



Tropentag, October 9-11, 2007, Witzenhausen

“Utilisation of diversity in land use systems:  
Sustainable and organic approaches to meet human needs”

## Effects of Roxazyme -G on Growth Indices and Haematological Variables of Broilers Fed Maize Offal-based Diets

OLUFEMI P.A. OLOWU<sup>1</sup>, J. OLUWASOLA AGBEDE<sup>2</sup>, V. AYOBORE ALETOR<sup>2</sup>

<sup>1</sup>*Federal College of Agriculture, Department of Animal Science, Nigeria*

<sup>2</sup>*Federal University of Technology, Department of Animal Production and Health, Nigeria*

### Abstract

Influence of roxazyme -G on the utilisation of maize offal in place of maize was investigated using 420 broiler chicks. Seven diets were used in which the control diet (diet 1) contained 529 g kg<sup>-1</sup> and 569 g kg<sup>-1</sup> maize at starter and finisher phases, respectively. In diets 2, 3 and 4, twenty five percent of the maize components of diet 1 were replaced with maize offal while in diets 5, 6 and 7, fifty percent maize component of diet 1 was replaced with maize offal. Roxazyme-G was added to the diets at levels of 100, 200 and 300 mg kg<sup>-1</sup> in diets 2 & 5, 3 & 6 and 4 & 7, respectively. At the close of the starter (2–4 weeks of age) and finisher (5–8 weeks of age) phases 5 chicks and 5 chickens per replicate, respectively were sacrificed conventionally and their blood collected for blood analysis. Only the final weight of chicks were significantly ( $P \leq 0.05$ ) influenced while growth indices were not in finished birds. The entire haematological indices measured were not significantly ( $P \geq 0.05$ ) influenced by dietary treatment in both starter and finisher birds. At starter phase, the optimum level of maize offal substitution for maize could be achieved at 132.3 g kg<sup>-1</sup> + 200 mg kg<sup>-1</sup> roxazyme -G while 142.3 g kg<sup>-1</sup> maize offal + 200 mg kg<sup>-1</sup> roxazyme -G was the optimum level for finisher birds. Conclusively, the use of maize offal and roxazyme -G at these optimal levels could lead to more of maize offal being included in broiler diets in tropical countries.

**Keywords:** Blood indices, broilers, finisher, roxazyme -G, starter