EVALUATION OF ANTIMICROBIAL ACTIVITY OF EXTRACT METHANOL OF FRUIT SQUASH *Artocarpus heterophyllus* FACE TO STRAINS OF MEDICAL IMPORTANCE OF BACTERIA.

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Summary:

Microbial resistance is a growing public health problem and no need to obtain new therapies, so more and more we study the use of plant species as active ingredients in the development of new drugs, especially antibiotics. In this context falls the jackfruit (Moraceae), popularly known as jackfruit is native to India, Malaysia and Brazil it was brought during the period of colonization and has adapted very well to environmental conditions. The fruits of *A. heterophyllus* it ideal for humans and animals. The objective of this study was to evaluate the antimicrobial activity of the methanol extract of the pulp of the fruit of jackfruit (Moraceae) 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) located in Itapetinga-BA campus. The pulps were dried fruit, crushed, placed in maceration for 72 hours using methanol as solvent by exhaustive extraction, filtering and collecting the filtrates are periodically. The solvent was removed under reduced pressure on rotavap at 50 ° C temperature, there was obtained a concentration of 148mg / ml methanolic extract from *A. heterophyllus*. The Minimum Inhibitory Concentration (MIC) was performed by broth microdilution, using different concentrations of the extract for testing (133.3; 66.6; 33.3; 16.6; 8.3; 4.1; 2.0 and 1.0 mg / ml). After 24 hours, all strains were re-cultured to see if the bacteriostatic / bactericidal activity. The tests were performed in triplicate. The antimicrobial activity was more efficient in the concentrations: 133.3; 66.6 and 33,3mg / ml for all bacteria: *Staphylococcus aureus* (ATCC 25921), *Enterococcus faecalis* (ATCC 31299), *Pseudomonas aeruginosa* (ATCC 27853). The methanol extract of the jackfruit fruit pulp presented himself bactericidal for *E. faecalis* and *P. aeruginosa i*n the concentration (133.3 mg / mL), and bacteriostatic to other concentrations.

Key Words: *A. heterophyllus,* antimicrobial activity, fruit.

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