

The effect of different level of dietary herbal on some of the hematological, biochemical and immune parameters Of Rainbow trout(*Oncorhynchus mykiss*)

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Abstract

The main goal of the current study is to evaluate the impact of dietary herbal On Some of the Hematological, Biochemical and Immune Parameters of Rainbow trout (*Oncorhynchus mykiss*). This project was conducted at Caspian Sea research institute of ecology from 2017 to 2018. Totally 180 rainbow trout with an average weight of 28.8g were randomly distributed to 9 fiberglass tanks with area and depth of 1m² and of 0.6 m. The experiment lasted for seven weeks and the rainbow trout were fed by three different diets as follows: 1. Commercial pellet contained no herbal additive (control diet) 2. Commercial pellet contained 2% dietary herbal and 3. Commercial pellet contained 4% dietary herbal. At the end of the trial, blood samples were collected to determine some hematological, biochemical and immunity parameters in different groups and compared to one another. Results showed that 4% dietary herbal can enhance the non specific immune system of *O.mykiss*. Thus, addition of dietary herbal at 4% is recommended in improve immune stimulants in rainbow trout.

Keywords: *Oncorhynchus mykiss*, Dietary herbal, Hematological, Biochemical, Immune parameters