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Sustainable Aquaculture for a Secure Future

Title: Evaluation of Larval Growth and Survival in Mexican Mojarra, *Cichlasoma urophthalmus*, and Bay Snook, *Petenia splendida*, Under Different Initial Stocking Densities

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Abstract: Two experiments were conducted to evaluate the initial stocking density in larvae of Bay snook, *Petenia splendida*, and Mexican mojarra, *Cichlasoma urophthalmus*, using a recirculation system. Five initial stocking densities (0.5, 1, 5, 10, and 20 larvae/L) were evaluated by triplicate for 45 d. Weight and total length (TL) were measured every 15 d, and fish production was calculated for each density. The larvae stocked at the lowest densities (0.5 and 1 larvae/L) presented the highest growth for both species: *C. urophthalmus* (0.78 g and 45-mm TL, and 0.76 g and 45-mm TL, respectively) and *P. splendida* (0.80 g and 52-mm TL, and 0.79 g and 49-mm TL, respectively). However, lowest fish production was recorded (35 and 69 fish per tank, respectively, for *C. urophthalmus* and 34 and 70 fish per tank, respectively, for *P. splendida*) compared with those at densities of 5, 10, and 20 larvae/L (336, 584, and 604 fish per tank, respectively, for *C. urophthalmus* and 341, 679, and 912 fish per tank, respectively, for *P. splendida*). The polynomial model for biomass production related to the stocking density shows that the optimum stocking densities for *C. urophthalmus* and *P. splendida* are 12 and 14 larvae/L, respectively.

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