

ABSTRAK

FORMULASI DAN UJI ANTIBAKTERI MASKER GEL EKSTRAK ETANOL DAUN SIRSAK (*Annona muricata L.*) DAN DAUN BINAHONG (*Anredera cordifolia (Ten.) Steenis*) TERHADAP BAKTERI *Propionibacterium acnes*

Jerawat merupakan penyakit kulit yang salah satu penyebabnya adalah pertumbuhan bakteri *Propionibacterium acnes*. Penggunaan antibiotik secara terus-menerus dapat meningkatkan risiko resistensi sehingga diperlukan alternatif antibakteri dari bahan alam. Daun sirsak (*Annona muricata L.*) dan daun binahong (*Anredera cordifolia (Ten.) Steenis*) diketahui mengandung senyawa yang berpotensi sebagai antibakteri. Penelitian ini bertujuan mengetahui kandungan metabolit sekunder, kadar total fenolik, mutu fisik, dan antibakteri masker gel kombinasi ekstrak etanol daun sirsak dan daun binahong terhadap *Propionibacterium acnes*. Ekstraksi dilakukan dengan metode maserasi menggunakan etanol reddest, dilanjutkan dengan skrining fitokimia, penetapan kadar total fenolik metode Folin–Ciocalteu, formulasi masker gel (F0–F3), evaluasi mutu fisik, dan uji antibakteri menggunakan metode difusi sumuran. Hasil penelitian menunjukkan bahwa kedua ekstrak mengandung flavonoid, tanin, saponin, dan terpenoid/steroid, sedangkan alkaloid tidak terdeteksi. Kadar total fenolik ekstrak etanol daun sirsak dan daun binahong berturut-turut sebesar 266,962 mg GAE/g ekstrak dan 204 mg GAE/g ekstrak. Seluruh formula memenuhi persyaratan mutu fisik, tidak menimbulkan iritasi, dan dapat diterima panelis. Hasil uji antibakteri menunjukkan rata-rata diameter zona hambat F1, F2, dan F3 berturut-turut sebesar 9,40 mm, 12,60 mm, dan 15,30 mm, dengan Formula F3 memiliki antibakteri terbaik.

Kata kunci: antibakteri, daun binahong, daun sirsak, masker gel, *Propionibacterium acnes*, total fenolik.

ABSTRACT

FORMULATION AND ANTIBACTERIAL ACTIVITY OF A GEL MASK CONTAINING ETHANOL EXTRACTS OF SOURSOP LEAVES (*Annona muricata* L.) AND BINAHONG LEAVES (*Anredera cordifolia* (Ten.) STEENIS) AGAINST *Propionibacterium acnes*

Acne is a skin disorder associated with the growth of *Propionibacterium acnes*. Continuous use of antibiotics may increase bacterial resistance, highlighting the need for natural antibacterial alternatives. Soursop (*Annona muricata* L.) and binahong (*Anredera cordifolia* (Ten.) Steenis) leaves are known to contain antibacterial compounds. This study aimed to determine the secondary metabolites, total phenolic content, physical quality, and antibacterial activity of a gel mask containing a combination of ethanol extracts of soursop and binahong leaves against *Propionibacterium acnes*. The extracts were prepared by maceration using redist ethanol, followed by phytochemical screening, determination of total phenolic content using the Folin–Ciocalteu method, gel mask formulation (F0–F3), physical quality evaluation, and antibacterial testing using the agar well diffusion method. The results showed that both extracts contained flavonoids, tannins, saponins, and terpenoids/steroids, while alkaloids were not detected. The total phenolic contents of the soursop and binahong leaf ethanol extracts were 266.962 mg GAE/g extract and 204 mg GAE/g extract, respectively. All formulations met the physical quality requirements, caused no irritation, and were acceptable to the panelists. The inhibition zone diameters of F1, F2, and F3 were 9.40 mm, 12.60 mm, and 15.30 mm, respectively, with Formula F3 showing the highest antibacterial activity.

Keywords: antibacterial activity, binahong leaves, soursop leaves, gel mask, *Propionibacterium acne*, total phenolic content.