

2. Pectoral spine nearly as long as the head.

Anal of 19 to 21 rays, the longest as long as or a little longer than the base

of the fin; dorsal filament extending to the adipose fin 5. *bahiensis*.

Anal of 24 to 26 rays, the longest a little shorter than the base of the fin;

dorsal filament extending to the caudal 6. *filamentosus*.

B. Distance from tip of snout to origin of dorsal $\frac{1}{4}$ to $\frac{2}{7}$ the length of the fish; longest anal ray much shorter than the base of the fin.

Anal of 27 to 31 rays; vomerine patches of teeth united, about as large as

the palatine patches, with which they are continuous 7. *pinnimaculatus*.

Anal of 31 to 35 rays; vomerine patches of teeth separated, much shorter than

than the palatine patches, with which they are subcontinuous 8. *bagre*.

1. *Ælurichthys panamensis*.

Ælurichthys panamensis, Gill, Proc. Ac. Philad. 1863, p. 172.

Ælurichthys nuchalis, Günth. Cat. Fish. v. p. 179 (1864), and Trans. Zool. Soc. vi. 1868, p. 476, t. 81. fig. 2.

Ælurichthys panamensis (part.), Steind. Sitzungsab. Ak. Wien, lxxii. 1876, p. 564, t. 2. figs. 3 & 4.

Felichthys panamensis, Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 117.

Felichthys panamensis (part.), Gilb. & Starks, Mem. Calif. Ac. Sci. iv. 1904, p. 20.

Depth of body a little less than the length of head, which is 4 in the length of the fish. Breadth of head $1\frac{1}{3}$ in its length; snout a little longer than eye, the diameter of which is 4 in the length of head. Lower jaw a little shorter than the upper; vomerine patches of teeth separate, equal in length and breadth to the palatine patches; maxillary barbel extending to the ventral fin. 14 gill-rakers on the lower part of the anterior arch. Head covered with skin; profile nearly straight from snout to dorsal fin; occipital process uncovered by skin, pitted, of nearly equal breadth throughout, the lateral edges somewhat convex, the posterior edge a little emarginate; two halves of the process meeting in the middle line at an angle which is rather more than a right angle; breadth of process equal to (or a little less than) its length and $\frac{1}{3}$ the length of head. Dorsal I 7, the spine not bearing a long filament. Anal 26 (27), somewhat produced anteriorly, the longest rays, when laid back, just reaching the end of the base of the fin. Pectoral spine bearing a long filament; ventrals not reaching the anal. Caudal deeply forked. Caudal peduncle twice as long as deep. Silvery, back bluish.

Hab. PACIFIC COAST OF PANAMA (*Dow*).

One specimen, type of *A. nuchalis*, 220 mm in length.

2. *Ælurichthys scutatus*, sp. n. (Tab. XV. fig. 2 and Tab. XIX. fig. 2.)

Ælurichthys panamensis (part.), Steind. Sitzungsab. Ak. Wien, lxxii. 1876, p. 564, t. 2. figs. 3 & 4.

Felichthys panamensis (part.), Gilb. & Starks, Mem. Calif. Ac. Sci. iv. 1904, p. 20.

Depth of body a little less than the length of head, which is 4 to $4\frac{1}{4}$ in the length of the fish. Breadth of head $1\frac{1}{4}$ in its length; snout longer than eye, the diameter of which is $4\frac{1}{2}$ to 5 in the length of the head. Lower jaw a little shorter than the upper; vomerine patches of teeth united, considerably broader than the palatine patches; maxillary barbel extending nearly to the ventral fin or a little beyond. 14 gill-rakers on the lower part of the anterior arch. Head and occipital process covered with smooth skin (in large specimens occipital region and process naked, rugose); profile from end of fontanel to origin of dorsal convex; occipital process shaped nearly as in the preceding species, but considerably broader than long (the breadth $\frac{2}{5}$ or nearly $\frac{2}{5}$ the length of head) and with the two halves forming a more