عنوان مقاله:

The effects of Pediococcus acidilactici as a probiotic on growth performance and survival rate of great sturgeon, Huso huso (Linnaeus, ۱۷۵۸)

محل انتشار:

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خلاصه مقاله:

This study was accomplished to investigate the effect of Artemia urmiana nauplii enriched with Pediococcus acidilactici as probiotic on growth performance and survival rate of great sturgeon, Huso huso. Artemia nauplii were enriched with P. acidilactici at a final concentration of ۱۰۱۰ CFU mL-۱ in three time dependent treatments as ۳ h (T۳), ۶ h (T۶), ۹ h (T۹), and one non-enriched Artemia as the control treatment. All treatments were considered in triplicates. Since the nauplii enriched for ۹ hours (T۹) had the most significant CFU/g compared to other treatments (p<۰.۰۵), juvenile beluga at the stage of first feeding with the mean body weight of ۴۸ ± ۱ mg (mean ± SE) were fed with nauplii enriched for ۹ hours (T۹) and the control diet, with three tanks assigned to each diet. No significant differences were observed in final weight, final length, condition factor, specific growth rate, average daily growth, and survival rate for fish fed with T۹ compared to those in the control group (p>۰.۰۵). On the other hand, a decreasing trend was recorded in food conversion ratio (FCR) and final biomass changed significantly for T۹ in comparison with that recorded in the control group (p<۰.۰۵). The results indicated that P. acidilactici had a positive effect on growth and survival of beluga larvae, and a different time of enrichment had a significant effect on LAB effect. The best time of enrichment for beluga larvae was found to be ۹ hours.

کلمات کلیدی:

Artemia nauplii, Enrichment, Probiotic, Lactic acid bacteria, Huso huso