

## INTISARI

**PARAMIDHA, DP., 2019, FORMULASI DAN UJI AKTIVITAS ANTIBAKTERI MASKER GEL *PEEL-OFF* EKSTRAK ETANOL DAUN JAMBU BIJI (*Psidium guajava* L) SEBAGAI ANTIJERAWAT TERHADAP BAKTERI *Staphylococcus epidermidis* ATCC 12228, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.**

Jerawat terjadi karena adanya peningkatan produksi sebum dan peradangan yang umumnya dipicu oleh bakteri, salah satunya adalah *Staphylococcus epidermidis*. Ekstrak daun jambu biji diketahui memiliki aktivitas antibakteri terhadap bakteri tersebut. Ekstrak etanol daun jambu biji diformulasikan menjadi masker gel *peel-off* untuk kemudahan penggunaan. Penelitian ini bertujuan untuk membuat masker gel *peel-off* ekstrak etanol daun jambu biji dengan variasi konsentrasi gelatin dan HPMC serta diuji aktivitas antibakterinya terhadap *Staphylococcus epidermidis* ATCC 12228.

Ekstraksi daun jambu biji dilakukan secara maserasi dengan pelarut etanol 70%. Uji aktivitas antibakteri masker gel *peel-off* ekstrak etanol daun jambu biji menggunakan metode difusi cakram. Evaluasi sifat fisik masker gel *peel-off* ekstrak etanol daun jambu biji meliputi pengamatan organoleptis, homogenitas, pH, viskositas, daya lekat, daya sebar, waktu mengering, dan diuji stabilitas menggunakan metode *freeze thaw*. Data dianalisis statistik menggunakan *one-way ANOVA* dan *independent sample t-test*. Formula masker gel *peel-off* ekstrak etanol daun jambu biji yang memiliki sifat fisik, stabilitas, dan aktivitas antibakteri terhadap bakteri *Staphylococcus epidermidis* ATCC 12228 yang paling baik adalah FI yang memiliki konsentrasi gelatin 5% dan HPMC 2,5% dengan rata-rata diameter daya hambat sebesar 17,14 mm.

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Kata kunci : Daun jambu biji, antijerawat, *Staphylococcus epidermidis*, masker gel *peel-off*

## ABSTRACT

**PARAMIDHA, DP., 2019, FORMULATION AND ANTIBACTERIAL ACTIVITY TEST OF PEEL-OFF GEL MASK FROM ETHANOL EXTRACT OF GUAJAVA LEAF (*Psidium guajava* L) AS ANTI ACNE AGAINST *Staphylococcus epidermidis* ATCC 12228, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.**

Acne is caused by increase of sebum production and inflammation that generally triggered by bacteria such as *Staphylococcus epidermidis*. Guajava leaves extract have been known have antibacterial activity against that bacteria. For make easier application of guajava leaves extract, it can be formulated in a peel-off gel mask that has advantages, which can be easy to use. This study aims to formulate guajava leaves extract's peel-off gel mask with variation concentration of gelatin and HPMC and to test antibacterial activity against *Staphylococcus epidermidis* ATCC 12228.

Guajava leaves was extracted with maceration method by using ethanol 70%. Then, the antibacterial activity of peel-off mask was determined by the disk-diffusion method. Evaluation of guajava leaves extract peel-off gel mask include organoleptical properties, homogeneity, pH, viscosity, spreading and adhesion strength, drying time, and stability test with freeze thaw method. The data were analyzed statistically using one-way ANOVA dan independent sample t-test. FI is the best peel-off gel mask formula of guajava leaves extract that has good evaluation, stable, and antibacterial activity against *Staphylococcus epidermidis* ATCC 12228, which was contained 5% gelatin and 2,5% HPMC with average of inhibition zone 17,14 mm.

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Keywords: *Psidium guajava* L, anti acne, *Staphylococcus epidermidis*, peel-off gel mask