Survey of Some Blood Plasma Biochemical Factors of Fingerling Rainbow Trout during Short-term Starvation Periods

Azodi, Maryam¹; Ebrahimi, Eisa^{2*}; Motaghi, Ebrahim³; Morshedi, Vahid⁴

- 1- Graduated M.Sc., Persian Gulf Research and Study Centre, Persian Gulf University, Bushehr. Iran. Email: mary azodi@yahoo.com
- 2- Associate professor, Department of Fisheries, Faculty of Natural Resources, Isfahan University of Technology, Isfahan, Iran. Email: eebrahimi99@yahoo.com
- 3- Graduated M.Sc., Department of Fisheries, Faculty of Natural Resources, Isfahan University of Technology, Isfahan, Iran. Email: ebrahimmotaghi@yahoo.com
- 4- PhD student, Member of Young Researchers Club of Islamic Azad University, Iran. Email: v.morshedi@gmail.com

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Abstract

In this study, the effect of short-terms starvation on glucose, triglyceride, protein and cholesterol levels of rainbow trout was investigated. After 3 weeks acclimation to experimental conditions, 180 juvenile rainbow trout with the average initial weight of 39±2.73 (mean ± SE) were randomly distributed in four treatments with three replications. Controls (C) were fed to two times daily to apparent satiation. Other treatments experienced 5 (D1), 7 (D2) and 10 (D3) days starvation, respectively. Blood samples were taken from each experimental treatment at the end of the starvation periods. Any significant different between control and starvation treatments (P>0.05) was not observed in any parameters. Overall, the present study showed that during the occurrence of unpredictable stress, starvation periods, considering there are not any significant effects on biochemical blood factors, could be an appropriate method for reducing metabolism.

Keywords: Oncorhynchus mykiss, Blood metabolites, Food deprivation, Glucose.