

AII 09 The effect of different shade nets on the growth of Molly (*Poecillia latipinna*) in outdoor grow-out systems

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The study was aimed at determining the effect of different shade nets to control light intensity in outdoor grow-out systems on the growth and survival of a Black Lyre-tail Molly fish (*Poecillia latipinna*). Three outdoor cement grow-out systems were covered with different colored and/ or combination of nets one of the net such as Black shade (B), Green shade (G) and net combination (D) (Black + Green shade). Another tank setup was opened (Un-shaded/ control) to direct sunlight. Each system had three similar size ($2.4 \times 2.4 \times 0.45$ m) tanks. Tanks were stocked with 40 days old Black Lyre-tail Molly fry (length 2.94 ± 0.05 cm, weight 0.34 ± 0.02 g). Fish were fed on Iran feed and reared for 60 days. At the end of production period, fish were larger in G and U treatments compared to other two treatments; mean fork length of fish were 5.07 ± 0.40 cm, 5.01 ± 0.45 cm in G and U treatment respectively. The body weights of fishes were 2.20 ± 0.60 g, 2.01 ± 0.54 g in G and U treatments. Fish in tanks covered with the combination green and Black nets (D) were significantly smaller (4.01 ± 0.51 cm) compared to other treatments. Percentage survival of the fish in different treatments was significantly different. The higher % Tsurvival was observed for fish in the U, G and B net treatments while the lowest was observed in the D. These results show that the use of the Green shade net and Un-shaded systems in outdoor grow out systems gave the best conditions for Molly fish growth.

Keywords: grow-out system, shade net, molly fish