EVALUATION OF THE WOOD VINAGAR AS GROWTH PROMOTER IN CARCASS WEIGHT AND CUTS IN BROILER CHICKENS

Isidro Argentina CHEMANE†, Elisanie Magalhães TEIXEIRA†, Janete Gouveia de SOUSA†, José Aparecido MOREIRA†, Andreza Lourenço MARINHO†

*corresponding author: ichemane88@gmail.com
†Universidade Federal de Rio Grande do Norte, Macaiba, Rio Grande do Norte, Brasil

Brazil is the world's first largest exporter of poultry meat, exporting to 155 countries. A significant part of poultry production is assured by the use of antibiotic growth promoters (AGPs), which have been banned in the main world markets for promoting bacterial resistance and its residual effect, which have been associated with the emergence of super-resistant bacteria counteract the effects of drugs used in human medicine, which constitutes a serious threat to public health. Wood vinegar is a liquid extracted from coal burning smoke, with antibiotic properties such as seringol, quaiacol, phenols and eugenol that eliminate enteropasites like 

coliforms, salmonellas, clostridium in animal gastrointestinal tract. It makes W V an alternative potential for conventional performance potentiator. The objective of this study was to evaluate the effect of different levels of wood vinegar (W V) as an alternative potentiator for the conventional antibiotic (enramycin). For this purpose, 504 one-day-old Cobb 500 lineage broilers distributed in a completely randomized design were used in seven treatments (0; 0.5; 1.0; 1.5; 2.0; 2.5% W V and 115 ppm enramycin) with six replicates and 12 birds per replicate. The birds were slaughtered at age of 21 and 42 days to evaluate carcass weight, breast, overcoat, thigh, liver weight and lipid deposition in the liver. The effects of W V levels were estimated using linear and quadratic regression models. In the cuts and carcass weight there was no effect of W V. The W V had an effect on the liver from animals slaughtered at age of 21 days and, had no effect on animals slaughtered at age of 42 days. The W V did not influence the weight of the cuts of broiler chickens. According to this study, W V should not be used in the formulation of diets for broiler chicken.

Keywords: antibiotic, bacterial resistance, gastrointestinal tract, performance, poultry farming