DESCRIPTION OF TWO NEW SPECIES OF FISHES (MYROPHIS VAER AND CHLOROSCOMERUS ORQUETA) FROM PANAMA.

By DAVID S. JORDAN AND CHARLES H. GILBERT.

1. Myrophis vaer sp. nov. (29681.)

(§yrophis punctatus Günther VIII, 1870, 50. Jor. & Gilb., Bull. U. S. Fish Comm., 1882, 109: name only; not of Lütken.)

Body subterete anteriorly, compressed posteriorly, more robust and less vermiciform than in Myrophis lumbriuces; tail strongly compressed. Head comparatively large, its width posteriorly being greater than that of the body. Upper jaw considerably projecting; both jaws rather blunt. Eye moderate, considerably nearer angle of mouth than tip of snout, its diameter rather less than half snout. Gape rather long, about 3\(\frac{1}{4}\) in head. Head constricted behind the cheeks.

Teeth small, sharp, slender, hooked backward, apparently in one or two irregular series in each jaw, and a single long series, somewhat broken anteriorly, on the vomer.

Anterior nostrils with small tubes, posterior nostrils without tubes. Gill-openings moderate, oblique, placed in front of and below the bases of the pectorals, which are rather broader than the gill-openings.

Pectoral fins small, acute at tip, their length a little more than that of snout, and one-fifth to one-sixth that of head. Dorsal fin of moderate height posteriorly, its origin somewhat nearer gill-opening than vent, its distance from gill-opening a little more than length of head.

Head 8\(\frac{1}{4}\) in total length. Greatest depth of body about 28. Length of head and trunk 2\(\frac{1}{2}\) in total. Head 2\(\frac{1}{3}\) in trunk.

Color in life, light olivaceous; silvery on breast and belly; back and sides thickly dotted with fine, olive-brown specks. Snout somewhat dusky.

This species is very common in the rock-pools at Panama, where numerous examples (the types numbered 29681 U. S. Nat. Mus. register) were obtained by Mr. Gilbert, the largest 7\(\frac{1}{2}\) inches in length.

This species has been already noticed under the name of Myrophis...
There is, however, no positive evidence that it is identical with the African species, so named by Professor Lütken. The Texan species of Myrophis (lumbricus J. & G.) and the Cuban species (microstigmus Poey) seem to be distinct from it.

**Chloroscombrus orqueta** sp. nov. (29165, 29278, 29285, 29343.)


Proportions, fin rays, and coloration essentially as in *C. chrysurus*, which species it represents in the Pacific. From the Atlantic form, *C. orqueta* differs constantly in the much longer curve of the lateral line, and in the distinct armature along caudal peduncle.

Body ovate, strongly compressed, the edges trenchant. Dorsal and ventral outlines very regularly curved, the curve of the belly considerably stronger than that of the back, the axis of body much nearer the latter. Caudal peduncle very slender. Young less elongate than the adult, otherwise very similar in form.

Head small, rather pointed, the anterior profile nearly straight. Mouth small, very oblique, the lower jaw projecting. Maxillary broad, extending a little beyond front of eye, its length 2/3 in head, its tip marginate; supplemental bone well developed. Teeth very small, those of the jaws not villiform, forming very narrow bands or single series in both jaws; villiform patches on vomer, palatines, and tongue. Adipose eyelid well developed. Preorbital very narrow, not half width of orbit. Gill-rakers numerous, very long, slender, close set.

Head nearly naked. Body covered with well-developed imbricated scales; the ventral ridge, and a narrowly triangular area forwards from front of dorsal naked.

Lateral line with a rather strong arch anteriorly, the chord of the curve being considerably longer than head, and 1/2 to 1/3 in the straight part. (In *C. chrysurus* the chord of the curve is about as long as head from tip of lower jaw, and 1/2 to 1/3 in the straight portion.) A distinct keel along caudal peduncle, the scales of lateral line enlarged and bony with bluntish tips. (In *C. chrysurus* the scales of lateral line are little if at all different from the other scales.) Dorsal and anal naked, the sheaths at their bases largely developed along the anterior half of each fin.

Antrorse dorsal spine concealed. Spinous dorsal persistent, the spines slender, the longest slightly shorter than anterior rays of soft dorsal, which are about half head. Soft dorsal and anal with anterior rays highest, the fins not falcate. Caudal widely forked, the upper lobe slightly longer than the lower, which about equals head. Anal spines strong. Pectorals very long, falcate, a little more than one-third length. Ventrais short, about two-fifths head.

Color somewhat darker than in *C. chrysurus*. In life, back green with blue reflections; sides and below silvery-white with bluish and
PURPLISH reflections; a distinct black blotch on upper angle of opercle, extending on shoulder girdle; inside of opercle, and skin lining shoulder girdle below, largely dusky. A quadrate black blotch on back of tail, extending backwards along bases of upper caudal rays. Fins light yellowish, the dorsal and anal and anal edged with black; tip of upper caudal lobe black. Ventrals whitish. Tongue, base and roof of mouth, and skin of upper branchiostegals black.

Abundant at Panama; recorded by Dr. Steindachner from Magdalena Bay, Lower California. The types, numbered 29165, 29278, 29285, and 29343, were collected by Mr. Gilbert at Panama. It is known to the fishermen at Panama as Orqueta.

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DESCRIPTION OF A NEW EEL (SIDERA CASTANEA) FROM MAZATLAN, MEXICO.

BY DAVID S. JORDAN AND CHARLES H. GILBERT.

Sidera castanea sp. nov.
(Sidera panamensis Jor. & Gilb., Bull. U. S. Fish Comm. 1882, 106; name only; not Murana panamensis Steind.)

Tail about as long as rest of body, or slightly longer. Head $2\frac{3}{4}$ in length of trunk; cleft of mouth wide, $2\frac{3}{4}$ to $2\frac{1}{4}$ in head; teeth everywhere uniserial or nearly so, those on sides of mandible small, compressed, close-set, subtriangular, directed backwards, about 18 in number on each side; mandible with about four large canines anteriorly; upper jaw with the teeth partly in two series, some of the teeth being movable, the others mostly stronger, canine-like, especially anteriorly. Front of vomer with two very long slender canines, behind them a single series of small teeth; teeth all entire.

Eye large, slightly nearer tip of snout than angle of mouth, its diameter 2 to $2\frac{1}{2}$ in snout; gill-opening one-third wider than the orbit; tube of anterior nostril short, less than half diameter of orbit; posterior nostril without tube; occiput not especially elevated, the anterior profile scarcely concave (perfectly straight in young 2 feet long).

Dorsal fin commencing much in advance of gill-opening, becoming unusually high posteriorly, where its vertical height is more than half greatest depth of body; the length of the longest ray more than greatest depth of body.

Color light brownish-chestnut, slightly paler on abdomen; no spots or bands anywhere; fins without dark margins; no dark spot on gill-opening or at angle of mouth; no black about eye; head without conspicuous pores.

The specimen here described is 44 inches in length; others about 2 feet in length agree very closely.