EFFECT OF FEEDING ROTIFER AND METHIONINE ENRICHED ROTIFER ON SURVIVAL AND GROWTH PERFORMANCES OF Catla catla POSTLARVAE

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Survival of Catla catla (C.catla) early larval stages seems to be extremely poor in the pond culture. During the early larval stage, it is required to provide a high protein level of around 45%, however commercial feed contains only 40% of protein. In this study, the effect of live feeds on the survival and growth of C. catla postlarvae was evaluated using three treatments i.e. commercial fish feeds (control, T1), commercial fish feed with rotifer supplement (T2) and commercial fish feed with methionine enriched rotifer supplement (T3). Feeding experiments were carried out in triplicates and 100 L capacity cement tanks were used as experimental tanks for the nursery rearing period of 27 days. Specific growth rate (SGR), feed conversion ratio (FCR), length gain, weight gain and survival rate were analysed at the end of the feeding trial. Growth parameters of the fish larvae fed with live feeds were significantly (p<0.05) higher compared to the control. Moreover, FCR of the postlarvae fed with live feeds was also significantly lower (p<0.05) compared to the control. Survival rates of fish fed with live feeds were significantly (p<0.05) higher compared to the control diet. Water quality parameters remained static throughout the experimental period. However, results of the cost-beneficial analysis revealed that the cost factor was significantly higher in T3. Therefore, in the view of growth, survival and cost factor, T2 would be the best treatment to acquire a higher survival rate and growth performance.

Keywords: Feed conversion ratio, Live feeds, Methionine, Specific growth rate, Water quality