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“Filling gaps and removing traps
for sustainable resource management”

Haematological and Serum Biochemical Characteristics of Weaned Rabbits Fed Plantain Leaf and Concentrate

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Abstract

An experiment was undertaken with 30 mixed bred rabbits (6–8 weeks), with initial weight of 0.7 ± 0.02 kg, to assess their haematological and serum biochemical response when fed plantain leaf and concentrate. The plantain leaf was offered at levels of 0 g, 25 g, 50 g, 75 g and 100 g in treatment 1 (control), 2, 3, 4 and 5 respectively, with six rabbits per treatment and for an eight week feeding trial. Control had concentrate alone. After the feeding trial, blood samples were collected from each rabbit through ear vein using a sterilized disposable syringe. The packed cell volume, haemoglobin, red blood cell, mean cell volume, mean cell haemoglobin, mean cell haemoglobin concentration, monocytes and Eosinophils were statistically similar ($p > 0.05$) amongst the five treatments, except total white blood cell, neutrophils, leukocyte counts and platelet counts which were significantly ($p < 0.05$) different. The alanine amino transferase, aspartate amino transferase, alkaline phosphatase activities and creatinine levels of rabbits fed plantain leaf were not significantly different ($p > 0.05$) from those fed the control treatment. The values for the haematological and sera of the animals obtained in this study were within the normal range of healthy rabbits. The mean dry matter intake of rabbits were 55.91 g, 50.38 g, 72.53 g, 92.80 g and 113.10 g per day while their mean weight gain were 12.14 g, 4.11 g, 7.14 g, 6.25 g and 11.96 g per day for treatments 1, 2, 3, 4 and 5 respectively. This invariably suggests that feeding plantain leaf up to 100 g in rabbit diet per day will not illicit any deleterious effect on the blood profile of weaned rabbits and could go a long way in assisting to filling the gap in animal protein shortage.

Keywords: Electrolytes, haematology, plantain leaf, rabbits, serum biochemistry