

FORMULATION AND TESTING OF THE ACTIVITY OF FACIAL WASH MADE FROM ETHANOL EXTRACT OF PATIKALA FRUIT (*Etlingera elatior*) AGAINST THE GROWTH OF *Propionibacterium acnes* and *Staphylococcus epidermidis*

ABSTRACT

Background: Acne (*acne vulgaris*) in Indonesia, as a tropical country, has a high prevalence of the disease. This is due to the tropical climate conditions that support the growth of bacteria, parasites, and fungi. *Propionibacterium acnes* is another organism involved in skin pathogenesis. *Staphylococcus epidermidis* is a bacterium that causes skin infections, such as bacterial infections, and if the infection spreads, it can lead to abscesses like skin infections. One plant with antibacterial properties is the patikala fruit (*Etlingera elatior*), which is effective against acne and can be formulated into a facial wash due to its antioxidant and antimicrobial properties.

Research Objective: This study aims to determine whether ethanol extract of patikala fruit (*Etlingera elatior*) can be formulated into a facial wash formulation with good physical stability and antibacterial activity at concentrations of 3%, 6%, and 9%. **Research Method:** This research method is a laboratory experiment aimed at formulating a facial wash formulation based on ethanol extract of patikala fruit (*Etlingera elatior*) and its antibacterial activity against acne-causing bacteria, namely *Propionibacterium acnes* and *Staphylococcus epidermidis*. **Research Results:** The facial wash formulation of ethanol extract of patikala fruit (*Etlingera elatior*) at a concentration of 3% 6%, and 9% was most effective in inhibiting the growth of *Propionibacterium acnes*, with an inhibitory zone of 16.43 mm, classified as strong. For *Staphylococcus epidermidis*, the most effective concentration for inhibiting bacterial growth was 9%, with an inhibitory zone of 15.73 mm, also classified as strong.

Keywords: Patikala fruit extract (*Etlingera elatior*), antibacterial activity, facial wash, *Propionibacterium acnes*, *Staphylococcus epidermidis*