CENTROPOMUS.

back darker; lateral line usually more or less blackish; spinous dorsal and membrane between second and third anal spines blackish.

_Hab._ Pacific Coasts of Tropical America, entering rivers: Panama; Rio Vauqueria, Ecuador.

Here described from four specimens from Panama, 210–260 mm. in total length.

_Centropomus brevis_ is founded on a young example of _C. armatus_; and _C. atridorsalis_ was described from a small specimen of this species from the Rio Vauqueria, N.W. Ecuador, with the exceptional number of seven branched rays in the anal fin.

10. _Centropomus altus_, sp. n. (Tab. VIII. fig 1.).

_Centropomus armatus_ (non Gill), Vaill. & Boc. Miss. Sci. Mex., Poiss. p. 34, t. 1 ter, fig. 3 (1874).^1_

_Centropomus ensiferus_ (part.), Boulang. Cat. Fish. i. p. 369 (1895).^2_

Depth of body 3 in the length, length of head 2 1/4. Snout 1 1/4 as long as eye, the diameter of which is 6 in the length of head and equal to the interorbital width. Maxillary extending to below middle of eye, its greatest width 2/3 the diameter of eye. Preopercle acutely serrated; two strong spines at the angle; lower edge with only 4 or 5 distinct serrae. Subopercular flap extending a little beyond the vertical from origin of dorsal. 14 gill-rakers, including 3 rudiments, on the lower part of anterior arch. 50–52 scales in a longitudinal series, 7 or 8 between middle of second dorsal and lateral line. Dorsal VIII, I 9–10; spines moderately strong, the third or fourth the longest, a little more than 3/4 the length of head. Anal III 6; third spine 2/3 the length of the second, which is 1/2 the length of the fish. Pectoral 1/2 the length of head. Ventra extending a little beyond the vent, which is situated at 3/5 the distance from base of ventral spine to origin of anal. Caudal peduncle 1 1/2 as long as deep. Silvery, back brownish; lateral line not blackish; vertical fins more or less dusky.

_Hab._ Atlantic Coast of Panama, Colon (Boucard).^2_

The description is based on a single specimen, 170 mm. in total length. Two others, of 85 and 95 mm., agree with it in all essential characters, but have, of course, a shorter snout, larger eye, more elevated spinous dorsal and longer anal spines. The number of scales and fin-rays in these is included in the description.

_C. altus_ is the Atlantic representative of _C. unionensis_, from which it differs especially in the deeper body, the more strongly armed preoperculum, and the longer second anal spine, projecting further beyond the third.

11. _Centropomus unionensis._


Depth of body 3 1/2 in the length, length of head 2 3/4. Snout 1 1/2 as long as eye, the diameter of which is 7 in the length of head; interorbital width 6 in the length of head. Maxillary extending to below the middle of eye, its greatest width 2/3 the diameter of eye. Preopercle feebly serrated posteriorly. Posterior edge of preopercle feebly serrated; two moderately strong spines at the angle; lower edge with a few serrae. Opercular flap extending slightly beyond the vertical from the origin of dorsal. 14 gill-rakers, including 3 rudiments, on the lower part of the anterior arch. 52 scales in a longitudinal series, 7 1/2 between middle