

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## **YIELD OF CARCASS AND COMMERCIAL CUTS OF CHICKEN FED WITH HERBAL EXTRACTS IN SUBSTITUTION OF GROWTH PROMOTERS**

Caroline Schmidt FACCHI<sup>2</sup>, Gilnei Elmar BOSETTI<sup>2</sup>, Juliana ROMANI<sup>1</sup>, Paulo Cesar GUARNIERI<sup>2</sup>, Gabriel ROSSATTO<sup>1</sup>, Clovisnei BASI<sup>2</sup>, Letieri GRIEBLER<sup>3</sup>, Tiago Goulart PETROLI<sup>3</sup>

\*Corresponding author: clovisbasizootecnista@outlook.com

<sup>1</sup> Graduação na Universidade do Oeste de Santa Catarina, Xanxerê, SC, Brasil

<sup>2</sup> Mestrado na Universidade do Oeste de Santa Catarina, Xanxerê, SC, Brasil

<sup>3</sup> Docente na Universidade do Oeste de Santa Catarina, Xanxerê, SC, Brasil

The use of herbal extracts with a purpose of promoting growth has been widely studied, but its influence on the relative weight of the carcass and its cuts (chest, thigh, overcoat, wing, back) has not been fully elucidated. In view of this demand, the objective of this study was to evaluate the effect of the use of Carvacrol and Cinnamaldehyde (the blend was composed of 60% cinnamaldehyde from cinnamon and 30% carvacrol from oregano) hydro-based herbal extracts in substitution of performance-enhancing antibiotics on carcass yield and commercial cuts of broilers. The experiment was conducted at the experimental unit of the University of the West of Santa Catarina, using 600 male chickens from the COBB lineage, housed in the first day of life in boxes of 2 m<sup>2</sup>, with bed of shavings, tubular feeders and a nipple drinking fountain. The experimental lineation was completely randomized, consisting on five treatments and eight replicates with 15 chicken in each replicate. During the experiment the animals had access to water and ad libitum feed. The test comprised the following treatments: T1 - negative control; T2 - positive control (Virginiamycin 30 ppm); T3 - 100 ppm of essential oils; T4 - 200 ppm of essential oils; T5 - 400 ppm of essential oils. At 40 days after lodging, two birds per experimental unit were euthanized for evaluation of carcass yield and carcass cuts (chest, thigh, overcoat, wing, back). The data were submitted to analysis of variance, and in case of significant difference, the results were submitted to the Tukey test, at 0.05 of significance. IN the variables evaluated in this experiment, there were no differences ( $P > 0.05$ ) between them, which indicates that the use of the herbal extract does not affect the animal performance and therefore, does not present losses in the yields of cuts. There by, it is possible to conclude that carvacrol and cinnamaldehyde can be safely used instead of the use of growth promoters in broiler feed, without compromising carcass yield and carcass cuts.

**Keywords:** antibiotics, carvacrol, cinnamaldehyde, nutrition

**Acknowledgments:** Universidade do Oeste de Santa Catarina

Promoção e Realização:



Apoio Institucional:



Organização:

