عنوان مقاله:

Effects of mushroom (Lentinula edodes) extract on growth performance, immune response and hemato-biochemical (parameters of great sturgeon juvenile (Huso huso Linnaeus, 1754

محل انتشار:

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خلاصه مقاله:

This research was carried out to survey the ffects of dietary of Lentinula edodes mushroom extract as a feed supplement on growth performance and survival rate, immune response, hematological and biochemical characteristics of beluga juvenile (Huso huso). Four hundred and fifty fish after acclimation with average weight of 40.45 ± 5.72 g were fed in a wholly randomized design in 5 treatments (basic diet containing 0% (control), 00.5%, 1%, 1.5% and 2% L. edodes mushroom extract) and 3 replicates. During the experiment (56 days), a total of eight samples were taken in 8 weeks. The mean of data were analyzed using one-way ANOVA and Duncanchr('39')s post hoc test at 5% level. Results indicated that administration of 2% of mushroom extract for 8 weeks improved weight gain, specific growth rate and feed conversion ratio of beluga (P<0.05). Among the investigated hematological indices, Supplementing 2% L. edodes resulted in increased levels of the erythrocytes (RBC), hemoglobin (Hb), haematocrit (Hct) in comparison with the control group (P<0.05). At the end of the assay, there were significant decreased in some of the biochemical parameters (Cholesterol, alkaline phosphatase (ALP) and alanine aminotransferase (ALT)) in the treatments containing mashroom extract (P <0.05). Also the activity of serum lysozyme activity and superoxide dismutase (SOD) Among immune parameters studied were increased in group of 2% of L. edodes compared to other treatments (P <0.05). These results indicated that the addition of supplemental mashroom extracts, especially at 2% level to the beluga juveniles diet, were improved the growth performance, some hematological and biochemical parameters and immune response of beluga juvenile.

کلمات کلیدی:

Hemato-immunological parameters, growth, Huso huso, Lentinula edodes (mushroom) extract