**UTILIZATION OF GRADED LEVELS OF AWARA RESIDUE MEAL BY BROILER CHICKENS**

**By**

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**ABSTRACT**

A feeding trial was conducted to investigate the effects of diets containing graded levels of soya bean by-product popularly known as ( awara) residue meal as protein source included at 0, 5, 10, 15, and 20% levels of inclusion on growth performance, haematological and biochemical indices, carcass characteristics and economics of production of broiler chickens. A total of 220 unsexed day old Marshall Broiler line were assigned to five dietary treatments each replicated four times in a completely randomised design (CRD). Birds were provided with feed and water ad libitum and the experiment lasted for seven weeks. Data collected were subjected to one way analysis of variance (ANOVA). The result showed that at the starter phase, there was significant (P<0.05) difference in both daily feed intake and daily weight gain as well as final weight gain, while initial weight gain and feed conversion ratio indicated no significant (P>0.05) difference. At the finisher phase, daily feed intake, total weight gain and final weight gain showed significant (P<0.05) difference, while daily weight gain and feed conversion ratio recorded no variation. Furthermore, no significant difference (P>0.05) was observed in feed conversion ratio at pooled phase, while final weight gain, daily weight gain and daily feed intake showed significant difference (P<0.05). Haematological and blood biochemical indices as well as carcass characteristics and internal organ weights recoded no significant variation (P>0.05). The cost of feed intake per bird (N/kg feed) which ranges as (225.60 vs 264.83) was decreased as the inclusion levels of the test diet increased, which led to the significant increased in the cost saving (N11.97 vs 22.90). In conclusion, awara residue meal is a good protein source and broiler feeds could contain up to 20% level of its inclusion both during the starter and finisher phases with no adverse effect on growth performance, or any adverse effect on haemato-biochemical indices, carcass characteristics and internal organ weights. Also, there is reduction in feed cost.

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