**TITLE:** ANTIMICROBIAL ACTIVITY OF THE HEXANIC EXTRACT OF *Cinnamomum amoenum* (Ness) Kosterm. (LAURACEAE) FRONT TO *SALMONELLA* spp. OF AGRICULTURAL IMPORTANCE

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**ABSTRACT:**
Salmonellosis is a zoonotic disease that affects commercial poultry and causes great economic and productivity losses in the poultry sector. Belonging to the *Enterobacteriaceae* family, the Gram-negative bacilli of the genus Salmonellahave been presented as a sanitary problem in the last years, there was a considerable increase in bacterial resistance, due to the indiscriminate use of antimicrobials as growth promoters. In this context, the Brazilian flora is considered one of the most abundant in biodiversity, presents alternatives to the use of synthetic products through the extraction of natural compounds from plants. So, the objective of this work was to evaluate the antimicrobial activity of the hexane extract of the leaves of the native species *Cinnamomum amoenum* (Ness) Kosterm versus 5 serotypes *Salmonella enterica*: *S.* Enteritidis, *S.* Heidelberg, *S.* Orion, *S.* Montevideo e *S.* Infantis. To obtain the extract, the leaves of the plant were dried at 40°Cand ground in a knife mill. Subsequently, vacuum filtration and evaporator route,for total solvent removal. The minimum inhibitory concentration (MIC) and the minimal bacterial concentration (MBC) were carried out by the broth microdilution method, with serial concentrations ranging from 200 - 0,09 mg/mL of the extract. As a positive control was usedgentamicin at a concentration of 200 mg/mL. The hexanic extract showed antimicrobial activity for all serotypes tested,being that for the serotypes *S.* Orionand *S.* Montevideo, the MIC and MBC were of 100 mg/mL. Already for *S.* Heildeberg, *S.* Enteritidis and *S.* Infantis, the MIC e MBC were of 50 mg/mL and 100 mg/mL, respectively. According to the results, it is possible to verify that the hexanic extract of C. *amoenum* show antimicrobial potential, and may be an alternative to synthetic antimicrobials for the control of *Salmonella*in the aviaries. In addition, it is indispensable that new studies concerning their biological activities are carried out,to validate their use in the control of these bacteria.

**Keywords:** *Salmonella* spp., plant extracts, microdilution in broth

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