

IN VITRO ANTIMICROBIAL ACTIVITY AND MIC ANALYSIS OF *LEUCAS ASPERA* AGAINST SKIN INFECTION CAUSING PATHOGENS

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ABSTRACT

This explorative study centers around the aromatic herbs *Leucas aspera* from the Lamiaceae family to recognize its anti-microbial action. *L. aspera* is known to have an extensive variety of phytochemicals present in it, which have significant pharmacological qualities. Under this research, phytochemical screening was performed on extracts. Extraction of phyto constituents from aerial parts of the plant was done utilizing cold and Soxhlet extraction process using different solvents such as dichloromethane, methanol, hexane and ethyl acetate. Extracts obtained were thereafter screened against a wide range of micro-organisms and the outcomes are reported. Using the well diffusion assay, antimicrobial activity was determined against *Escherichia coli*, *Staphylococcus aureus*, *Salmonella enteritidis*, *Pseudomonas aeruginosa*, *Bacillus cereus*, *Enterococcus faecalis*, *Candida albicans* and *Aspergillus brasiliensis*. This wide spectrum of microorganisms includes skin infection causing pathogens. It significantly inhibits microbial growth against *Staphylococcus aureus*, *Bacillus cereus* and *Enterococcus faecalis*. Hence minimum inhibition concentration has been established against these microorganisms. Our study indicates that *L. aspera* contains potentially active phytoconstituents that can effectively combat bacteria that cause skin infections.