



Effect of manan oligosaccharide on the growth and survival performance and resistance to salt stress in common carp (*Cyprinus carpio*)

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Abstract

This nutritional study was conducted to evaluate the effect of manan oligosaccharide (Mos) on survival, common growth of common carp (*cyprinus carpio*). After two weeks of adaptation to breeding conditions, nursery was fed to diets containing 1% and 2% mannan oligosaccharides. This research was carried out for 60 days using completely randomized design in 3 treatments and 3 replications with 20 fish per replicate with an average weight of 13.2 ± 0.5 in 300 liters. At the end of breeding and feeding, there was no significant difference in survival of infants ($p > 0.05$). According to the results obtained in some growth parameters such as body weight gain, body weight gain, specific growth rate and mean daily growth, there was a significant difference ($P < 0.05$). There were no significant differences between the tested levels on nutritional criteria such as dietary conversion ratio and protein efficiency ratio ($P > 0.05$). Difference meaning There was no correlation between salinity stress ($p > 0.05$). According to the results, 2% manan oligosaccharide prebiotic treatment of oligosaccharide in diet was based on feed conversion factors, body weight gain, specific growth rate, daily average weight and Long-term growth rate and weight growth rate have a better effect. Therefore, it can be concluded that the addition of mannan oligosaccharide prebiotic in the diet with designated levels can not be effective as a stimulant for the growth of common carp, therefore, it is necessary at higher levels to be investigated.

Key words: prebiotic, manan oligosaccharide, growth, common carp