EFFECTS OF ORGANIC FERTILIZER AND SUPPLEMENTARY FEEDS ON GROWTH PERFORMANCE OF SILVER CARP (*HYPOPHTHALMICHTHYS MOLITRIX*) AND BATA (*CIRRHINUS REBA*) FRY IN NURSERY PONDS

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ABSTRACT

Experiment was conducted to evaluate the effects of an organic fertilizer and supplementary feeds on the growth performance of silver carp*(Hypophthalmichthysmolitrix)* and bata (*Cirrhinusreba)* fry for a period of 90 days.It was carried out under 3 (three)treatmentswere consisted of mustard oil cake (T_1), cow dung (T_2) and rice bran + mustard oil cake (T_3) with each three replications. The fries were initially fed at the rate of 30% of body weight and it was reduced to 15% gradually. The rate of cow dung application was 988 kg/ha. During the experimental period, the water parameters werein suitable range.The average weight gain of silver carp and bata in T_3 (4.69±0.17 g and 2.05±0.08 g) was significantly ($p<0.05$) higher than those of T_1 (3.00±0.16g and 1.81±0.02 g) and T_2 (2.32±0.09 g and 1.19±0.13 g). The survival rate was found significant 59.12, 55.05 and 63.33 % for Silver carp and 52.15, 51.10 and 55.18 % for bata in T_1, T_2 and T_3respectively. The SGR of silver carp and bata in T_3 (2.55±0.43%bwd^{-1} and 2.29±0.08%bwd^{-1}) was significantly ($p<0.05$) higher than those of T_1 (2.32±0.46%bwd^{-1} and 1.95±0.47 %bwd^{-1}) and T_2 (1.91±0.40 %bwd^{-1} and 1.72±0.28 %bwd^{-1}). Among the treatments, significantly highest production of Silver carp and Bata(2276.01±85.95 and1855.38±35.95 kg/ha)was achieved from T_3 followed by T_1 (2116±6.72 and 1745.98±12.31 kg/ha) and T_2 (2058.48±26.68 and 1432.82±16.82 kg/ha).

KEYWORDS: Fertilizer, Supplementary Feeds, Silver Carp, Bata, Fry, Nursery Ponds