EVALUATION OF THE WOOD VINAGAR AS AN ALTERNATIVE POTENTIATOR PERFORMANCE IN BROILER CHICKENS

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The high Brazilian poultry productivity is directly linked to nutrition. Significant part of it is ensured by the use of conventional performance potentiators, which by eliminating enteroparasites, ensure gastrointestinal health and integrity. They were banned in major world markets for promoting bacterial resistance. Hence the search for its alternatives. Wood vinagar (W V) is a liquid extracted from the smoke of burning wood, with antibiotic components, such as: seringol, quaiacol, phenols and eugenol, that eliminate enteropasites such as: coliforms, salmonella, fusarium, among others that occur in the gastrointestinal tract. It makes W V an alternative potential for conventional performance potentiator. The aim of this study was to evaluate the effect of different levels of W V as a alternative potentiator performance to the conventional antibiotic (enramycin). In order to achieve this aim, 504 broilers of the Cobb 500 lineage were used at age of one day, distributed in a completely randomized design, in seven treatments (0.0%, 0.5%, 1.0%, 1.5%, 2.0%, 2.5% EP and 115 ppm enramycin) with six replicates and 12 birds. by repetition. The following variables were evaluated: weight gain (g), final weight (g), feed intake (g) and feed conversion in the stages of 1-7; 8-21 and 22-42 days of age. The effects of W V levels were estimated using linear and quadratic regression models. In the 1-7 phase there was only a linear effect of W V only on feed intake and feed conversion (P <0.05). As levels of W V increased, feed conversion worsened and consumption increased. In the 8 to 21 days phase, none of the variables evaluated had an effect (P <0.05). In the 22-42 days phase, there was a quadratic effect on feed intake and a linear effect on feed conversion (P <0.05) only. According to this study, the use of W V as alternative performance potentiator in broiler chickens is not recommended.

Key words: antibiotic, bacterial resistance, gastrointestinal tract, nutrition, poultry farming