EFFECT OF GRADED DIETARY LEVELS OF GARCINIA KOLA SEED MEAL ON PERFORMANCE, INTESTINAL MICROBIAL LOAD, HAEMATOLOGICAL AND SERUM BIOCHEMICAL PROFILE OF RABBITS.

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ABSTRACT
Effect of dietary Garcinia kola seed meal (GKSM) (bitter kola) on the performance, microbial activities and blood constituents of rabbits were investigated. Four rabbit grower mash were prepared such that diet T₀ (control) contained no Garcinia kola seed meal while diets T₁, T₂ and T₃ contained 2.5%, 5.0% and 7.5% Garcinia kola seed meal, respectively, partly replacing maize. Each diet was fed to a group of 9 grower rabbits for 56 days, in a completely randomized design (CRD) experiment. Each group was further subdivided into three replicates of 3 rabbits each. Faecal samples were collected from four rabbits per treatment at the first and last weeks of the experiment and used to determine intestinal microbial load of the rabbits. At the end of the feeding trial, blood samples were randomly collected from four rabbits per treatment and used to determine haematological and serum biochemical profile of the rabbits. Body weight gain, daily body weight gain and feed conversion ratio (g feed/g gain) of the groups on GKSM diets decreased significantly (P < 0.05) while the feed intake increased (P < 0.05). GKSM had no significant effects (P<0.05) on the parasite, cysts of Isospora belli, but significantly eradicated Salmonella and Streptococcus species. Haematological indices (RBC, HB, PCV, MCV, MCHC, MCH, WBC and platelets) were not affected by the treatments (P > 0.05). There were no traces of eosinophils, basophils and monocytes. Biochemical indices (serum cholesterol, serum protein, serum albumin, serum globulin) were also not significantly affected (P > 0.05) by the treatments. The glucose levels of GKSM fed groups were significantly (P < 0.05) reduced. The electrolytes (potassium, sodium and chloride) as well as calcium and bicarbonate levels were not affected by the treatments (P > 0.05). Cost of production (₦/Kg gain) was highly increased with increase in dietary GKSM.

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