Nutritional Evaluation of Adansonia digitata (Baobab Fruit) as a replacement for maize in the diet of Broiler Chickens

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Abstract

Feeding trial was carried out to investigate the nutritional value of Adansonia digitata (Baobab seed and fruit pulp) as feed resource using one hundred and fifty (150) day old broiler chicks. Maize meal was replaced with Baobab meal at 0, 20, 30, 40 and 50% replacement levels. The birds were equally and randomly allotted to the diets while water and other management practices were carried out accordingly. Daily feed intake and weekly weight gain were monitored while feed conversion ratio was estimated. At the end of 8 weeks, feacal and blood samples were collected and analyzed for nutrient digestibility and haematological parameters respectively. Birds fed 40% replacement level had best feed intake, weight gain, feed conversion ratio, protein efficiency ratio and least feed cost per body weight gain compared to other treatments control inclusive. Nutrient digestibility of the experimental birds was significantly (P<0.05) affected. The parameters measured increased as the inclusion level increased. The RBC, WBC, Hb and PCV were not significantly influenced (p>0.05) by level of BM while lymphocyte, monocyte and eosinophil were significantly affected. It could be concluded that Baobab meal can be used up to 40% as a replacement for maize in the diets of broiler chickens without adverse effect on performance and health status of the birds. therefore be recommended that the test ingredient can be used to replace maize up to 40% without adverse effect on performance of the birds.

Keywords: Adansonia digitata, Broiler, Performance, Digestibility, Haematology