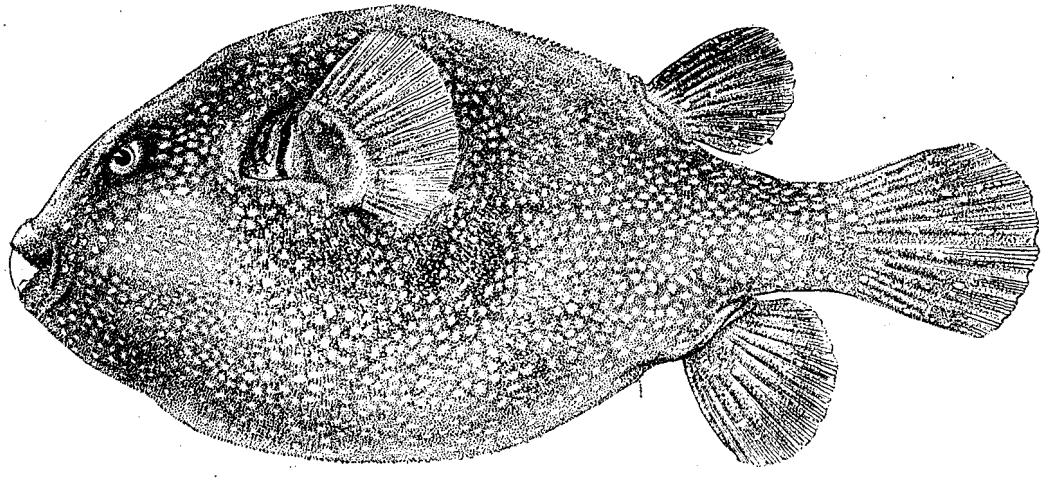
Ostracion camurum.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	Ostracion camurum.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
Length in millimeters	104	102	94	88	86	Eye	.10	.11	.11	.12	.12
Depth	.34	.34	.34	.34	.34	Interorbital	.23	.24	.23	.22	.24
Width of body (dorsal)	.34	.35	.32	.35	.35	Snout	.20	.20	.22	.23	.23
Width of body (ventral)	.38	.37	.39	.40	.40	Caudal peduncle (dorsal edge)	.13	.13	.15	.13	.13
Pectoral	.18	.21	.20	.20	.20	Dorsal rays	9	9	9	9	9
Longest dorsal ray	.16	.15	.17	.17	.16	Anal rays	9	9	9	9	9
Longest anal ray	.13	.14	.15	.15	.14	Pectoral rays	10	10	10	10	10
Longest caudal ray	.27	.28	.26	.25	.27						

Family TETRAODONTIDÆ.

Ovoides latifrons Jenkins, new species. Fig. 10.

Length of head 2.7 in length of body, width of head 3.7. Snout (to tip of dental plates) 2 in head. Interorbital space flat, wide, 6.25 in length of body, equal to snout from nostril. Eye 4.33 in head. Nostrils a simple, bifid, nonperforate tentacle on each side. Dorsal profile evenly rounded, belly distensible. D. 10; A. 12; P. 19. Dorsal rays 2 in head; anal rays a little shorter than dorsal. Pectoral 1.33 in snout. Caudal fin rounded, equal to distance from tip of dental plates to center of pupil. All parts of body and posterior parts of head covered with small, simple, setæ-like spines, mostly embedded in the skin, having only the tips projecting, most of them inclined backward. None on the caudal peduncle. (The specimen described has the base of the dorsal fin covered by a fold of the integument from the right side. This, however, occurs as a "freak" in *Ovoides setosus*.)

Color in life: Light brown, covered with rather closely set white spots. Spots distributed over entire surface of head and body, those on the chin smaller than the others, a few on dorsal, anal, and caudal fins; pectorals spotted at base; nasal tentacles black; iris yellow.



10. *Ovoides latifrons* Jenkins, new species. Type.

This species is very similar to *Ovoides setosus*[1] of the west coast of tropical America, differing from it in the greater width of the interorbital space, the interorbital being 8.33 in the length of the body in *O. setosus* and 6.25 in *O. latifrons*.

One specimen, 188 mm. long, collected by me at Honolulu. Type No. 49696, U. S. N. M.

The following table gives comparative measurements and numbers of fin rays of the one specimen of *Ovoides latifrons* and of three specimens of *O. setosus* in the Stanford University collection from the Revillagigedo, Cocos, and Galapagos Islands:

Measurements.	Ovoides latifrons.	Ovoides setosus.			Measurements.	Ovoides latifrons.	Ovoides setosus.		
	No. 1.	No. 1.	No. 2.	No. 3.		No. 1.	No. 1.	No. 2.	No. 3.
Length in millimeters	188	205	142	141	Longest anal ray	.16	.14	.18	.19
Length of head	.37	.33	.31	.32	Longest pectoral ray	.14	.15	.15	.17
Width of head	.27	.28	.31	.32	Longest caudal ray	.25	.22	.21	.27
Snout	.20	.17	.17	.19	Dorsal rays	10	.....	11	10
Eye	.095	.10	.10	.10	Anal rays	12	12	12	11
Interorbital width	.16	.12	.13	.12	Pectoral rays	19	18	17	17
Longest dorsal ray	.18	.....	.17	.19					

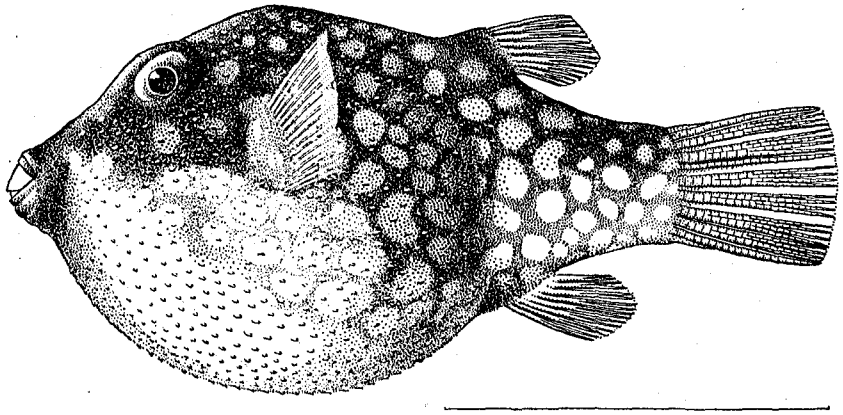
[1] *Tetraodon setosus* Rosa Smith, Bull. Cal. Acad. Sci., II, p. 6, 1886 (Mexico).

Family TROPIDICHTHYIDÆ.

Tropidichthys jactator Jenkins, new species. Fig. 11.

Head 2.66 in length of body; depth of body from back to lower edge of base of pectoral 3.33 in length. Eye equal to interorbital space, 2 in snout. D. 9; A. 10; P. 16; C. 7. Profile rising from tip of snout to middle of back where the median dorsal crest forms a prominent point. Dorsal profile of head concave from tip of snout to eyes, straight from eyes to dorsal prominence. Interorbital space very slightly concave. Profile descending to a straight line from apex of back to dorsal fin, from dorsal fin to caudal fin descending with gentle concavity. Caudal peduncle deep anteriorly, depth just back of dorsal and anal fins equal to snout; much less deep posteriorly, depth just before bases of caudal rays 2.33 in head. Ventral parts of body much dilated, depth below pectoral 1.25 in depth above pectoral. Dorsal and anal fins very short, dorsal above anal; rays equal, about 3 in head. Caudal slightly rounded, median rays equal to snout. Pectoral wide, distal edge slightly concave; upper rays longest, 2.66 in head. Body and head everywhere except on caudal peduncle covered with small asperities consisting of small, erectile, two-rooted spines directed backward; spines largest on belly.

Color in alcohol: Dark brown above and on sides, belly pale yellowish; dark parts with numerous, regularly distributed, pale (apparently bluish in life), round or polygonal spots; spots largest on sides where the brown ground-color appears as a network between them, obsolete on fore part of head in one specimen, extending distinct to tip of snout in a smaller one, none smaller than pupil, those on sides three-fourths of eye in diameter; dusky ring about eye, most conspicuous above; fins colorless.



11. *Tropidichthys jactator* Jenkins, new species. Type.

Very similar to *Tropidichthys punctatissimus* (Günther)[1] of the west coast of tropical America, but differs from this species in the much greater size of the spots (none of them in *C. punctatissimus* being greater than the pupil) and in having the belly much more distended.

(*Jactator*, boaster.)

Two small specimens, 30 and 42 mm. in length, taken by me at Honolulu. I have compared these with 7 specimens, 35 to 60 mm. in length, of *C. punctatissimus* in the Stanford University collection, taken at Panama by Dr. C. H. Gilbert. Type No. 49703, U. S. N. M.

Genus EUMYCTERIAS Jenkins, new genus.

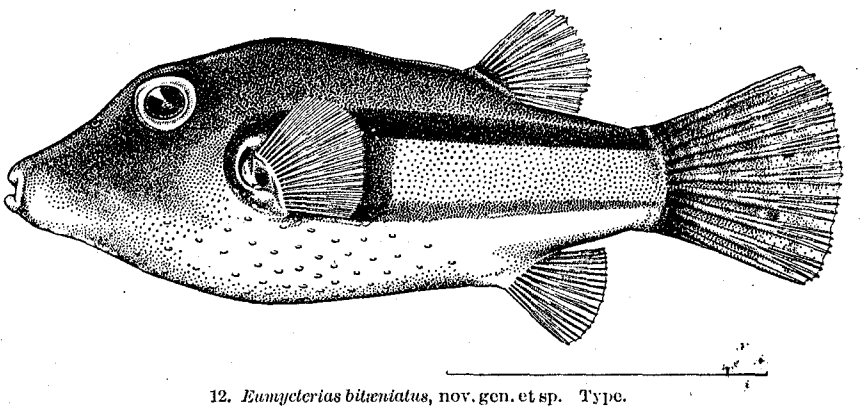
General characters of *Tropidichthys* Bleeker (=*Canthigaster* Swainson, diagnosis only; no type), the back being compressed and produced into a blunt prominence midway between the eyes and the dorsal fin. The nostrils, however, consist of a single simple opening on each side. In *Tropidichthys* the nostrils are obsolete.

(*Εὖ*, true; *μυκτήρ*, nostril.)

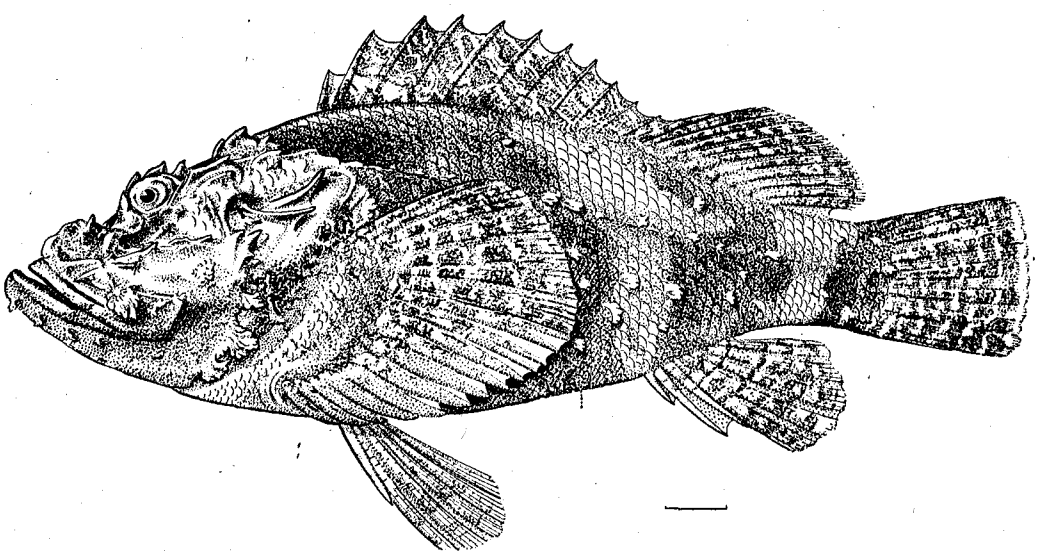
[1] *Tetrodon punctatissimus* Günther, Cat. Fishes Brit. Mus., VIII, p. 302, 1870 (Panama).
Tetrodon oxyrhynchus Lockington, Proc. Acad Nat. Sci. Phila. 1881, p. 116 (Gulf of California).

Eumycterias bitæniatus Jenkins, new species. Fig. 12.

Head 2.66 in length of body; depth a little greater than head. Back compressed, culminating in a very obtuse point above middle of pectoral fin. Profile from tip of snout to before eyes somewhat concave; straight from interorbital to top of dorsal prominence, descending in a straight line from here to base of caudal fin, being interrupted, however, at middle by elevation bearing dorsal fin. Ventral outline evenly curved, no more convex than the dorsal. Eye 3.33 in head. Snout 1.75 in head. Interorbital concave, slightly greater than eye, 3 in head. One nostril in each side, each a simple opening with slightly raised margin, but scarcely tubular. Distance from eye to nostril 2 in



12. *Eumycterias bitæniatus*, nov. gen. et sp. Type.



13. *Scorpænopsis cacopsis* Jenkins, new species. Type.

distance from nostril to tip of snout. Front of dorsal fin midway between dorsal prominence and base of caudal fin, outline rounded; rays 10, longest 1.5 in snout. Caudal slightly rounded, median rays equal distance from tip of snout to center of pupil. Anal similar to dorsal, front of its base below posterior end of base of dorsal. Pectoral broad (in specimen median and lower rays on both sides broken), upper rays 2.5 in head. A few minute spines on lower surface of body; surface otherwise smooth.

Color in alcohol: General color brown or dusky above, paler brownish below; a wide dusky band from base of upper rays of the caudal running forward along side of body, above base of pectoral, to upper end of gill slit, here becomes narrow and curves downward around anterior edge of gill slit and

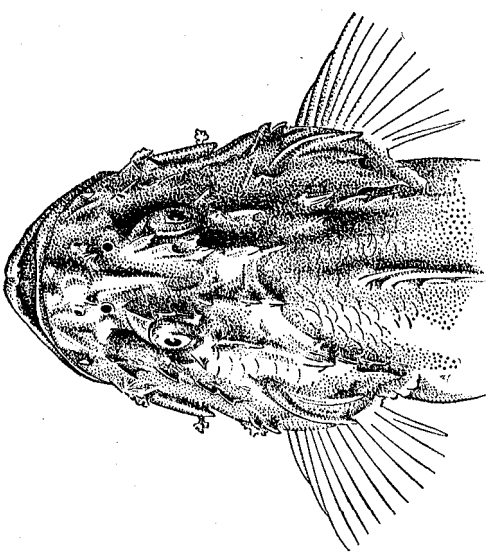
then goes backward again below it as a narrow band below base of pectoral and along side of body, parallel with the upper band, to a little below middle of caudal fin; a black spot on outer side of base of pectoral; bases of upper and lower caudal rays black.

One specimen, 52 mm. long, secured by Dr. Wood at Honolulu. Type No. 49702, U. S. N. M.

Family SCORPÆNIDÆ.

Scorpænopsis cacopsis Jenkins, new species. Figs. 13 and 14.

Head 2.6 in length of body. Depth 3 in length. D. XII, 10; A. III, 5; P. 18. Scales in 50 transverse series. Specimen described, large and robust, 347 mm. in length. Greatest depth at front of dorsal fin; depth here equal to distance from tip of upper jaw to vertical through base of first dorsal spine, so that upper profile of head is inclined at angle of about 45°. Lower outline of head descending at lesser angle from tip of lower jaw to below pectorals. Mouth on level with median pectoral rays; lower jaw projecting beyond upper a distance equal to one-half diameter of eye, most of the teeth in front of lower jaw being exposed. Dorsal and ventral outlines of body back of front of dorsal and base of pectorals symmetrically converging to base of caudal peduncle, where depth is 3.5 in head. Eye small, 2.5 in snout, on level with middle of caudal peduncle. Snout 2.33 in head, equal to third dorsal spine, its upper profile in front of posterior nostril very convex, forming an abrupt hump. A prominent spine on each side of upper end of this hump between inner rims of nostrils of same side. Interorbital very concave, least width equal to distance from eye to first nostril. Maxilla reaches posterior margin of pupil. Below eye a deep cavity on side of head, deepest anteriorly. A rectangular depressed area on top of head back of eyes. Teeth all villiform, in wide bands in front and on sides of jaws and in a V-shaped patch on vomer.



14. *Scorpænopsis cacopsis*, dorsal view of head.

The spines of the head are distributed as follows: Above, three on upper rim of the orbit, a fourth back of and within the most posterior of these on top of head at anterior angle of the occipital depression, two approximated spines on occiput at posterior angle of occipital depression; laterally, a row of three spines back of eye, the last at posterior end of opercle, one between the second of these and the two occipital spines of same side, a row of about seven spines from side of snout below suborbital cavity to middle of opercle, angle of opercle with two dorsally curved spines, the upper the larger. Numerous dermal flaps are distributed over the head in the following manner: One on posterior margin of posterior nostril, folding over nostril like a lid, a large one attached to suborbital and overlapping maxilla, several small ones on posterior end of maxilla, three large ones along lower limb of preopercular margin, one on each side of preopercle below lower row of spines on side of head; on lower jaw two flaps just back of symphysis, three on each side back of these just within ramus of jaw. Third dorsal spine longest, about 3 in head; the following three of about same length as third; seventh to eleventh gradually shorter; twelfth about one-third longer than the eleventh. Anterior soft rays a little longer than the posterior soft rays, equal to fourth spine. Anal short, two-thirds of length of soft dorsal; first spine two-thirds of second; second and third spines equal to the fourth dorsal spine. Pectoral very large, upper and median rays longest and of equal length, about 2 in head, lower rays successively shorter; the lower ten much thickened, angulated near bases, especially the short lowermost ones, so as to be bent somewhat inward. Ventrals narrow, 1.66 in head.

Scales in 50 transverse series, each row almost vertical below the lateral line, oblique above. Lateral line straight, extending from above gill cleft to middle of base of caudal fin. Ten scales in oblique series from first dorsal spine to lateral line, twenty from lateral line to anus. A few dermal flaps irregularly distributed over sides of body, about twelve along lateral line on each side.

Color in alcohol: Dusky-brown and gray, everywhere mottled, except on ventral surface, which is uniformly pale; colors rather clouded on sides of body, each covering a large but indistinctly defined area, finely mottled on head and bases of pectorals; dusky-brown and gray forming irregular cross-bands on all the fins except spinous dorsal, which is mottled.

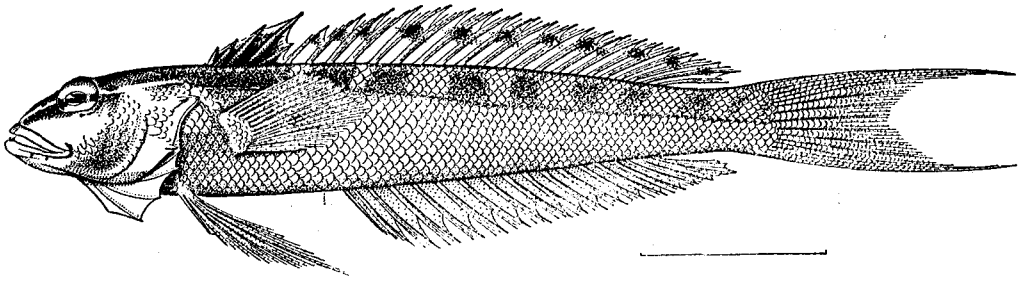
This species is probably allied to *Scorpænopsis gibbosa* Bloch & Schneider,[1] of the Red Sea, Indian Ocean, and Society and Samoan islands. It agrees with *S. gibbosa* in lacking palatine teeth, in having the strongly convex hump on the snout, and in having the lower pectoral rays thickened and bent inward, but differs in having a wider interorbital and in not having the dorsal spines shortened, the longest, the third, being in *S. gibbosa* 4 in head, and in *S. cacopsis* 3 in head.

(*Κάκος*, ugly; *ὄψις*, the face.)

One large specimen taken by me at Honolulu. Type No. 49690, U. S. N. M.

The following gives the comparative measurements and the numbers of fin rays and scales:

Scorpænopsis cacopsis.	No. 1.	Scorpænopsis cacopsis.	No. 1.
Length in millimeters	347	Third dorsal spine	.14
Head	.40	Dorsal spines	XII
Depth	.35	Second dorsal rays	10
Pectoral	.21	Second anal rays	5
Ventral	.24	Pectoral rays	18
Eye	.06	Scale rows	50
Interorbital	.07	Tubes on lateral line	25
Snout	.15		



15. *Parapercis pterostigma* Jenkins, new species. Type.

Family PERCOPHIDÆ.

Parapercis pterostigma Jenkins, new species. Fig. 15.

Parapercis Bleeker=*Percis*, Bloch & Schneider, Syst. Ichthy., p. 179, 1807; Cuvier & Valenciennes, III, p. 259; Günther, Cat. Fishes Brit. Mus., II, p. 237; not of Scopoli.

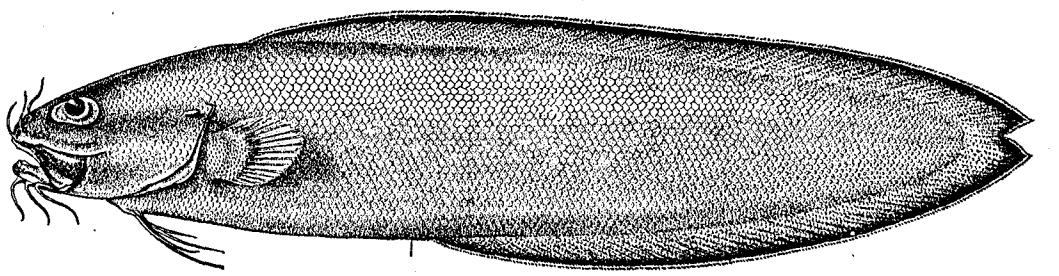
Head about 4 in length of body; depth 6 in length. D. v, 21; A. 17. Body elongate; dorsal profile of head convex, gently rising from snout to nape, ventral profile of head symmetrical with dorsal. Eye 1.25 in snout. Interorbital about flat or almost imperceptibly concave, 1.5 in eye. Suborbital equal to interorbital. Opercular margin above with two small spines, below with minute serrations. Branchiostegals 6. Gillrakers very short, 10 on lower arm of arch. Fourth dorsal spine longest, equal to snout; first two spines very short, third but little shorter than fourth, fifth about equal to third. Soft rays of dorsal of uniform length, 2.5 in head, except first, which is shorter, and last, which is longer than the others. Anal similar to but shorter than soft dorsal, begins beneath fourth soft ray of dorsal. Caudal rather slender, deeply forked, lobes equal (rays in specimen examined broken, but longest probably equal to head.) Pectoral pointed, lower rays longest, 1.5 in head Ventrals elongate, tapering, inner rays longest, equal to head; tips reach fourth anal ray. Teeth villiform, in bands in each jaw and in a crescentic patch on vomer; four canines in front of each jaw, those of lower jaw considerably smaller than those of upper; an outer series of slightly enlarged teeth in each jaw. Top of head, cheeks, sides of snout, jaws and fins naked, other parts scaled. Scales 7–61–15.

[1] *Scorpæna gibbosa* Bloch & Schneider, p. 192, pl. 44; Günther, Cat. Fishes Brit. Mus., II, p. 119, 1860; Fische der Südsee, p. 79, pl. 53, 1873.

Color in alcohol: Ground-color pale-brownish, a series of 9 quadrate dark blotches across back, separated by interspaces shorter than their own lengths, the first interspace just before front of first dorsal spine; apparently a yellow stripe from tip of snout through anterior nostril to middle of front of eye; a series of 13 black spots along the soft dorsal fin nearer the outer margin than base of the fin; other fins plain.

Two specimens secured by Dr. Wood at Honolulu. Type No. 49701, U. S. N. M. The following are their comparative measurements and the numbers of fin rays and scales:

Parapercis pterostigma.	No. 1.	No. 2.	Parapercis pterostigma.	No. 1.	No. 2.
Length in millimeters	100	89	Interorbital	.05	.05
Head	.27	.26	Snout	.09	.09
Depth	.17	.17	Dorsal spines	V	V
Pectoral	.18	.19	Second dorsal rays	21	20
Ventral	.26	.20	Anal rays	17	17
Eye	.07	.07	Scales on lateral line	61	57



16. *Brotula marginalis* Jenkins, new species. Type.

Family BROTULIDÆ.

Brotula marginalis Jenkins, new species. Fig. 16.

Body not much elongate, depth 5 in length. Head equal to depth. Caudal region rounded, not tapering to a point. Profile of head ascending in a straight line from tip of snout to front of dorsal. Greatest width of body near anterior end, about 1.5 in head; caudal region much compressed. Distance from tip of snout to anus 2.33 in length. Dorsal rays 96; fin beginning a little back of base of pectoral, of about uniform height throughout. Anal with 70 rays, beginning just back of anus, of same height as dorsal and continuous with it around caudal end of body. (In this example, which doubtless is abnormal in this particular, the caudal part of the fin is conspicuously notched on axis of body.) Vertical height of dorsal and of anal a little less than eye, 4.75 in head. Snout from all aspects bluntly rounded, equal to horizontal diameter of eye. Eye on right side of specimen ovate, larger end posterior, longitudinal diameter 4 in head; eye on left side elongate ovate, constricted at middle. Maxillary reaching to below posterior margin of eye. Preorbital 2 in longitudinal diameter of eye. Mouth oblique. Teeth minute, villiform, in bands in each jaw and on palatines, in a V-shaped patch on vomer. Snout above with six tentacles, longest about equal to eye in length, two at lower end of each nasal bone, one on posterior rim of each anterior nostril. Lower jaw also with six tentacles, each longer than eye, three on each side, just back of symphysis. Anterior nostril with a very short tube, larger than the posterior, situated somewhat nearer eye than tip of snout. Posterior nostril almost sessile, having only very slightly raised rim. Movable spine on side of head arising from upper anterior angle of opercle. Gillrakers 3 on upper end of lower arm of arch. Branchiostegals 8. Pectoral rounded, longest rays 2 in head. Ventrals at symphysis of humeral arch, the two arising close together, each filamentous, 1.66 in head, bifid near middle, outer part the shorter, about half the length of inner from bifurcation. All parts of head and body scaled; scales elongate ovate, ctenoid, in 165 transverse series, 44 in transverse row at middle of body.

Color in alcohol: Body and head dark brown, paler below, jaws dusky; dorsal and anal fins brown with narrow white marginal band and black submarginal band, the black widest on the posterior divergent tips of the caudal ends of the two fins.

This species is similar to *Brotula multibarbata*[1] of Japan, differing from it in having the ventrals distinctly bifid, in having the front of the dorsal fin back of the bases of the pectorals, and in having the very distinctly outlined submarginal black band on the dorsal and anal fins instead of simply a diffusion of black along the same areas.

One specimen, 220 mm. long, collected by Dr. Wood at Honolulu. Type No. 49694, U. S. N. M.

(*Marginalis*, in reference to the black border of the dorsal and anal fins.)

The following are measurements and numbers of fin rays and scales of the specimen:

Brotula marginalis.	No. 1.	Brotula marginalis.	No. 1.
Length in millimeters	220	Interorbital	.03
Head	.20	Snout	.05
Depth	.20	Dorsal rays	96
Pectoral	.10	Anal rays	70
Ventral	.12	Scales (longitudinal)	165
Eye (longitudinal)	.05	Scales (transverse)	44

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[1] *Brotula multibarbata* Schlegel, Fauna Japonica, Poiss., p. 251, pl. III, fig. 2, 1847; Güenther, Cat. Fishes Brit. Mus., IV, p. 371, 1862.