

Abstract

In this study, the effect of different levels of protein in artificial diets on bioenergetic indexes of Snow trout juveniles (*Shizothorax zarudnyi*) evaluated in 8 weeks. Eighty four Snow trout juveniles with average weight 14.71 ± 1.05 g and length 13.5 ± 0.8 cm fed with isocarbohydrate and isolipidic diets and varying levels of protein ($D_1 = 25\%$, $D_2 = 30\%$, $D_3 = 35\%$ and $D_4 = 40\%$). Seven advanced fry were stocked into each 50-l aquaria with triplicate in fore treatments and fed three daily at 5% body weight rate. Results indicated highest body weight gain (7.33 ± 1.35), specific growth rate (0.68 ± 0.11), average daily gain (0.12 ± 0.02) observed in D_1 treatment group that fed by diet containing 25% protein that no significantly difference with other treatments ($p > 0.05$). highest protein efficiency ratio (0.11 ± 0.02) and Apparent net protein utilization (0.03 ± 0.00) observed in D_1 treatment group that significantly difference with other treatments. Also results of body composition of Snow trout juveniles (*Shizothorax zarudnyi*) indicated except in the moisture rate that it has been affected significantly by different levels of dietary protein ($p < 0.05$). Finds of this study indicated that optimum protein level in diet for optimal growth and nutrition indexes in Snow trout juveniles is 25% .

Key words: Nutrition, Feed conversion ratio, Protein Dietary, Snow trout (*Shizothorax zarudnyi*).



Zabol University
Graduate School
Faculty of Natural resources
Department of Fisheries

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Subject:

**Effect of various levels of dietary protein
on growth performance and body
composition of Snow trout juveniles
(*Shizothorax zarudnyi*)**

Supervisors:

Mostafa Ghaffari (Ph.D)
Ahmad Gharaei (Ph.D)

Advisor:

Abdolali Rahdari (M.Sc)

By:

Rahimeh Khammar

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