

Sadek, M. F. A. (2019). Effect of rocket seeds (*Eruca sativa*) powder on productive performance on Nile tilapia. Egyptian journal of applied sciences, 34, 12.

ABSTRACT

The present study were conducted to evaluate the impact of 0, 0.5, 1 and 1.5% dietary grade levels of Rocket seeds (*Eruca sativa*) on the productive performance, feed utilization, Fish body composition of Nile tilapia, *Oreochromis niloticus*. A total of 1680 Nile tilapia *O. niloticus* was randomly distributed into four treatments with an average initial body weight of 3.51 ± 0.153 g. T0 (control without additives), T1 (0.5 % rocket seed powder), T2 (1.0 % rocket seed powder) and T3 (1.5 % rocket seed powder). The trail continued for 200 days in 12 hapa suspended in earthen ponds. The results revealed that T3 and T2 were the best treatments which were responsible for the significantly ($P \leq 0.05$) increased growth performance, feed utilization and economic evaluation among all treatments. The results of the body chemical composition indicate that there are significant differences among treatments, except ash, increased levels of rocket seed significantly ($p \leq 0.05$) decreased of ether extract (EE) and increased crude protein (CP) content in the whole fish body, the diet T0 recorded the lowest significant ($p \leq 0.05$) values of CP and the highest significant values of EE. It could be recommended that the useful dietary supplementation of 1.5% rocket (*E. sativa*) seed powder for Nile tilapia, *O. niloticus* monosex fingerlings. This level achieved the best growth performance, feed utilization and economical evaluation.

Key words: Nile tilapia, rocket seed powder, growth performance, feed utilization and economic evaluation.