

Research Article



Utilization of mallow, *Malva parviflora*, leaves meal for feeding sailfin molly fish *Poecilia latipinna* (Lesueur, 1821)

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Abstract

The present study was carried out to investigate the effect of replacing some conventional feedstuffs (barley and yellow corn) with mallow, *Malva parviflora*, leaves meal on the growth and feeding efficiency of sailfin molly, *Poecilia latipinna*. Five experimental diets containing 0, 5, 10, 15, and 20% of mallow leaves meal M₀, M₅, M₁₀, M₁₅, and M₂₀ respectively, were prepared by replacing barley and yellow corn. A total of 90 fish (2.55±0.17 g) were used, distributed equally into fifteen plastic tanks at a rate of 6 fish per tank. The experiment lasted for 60 days, during which fish were fed the experimental diets to satiation twice daily. Results exhibited a gradual significant ($p<0.05$) increase in the feed intake FI ($r=0.935$) of the fishes with increasing dietary mallow leave replacement. There were no significant differences ($p>0.05$) in specific growth rate (SGR), feed conversion ratio (FCR), and protein efficiency ratio of sailfin molly fed control (M₀) diet compared to fish fed on M₅ and M₁₀ diets at the end of the experiment. Increasing the involvement of mallow in M₁₅ and M₂₀ diets led to inhibited SGR, FCR, and PER significantly ($p<0.05$) compared to the control diet. In conclusion, using mallow dried meal in the diets at a 10% level was proved to be more suitable with no noticeable adverse effects on the growth and feeding efficiency of experimental fish.

Keywords: Feedstuff, Fish nutrition, Growth, Mallow meal, Sailfin molly

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