

## **Comparison of early larval growth and survival rate of the Snow trout (*Shizothorax zarudnyi*) feeding by rotifer, decapsulated artemia cyst and artificial food**

The Purpose of this study was survey effect of food type on growth and survival rate of the Snow trout (*Shizothorax zarudnyi*) on 6 weeks. For this objective early larvae of Snow trout with average weight  $4\pm 0.21$  mg and length  $9\pm 0.26$  mm fed in complete random model in 4 treatment groups (starter food of common carp, rotifer, decapsulated cyst of artemia and pond) with triplicate in californian trough and ponds. Results indicated highest body weight gain ( $2046.83\pm 75$  mg), specific growth rate ( $\%17.72\pm 0.09$ ), average daily gain ( $47.58\pm 2.03$  mg), final weight gain ( $2050\pm 87.18$  mg) and final length ( $60\pm 2.0$  mm) observed in pond treatment group that significantly differences with other treatments ( $p>0.05$ ). highest survival rate ( $\%75.7$ ) observed in rotifer treatment group that significantly differences with other treatments ( $p>0.05$ ). Also on the base of chemical analysis of carcass fry in end culture period, highest protein ( $\%16.22\pm 0.17$ ) and lipid ( $\%5.28\pm 0.04$ ) observed in cyst and pond treatment groups respectively, that significantly differences with other treatments ( $p>0.05$ ). Finds of this study indicated that optimum growth indexes of the Snow trout observed in pond treatment group and highest survival rate obtained in rotifer treatment group.

**Key words:** Snow trout (*Schizothorax zarudnyi*), growth, artificial food, artemia cyst, survival rate.



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