ANTIMICROBIAL ACTIVITY OF ROSEMARY STUDY (*Rosmarinus officinalis L*.) FORMULATING AQUEOUS EXTRACTS AND ALCOHOLIC.

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Summary:

Studies on the antimicrobial properties of plant extracts have gained prominence in the scientific community, presenting a new interpretation of the active compounds in the control and spread of disease, representing a breakthrough in the field of animal health, the development of new drugs. Several plant species easily found on farms, as the case of Rosemary (*Rosmarinus officinalis L.*) are used as disinfectants because they are inexpensive. The antimicrobial effect of a plant extract is analyzed by determining the required amount, which inhibits growth of the test microorganism. Excessive consumption of antibiotics, resulting in a serious public health problem, both in poor countries and more developed, due to the resistance of microorganisms to antibiotics. Pharmaceutical companies in recent years failed to develop any kind of different antibiotics, therefore, began the search for natural antibiotics. Studies have shown positive results for the control of pathogens when used *Rosmarinus officinalis L* .. The present study aims to demonstrate the comparative results between the aqueous and alcoholic extract used in control in vitro of the pathogen *Staphylococcus aureus*. The methodology for the preparation of the aqueous extract followed the method Souza, Vidal and Viani (2002) and the alcoholic extract was prepared by the methodology of ANVISA and after evaporated route without hydro reconstitution and under aseptic. The Gram-positive bacterium *Staphylococcus aureus* was inoculated into BHI broth (Brain Heart Infusion Broth) at 35 ° C for 24 hours and after seeded in petri dishes with solid medium PCA (Plate Count Agar), previously sterilized. For the comparative evaluation of the antimicrobial action of both extracts, it used the agar diffusion method, using the disk technique. The result of this study showed that there was antimicrobial activity, the presence of inhibitory halo when used the alcoholic extract and no significant antimicrobial activity in the absence of inhibitory halo when used the aqueous extract.

Keyword: Antimicrobial activity, agar diffusion, disk method, *Rosmarinus officinalis L.*

Promotion agency: CNPq