8. *Gambusia annectens*. (Tab. XIV. figg. 5, 6.)


Depth of body 3 to 3½ in the length, length of head 3½ to 3¾. Snout as long as or shorter than eye, the diameter of which is 3 to 3½ in the length of head; interorbital width equal to the distance from middle or posterior part of eye to free edge of operculum. 28 to 31 scales in a longitudinal series. Dorsal 10–12; origin equidistant from tip of snout and middle or posterior part of caudal; free edge of the fin convex. Anal 9–10, pointed, originating a little in advance of the dorsal. Pectoral about ⅛ the length of head. Caudal rounded or subtruncate. Least depth of caudal peduncle about ⅔ the length of head. Scales with dark edges, forming series of spots on the lower part of the side; often a series of short dark vertical bars along the middle of the side; a series of dark spots on the lower part of the dorsal fin.

_Hab._ COSTA RICA, Carrillo and Juan Viñas (Underwood), Irazú (Rogers).

Numerous specimens, measuring up to 70 mm. in total length.

This species is very close to *G. episcopi*, Steind., from Panama, which has only 8 or 9 dorsal rays and also differs in having a blackish spot on the anal fin. It is also close to *G. terrabensis*, Regan, and *G. jonesii*, Günther, and with them forms a series from *G. episcopi* to *G. (Pseudoxiphophorus) bimaculata*, Heck., so that the genus _Pseudoxiphophorus_ can no longer be maintained.

9. *Gambusia terrabensis*. (Tab. XII. fig. 7.)


Depth of body 3½ to 3¾ in the length, length of head 3¼ to 3¾. Snout shorter than eye, the diameter of which is 3 to 3¼ in the length of head; interorbital width equal to the distance from posterior margin of pupil to free edge of operculum. 29 to 31 scales in a longitudinal series. Dorsal 12–14; origin equidistant from tip of snout and base of caudal or a little nearer the latter. Anal 9–10; origin below or a little in advance of the middle of dorsal. Pectoral nearly ⅛ the length of head. Caudal subtruncate. Least depth of caudal peduncle nearly ⅔ the length of head. Scales of the upper part of the body with dark edges; an interrupted dark lateral stripe; dorsal fin with a basal series of vertically expanded blackish spots and with a second series of smaller spots; anal dark at the base and also distally; posterior part of caudal dusky.

_Hab._ COSTA RICA, Rio Grande de Terraba, Pacific Slope (Pittier).

Six specimens, measuring up to 48 mm. in total length.

10. *Gambusia jonesii*. (Tab. XII. fig. 8.)


Very closely allied to *G. bimaculata*. Dorsal 11–13; origin of dorsal equidistant from tip of snout and middle or posterior part of caudal. Longest anal ray ⅑ to ⅓ the length of head. Scales with dark edges, especially superiorly; a dark spot on the operculum, another above the root of the pectoral, and a third on the upper part of the base of the caudal; dorsal with about 3 series of small dark spots; anal and caudal with an oblong dark spot on each interradial membrane.

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