

**FORMULATION OF ANTIBACTERIAL HAND CREAM
FROM *PITHECELLOBIUM JIRINGA* LEAVES**

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ABSTRACT

FORMULATION OF ANTIBACTERIAL HAND CREAM FROM *PITHECELLOBIUM JIRINGA* LEAVES

The aim of this study was to prepare and evaluate herbal antioxidant hand cream which is made by the ethyl acetate extract of *Pithecellobium Jiringa* leaves. The antioxidant activity of ethyl acetate extract was determined by DPPH free radical method and proved this plant contains higher antioxidant. By creating a different type of formulations which is different concentrations of stearic acid and cetyl alcohol. The evaluation of formulations has been done by the analysis of different parameters such as stability, pH and others physical properties. Among these cream, F4 showed good result in all physical properties which are more stable when storing in considerable time and free from irritancy. These cream were investigated for their antimicrobial activity of different microorganism (*Staphylococcus epidermidis*, *Bacillus cereus* *Escherichia coli*, and *Klebsiella pneumonia*) and showed the positive against all these microbes. The current study proved that the leaves of *P. jiringa* have a biologically active compound for antimicrobial agent.

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