

**PRELIMINARY STUDY ON EFFECT OF FEEDING
FREQUENCY ON GROWTH RATE AND SURVIVAL
OF CATLA (*Catla catla*) POST LARVAE**

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By Dasanayake. P.D.M.V.D.K

**Panane Dasanayake Mudiyansele Vindya Dakshini Kumari
Dasanayake**

**Aquatic Resources Technology Degree Programme
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
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ABSTRACT

The effect of feeding frequency on growth and survival rate of *Catla catla* post larvae was investigated in the experiment over a period of 7 weeks. The trial performed using 1500 catla post larvae fish with a mean weight of 0.0007 g and mean total length of 0.7 cm was sampled, counted and divided equally to 15 glass tanks (50 l). The five treatments (namely, daily feeding frequencies of one - F1, two- F2 and three - F3, four- F4) F0 use as no feed (PL depended on natural food), the control group. Three replicates were used for each treatment. Mean live weights of the fish in trial groups reached 0.007 ± 0.0003 g, 0.012 ± 0.002 g, 0.095 ± 0.0035 g, 0.099 ± 0.0023 and 0.101 ± 0.001 g at the end of the trial in groups F0, F1, F2, F3 and F4, respectively. Mean total lengths of the fish in trial groups reached 1.3 ± 0.1 cm, 1.57 ± 0.15 cm, 2 ± 0.1 cm, 2.37 ± 0.057 cm and 2.53 ± 0.11 cm at the end of the trial in groups F0, F1, F2, F3 and F4, respectively. There was a significant difference ($P < 0.05$) in final length and weight among these feeding frequencies. For weight values, feeding frequency F0 (no feed) had the lowest final mean weight while feeding frequency F4 (four times daily) had the highest mean weight value. The highest length increment was observed in feeding frequency F4 and the lowest value was observed in frequency F0. Similarly, Growth data indicated that, the final live weight and SGR values of group F4, F3, F2 were significantly higher than those of the other groups ($P < 0.01$). The best (highest) mean SGR, Body weight gain, body length gain were obtained from four times daily feeding (F4) ($P < 0.05$). For all growth parameters ANOVA, revealed a significant difference ($P < 0.05$) among the feeding frequencies, but non ($P > 0.05$) specifically, between feeding frequencies F3 and F4 (i.e. between thrice and four times daily feeding). Significant difference ($P < 0.05$) could be observed in survival rates among treatments. The highest survival rate can be observed in F3 (74.6 ± 7.6). It was concluded that feeding frequency has a significant effect on growth and survival rate of the catla post larvae. Feeding of post larvae, *Catla catla* more than once a day increased growth performance and survival rate and the specific growth rate was better in four times and thrice daily feeding than feeding the fish once or more than twice daily. Thrice a day feeding frequency is the best feeding frequency in both aspects of growth performances and survival.

Key words: Feeding frequency, Growth performance, Survival, Specific growth rate, Post larvae, times per day.