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## Performance of Weaned Rabbit Bucks Fed Graded Levels of African Yambean in Cassava Peel Meal-based Diets

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### Abstract

A total of 40 crossbred weaned rabbit bucks with an average initial body weight of  $634 \pm 1.50$ g were used to study the effects of dietary inclusion of graded levels of African yambean (AYB) in cassava peel meal (CPM) based diets on performance. Phytochemical screening of the AYB (Raw and Processed) and CPM was carried out. Four experimental diets were used in this study containing graded levels of AYB at (0, 10, 20 and 30 percent) respectively with CPM fixed across the treatments at 25 percent. The rabbits were divided into 4 treatments; 10 rabbits per treatment, each serving as a replicate and were randomly assigned to the experimental diets in a completely randomised design (CRD). The rabbits were managed based on standard experimental procedures. Feed and water were given *ad libitum*. Blood samples for serum biochemical and haematological indices were collected before and after the feeding trial. Data on growth performance and linear body measurement were recorded. The calcium and globulin were significantly different across treatments ( $p < 0.05$ ) for the initial and final blood analysis. Serum cholesterol was reducing as the level of AYB was increasing. Results of growth performance were significantly different ( $p < 0.05$ ) for final weight, total weight gain and feed conversion ratio (FCR) while total feed intake was not significantly different ( $p > 0.05$ ). Dressed weight showed significant difference ( $p < 0.05$ ) between treatments. Mean score for sensory evaluation of palatability and acceptability of rabbit meat showed significant difference ( $p < 0.05$ ) between the two processing methods (scalding and singeing). Colour, flavor, taste and overall acceptability of scalded carcass did not have any significant effect ( $p > 0.05$ ) while singed carcass significantly differed in texture, flavor, appearance and overall acceptability compared to scalded carcass. The economics of production showed

that though diet with 30 percent AYB had the least cost/kg diets with higher FCR. Feed with 20 percent AYB inclusion level did not record adverse effect on the performance characteristics. From this study, AYB can be included up to 20 percent level with cassava peel meal for weaned rabbit bucks without adverse effects on their performance, blood characteristics and cost of production.

**Keywords:** African yam bean, performance, Rabbits