

**Title: ANTIMICROBIAL ACTIVITY EVALUATION OF ETHYL ACETATE EXTRACT OF LEAVES *Cnidocolus pubescens* Pohl AGAINST MEDICAL IMPORTANCE OF BACTERIA**

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**Summary**

The microbial resistance has increased in recent times, thus arises the need for new treatment options based on the use of plants for the production of natural drugs. In this context falls the *Cnidocolus pubescens* Pohl, which has unique genre of tropical America, mainly concentrated in Mexico and northeastern Brazil, where it is known popularly by cansanção, has leaves and flowers that are often used against cancer, inflammation and other treatments. The objective was to evaluate the antimicrobial activity of the ethyl acetate extract of leaves *Cnidocolus pubescens* Pohl against three strains of pathogenic microorganisms of medical importance. The analyzes were performed at the Laboratory of Natural Products and Biotechnology (LPNBio), located at the State University of Southwest Bahia (UESB), campus Itapetinga-BA. The sheets were dried, crushed, placed in maceration for 72 hours using Ethyl Acetate as solvent, by exhaustive extraction, filtering and collecting the filtrates are periodically. The solvent was removed under reduced pressure on rotavap at 65 ° C temperature, there was obtained a concentration of 30,2 mg / ml of the ethyl acetate extract of *C. pubescens* Pohl sheets. The Minimum Inhibitory Concentration (MIC) was performed by broth microdilution, using different concentrations of the extract for testing (27,1; 13,5; 6,7; 3,3; 1,6; 0,8 and 0,4 mg / ml). After 24 hours, all strains were re-cultured to verify the CMM (Minimum Concentration Microbicide). The tests were performed in triplicate. The antimicrobial activity was more efficient in concentrations of: 27,1 and 13,5 mg / mL to the three bacteria tested, as follows: *Staphylococcus aureus* (ATCC 25921), *Enterococcus faecalis* (ATCC 31299) and *Pseudomonas aeruginosa* (ATCC 27853), in other concentrations was observed inhibitions. The extract of the leaves of *C. pubescens* Pohl. He presented himself bacteriostatic for the three microorganisms tested at concentrations that there was inhibition.

**Key words:** *Cnidocolus pubescens* Pohl, Minimum Inhibitory Concentration (MIC), Antimicrobial Activity.