

EFFECT OF WATER TEMPERATURE ON THE GROWTH AND FEED CONVERSION RATIO IN *LABEO DYOCHAILUS* FINGERLING

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ABSTRACT

Present study was conducted to explore the effect of different water temperature ranges on growth performance, total length and feed conversion ratio of *Labeo dyocheilus*. For that the three temperature ranges 16-18°C, 18-20°C and 20-22°C were selected and maintained in laboratory conditions in glass aquaria. Each experiment repeated three times to minimise experimental error for each water temperature range. The feed was offered at the rate of 4% of body weight of the fish one time in a day. *Labeo dyocheilus* attained significantly higher body weight (12.260 ± 0.256 g) and total length (11.898 ± 0.073 cm) under water temperature range of 20-22°C. This was followed by 11.813 ± 0.203 g body weight and 11.789 ± 0.110 cm total lengths under water temperature range of 18-20°C and 11.436 ± 0.162 g and 10.325 ± 0.178 cm for body weight and total length respectively for the water temperature range of 16-18°C. The fish reared in water having temperature between 20-22°C showed the best FCR value (2.324 ± 0.167), followed by those maintained in 18-20°C (2.760 ± 0.132) and 16-18°C (3.018 ± 0.173). It was concluded that water temperature ranging from 20-22°C seems to be the most effective for rearing of *Labeo dyocheilus*.

Key Words: Water temperature, Growth, Feed conversion ratio, *Labeo dyocheilus*.

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