

# INFLUENCE OF FEEDING STRATEGY ON SURVIVAL RATE OF CATLA POST LARVAE

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Among exotic fish species, catla (*Catla catla*) has given significant contribution to fresh water fish catch in Sri Lanka. However, catla shows low survival rate in its post larval (PL) stage at Udawalawa Carp Breeding Center, leading to interruption in the continuous supply of fingerlings. Therefore, this study was conducted to investigate the effect of different feeding strategies of *Artemia* on survival rate and growth performance of catla PL. The experiment was conducted in a Completely Randomized Design (CRD) and PL were fed with four feeding strategies namely, feeding with commercial feed (Prima 0) and soya milk (control) and feeding with *Artemia* for one day (T2), two days (T3) and three days (T4), each with three replicates (30000 PL per replicate). After *Artemia* feeding, Prima 0 and soya milk were given until nine days. Body length, body weight and number of survived post larvae were recorded at the end of the experiment. Water quality parameters were recorded at three-day intervals until nine days. Data were analyzed using Analysis of Variance (ANOVA) in SAS. Water quality parameters were not significantly different ( $p > 0.05$ ) among the treatments. Survival rate, specific growth rate and body length gain of PL were significantly different ( $p < 0.05$ ) with different feeding strategies and the highest survival rate and growth performance were observed in PL fed with *Artemia* for three days. Further, survival rate and growth performance of catla PL were significantly higher ( $p < 0.05$ ) when they were fed with *Artemia* for two days or one day, compared to the PL fed with commercial feeds. Therefore, it can be concluded that survival rate can be improved with *Artemia* feeding and three days feeding of *Artemia* is the most suitable for feeding catla PL.

**Keywords:** *Artemia*, *Catla catla*, Feeding strategy, Post larvae, Survival rate