

b. Two nostrils on each side.

α . Spinous part of the dorsal fin considerably shorter than the soft-rayed part; anal with 1 or 2 spines 6. SCIÆNIDÆ.

β . Spinous part of the dorsal fin not shorter or not much shorter than the soft-rayed part.

* Ventral fins without scaly axillary processes.

Two dorsals, with VI–XVII, 8–17 rays; anal with I–II 6–12 rays 7. PERCIDÆ.

A single dorsal, with X–XI 10–13 rays; anal with III 8–12 rays 8. CENTRARCHIDÆ.

** A scaly process at the base of the spine of each ventral fin.

A single dorsal with IX 10 rays; anal with II–III 7–9 rays 9. LIIGNATHIDÆ*.

A single dorsal with X–XIV 10–18 rays; anal with III 7–13 rays 10. POMADASIDÆ.

Two dorsals, with VIII, I 9–11 rays; anal with III 6–7 rays 11. CENTROPOMIDÆ.

In all cases the account of the species is based on an examination of the examples in the British Museum Collection; but in the case of groups which have already been adequately described a synopsis only is given, with references to the works in which more details are to be found.

Fam. 1. PLEURONECTIDÆ.

The Flat-fishes are a large family, at once distinguished from all other fishes by the asymmetrical head, with the two eyes on one side. They are mostly marine, but many ascend rivers for considerable distances. In Mexico and Central America four species have been recorded as occurring in rivers above the regions affected by the tides, and must therefore be included in an account of the fresh-water fishes.

1. CITHARICHTHYS, Bleeker, 1862.

Citharichthys, Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1898, p. 2678.

Eyes on the left side. Mouth moderately large; each jaw with a single series of small pointed teeth; palate toothless. Scales moderate or small, feebly ctenoid, deciduous; lateral line nearly straight. Dorsal commencing just in front of the eye and posteriorly free from the caudal; left ventral median, but not continuous with the anal; pectorals well-developed.

1. *Citharichthys gilberti*, Jenkins & Evermann, 1888.

Citharichthys gilberti, Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1898, p. 2686.

Depth of body about 2 in the length, length of head $3\frac{1}{3}$ to $3\frac{2}{3}$. Snout as long as or a little longer than eye, the diameter of which is $4\frac{2}{3}$ to $5\frac{1}{2}$ in the length of head; interorbital region a narrow, shallow groove, bordered by the slightly elevated orbital margins; maxillary extending to below middle of eye; gill-rakers of moderate length, 12 to 14 on the lower part of the anterior arch. 38 to 45 scales in a longitudinal series. Dorsal 77–85. Anal 57–63. Left pectoral as long or nearly as long as the postorbital part of head; right pectoral shorter; caudal doubly truncate. Light brown, spotted or marbled with darker.

Hab. Pacific Coast from Guaymas, Mexico, to Ecuador, entering rivers.

My description is based on four specimens, 110 to 160 mm. in total length, from

* Usually known as Gerridæ, a family name preoccupied in Hemiptera.