

INTISARI

SARI, ADK., 2019, FORMULASI DAN UJI AKTIVITAS ANTIBAKTERI MASKER GEL *PEEL-OFF* EKSTRAK DAUN BINAHONG (*Anredera cordifolia* (Ten.) Steenis) TERHADAP *Staphylococcus epidermidis* ATCC1228 PENYEBAB JERAWAT, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Jerawat merupakan penyakit kulit yang terdapat pada folikel polisebacea kepala dan badan bagian atas. *Staphylococcus epidermidis* adalah bakteri pemicu peradangan pada jerawat. Tanaman yang telah banyak diteliti sebagai antibakteri dan dapat menghambat pertumbuhan *Staphylococcus epidermidis* adalah daun binahong (*Anredera cordifolia* (Ten.) Steenis). Tujuan penelitian ini untuk memformulasi sediaan masker gel *peel-off* ekstrak daun binahong dan menguji sifat fisik, stabilitas, dan aktivitasnya terhadap bakteri *Staphylococcus epidermidis* ATCC 12228.

Ekstraksi daun binahong menggunakan metode maserasi dengan pelarut etanol 96%. Variasi konsentrasi ekstrak yang digunakan adalah 10%, 15%, 20%, 25%, 30%. Sediaan masker gel *peel-off* dari setiap formula di uji organoleptis, homogenitas, pH, viskositas, daya sebar, dan daya lekat, stabilitasnya dan aktivitasnya terhadap bakteri *Staphylococcus epidermidis* ATCC 12228. Data yang dianalisa secara statistik dengan uji *kolmogorov-smirnov* dilanjutkan dengan ANNOVA.

Hasil penelitian menyatakan bahwa formula IV dengan konsentrasi ekstrak 20%, gelatin 2,5% dan HPMC 5% merupakan formula terbaik secara sifat fisik, stabilitas dan mampu memberikan zona hambat terhadap pertumbuhan *Staphylococcus epidermidis* ATCC 1228 dengan diameter zona hambat 12,65 mm.

Kata kunci : antibakteri, binahong, masker gel *peel-off*, *Staphylococcus epidermidis* ATCC 1228

ABSTRACT

SARI, ADK., 2019, FORMULATION AND TEST OF ANTIBACTERIAL ACTIVITY PEEL-OFF GEL MASK EXTRACT OF BINAHONG LEAF (*Anredera cordifolia* (Ten.) Steenis. TO BACTERIA *Staphylococcus epidermidis* ATCC 12228 CAUSES OF ACNE, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Acne is a skin disease found in the follicles of the head and upper body polysebacea. *Staphylococcus epidermidis* is a bacterium that triggers inflammation of acne. Plant that have been widely studied as antibacterial and can inhibit the growth of *Staphylococcus epidermidis* is binahong leaves (*Anredera cordifolia* (Ten.) Steenis). The purpose of this study was to formulate the binahong leaves extract peel-off gel mask and test its physical properties, stability, and activity against the *Staphylococcus epidermidis* ATCC 12228.

Extracti of binahong leaves obtained by maceration method with ethanol 96%. Variations in extract concentrations used were 10%, 15%, 20%, 25%, 30%. The peel-off gel masks from each formula were tested for organoleptic, homogeneity, pH, viscosity, dispersion and adhesion, their stability and activity against the *Staphylococcus epidermidis* ATCC 12228. Data were analyzed statistically by the *Kolmogorov-Smirnov* test followed by ANNOVA.

The results showed that formula IV with extract concentration of 20%, 2.5% gelatin and 5% HPMC were the best formulas in physical properties, stability and were able to provide inhibition zones to the growth of *Staphylococcus epidermidis* ATCC 12228 with inhibition zone diameters of 12.65 mm.

Key word: antibacterial, binahong leaf , peel-off gel mask, *Staphylococcus epidermidis* ATCC 12228