

Título: *Gochnatia Polymorpha* (Less.) Cabrera ETHYL ACETATE EXTRACT ACTIVITY EVALUATION FRONT OF DIFFERENT *Salmonella* spp. SEROTYPES

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Resumo:

Salmonella spp. is considered a public health problem. The animals intestinal tract is the main natural reservoir of this pathogen, therefore the avian origin food are important transmission routes of this bacteria. Actually, Salmonellosis in poultry brooder houses are controlled mostly with the synthetic antimicrobials use that are known to cause microbial resistance. In search to reduce this resistance contents, the medicinal plants properties are highlighted. In this sense, the native plant *Gochnatia polymorpha* was evaluated for antimicrobial potential against different serotypes of *Salmonella* spp. To antimicrobial susceptibility test was used ethyl acetate extract front of *Salmonella* Heidelberg (ATCC 8326), *Salmonella* Typhimurium (ATCC 14028), *Salmonella* Gallinarum (ATCC 1138) and *Salmonella* Enteritidis (ATCC 13076) strains. To obtain the extract, plant leaves were dried at 40 °C and ground in a slicer. After, sterilized by vacuum filtration and roto-evaporated to complete solvent removal. The minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) were determined by the microdilution broth method, with graded concentrations ranging from 200 to 0.09 mg/mL extract. As positive control was used gentamycin 200 mg/mL. The extract exerted inhibitory activity against all bacteria tested, with MIC and MBC values ranging from 100-50 mg/mL. The best result was observed to *S. Enteritidis* with MIC and MBC 50 mg/mL. The results indicated that plant ethyl acetate extract showed antimicrobial activity against four serotypes of *Salmonella* spp. tested. It is concluded that *Salmonella* is an important pathogen of zoonotic nature, and may cause significant economic losses, as well as public health problems. Thus, it is suggested the use of *G. polymorpha*, as an alternative to combat these bacteria in aviculture, but further investigation is needed about the biological potential of this plant.

Palavras-chave: ethyl acetate, *Salmonella* spp., plant extract.

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