

C. Opercular flap extending to or beyond the vertical from origin of dorsal; 48–60 scales in a longitudinal series.

1. 17–19 gill-rakers, including 2 to 4 rudiments, on the lower part of anterior arch; 5 to $6\frac{1}{2}$ scales between middle of second dorsal and lateral line.

Third dorsal spine longer than fourth; second anal spine about $\frac{1}{5}$ the length of the fish (in specimens of 300 mm.) 7. *robalito*.

Third and fourth dorsal spines subequal; second anal spine about $\frac{1}{4}$ the length of the fish (in specimens of nearly 300 mm.) 8. *ensiferus*.

2. 13–15 gill-rakers, including 2 or 3 rudiments, on the lower part of anterior arch; 7 to $8\frac{1}{2}$ scales between middle of second dorsal and lateral line.

Third anal spine $\frac{2}{3}$ – $\frac{4}{5}$ as long as second, which is $\frac{2}{7}$ – $\frac{1}{3}$ the length of the fish (in specimens of 210–260 mm.) 9. *armatus*.

Third anal spine $\frac{4}{5}$ as long as second, which is $\frac{1}{4}$ the length of the fish (in a specimen of 170 mm.) 10. *altus*.

Third anal spine nearly as long as second, which is less than $\frac{1}{5}$ the length of the fish (in a specimen of 260 mm.) 11. *unionensis*.

The length of the fish is measured from the tip of the snout to the base of the caudal fin, that of the head from the tip of the snout to the extremity of the opercular flap, which appears to be a true prolongation of the suboperculum and distinct from the branchiostegal membrane; the projecting lower jaw is not included in either case. The scales are counted in a longitudinal series above the lateral line from the supra-clavicle to the base of the caudal fin, not including the scales covering the basal part of the fin.

In using the descriptions the size of the specimens described must be taken into account. Young specimens have the head proportionately longer, eye larger, snout and maxillary shorter and vertical fins more developed than the adults.

In the case of *C. nigrescens* the second anal spine is described as $\frac{1}{7}$ – $\frac{1}{5}$ the length of the fish in specimens of 150–300 mm. in total length; *i. e.*, $\frac{1}{5}$ in the smallest example and $\frac{1}{7}$ in the largest. *C. undecimalis* also is described as having the second anal spine $\frac{1}{7}$ – $\frac{1}{5}$ the length of the fish, but this is in specimens of 230–600 mm. in total length, the spine being longer in this species than in *C. nigrescens*, when examples of the same size are compared.

1. *Centropomus pectinatus*.

Centropomus undecimalis (part.), Cuv. & Val. Hist. Nat. Poiss. ii. p. 102 (1828)¹; Günth. Cat. Fish. i. p. 79 (1859)².

Centropomus pectinatus, Poey, Mem. Cuba, ii. p. 121 (1860)³, and Repert. ii. p. 280 (1868)⁴; Vaill. & Boc. Miss. Sc. Mex., Poiss. p. 25 (1874)⁵; Bouleng. Cat. Fish. i. p. 368 (1895)⁶; Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 1122⁷.

Centropomus pedimacula, Poey, Mem. Cuba, ii. p. 122 (1860)⁸, and Repert. ii. p. 280 (1868)⁹;