The study of hematological parameters of common carp (Cyprinus carpio L.) juvenile during transportation using probiotic Bacilli and Celmanax liquid yeast by supplementation in diet

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Abstract

The main concern in fish transportation is about minimizing stress during transportation

This study aims to find the changesin blood factor in 150 common Carp juveniles with (60.50±1.50 g) average weight in 12 h transportation. it was performed, five treatments and three replications for each treatment including control, Celmanax liquid yeast, probiotic

bacilli(*Bacillus licheniformis*, *B. subtilis*, *B. polymyxa*, *B. laterosporus* and *B. circulans*) , 0. 5 g per liter salinity + Celmanax, 0. 5 g per liter salinity + probiotic bacilli treatment. were fed by diet supplemented with Celmanax perbiotic at the level of 1 ml per kg, and by diet supplemented with probiotic bacilli at concentrations of 1×10^6 CFU per 100 g food. During 90 days. the fishes were introduced to plastic bags in stocking density of 1 kg/m^3. . There were no significant differences in values hematocrite and Hb levels in different treatments. ($p>0.05$). in this study, the usage of Celmanax to reduced transportation .
Keywords: Celmanax liquid yeast, probiotic Bacilli, hematological parameters, transportation