



EFFECT OF REPLACING MAIZE WITH CASSAVA LEAF SIEVATE MEAL ON GROWTH, HAEMATOLOGICAL AND SERUM INDICES OF BROILER CHICKS

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ABSTRACT

The study was carried out to examine effect of replacing maize with cassava leaf sievate meal on growth, haematological and serum indices of broiler chicks. In the study, 288 day old broiler chicks were randomly allotted to experimental diets (starter and finisher) cassava sievate-leaf meal (CSLM) based diets with the CSLM as replacement for maize. The trial lasted eight (8) weeks; and also four (4) diets each were compounded for starter and finisher phases in which CSLM replaced maize (0, 15, 30 and 45%). The diets were isocaloric and isonitrogenous based on the age birds. The chicks were raised on deep litter system with stand health and management practices to evaluate growth performance, haematological and serum indices. Test feed stuffs, diets and blood samples and all data collected were also analyzed using analysis of variance (ANOVA). The proximate composition of feed stuffs revealed that cassava sievate meal (CSM) had 2.34% crude protein (CP), while the values for cassava leaf meal CLM and CSLM were 19.45% and 8.50, respectively; and the highest nitrogen free extract (NFE) (87.09%) was recorded for CSM. The starter and finisher diets had recommended levels of energy (2800 Kcal/kg -3000 Kcal/kg) and crude protein (19-22%). Daily feed intake compared ($P < 0.05$) in T_1 – T_4 , the best daily weight gain (38.569) was recorded for T_1 and compared with T_2 . Utilization of feeds reduced with increased level of CSLM; and highest pack cell value (PCV) 24.34% was recorded for T_4 while other haematological factors were significantly ($P < 0.05$) varied. Serum creatinine and Cholestrol were elevated at T_4 . The study concluded that CSLM can be utilized by broiler chicks up to 45% as replacement for maize without any adverse effect. It was therefore, recommended that poultry farmers should adopt 30% CLSM inclusion in the diet of growing broiler for efficient growth and good body health.

Keywords: Blood parameters, Cassava leaf-sievate, Diets, Energy sources, Growth performance.