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STUDIES OF THE FISHES OF THE ORDER CYPRI-
NODONTES. IX. A NEW AND PRIMITIVE
GENUS OF POECILIIDAE FROM
CENTRAL AMERICA

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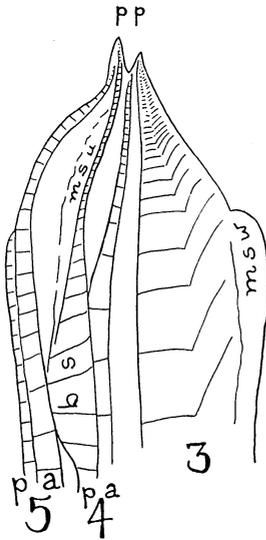
FOWLER has described (1923: 27), as *Priapichthys huberi*, a very striking species of poeciliid from "Marceligo Creek, tributary of the Tunky River, at Miranda, Nicaragua." He based the species on two adult specimens, male and female. I have reported (1926: 53) the third known specimen, an unripe male from Siquatepeque, Honduras.

While suspecting that the species has little in common with *Priapichthys (annectens)* of Costa Rica, I have not been able to place it in the system. The simplicity of the gonopodium of this species, as described by Fowler, led me to the wholly erroneous statement that this organ is not completely developed in the type male. I now find, on re-examining the holotype, that this specimen does have a thoroughly elaborated gonopodium. The structure of this organ, so vital in the classification of the Poeciliidae, shows peculiarities that demand the erection of a new genus for the species.

Furcipenis, new genus

Orthotype.—*Priapichthys huberi* Fowler.

Furcipenis fits well into the Gambusiinae as defined by me, with the exception that it possesses a thick membranous swelling



ending in a rounded lobe along the front of the gonopodium. In this feature *Furcipenis* approaches the Poeciliinae, especially the tribe Xiphophorini (Hubbs, 1924: 10), in which tribe the prepuce-like hood of the other poeciliines is represented by a membranous swelling (m s w) not unlike that of *Furcipenis*.

The approach thus indicated toward the Poeciliinae suggests that *Furcipenis* is an ancestral type. The extreme simplicity of the gonopodium, as shown in the figure, which I sketched freehand from the type, confirms this interpretation. The three rays of this organ are without definite spines, and lack all trace of serrae, hooks, or processes. The genus may provisionally rest in the tribe Heterandriini of the Gambusiinae.

The sutures of the much thickened ray 3 are abruptly angulated, but do not form definite spines. The segments of this ray retain their angulated sutures even as they become excessively small toward the extreme tip, which enters the anterior of the two pointed projections (p p) of the gonopodial extremity. The anterior branch of ray 4 is very slender, but is slightly thickened to form a structure that may be ancestral to the elbow of the tribe Gambusiini. Just basad to this slight thickening, the posterior branch of ray 4 has a much larger bulbous swelling (b s), beyond which this branch is also very slender. This branch does not develop the serrae which are present in nearly all the species of the Poeciliidae. The extreme weakness of the distal portion of this branch is compensated for by a hardened membranous support (m s u) along its posterior edge outward from the bulbous swelling.

The extreme tip of the posterior branch enters the larger of the two pointed projections, while the anterior branch appears to end near the tip of the V-like indentation between the processes. The posterior branch of ray 5 ends about opposite the membranous swelling of ray 3, and the anterior branch ends near the base of the posterior of the pointed projections. These two pointed projections, especially diagnostic, suggested the generic name *Furcipenis*.

The body is moderately deep, strongly modified into the top-minnow type, and sharply compressed posteriorly. The lower edge of the caudal peduncle, though rounded over, approaches that of *Alfaro* in sharpness. The mouth has a moderate lateral cleft; the jaws are firmly united; the teeth are all conic, in bands, with the outer series somewhat enlarged.

The one known species of the genus is *Furcipenis huberi* (Fowler).

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