

## Effects of Various Levels of Garlic Essence on Growth Performance, Feeding Rate and Chemical Body Composition in Beluga (*Huso huso*) Juveniles

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### Abstract

The effect of garlic essential oil (garlic essence) as an growth promoter, on growth, feeding indices and chemical body composition were investigated in juveniles of reared beluga (*Huso huso*). Six diets (one diet without garlic essential oil and antibiotic as in control diet, one diet with 30 mg/kg Oxytetracycline antibiotic and four diets with 50, 100, 150 and 200 mg/kg garlic essence) were prepared. Juveniles of reared beluga with averaged weight  $24 \pm 1.50$  g were fed with these diets for 8 weeks. The Final Weight (FW) and percentage increase in Body Weight (BWI), Protein Efficiency Ratio (PER), Protein Production Ratio (PPR) and Protein level of Chemical body composition wear significantly higher in diet with 150 mg/kg garlic essences while, the Food Conversion Ratio (FCR) was significantly lower. This treatment was significantly ( $P < 0.05$ ) better than other treatments. In conclusion, adding 150mg/kg garlic essential oil to beluga juveniles diet, is proposed to improve Growth Performance, Feeding indices and Chemical body composition.

**Keywords:** Beluga, Growth promoter, Protein Production, Protein Efficiency Ratio, Body composition

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