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Performance and Haematology of Broiler Starter Birds Fed Graded Levels of *Gongronema latifolium* (Utazi) Leaf Extract

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Abstract

The use of ethno-pharmacological plants as growth promoters in livestock has become necessary as a result of the problems of resistant strains and residue from antibiotic growth promoters. *Gongronema latifolium* has shown both bacteriocidal and bacteriostatic effects on microorganisms and this has necessitated the intention to investigate the effect of *G. latifolium* extract on growth performance and haematology of broiler birds. Ninety six Agrited day old broiler chicks were randomly assigned into four treatment groups of 24 birds, each replicated three times with 8 birds per replicate in a Completely Randomised Design (CRD). The groups were fed four diets. Diet 1 (T1) contained no *G. latifolium* and served as the control. Diets 2, 3 and 4 designated T2, T3 and T4, respectively contained 10 ml, 20 ml and 30 ml, respectively of *Gongronema latifolium* extract. The extract was produced by dissolving 100g of the dried and milled *G. latifolium* leaf in one litre of water. Thereafter 10 ml, 20 ml, and 30 ml, respectively were decanted and dissolved in one litre of water, respectively for the various treatments. Feed and water were offered *ad-libitum* and data were collected on growth and haematological indices. Results showed that there were significant ($p < 0.05$) differences in weight gain and feed intake and no difference ($p > 0.05$) in haematological parameters. Birds fed T2 (10 ml) and T4 (30 ml) gained more ($p < 0.05$) weight (29.8 g d^{-1}) and (29.2 g d^{-1}), respectively than those birds on the control diet (27.4 g d^{-1}). Similarly, birds fed T4 consumed more ($p < 0.05$) feed (54.4 g d^{-1}) than those birds on the control and T2 diets (47.7 g d^{-1}) and (50.9 g d^{-1}), respectively. There were no significant ($p > 0.05$) differences in FCR, water intake and blood parameters measured. These results showed that 10ml extract of *G. latifolium* enhanced growth performance of broiler starter birds without any adverse effects on their blood chemistry.

Keywords: Broiler starter, *Gongronema latifolium*, growth, hematology