

Fam. 3. CYPRINIDÆ.

Fresh-water fishes of North America, Eurasia, and Africa. The species are very numerous, about 1400 being known. The American Cyprinidæ extend southwards to the Rio Balsas in Southern Mexico and the Rio Usumacinta in Guatemala. The Mexican and Central-American representatives are scaly fishes, with the mouth toothless, with the gill-membranes joined to the isthmus and with 3 branchiostegals. There are no spinous fin-rays, the single dorsal fin is not followed by an adipose fin and the ventral fins are abdominal, 7- to 12-rayed. The upper pharyngeals are toothless and the lower pharyngeals are falciform, each with 1 to 3 series of teeth.

Synopsis of the Genera represented in Mexico and Central America.*

- I. Mouth bordered above by the præmaxillaries and the maxillaries; lips fleshy, papillose or plicated; pharyngeal teeth in a single series, 6 or more in number on each side. [CATOSTOMINÆ.]
 - A. Dorsal fin long, of 20 to 35 rays. 1. ICTIOBUS.
 - B. Dorsal fin short, of 8 to 16 rays.
 1. Body normally shaped; no nuchal hump.
Scales moderate, 40 to 50 in a longitudinal series; jaws without cartilaginous sheaths 2. MOXOSTOMA.
 - Scales small, 60 to 100 in a longitudinal series; jaws with more or less distinct cartilaginous sheaths 3. CATOSTOMUS.
 2. Nuchal region with an elevated sharp-edged hump, the inter-neural spines being enlarged and expanded; scales small . . . 4. XYRAUCHEN.
- II. Mouth bordered above by the præmaxillaries; lips not papillose nor plicated; pharyngeal teeth in 1 to 3 series, 3 to 6 in number in the main row on each side. [CYPRININÆ.]
 - A. No barbels.
 1. Abdomen behind the ventral fins compressed to form a keel; anal fin more or less elongate 5. ABRAMIS.
 2. Abdomen not compressed to an edge.
 - a. Anterior 2 or 3 rays of dorsal fin simple, graduated and closely connected, the first not enlarged nor separated by a membrane from the second.
 - α. Air-bladder completely surrounded by convolutions of the very long intestine 6. CAMPOSTOMA.
 - β. Air-bladder not surrounded by the intestine.

* Pharyngeal teeth subconical or more or less compressed and hooked, 4 to 6 in the main row on each side.
† Gill-rakers comparatively few and short.

* A revision of the American Cyprinidæ would probably show that several of the genera here recognized are untenable. For the present I have thought it best to agree as far as possible with the current American nomenclature for the fishes of this family.