

boats had called there and found shark fishing profitable some years before, but at this time few were seen and no specimens secured.

On my return to Honolulu a preliminary examination of the material secured brought to light a number of interesting specimens. The aid of Dr. C. H. Gilbert, who had kindly offered to assist the author of this monograph in mooted questions of nomenclature, etc., was accordingly sought. A portion of the collection was subsequently forwarded to him. Mr. Albert C. Herre, of Stanford University, volunteered to help in bringing this list to a completion; he has written the descriptions of all the new species and has added many notes and observations of value. Dr. Gilbert, in commenting on the collection, says (*in litt.*) that "If the Marcus Island fauna had turned out to be an extension of the Hawaiian fauna we could have sent you a list in a few days. But there are apparently very few Hawaiian species found there, the completion of the fauna being of the South Seas."

The numbers given are those of the specimens in the Bishop Museum. A duplicate series will be deposited in the Leland Stanford Jr. University. The arrangement followed is, so far as possible, that of Jordan and Evermann in their work on the Fishes of North and Middle America. Color notes were frequently taken from the fresh specimen.

In conclusion I wish here to express my indebtedness to Dr. Gilbert and his associates at Leland Stanford Jr. University, as well as to Mr. Seale of the Bishop Museum staff, for their kind and generous assistance. To Mr. Herre, who shares the authorship of the appendix, I am especially beholden. W. A. B.

ANNOTATED LIST OF THE MARCUS ISLAND FISHES.

BY WM. ALANSON BRYAN AND ALBERT C. HERRE.

FAMILY MURÆNIDÆ.—THE MORAYS.

2403. *Gymnothorax detactus*. New species.

Head 3.33 to anus, 7.20 in total length; head and trunk shorter than tail; depth 14 in total length; snout .20 of head; eye .60 of snout, 8.33 in head; gill opening small, less than diameter of eye; interorbital space, flat, grooved, its width equal to diameter of eye; lower jaw weak, inferior; teeth uniserial; a row

of three depressible teeth on vomer. Anterior nostril on tip of snout above lip, its tube a little more than .50 diameter of eye; tip of snout keeled; between tube of anterior nostril and keel is a mucus pore; posterior nostril without tube, situated above anterior portion of eye; a pore midway between posterior nostril and tip of snout; a row of four pores on the sides of each jaw. Origin of dorsal in advance of gill opening, its height contained 8 times in length of head.

Color in alcohol: purplish brown, everywhere marked with very numerous irregular dark brown transverse bands, those on middle and anterior portion of body dendritic; paler on belly and throat, the latter becoming pale reddish. B. P. B. Mus. No. 2403 is the type.

2404. ***Muræna nebulosa*** (Bl.).

A single specimen.

FAMILY HEMIRHAMPHIDÆ.—THE BALAOS.

2405. ***Hemirhamphus depauperatus*** Lay & Bennet.

FAMILY EXOCÆTIDÆ.—THE FLYING-FISHES.

2406. ***Exocoetus volitans*** Linn.

FAMILY MUGILIDÆ.—THE MULLETS.

2407. ***Chænomugil nauticus***. New species.

D. IV-1-9; A. III-10; scales in lateral series 50. A long pointed scale at base of spinous dorsal and base of ventral; greatest depth of body nearly equal to length of head, 5.50 in total length; head a trifle less than 5 in total length; eye equals snout 3.50 in head. Upper lip not thick, notched; lower lip with a ridged knob at tip, which fits into notch of upper lip; both lips fringed with numerous ciliated teeth, the tips bifid or trifid. Maxillary entirely concealed when mouth is closed; interorbital space broad, very gently convex, 3 in length of head. Origin of spinous dorsal midway between tip of snout and base of caudal; origin of anal fin forward of soft dorsal; first ray of soft dorsal .80 of length of head, equal to longest rays of anal; caudal forked, longest rays scarcely as long as head.

Color in alcohol: silvery, dorsal region darker. Margin of soft dorsal and caudal dusky; other fins pale or colorless, except

that in some specimens the anal has a dusky margin. B. P. B. Mus. No. 2407 is the type.

FAMILY HOLOCENTRIDÆ.—THE SQUIRREL-FISHES.

2408. **Myripristis adustus** Bleeker.

2409. **Holocentrus diadema** Lacép.

2410. **Holocentrus tiereoides** Bleeker.

D. XI-14; A. IV-9; lateral line 42. Depth 2.75 without caudal, 3.33 with caudal; head 2.88 without caudal. Eye 3 in head, to end of opercular spines. Depth of caudal peduncle 4 in head. Two opercular spines, the upper the larger. Third anal spine very stout and long, equal to distance from snout to posterior edge of preopercle.

Color in alcohol: brown with reddish cast. A red-brown line at base of spinous dorsal. Two golden longitudinal lines above, and six below the lateral line. Fins pale, uniform. Membrane of spinous dorsal more or less suffused with rose color.

2411. **Holocentrus binolatum** Quoy & Gaim.

FAMILY MULLIDÆ.—THE SURMULLETS.

2412. **Mulloides samoensis** Günth.

2413. **Pseudupeneus bifasciatus** (Lacép.).

Three very young specimens. Color in life: "Barbules and lower fins yellow. Dorsal reddish pink. Body crossed by two darker bands; light bands yellowish."—Bryan. Color in alcohol: from head to origin of spinous dorsal a broad poorly defined blackish band running down to belly; a similar band from soft dorsal to anal; between these two a broad pinkish band; caudal peduncle yellowish, inclined to pinkish. Fins all pale, except spinous dorsal, which is barred with dusky, becoming blackish near margin.

FAMILY CARANGIDÆ.—THE POMPANOS.

2414. **Caranx melampygus** Cuv. and Val.

D. VIII-1-23; A. II-1-18; scutes 40. A young specimen 106 mm. long. The number of scutes is greater than the typica

number owing to the immaturity of the specimen, in which the anterior ones are more obvious than in the adults.

FAMILY KUHLIIDÆ.

2415. ***Kuhlia malo*** (Cuv. & Val.).

Color in life: "Silvery bluish on the back; tail with a black margin."—Bryan. In alcohol: general color silvery white; bluish gray on the back; caudal and dorsal fins with a marginal black band.

2416. ***Kuhlia tæniura*** (Cuv. & Val.).

Color in life: "Silvery bluish over the back; tail with two diagonal stripes."—Bryan.

2417. ***Kuhlia marginata*** (Cuv. & Val.).

D. X-11; A. III-12; lateral line 44. Color in alcohol: silvery brown, darker above, where it is covered with more or less distinct dark brown spots. A row of brown spots at base of anal. Soft dorsal and anal with a black band at margin; another black band composed of longitudinal blotches occupies the middle portion of each fin. Spinous dorsal membrane edged with black. Two oblique black cross bands on caudal, the posterior, marginal one distinct, the inner, anterior one, broader and ill-defined.

In general appearance and color the specimen strongly resembles *Kuhlia rupestris* (Lacépède), but differs in some minor characters. Examination of a number of specimens of *rupestris* in the L. S. Jr. University Museum shows a constant difference in the number of anal rays, *rupestris* having 10, the Marcus Island specimen having 12.

FAMILY SERRANIDÆ.—THE SEA BASS.

2418. ***Epinephelus spiniger*** (Günth.).

Previously described from a single specimen in the British Museum, from an unknown locality.

D. XI-16; A. III-8; lateral line 70. Total length 198 mm. Depth 3 in length without caudal, 3.50 in total length. Head 2.75 in length without caudal, 3.20 in total length. Eye 5 in head; snout 4.33; interorbital space 6.66. Lower jaw strongly projecting; maxillary extending beyond vertical from posterior margin of eye, its posterior end .66 of diameter of eye. Preopercle

rounded, serrations enlarged at angle; opercular flap pointed; opercle with three nearly equidistant spines, the middle one much the largest and strongest, the upper one inconspicuous and anterior to the others. Gill rakers short, 12.

Teeth in bands, in two series on the sides of mandible, inner series much enlarged. Canines strong, those of lower jaw visible when mouth is closed.

Anterior nostril round, covered by an elongate, membranous flap; posterior nostril slightly larger, nearly circular.

Scales small, ctenoid over body; head covered with cycloid scales; a tine patch on maxillary. Breast and entire belly covered with cycloid scales; all cycloid scales with numerous accessory scales.

Origin of dorsal above base of pectoral; first spine less than .33 of second, which is .50 of head, far exceeding the others both in length and thickness; the other dorsal spines sub-equal, a little more than half length of second spine. Soft dorsal shorter but higher than spinous dorsal, the longest rays being about .75 of second dorsal spine.

Caudal truncate; pectoral .66 of head; rounded; ventral .58 of head, not quite reaching anus; anal rounded; first spine .43 of second; second and third stout, sub-equal.

Color in alcohol: Uniform pale brown over body, except upper part of head and along base of dorsal, where it is darker. Spinous dorsal with a black margin; spinous and soft dorsals dark brown, the latter with a pale streak toward margin, outside of which is a blackish line, the free ends of the rays being edged with white; caudal similar to soft dorsal; anal brown with traces of dark brown spots; border of fin dusky; pectoral pale brown.

2419. **Epinephelus merra** Bloch.

2420. **Epinephelus hexagonatus** (Bl.).

FAMILY LUTIANIDÆ.—THE SNAPPERS.

2421. **Lutianus bohar** (Forskål).

2422. **Lutianus quinquelineatus** (Cuv. & Val.).

2423. **Lutianus bengalensis** (Bloch).

2424. **Pentapus aurolineatus** (Lacép.).

FAMILY SPARIDÆ.—THE PORGIES.

2425. **Lethrinus rostratus** (Kuhl & Van Hass).

FAMILY KYPHOSIDÆ.—THE RUDDER-FISHES.

2426. **Kyphosus elegans** (Peters).

FAMILY SCIÆNIDÆ.—THE CROAKERS.

2427. **Grammistes sexlineatus** (Thunb.).

FAMILY CIRRHITIDÆ.—THE CIRRHIOIDS.

2428. **Paracirrhites forsteri** (Schneider).

2429. **Cirrhites marmoratus** (Lacép.).

(This is the original spelling; not *Cirrhites* as generally written.)

FAMILY POMACENTRIDÆ.—THE DEMOISELLES.

2430. **Dascyllus trimaculatus** (Rüpp.).

2431. **Pomacentrus lividus** Bleeker.

2432. **Abudefduf sexatilis** (Linn.).

FAMILY LABRIDÆ.—THE LABROID FISHES.

2433. **Stethojulis albobittata** (Kölreuter).

2434. **Thalassoma dorsale** (Quoy & Gaim.).

2435. **Thalassoma lunare** (Linn.).

2436. **Thalassoma genivittata** (Cuv. & Val.).

2437. **Novaculichthys vanicorensis** (Quoy & Gaim.).

FAMILY SCARIDÆ.—THE PARROT-FISHES.

2438. **Scarus brighami**.⁷ New species.

The head and fins of a large Scaroid were sent by Mr. Bryan. In several characters this fish differs from any other yet described, and seems to be a valid species.

⁷Named in honor of Wm. T. Brigham, Director of the Bernice Pauahi Bishop Museum.

D. x-10; A. 11-9. Two large white canines present on upper jaw above angle of mouth. Lips covering but little more than bases of the jaws, which are green; teeth white. Scales on cheeks in two series, the lower limb of the preoperculum being entirely naked. Scales of the lower series about .80 as large as those of upper series. Eye small, 10 in head. Distance between tip of jaw and eye a trifle less than 2 in head. Depth of head almost equal to length. Eye situated 2 of its diameters below upper profile of head. Profile of head boldly convex. Anterior nostril with a small membranaceous flap; posterior nostril twice as large as anterior and without flap.

Outer rays of caudal much elongated, about .66 longer than caudal proper; the other rays of the caudal form a double curve or scallop, the central rays being slightly longer than the rest; the free edge of the membrane is denticulate. Dorsal low, highest posteriorly; the eighth soft ray longest, 3 in head. Pectoral large, longest rays 1.50 in head. Length of anal 2.75 in length of dorsal. Anal highest posteriorly, longest ray 2.66 in head. Ventral small, second rays longest, 1.88 in head.

Color in alcohol: a faded yellowish green, becoming buff on throat. A broad, irregular, cream-colored band forms a rectangular figure on top of the head, the posterior part of the figure forming a broad band connecting the eyes; in this band are three small patches of the general green color, while the space enclosed within the figure is of the general color of the head. From the figure a streak passes below and beyond the eye for a short distance. Another short streak of the same color extends backward from the centre of the posterior margin of the eye. A broad cream-colored band starts below and anterior to the angle of the mouth, on either side, and passes to the edge of the lip; there it greatly narrows and follows the margin of the lip to the throat, but the two bands stop just before meeting. A cream-colored dot behind angle of mouth.

Dorsal slaty blue, with olive green margin. Caudal yellowish green with slaty blue longitudinal streaks. Anal similar to dorsal. Ventral pale cream color. Pectoral slate color, fading into yellowish green inferiorly. B. P. B. Mus. No. 2438 is the type.

FAMILY TEUTHIDIDÆ.—THE SURGEON-FISHES.

2439. **Teuthis atrimentatus** Jordan & Evermann.

2440. **Teuthis bipunctatus** (Günth.).

2441. **Teuthis striatus** (Quoy & Gaim.).

Twenty-one small specimens, ranging in length from 38 to 52 mm., and including colorless larvæ in the Acronurus stage, showing every gradation in color up to the dark, fully marked adults.

D. IX-26; A. III-26 or 27; P. 15; V. 1-5. Head 3.50 to 4 in larvæ; 3.83 to 4.17 in adult, but usually 4; depth 2 in length without caudal; 2.33 in total length; eye 3 in head.

Body deep, much compressed, oval; profile convex. Mouth small, with 8 incisors on each side of jaw. Nostrils small, close together; the anterior one larger and with small fleshy flap. Spinous dorsal low, posterior soft rays highest, longest rays 2 in head. Anal low, highest posteriorly, longest rays about 1.75 in head; pectoral equals head; caudal forked; ventral about 2 in head. All fins very delicate, the tips breaking off in handling, so that it is difficult to give exact measurements. In none of the specimens was the caudal entire when received. Lateral line high, arched under third, fourth and fifth dorsal spines, then almost straight to middle of soft dorsal, where it descends abruptly to middle of caudal peduncle, a short distance anterior to caudal spine, then runs to tail along caudal peduncle by a sinuous course, curving above caudal spine.

Caudal spine small, 4.25 in head. Scales minute, ctenoid.

Color in alcohol: Larvæ a pale brown, belly and opercles silvery. A dark bluish band connecting the eyes, slightly posterior to them; a broad band of same color across caudal peduncle at base of fin. A dark ring around the mouth. A lighter band at base of dorsal, beginning at posterior portion of spinous dorsal and extending posteriorly to band on caudal peduncle. Other fins colorless. Adult: color of body varies from dark brown to very dark blackish brown, with from 9 to 11 straight light brown, longitudinal lines along sides of body, and a silvery sheen on the abdomen. Fins all black, except pectoral, which is bluish. Bands on larvæ are also present on adults, but become obscured or lost in those specimens that are almost black, with the exception of the ring about the mouth, which is always prominent.

2442. **Teuthis bishopi**.⁸ New species.

D. IX-26; A. III-24. Depth 2.11 in total length; head 4.33 in total length, 3.75 without caudal; eye 5 in head, 3.90 in snout; snout 1.29 in head; interorbital 2.60 in head; caudal peduncle 2.40 in head. Pectoral slightly longer than head, 3.40 in length, without caudal.

Body deep, compressed, ovoid, upper profile much steeper than lower. Profile from base of dorsal to eye very slightly convex; from eye to tip of snout gently concave. Breast and belly, as far back as the anal fin, covered with cycloid scales, which also cover the entire head and extend over nape as far back as base of dorsal fin; remainder of body covered with ctenoid scales. Anterior nostril the larger, with small fleshy ring about it. Nine lobate incisors on each side of both upper and lower jaws. Caudal spine 4.50 in head; stout.

Origin of dorsal above base of pectoral; first dorsal spine imbedded in skin; posterior spine longest, 1.62 in head. Dorsal rays shorter than longest spine, from which they gradually descend to posterior ray, which is .25 of head. Anal highest in middle, slightly and uniformly curved; third anal spine .75 of longest anal rays. First anal spine very short, concealed in skin. Caudal broad, lunate, middle rays .66 of outer rays. Ventrals reaching beyond anus, to base of third anal spine.

Color in life: "Body like fresh pig skin; dorsal with blue and orange stripes."—Bryan.

In alcohol: uniform brownish slate color; lips chocolate color; breast gray; distal half of soft dorsal and anal fins blackish; ventral blackish; pectoral body color; caudal lighter than body and showing traces of a whitish marginal streak. B. P. B. Mus. No. 2442 is the type.

"An abundant fish about the island and much used as food by the Japanese there."—Bryan.

2443. **Teuthis achilles** (Shaw).2444. **Teuthis triostegus** (Linn.).

A common species; much esteemed as food.

2445. **Zebrasoma flavescens** (Bennett).

⁸ Named in honor of Hon. Charles Reed Bishop, founder of the Bernice Pauahi Bishop Museum.

FAMILY SIGANIDÆ.

2446. **Siganus fuscescens** (Houttuyn).

FAMILY BALISTIDÆ.—THE TRIGGER-FISHES.

2447. **Balistapus rectangulus** (Bloch & Schneider).

2448. **Balistapus aculeatus** (Linn.).

2449. **Melichthys bispinosus** Gilbert.

Very abundant at the island.

FAMILY OSTRACIIDÆ.—THE TRUNK-FISHES.

2450. **Ostracion tuberculatus** (Linn.).

2451. **Ostracion cornutus** (Linn.).

FAMILY GOBIIDÆ.—THE GOBIES.

2452. **Gobius albo-punctatus** Cuv. & Val.

FAMILY ECHENEIDIDÆ.—THE REMORAS.

2453. **Remora albescens** (Temm. & Schl.).

FAMILY BLENNIIDÆ.—THE BLENNIES.

2454. **Salarias gilberti**.⁹ New species.

D. XII-19; A. 21; C. 13; P. 14; depth 5 without, 6 with caudal; head 4 without, 4.87 with caudal. Eye 4 to 4.50 in head. Head comparatively slender, breadth through cheeks .50 length. Mouth inferior, width of cleft .50 length of head. Teeth small, very numerous, finely pectinate. A triangular, simple tentacle above eye, its length greater than width of interorbital space; very small simple tentacle on nape; small palmately cleft tentacle over anterior nostril. Interorbital space grooved, its width .50 to .66 of eye. Maxillary extending to posterior margin of eye.

Dermal crest on head.

Dorsal fin deeply notched, rather high, its longest rays nearly equal to height of body. Posterior rays united to caudal. Anal membrane incised, rays with free tips, longest rays about .50 of

⁹In honor of Dr. Charles H. Gilbert, Department of Zoology, Leland Stanford Jr. University.

length of head. Caudal convex; pectoral somewhat rounded, about .90 of length of head. Ventrals 1.50 in head.

Head and body naked; lateral line arched to beyond tip of pectoral, where it descends to level of mouth and then extends backward to end of caudal peduncle.

Color in alcohol: blackish, somewhat streaked or mottled with brown. Fins black, except pectoral, which varies from black to pale in different specimens. B. P. B. Mus. No. 2454 is the type.

2455. **Salarias paulus.** New species.

D. XIII-20; A. 21; C. 15; P. 14. Depth 6.50 in total length; head 6 in total length, measuring from upper lip to tip of opercular flap; forehead protuberant; greatest length of head 5.66 in total length; eyes placed very high and far forward, 3.50 in head; cleft of mouth equals height of head, or .63 of length of head; cheeks bulging, breadth of head .81 of its length.

Lateral line high, commencing just above angle of opercular flap and describing an upward curve which extends to a point between the eighth and ninth dorsal spines, where it descends abruptly and ends below the twelfth spine, above the median line of the body. No scales.

Teeth small, pectinate, very numerous. Mouth inferior. Anterior profile strongly retreating.

No dermal crest on head. Posterior nostril inconspicuous; anterior nostril with dermal, fleshy flap prolonged into a four-cleft tentacle. Simple tentacle over eye, its length much less than width of interorbital space; very minute simple tentacle on nape, its length about .33 that of tentacle over eye. Maxillary extending slightly beyond posterior margin of eye.

Dorsal fin beginning above gill opening, notched, tips of soft rays free. Spinous dorsal of uniform height, lower than soft portion which is highest posteriorly; longest spine about .75 of longest ray, which is equal to greatest breadth of head.

Anal incised, slightly lower than soft dorsal. Uppermost rays of pectoral very short; tenth and eleventh rays longest, equal to length of head.

Color in alcohol: light brown; bluish on belly and under pectorals; body with seven faint transverse bands of darker brown, fading out below and posteriorly on caudal peduncle, so that in life

there may have been eight bands; each band has two conspicuous darker brown spots in it. Fins all pale brown; soft dorsal with a row of dark dots on each membrane between rays. A small dark brown line slightly below and back of eye.

This must have been a very beautiful fish in life. One specimen, 99 mm. long. B. P. B. Mus. No. 2455 is the type.

2456. **Salarias marcusii.** New species.

D. XII-21; A. 22; C. 13; P. 14. Depth equals length of head, 4.33 in length without caudal, 5.50 in total length. Eye 3.75 in head. Breadth of head 1.63 in its own length. Width of interorbital space 2 in eye. Mouth inferior, width of cleft .50 of length of head. Teeth very numerous, small, finely pectinate. Anterior profile of head convex. A small dermal crest on head; in one specimen its height is .50 width of interorbital space; in the other specimen it is merely a heavy keel; a small, simple tentacle over eye, its length equal to width of interorbital space; a much smaller simple tentacle on nape, its length somewhat more than .50 that of tentacle over eye; anterior nostril with a fleshy tube, the upper border of which is prolonged into a stout, but not lengthy, fringed tentacle.

Lateral line commences just above upper angle of opercular flap; curving upward it follows the dorsal outline from the fourth to the tenth dorsal spines, then curving obliquely to a point beyond tip of pectoral, it follows the median line of the body to the base of the caudal; tubes of lateral line disappear at about middle of soft dorsal, the remainder of the lateral line being marked by pores and depressions.

Origin of dorsal anterior to gill opening, the tip of opercle being under base of third dorsal spine. Dorsal deeply notched, spinous portion highest anteriorly; third and fourth spines longest, .80 of length of head and equal to highest soft rays; dorsal membrane incised, spines and rays with free tips, dorsal connected with caudal by a membrane. Anal membrane deeply incised, rays with free tips; fin much lower than dorsal, longest rays .50 length of head. Caudal convex; rays divided in posterior .66 of their length, the tips free. Pectoral somewhat rounded, tips of rays free, its length equal to that of head. Conspicuous mucus pores below and posterior to eye.

Color in alcohol: body brown, lighter on caudal peduncle, darker, almost black, on head, bluish white on belly. Color and markings greatly obscured by a blue film, which is probably coagulated mucus. Posterior third of body with three rows of very dark brown spots below the lateral line, and two rows above it. Each membrane of spinous dorsal with two vertical rows of dark brown spots. Soft dorsal with rows of dark brown dashes and dots running diagonally backwards on the membranes. Anal with three longitudinal rows of dark brown spots; free tips of rays whitish. Caudal and pectoral colorless.

Here described from two specimens, one 116 mm. long, the other 144 mm. long. B. P. B. Mus. No. 2456 is the type.

2457. **Entomacrodus gibbifrons** (Quoy & Gaim.).

2458. **Entomacrodus sealei**.¹⁰ New species.

D. XII-16 or 17; A. 17; P. 13; C. 12; head 5 in total length; depth 6.75; eye equals caudal peduncle, 3.40 in head. Eye situated very high up; interorbital space narrow, .50 in eye. Mouth inferior, width of cleft .50 length of head. Teeth very minute, forming a comb-like band in each jaw; lower jaw with two small posterior canines. No crest on head; tentacles on nape very small and very close together, hardly as long as width of interorbital space; tentacle over eye comparatively stout, triangular, with two hair-like filaments on inner side of tentacle; length .66 diameter of eye; anterior nostril with fleshy tube, from upper side of which extends a stout tentacle, the upper half divided into five filaments.

Lateral line straight in anterior portion, curving downward beyond pectoral, and ending on median line, between spinous and soft dorsals.

Dorsals separate; spines of first dorsal almost uniform in height, last two or three somewhat lower than the others; spines about 2.50 in head; membrane incised about .66 of length of spines; base of soft dorsal shorter than that of spinous dorsal, fin ending at beginning of caudal peduncle; highest anteriorly, where rays are about .50 length of head; membrane incised deeply, leaving tips of rays free. Length of anal .33 of total length; rays of anal of uniform length, their height same as soft dorsal; mem-

¹⁰In honor of Mr. Alvin Seale, of the Bishop Museum staff.

brane incised, tips of rays free. Caudal truncate. Longest rays of pectoral equal to head.

Color in alcohol: pale brown, fading away to dull white on belly and under side of head; seven cross bands on sides of body; above the median line they are distinct, and appear as heavy dark spots; below the lateral line they are very faint and divide, forming two diverging bands. Two longitudinal rows of white dots above median line. Caudal with three irregular dark transverse bands. Head and upper half of body thickly sprinkled with fine black dots; upper part of membrane of spinous dorsal dark; soft dorsal with six dark diagonal bands, running backward. A wide dark band on margin of anal; free tips of anal rays white. Pectoral pale and colorless to naked eye; under lens the membrane appears thickly sprinkled with minute dark dots.

One specimen, 38 mm. long. B. P. B. Mus. No. 2458 is the type.

FAMILY PSEUDOCHROMIDÆ.

2459. *Pseudogramma polyacanthus* Bleeker.

D. VII-18; A. III-16; lateral line tubes 29; scales in lateral series 50. Head 2.80 in total length without caudal, 3.33 including caudal. Depth of head at occiput .25 of length without caudal, .20 including caudal. Maxillary produced to posterior edge of eye. Eye 4 in head, distant .66 of its own diameter from tip of snout. Length of base of spinous dorsal 1.33 in base of soft dorsal.

A specimen in poor condition, 50 mm. in length, the caudal broken and most of the scales gone. It agrees very well in the main with Kner's description of *Pseudochromis polyacanthus* Bleeker (Neue Fische Mus. Godeffroy, October, 1867, 717), based on a specimen secured in the Viti Islands. But it is hardly the same fish that Bleeker described under the name *Pseudogramma polyacanthus* in "Sur la Famille des Pseudochromidoïdes et Revision de ses Espèces Insulindiennes", Verh. Ak., Amsterdam, 1875, p. 25, while Bleeker's text does not agree with his figure. Bleeker's description was based on a specimen from Ternate, in the East Indies, while Kner's specimen was from the South Pacific, and this specimen from Marcus Island would be more likely to agree with the latter than the former; it is possible that the Polynesian form is a different species from that of the East Indies, but they may be placed together until an abundance of good material is available.