

Abdel-Aziz, M.F., Abdel-Tawwab, Y.A., Sadek, M.F. and Yones, A.M. (2021). Evaluation of use effective microorganisms (EM) with different feeding strategies on growth performance, body chemical composition and economic efficiency of monosex Nile tilapia *Oreochromis niloticus* juveniles. Aquatic Living Resources, 34, 21.

Abstract

A factorial trial was conducted to detect the effect of different feeding strategies of supplementation of effective microorganisms (EM) liquid on the growth performance, feed utilization, body chemical composition and economic efficiency of monosex Nile tilapia (*Oreochromis niloticus*) juveniles. Three experimental treatments were formulated a basal diet without any addition of EM (control; A), a diet supplemented with 2% EM (B), and a diet supplemented with 4% EM (C). All treatments were offered to fish through two different strategies of feeding the meal: 2/3 in the morning and 1/3 in the afternoon or 1/3 in the morning and 2/3 in the afternoon. Each treatment was replicated three times. Juveniles Nile tilapia with an average initial body weight of 3.85 ± 0.22 g (\pm SE) were randomly stocked at a rate of 90 juveniles per 1.5 m³ tank. Fish growth performance and feed utilization significantly ($P \leq 0.05$) increased with increasing EM supplementation and was positively affected by different feeding strategies. Moreover, the economic evaluation showed that there were more benefits by when using the 4% EM diet and feeding 2/3 of daily meal in the morning.

Keywords: Nile tilapia / effective microorganism / feeding strategies / growth performance