

POTENTIAL ASSESSMENT OF EXTRACT ANTIMICROBIAL ETHANOLIC *Artocarpus heterophyllus* SEED AGAINST PATHOGENIC BACTERIA.

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Summary:

The *Artocarpus heterophyllus* belongs to the Moraceae family, popularly known as jackfruit, being from India. It was brought to Brazil during the period of colonization and it has adapted very well to environmental conditions. The seed of the jackfruit is used in folk medicine in the treatment for some diseases such as inflammatory bowel disease, diarrhea and showed to be effective in vivo immune response against *Candida albicans*. This study aims to evaluate the action of antimicrobial activity of ethanol extract *A. heterophyllus* against pathogenic microorganisms strains 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 seeds were dried, crushed, placed in maceration for 72 hours using ethanol as a 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 124mg / ml ethanolic extract of *A. heterophyllus*. The Minimum Inhibitory Concentration (MIC) was performed by broth microdilution, using different concentrations of the extract for testing (111.6; 55.8; 27.9; 13.9; 6.9; 3.4; 1.7 and 0.8 mg / ml). After 24 hours, all strains were re-cultured to see if the bacteriostatic / bactericidal activity. Tests were performed in triplicate. The antimicrobial activity was more efficient in the concentrations: 111.6; 55.8 and 27,9mg / ml for all bacteria: *Staphylococcus aureus* (ATCC 25921), *Enterococcus faecalis* (ATCC 31299), *Pseudomonas aeruginosa* (ATCC 27853). The ethanol extract *A. heterophyllus* seed presented itself bacteriostatic for all strains tested.

Key Words: *A. heterophyllus*, pathogenic strains, seed.

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