

Growth performance, blood parameters and carcass characteristics of broilers fed corn bran based diets with or without enzymes (Maxigrain®) supplementation.

1.Owosibo, A.O, 1.Odetola, O.M, 2.Okere I. A. Odejide, J.O Pp 135 -143

Abstract

This study was carried out with one hundred and twenty (120) day-old marshal chicks to investigate the effect of Maxigrain® enzyme supplementation of corn bran based diets on growth performance, carcass characteristics, haematology and serum biochemistry of broilers in an eight weeks experiment. Four experimental diets were formulated, Diet A served as the Control diet containing no corn-bran. Diet B contained 20% corn-bran without maxigrain enzyme. Diets C and D contained 20% corn-bran with inclusion of 0.01% and 0.02% enzyme respectively. The birds were randomly allotted to four dietary treatments with each treatment being replicated three times in completely randomized design. Data were collected on feed intake and weight gain, while blood samples were collected from the animals through the jugular vein for haematology and serum biochemistry. At 56 days of the experiment, 6 birds were randomly selected per treatment, starved overnight, weighed and sacrificed by cervical dislocation for carcass analysis. Feed intake and cost of feed consumed per bird were significantly ($P < 0.05$) influenced by the dietary treatment. Also enzyme supplementations of corn bran based diets for broilers had no significant effects ($P > 0.05$) on carcass parameters except breast and neck weights. The packed cell volume, haemoglobin concentration and white blood cells were within the range of 28.00-35.33%, 9.30-11.57 g/dl and $14.04-17.50 \times 10^3/\text{mm}^3$ in that order. It can be concluded that corn bran can be included in the diets of broiler chicken up to 20% inclusion level without any detrimental effect on their performance, carcass characteristics and blood parameters.

Keywords: Performance, carcass, haematology, serum, enzyme

Federal College of Animal Health and Production Technology, P.M.B. 5029, Moor Plantation, Ibadan, Nigeria

Livestock Improvement Programme, Institute of Agricultural Research and Training, Obafemi Awolowo University, Moor Plantation, P.M.B. 5029, Ibadan, Nigeria.

Federal College of Agriculture, P.M.B. 5029, Moor Plantation, Ibadan, Nigeria.

Corresponding author's email: owosibo@yahoo.com

Targeted audience: Poultry farmers, feed millers, Researchers, Animal Scientists, Veterinarian, Consumers