

The effect of dietary Behsam prebiotic on growth and feeding parameters of Caspian roach (*Rutilus rutilus caspicus*) fingerling

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Abstract

The aim of this study was conducted to evaluation of the effects of Behsam commercial prebiotic on the growth performance and feeding efficiency in Caspian roach (*Rutilus rutilus caspicus*) fingerling for 30 days. For this purpose, 360 fish fingerling with the mean weight of 4 g in a completely randomized design with four treatments which contain triplicates. Three levels of Behsam (0.4, 0.8 and 1.2 g/kg of ration) were added to the basic diet. the control that was devoid of any addetive. During the experimental period, fish were fed to 5% of biomass and three times a day. At the end of the experiment, the highest final weight, final length,

specific growth rate, Velocity of growth of body weight, food efficiency ratio, protein efficiency ratio, lipid efficiency ratio and the lowest feed conversion ratio were recorded in the treatment containing 1.2 g prebiotic per kg of diet($p < 0.05$). But, There were no significant differences in Velocity of growth of body length of fish fed with the experimental and control diets ($p > 0.05$). Finally, the present results suggest that diet containing 1.2 g/kg prebiotic of Behsam could improve growth and feed performances of Caspian roach.

Keywords: Prebiotic, Behsam, Caspian roach, Feeding, Growth