

DESCRIPTIONS OF TWO NEW SPECIES OF FISHES (SEBASTICHTHYS UMBROSUS AND CITHARICHTHYS STIGMÆUS) COLLECTED AT SANTA BARBARA, CALIFORNIA, BY ANDREA LARCO.

By DAVID S. JORDAN and CHARLES H. GILBERT.

1. *Sebasticthys umbrosus*, sp. nov. (31140, 31141.)

Head $2\frac{3}{5}$ to $2\frac{2}{3}$ in length, without caudal; depth $2\frac{4}{5}$ to $2\frac{5}{6}$. D. XIII, 12; A. III, 6. Scales 40 (tubes in lateral line), the number of cross series about 50 (counted below lateral line).

Body moderately robust, little compressed, not specially elongate. Mouth moderate, oblique, the maxillary extending backward about to posterior margin of pupil, its length almost half head. Jaws about equal, the lower with a strong symphyseal knob, fitting into a broad notch in the upper. Premaxillary in front on level of lower margin of eye. Preorbital narrow, not more than half width of maxillary, armed with two retrorse spines. Eye large, 4 in head, somewhat longer than snout. Nasal spines strong.

Cranial ridges well developed, sharp, but not high, in form intermediate between those of *pinniger* and *constellatus*; as strong as in *constellatus*, but lower. Preocular, supraocular, postocular, tympanic, and occipital spines present. Preocular spine very conspicuous; supraocular ridge low, its spine smaller than postocular or tympanic. Occipital ridge about as long as supraocular, about two-thirds eye. Interorbital space much broader than in *constellatus*, its width two-thirds eye; it is concave, with two rather strong ridges diverging backward; between these posteriorly are two smaller ridges. Suprascapula with two spines. Space between occipital ridges slightly concave. Preopercular spines strong, all of them acute, the second longest and rather slender. Opercular spines well developed. Gill rakers rather long and slender, the longest $2\frac{1}{2}$ in eye; about 24 of them on lower limb of arch.

Dorsal fin deeply notched; neither the spines nor the soft rays very high. Longest dorsal spine $2\frac{1}{2}$ to $2\frac{1}{2}$ in head; longest soft ray scarcely shorter. Soft dorsal longer than high. Caudal very slightly emarginate, the middle rays $2\frac{1}{2}$ in head. Pectoral $3\frac{3}{4}$ in body, not reaching vent. Ventrals about half head.

Scales rough, the accessory scales numerous; small scales along bases of fins. Both jaws with some small smoothish scales, those on mandible mostly towards its base.

Ground color light orange, quite faint or obsolete on parts of the body. Upper parts overlaid with a dusky hue, formed largely of dark points so numerous as to give a dusty appearance. The dark color on the sides forms irregular vermiculations, the center of each scale being pale orange, the edge dusky. Some areas along the back, between the pale blotches, are quite blackish. Jaws and inside of mouth light orange,

more or less soiled. Two or three dark shades from eye across cheek. A dusky shade along maxillary. Opercle dusky, its flap with a spot of pale pink or orange. Each side of back above the lateral line with 5 or 6 roundish pale blotches, of a light pink color, more or less tinged with orange. One of these just below base of fourth dorsal spine; two under base of eighth dorsal spine, the uppermost faint, the lower large, near the lateral line, and somewhat further back than the upper one. A large blotch under the last dorsal spine; a large one under last rays of soft dorsal, with sometimes a smaller one in front of it. These spots are rather less sharply defined and more yellowish than in *constellatus*, *rosaceus*, &c. They correspond in position nearly to those found in the latter species. Fins all pale orange, more or less shaded with blackish. Peritoneum black. In one specimen the orange shade is less intense than in the other.

Two specimens (31140, 31141), 10 and 11 inches in length, were taken by Andrea Laro at Santa Rosa Island, near Santa Barbara, and were forwarded by him to the National Museum.

The species is well distinguished from all its numerous congeners on our Pacific coast. It probably most nearly approaches *S. constellatus*, among the species thus far known.

2. *Citharichthys stigmæus*, sp. nov. (31099.)

Body moderately deep, the two profiles regularly and equally arched; the snout short, gibbous, projecting a little beyond the outline; caudal peduncle very short, not high, its length (from end of last vertebra to vertical from last anal ray) about two-fifths its height, which is three-sevenths length of head; caudal fin appearing sessile. Mouth moderate, very oblique, the maxillary reaching slightly beyond front of pupil, $2\frac{3}{4}$ in head; teeth in a single series, subequal in the two jaws, rather long, very slender and numerous, decreasing towards angle of mouth; about 40 teeth in the upper jaw, and 30 in the lower, on blind side. Eyes large, close together, separated by a narrow, sharp, scaleless ridge; the upper eye largest, slightly behind the lower, with considerable vertical range; diameter of upper eye, $3\frac{1}{2}$ in head. Snout and lower jaw scaleless; end of maxillary and rest of head scaled. Gill-rakers moderate, not strong, about 9 on anterior limb.

Dorsal fin beginning on the vertical from front of upper eye, the first three rays being somewhat turned to blind side; the fin low, highest at beginning of its posterior third, the longest ray nearly half length of head. Anal spine present, very small. Caudal rounded, about equaling length of head. Pectoral of colored side $1\frac{1}{2}$ in head, of blind side $2\frac{1}{2}$.

Scales moderate, those forming the lateral line persistent, the others deciduous; those on colored side with ciliated margins, on blind side smooth; lateral line without anterior curve; the scales are crowded and smaller anteriorly.

Head $3\frac{3}{4}$ in length, without caudal; depth $2\frac{1}{5}$. D. 87; A. 68; L. lat. $5\frac{1}{4}$ (pores).

Color in spirits uniform olivaceous, the scales dark-edged; lips and some of membrane bones of head margined with blackish. Fins dusky: each 7th (to 10th) ray of vertical fins with a very small but conspicuous black spot on its middle.

A single specimen (31099, U. S. Nat. Mus.) was collected at Santa Barbara, California, by Mr. A. Laro.

In the collection of which these specimens formed a part, are the following species not hitherto known from farther south than Monterey: *Oxylebius pictus*, *Ophidium taylori*, *Anarrhichthys ocellatus*, as also a single specimen of *Siphostoma bairdianum*.

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DESCRIPTIONS OF TWENTY-FIVE NEW SPECIES OF FISH FROM THE SOUTHERN UNITED STATES, AND THREE NEW GENERA, LEPTHARCUS, IOGLOSSUS, AND CIRRIODORUS.

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The following budget of descriptions is presented as the result of a partial examination of the large collections of fishes from the Southern Atlantic States in the United States National Museum, some of which have been on hand for twenty years or more.

1. *Tetrodon nephelus*, n. sp.

The types are numbered 31427, 31428, and 26570. The first two were taken at Indian River, Florida, by Mr. R. E. Earll; the last at Pensacola, Florida, by Mr. Silas Stearns. The specimens range from $7\frac{1}{2}$ to 9 inches in length.

This species is the southern representative of *Tetrodon turgidus*, from which it differs in several particulars, as mentioned below.

The spines of the upper parts are much larger, farther apart, distinctly stellate with conspicuous roots; they extend backward not quite to front of dorsal above and to the vent below, the whole region behind these points being entirely smooth. There are less than 40 spines on the median line of the back between the eye and front of dorsal.

The dorsal is larger than in *T. turgidus*, its base one-fifth to one-sixth as long as the head, its largest ray three-sevenths as long as head.

The anal, also, is larger than in *turgidus*, its longest ray nearly one third as long as head.

The humeral process is somewhat longer than in *turgidus*, its length from axil of pectoral being a little more than half that of head.

Head contained $2\frac{5}{8}$ times, depth 4 times in length to caudal base.

D. 8; A. 6 (D. 7; A. 5 in *T. turgidus*).

Color somewhat variable, but distinguished from that of *turgidus* by the presence of paler blotches on the back and sides, around which the ground color often forms distinct reticulations. Dark bars on the sides