**FORMULASI SEDIAAN GEL *HANDSANITIZER* DARI EKSTRAK ETANOL DAUN MALAKA (*Phyllanthus emblica* L*.*) SEBAGAI ANTIBAKTERI TERHADAP *Staphylococcus aureus***

#

# UBAH MUNTHE

# NPM. 172114037

# ABSTRAK

Seluruh bagian tumbuhan dari malaka seperti ranting, akar, daun, bunga, buah dan biji digunakan dalam pengobatan tradisional di India karena mempunyai nilai obat yang tinggi untuk efikasi terapeutik. Malaka digunakan sebgai obat tuberculosis dan anti penuaan. Malaka mengandung tanin yang berpotensi sebagai antibakteri dan mengadung vitamin C .

Tujuan dari penelitian ini untuk mengetahui kandungan metabolit sekunder serbuk simplisia dan ekstrak etanol daun malaka, memformulasikan ekstrak etanol daun malaka menjadi gel *handsanitizer* ,menegtahui mutu fisik sediaan, dan menguji aktivitas terhadap bakteri *Staphylococcus aureus* dengan metode difusi agar menggunakan cakram. Konsentrasi yang digunakan pada penelitian ini adalah 1 %, 2%, 3% dan kontrol positif.

Dari hasil penelitian menunjukkan bahwa serbuk simplesia dan ekstrak etanol daun malaka mengandung senyawa kimia alkaloid, flavoniod,tanin,saponin dan steroid. Hasil uji organoleptis daun malaka berbau khas berpaduan daun malaka dan essens stroberi ,berwarna hijau kecoklatan,berbentuk gel. Uji pH berkisar 6,4 – 6,9. Uji viskositas hasilnya berkisar 15800 – 21500, dan uji iritasi terhadap sukarelawan hasilnya negatif tidak memberikan efek iritasi pada kulit. Aktivitas antibakteri pada konsentrasi 1%, 2%, 3% . semakin besar konsetarsi , semakin beasr pula daya hambat yang dihasilkan . Zona hambat yang dihasilkan secara bertururt - turut adalah yaitu sebesar 16,83 ± 4,716 mm,18,73 ± 3,164 mm, 19,03 ± 2,683 mm.

Kata kunci : Gel *handsanitizer*, Daun malaka, Antibakteri, *Staphylococcus aureus*

***FORMULATION OF HANDSANITIZER GEL PREPARATION FROM MALACA LEAF (Phyllanthus emblica L.) ETHANOL EXTRACT AS ANTIBACTERIA AGAINST Staphylococcus aureus***

**UBAH MUNTHE**

**NPM. 172114037**

***ABSTRACT***

*All parts of the plant from Malacca such as twigs, roots, leaves, flowers, fruits and seeds are used in traditional medicine in India because of their high medicinal value for therapeutic efficacy. Malacca is used as a tuberculosis and anti-aging drug. Malacca contains tannins which have the potential as antibacterial and contains vitamin C.*

*The purpose of this study was to determine the secondary metabolite content of simplicia powder and ethanolic extract of malacca leaves, to formulate ethanolic extract of malacca leaves into handsanitizer gel, to determine the physical quality of the preparation, and to test the activity against Staphylococcus aureus bacteria using the agar diffusion method using discs. The concentrations used in this study were 1%, 2%, 3% and positive control.*

*The results showed that simplesia powder and ethanol extract of malacca leaves contained chemical compounds of alkaloids, flavonoids, tannins, saponins and steroids. The results of the organoleptic test of malacca leaves have a distinctive smell, combined with malacca leaves and strawberry essence, brownish green in color, in the form of a gel. The pH test ranged from 6.4 to 6.9. The viscosity test results ranged from 15800 – 21500, and the irritation test on volunteers was negative and did not have an irritating effect on the skin. Antibacterial activity at concentrations of 1%, 2%, 3%. The greater the concentration, the greater the resistance produced. The resulting inhibition zones successively were 16.83 ± 4.716 mm, 18.73 ± 3.164 mm, 19.03 ± 2.683 mm.*

*Keywords: Gel handsanitizer, Malacca leaves, Antibacterial, Staphylococcus aureus*