

Effect of different levels of NutriYeast[®] hydrolysis yeast on growth performance, blood parameters and stress parameters and survival rate in rainbow trout (*Onchorhynchus mykiss*)

Sadeq Karimzadeh^{1*}, Abbas Esmaeili Mulla², Mohammad Nazeri³, Majid Rezaei Mayani⁴ and Mohsen Nikkhah⁵

1-Rudaki Mazandaran Higher Education Institut

2,3,4-Fisheries Department in Behshahr, Neka and Galoogah

5-Kimia-Zim Knowledge -base Companies

* Corresponding Author e-mail: Journa

Abstract

The aim of this study was to investigate the effect of different levels of NutriYeast[®] hydrolysis yeast on growth, boold parameters and stress parameters and survival rate in rainbow trout. In a completely randomized design 600 fish were allocated to 4 treatments with 3 replicates and 200 fish per replicate. Hydrolysis yeast will be added to the pond at the rates of 0, 1, 1/5 and 2 kg/ton of diet. The results showed that in treatment received 1/5 and 2 kg of hydrolysis yeast /ton had significantly higher body weight, FCR and SGR better than the other groups ($P < 0.05$).

The survival rate in fish with 1 and 2 kg of hydrolysis yeast /ton significantly increased ($P < 0.05$). Also supplementation 2 kg of hydrolysis yeast/ton to diet increased IgM and cortisol counts in intestine, compared to the control treatment. **Keywords:** hydrolysis yeast, growth performance, rainbow trout, survival, blood parameters