

Effect of dietary supplementation with three commercial prebiotics on some biochemical factors of blood serum in Beluga (*Huso huso*) Cultured in pen

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Abstract

This study was conducted to evaluate the comparison of effects of dietary A-Max, A-Max Ultra and Celmanax powdery prebiotics on some of the biochemical factors of beluga juvenile. For this purpose, 120 beluga juvenile with the mean weight of 4-5 kg were prepared and acclimatized to the new condition for 14 days and then the fish randomly divided into four groups. One group selected as a control and fed with a commercial diet without any supplementation. Other groups received the commercial supplemented diet with containing A-Max, A-Max Ultra and Celmanax powdery at the concentration of 1 g/kg, respectively. At the end of the trial, Blood sampling was performed in caudal vein of 36 apparently healthy fish and serum was separated with centrifuge machine. The results showed that amount of glucose, Albumin and uric acid statistically ($p < 0.05$) were higher at the fish fed diet supplemented with Celmanax powdery. Also, the amounts of total protein and globulin were higher than at the fish fed A-Max Ultra prebiotic compared with other treatments and control group ($p < 0.05$).

Keywords: Prebiotic, Beluga, A-Max, A-Ma Ultra, Celmanax powdery, Immune indices.