

**LOW COST FISH FEED FOR REARING
ORNAMENTAL FISH, GUPPY (*Poecilia reticulata*)**

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Abstract

The study carried out to develop successful low cost aqua feed for guppy (*Poecilia reticulata*) Low cost two aqua feed types (Aqua feed I, Aqua feed II) were prepared by using locally available feed ingredients. A Commercial feed was used as a controller. A total of 1350 fry of guppy (*P. reticulata*) (average length of 2.76 ± 0.0252 cm and average weight $0.28\text{g} \pm 0.03$ g) were used to determine the performance of the two feed types. Complete randomized block design was used for the eight weeks feeding trial with three treatments which contained three replicates. Weights and lengths were measured bi-weekly. Growth performance and total cost of feed production parameters were assessed using the Feed Conversion Ratio (FCR), Specific Growth Rate (SGR) Survival rate, Weight gain, Condition Factor, Average daily growth (ADG). The trial groups reached a mean live length of 3.50 ± 0.0764 cm, 3.80 ± 0.0361 cm , 3.70 ± 0.0351 cm and mean live weight of 0.41 ± 0.06526 g, 0.62 ± 0.00541 g, 0.51 ± 0.07974 g at the end of the trial when fed with aqua feed I, aqua feed II and commercial feed respectively. Growth data indicates that the final length, weight ADG, SGR, weight gain values of aqua feed II was not significantly different with other groups ($p < 0.05$). The best (lowest) mean FCR was obtained from Aqua feed II ($p < 0.12$). Condition factor showed similar values. It seems that aqua feed II fed guppy fry showed higher performance than those fed with other two feeds.

Key words; Guppy, *Poecilia reticulata*, feed, growth, Aqua feed, Commercial feed