

5. *Arius multiradiatus*.

Arius multiradiatus, Günth. Cat. Fish. v. p. 173 (1864) ¹.

Tachysurus multiradiatus, Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 132 ².

Tachysurus emmelane (Gilb.), Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1900, p. 2786 ³; Gilb. & Starks, Mem. Calif. Ac. Sci. iv. 1904, p. 31, t. 6 ⁴.

Depth of body 5 in the length, length of head $3\frac{1}{2}$. Breadth of head $1\frac{2}{5}$ in its length, diameter of eye 7. Fontanel produced into a groove which nearly reaches the parieto-occipital; occipital process without distinct keel, broader than long, with concave sides and slightly emarginate apex; dorsal shield small, subcrescentic. Width of mouth $\frac{1}{2}$ the width of head; præmaxillary band of teeth 4 times as long as broad; teeth on the palate obtusely conical, in two small, well-separated, subovate patches; maxillary barbel extending to basal part of pectoral. 11 gill-rakers on the lower part of anterior arch. Dorsal I 7; spine $\frac{2}{3}$ the length of head; adipose fin shorter than the dorsal. Anal 27. Pectoral spine $\frac{3}{5}$ the length of head, with the inner edge rather strongly serrated.

Hab. PANAMA ^{1 3 4} (*Boucard*).

Here described from a specimen measuring 230 mm. in total length.

6. *Arius hypophthalmus*.

Arius hypophthalmus, Steind. Sitzungs. Ak. Wien, lxxii. 1876, p. 581, t. 10 ¹.

Tachisurus gulosus, Eigenm. & Eigenm. Occ. Papers Calif. Ac. Sci. i. 1890, p. 93 ².

Cathorops hypophthalmus, Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 133 ³.

Cathorops gulosus, Jord. & Everm. l. c. ⁴.

Hab. PANAMA ^{1 2 3 4}.

4. RHAMDIA, Bleek., 1858.

Rhamdia, Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 149.

Body elongate. Snout not greatly produced; mouth terminal or subterminal; jaws with villiform teeth in bands; palate toothless; nostrils remote from each other; no nasal barbels; barbels 6; occipital process not extending to the dorsal fin. Dorsal fin with a slender flexible spine and 5 to 8 branched rays; adipose fin long; anal short or of moderate length; ventral fins 6-rayed.

Numerous species, from Mexico to the La Plata.

Synopsis of the Mexican and Central-American Species *.

I. Caudal fin deeply notched, the middle rays not more than $\frac{1}{2}$ the length of the longest.

A. Width of mouth $\frac{2}{3}$ to $\frac{1}{2}$ the width of head; pectoral spine $\frac{1}{2}$ to $\frac{2}{3}$ the length of head.

Occipital process as broad as long, extending $\frac{1}{3}$ of the distance from its base to the origin of dorsal; body rather deep (depth $4\frac{1}{3}$ to 5 in the length) . . . 1. *parryi*.

Occipital process much longer than broad, extending $\frac{3}{8}$ of the distance from its base to the origin of dorsal; body rather slender (depth about 6 in the length); first branched ray of dorsal the longest 2. *motaguensis*.

* The original description of *P. brachypterus*, Cope (Trans. Am. Phil. Soc. 1866, p. 404), from Orizaba, is insufficient, but Fowler's re-description of the type (in Meek, Publ. Columbian Mus., Zool. v. 1904, p. 21) shows that this species is probably not distinct from *P. guatemalensis*.