

**NUTRIENT CHARACTERIZATION OF CASSAVA
PLANT MEAL AND EFFECTS OF FEED ADDITIVES
ON ITS UTILIZATION BY BROILER CHICKENS AT
STARTER AND FINISHER PHASES.**

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ABSTRACT

The study was designed to determine the nutrient composition of cassava plant meal (CPM) and to evaluate the utilization of CPM with or without feed additives by broiler chickens at starter and finisher phases. The aim was to substitute maize with CPM because maize is becoming unavoidable for poultry farmers due to competition between man and his livestock for maize.

One hundred and forty seven day old broiler chickens of hybro strain were used for the study which lasted for eight weeks. The birds were randomly distributed into seven experimental treatments with three replicates per treatment in a completely randomized design. Treatment I, the control was maize based. Treatments II and III had 25% and 50% respectively of maize in Treatment I replaced with CPM. Treatments IV, V, VI and VII had the same composition as treatment III but with the inclusion of baker's yeast, hemicell (enzyme), oxytetracycline and palm oil respectively as feed additives. CPM contained unpeeled cassava roots with leaves plus tender-stem mixed in the ratio of 1:2.5 of leaves + tender-stem to unpeeled roots. The proximate analysis indicated that the crude protein (0.40%) of CPM was close to that of maize (10.00%) while the energy values were 2,857kCal/kg and 3200kCal/kg for CPM and maize respectively.

The results showed that average final body weight per bird was significantly ($P < 0.05$) highest for treatment I and lowest for treatment III. Average weight gain was significantly affected ($P < 0.05$), treatment I had the highest value while treatment III was the least. Average daily intake and feed to gain ratio were not significantly affected by the dietary treatments. Dressed weight, carcass weight and caeca weight were significantly affected by the dietary treatment ($P < 0.05$) with increasing level of CPM in the diets, dressed weight and caeca weight decreased while carcass weight increased. The inclusion

of feed additives to CPM diet resulted in its improved utilization. The feed cost per kg of diet and cost of production were significantly ($P < 0.05$) lowest for birds on treatment III and highest for treatment IV.

From this study, it was observed that CPM could be used to replace 25% maize 1,1 the diet of broiler chicken without serious negative effect on the performance, carcass parameter and economics of production.