

Abstract

The aim of this study was to evaluate the effects rates Chironomidae larvae than concentrate feed on the growth performance, feed efficiency, maturation and survival rate in rosy barb (*Puntius conchonius*) during 16 weeks. The numbers of 180 rosy barb Thumbnail fish with weight average of 0.03 ± 0.004 g in four experimental groups were randomly divided in 12 aquarium (four treatment and three replicate) with density of 15 fish per aquarium with equal environmental conditions. After two week adaptation, fish were fed with four treatments included, treatment%100 concentrate feed (Control), %30 Chironomidae larvae and%70 concentrate feed, %50 Chironomidae larvae and%50 concentrate feed and finally%70 Chironomidae larvae and%30 concentrate feed/kg diet. The feeding rate was%3-5 of biomass weight and thrice per day. The results showed that whatever the percentage of Chironomidae larvae than concentrate feed was more in the diet rosy barb (*Puntius conchonius*). The growth rate and feed efficiency and maturation rate improved significantly ($p < 0.05$). Results showed although observed in treatment%30 concentrate feed and%70 Chironomidae larvae more fatality than other treatments, however growth performance and nutrition performance were significantly higher than other treatments and in diet fish cause decrease feed conversion ratio and also reduced the production costs and can lead to more profitability.

Key words: Chironomids larvae, Artificial food, *Puntius conchonius*, Growth.



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**Effect of Chironomids larvae and artificial
food feeding on the growth performance,
survival and sexual maturation
of *Puntius conchonius***

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