GROWTH PERFORMANCE, BLOOD PROFILES AND COST BENEFIT OF BROILER CHICKENS FED SELECTED AGRO-BY-PRODUCTS AS PARTIAL REPLACEMENT FOR MAIZE

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ABSTRACT

A feeding trial conducted to evaluate growth response, blood profiles, and cost benefit of feeding selected agro-by-products as partial replacement for maize in broiler finisher diet. Four experiment diets were formulated such that diet 1 had maize as the main source of energy; diet 2, 3, and 4 contain maize sievate (MS), tigernut residue (TNR) and cassava Sievate (CS) at 20% level of inclusion respectively, partially replacing maize in the diet. Two hundred and forty broiler chickens at four weeks of age were divided into four groups of sixty birds. Each group was assigned one of the treatment diets in a completely randomized design. Each group was further divided into four (4) replicates of fifteen birds per replicate. Data obtained during the course of the experiment were statistically analyzed. Results obtained showed significant (P<0.05) reduction in the values for final weight gain (FWG), daily weight gain and feed intake of birds fed cassava sievate. Significant (P<0.05) difference was also observed in the values for red blood cell, packed cell volume and haemoglobin of the birds fed cassava sievate. The white blood cells of the birds fed cassava sievate increased (P<0.05) significantly than the rest of the groups. The control had the best and lowest feed conversion ratio. The values for alanine transferase and Aspartate transferase increased (P<0.05) significantly in cassava sievate group. The cost of feed/kg and cost of feed per weight gain were significantly higher in groups fed cassava sievate. It can be concluded that maize sievate and tigernut residue could be included in broiler finisher diet up to 20% level without any deleterious effect on the performance and bold profile of finishing broilers and this reduces cost of feeding.

Keywords: Blood profile, Cassava Sievate, Performance, Poultry, Tigernut Residue.