

## **ABSTRACT**

### **(LITERATURE REVIEW)**

#### **ANTIBACTERIA PHARMACEUTICAL PREPARATIONS Ethanol BELUNTAS AGAINST *Propionibacterium acnes* CAUSES OF ACNE**

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Beluntas plant is one of the medicinal plants. Beluntas plants contain flavonoid compounds which are known to have antibacterial activity, one of which is the bacteria that causes acne, namely *Propionibacterium acnes*. This study aims to determine the activity and effective concentration of pharmaceutical preparations of facial cream, facial soap, beluntas leaf extract serum gel (*Pluchea indica* L) against *Propionibacterium acnes* bacteria. This research method is a laboratory experimental research. Beluntas leaf extract (*Pluchea indica* L) was obtained by maceration with 96% ethanol as solvent. For testing beluntas leaf extract (*Pluchea indica* L) was formulated into a cream preparation using 3 variations of the concentration of beluntas leaf extract (*Pluchea indica* L) namely 5%, 10%, 15%. In the results of the antibacterial activity test, the average diameter of the clear zone of the cream preparation of beluntas leaf extract (*Pluchea indica* L) at a concentration of 5%, 10%, 15%, respectively, was 6.16mm, 7.83mm, 10.16mm. And based on the classification of antibacterial power, there is a concentration of 15% which is the most effective cream to inhibit the activity of *Propionibacterium acnes* bacteria. For the preparation of facial soap, the results showed that the KHM of beluntas leaf extract (*Pluchea indica* L) was present at a concentration of 5%. The preparation of beluntas leaf extract facial soap (*Pluchea indica* L) has antibacterial activity against *Propionibacterium acnes* and the most effective in inhibiting *Propionibacterium acnes* is formula 3 with a concentration of 15% with an average LDH of 13.5mm. As for serum gel preparations, formulations were made with different concentrations of active substances, namely 0.5%, 0.75% and 1%, the preparations were tested against *Propionibacterium acnes* using the well method. The results of the bacterial test showed that the effective concentration was found in formula 3 with a concentration of 1% beluntas leaf extract (*Pluchea indica* L) with an inhibitory value of 20.73mm which could inhibit the growth of *Propionibacterium acnes* bacteria.

**Keywords :** Beluntas leaves, antibacterium test, *Propionibacterium acnes*