

**FORMULATION AND GEL ACTIVITY TEST OF ETHANOL EXTRACT OF
MANGO BACANG LEAVES (*Mangifera foetida* L) AGAINST
*Propionibacterium acnes***

ABSTRACT

*Mango Bacang (*Mangifera foetida* L) is a plant that has activity against the bacterium *Propionibacterium acnes*, which is responsible for causing acne. The leaves of the plant are used and contain various secondary metabolites, such as alkaloids, phenols, flavonoids, saponins, steroids, triterpenoids, and tannins. Gel is a topical preparation that uses a polar base formulation, making it easily absorbed by the skin. Its diffusion power is better than cream because it can pass through the skin membrane more effectively. In order to create gel preparations, it is necessary to include gel-forming compounds as the active agents in the formulation. Na-CMC is a type of gelling agent that belongs to the semi-synthetic polymer class. It is known for its high stability. Preparation of a gel formula using 20% ethanol extract of Bacang mango leaves and Na-CMC basis with 3%, 4%, and 5% concentrations. Gel preparations underwent tests for organoleptic characteristics, pH, homogeneity, spreadability, hedonic response, irritation, antibacterial activity, and stability. The concentration of Na-CMC affected the gel's characteristics, formula 3 (Na-CMC 5%) created a thicker gel than formulas 1 and 2, which were more liquid. The characteristics of pH, homogeneity, inhibition, and stability of the three formulas have similarities. While the characteristics of the spreadability in formula 1 have the best spreadability of 5,55 cm.*

Keywords: *antiacne, antibacterial, Mango Leaf Bacang, *Mangifera foetida* L, Gel, *Propionibacterium acnes*.*

(xiv + 86 + attachments)

References (1979-2023)