





Evaluation of some haematological and immunological parameters of benni fish (*Mesopotamichthys sharpeyi*) fed with different levels of onion powder (*Allium cepa*)

Maniat M.^{1,3*}; Ghotbeddin N.²; Rajabzadeh-Ghatrami E.³

- 1- Department of Fisheries, Khouzestan Science and Research Branch, Islamic Azad University, Ahvaz, Iran
- 2- Department of Fisheries, Ahvaz, Islamic Azad University, Ahvaz, Iran
- 3- Department of Fisheries, Khorramshahr University of Marine Science and Technology, Khorramshahr, Iran

*Corresponding autor's Email: Maniatmilad@gmail.com

Abstract

This study aimed to investigate the effects of different levels of onion powder on some haematological and immunological parameters of benni fish. For this purpose, onion powder in 4 levels of 0.5%, 1%, 2% and 3% was added to the diet and the diet without onion powder was used to feed the control group. Three repetitions were assigned for each experimental treatment. After eight weeks of feeding the fish, sampling was performed Haematological parameters including: Hemoglobin and Hematocrit(Ht), Red Blood Cell Count (RBC), MCV, MCH, MCHC and immunological parameters including: lysozyme, C3 and C4 were performed according to standard methods. The results of this study showed that the use of onion powder in the diet improves the Haematological parameters of fish compared to the control group, immunological parameters including lysozyme, C3 and C4 were also significantly increased in treatments containing onion powder relative to the control group, it is based on the results of this study, adding onion powder to food rations for fish benni in order to improve the haematological and immunological parameters in these fish, it is recommended.

Keywords: Dietary Supplements, Medicinal Plants, Immunity, Onion, Benni fish