THE INFLUENCE OF Moringa Peregrine Leaves as a Feed Additive on Growth Performance and Carcass Trait in Rabbit Diets

By

Said E.M. El-Sheikh

Department of Animal and Poultry Nutrition, Desert Research Center, Mataria, Cairo, Egypt.

saidelsheikh@yahoo.co

Abstract: A total of 36 California rabbits weaned at five weeks of age were used to study the influence of Moringa peregrine leaves as a feed additive on growth performance and carcass trait in rabbit diets. Rabbits were divided equally into three treatment groups. Each group was represented by four replicates of three rabbits each. The experimental period extended from 5 to 13 weeks of age. The growing rabbits were fed on diets contained (0.00, 1.00 and 3 % Moringa leave meal). The experimental diets were formulated to be iso-nitrogenous (16.00 % CP) and iso-caloric (2500 kcal DE/ kg diet).

The chemical analysis of Moringa peregrine leaves meal (MPLM) showed that it had good nutritive value as it contained, on dry mater basis, 7.13 % moisture, 92.87 % DM, 89.86 % OM, 28.42 % CP, 11.02 % CF, 3.91 % EE, 39.12 % NFE, 10.12 % ash, it also contained 3524 GE kcal/kg DM.

The highest (P ≤ 0.01) final live body weight and total body weight gain values were recorded with rabbits fed diet contained 3% MPLM (2233.00g and 1599.3g) followed by those fed diet contained 1% MPLM (1201.0g and 1494.3g), respectively compared with rabbits fed control diet (1989.0g and 1379.0g).

Fed intake was not significantly affected by MPLM supplementation. Rabbit fed diet contained 3% MPLM recorded the best (P ≤ 0.05) feed conversion value (3.25 g feed/g gain) compared with the other experimental groups.

Rabbits fed diet contained 1 or 3 % MPLM showed the highest (P ≤ 0.05) empty carcass weight (1257.0 and 1290.7g), respectively compared with rabbits fed control diet (1159.7). Moreover, Rabbit fed diet contained 3% MPLM recorded the highest (P ≤ 0.05) abdominal fat value (1.12 %) compared with the other experimental groups. However the other organs were not significantly affected by MPLM supplementation.

The best economical efficiency and relative economical efficiency values had been recorded for rabbit fed diet contained 3 % MPLM (2.6 and 128%), followed by rabbit fed diet contained 1% (2.4 and 117%), respectively compared with rabbits fed control diet (2.0 and 100%).