

## ABSTRAK

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### **FORMULASI SEDIAAN MASKER GEL ANTIBAKTERI EKSTRAK ETANOL 70% DAUN SEMBUNG RAMBAT (*Mikania micrantha* Kunth) TERHADAP BAKTERI *Staphylococcus aureus* SEBAGAI ANTIJERAWAT** Karya Tulis Ilmiah, Fakultas Ilmu Kesehatan (2023)

(XIV + 82 halaman; 14 tabel; 16 gambar; 27 lampiran)

Daun sembung rambat (*Mikania micrantha* Kunth) merupakan tanaman gulma dengan pertumbuhan sangat cepat mengandung alkaloid, fenol, flavonoid, saponin, steroid, terpenoid, dan tanin. Penelitian secara invitro ekstrak daun sembung rambat terbukti memiliki aktivitas antibakteri terhadap bakteri gram positif salah satunya *Staphylococcus aureus*. Penelitian dilakukan dengan tujuan untuk membuat formulasi sediaan gel masker ekstrak etanol daun sembung rambat dengan kombinasi konsentrasi basis yaitu HPMC dan carbopol 940 perbandingan (70%:30%), (50%:50%), dan (30%:70%). Metode dilakukan secara eksperimental laboratorium yang berhubungan dengan pengujian antibakteri ekstrak daun sembung rambat, pembuatan sediaan gel masker, serta melakukan uji sifat fisik sediaan diantaranya uji organoleptik, homogenitas, daya sebar, pH, dan viskositas sediaan. Hasil penelitian menunjukan bahwa sediaan gel masker ekstrak etanol 70% daun sembung rambat pada formula satu (F1) mampu memenuhi parameter mutu fisik gel secara organoleptik, homogenitas, daya sebar, pH, dan viskositas sediaan. Sediaan gel masker yang memberikan sifat fisik gel sesuai ditujukan pada F1 dengan perbandingan *gelling agent* (HPMC : Carbopol 940) yaitu (70:30) dengan penambahan konsentrasi ekstrak sebesar 5000 ppm yang baik menghambat bakteri *Staphylococcus aureus* dengan zona hambat  $10,10 \pm 0,73$  mm.

Kata Kunci: Antibakteri, Antijerawat, Daun sembung rambat, Masker gel, *Staphylococcus aureus*

Referensi : (1986-2023)

## **ABSTRACT**

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**FORMULATION OF ANTIBACTERIAL GEL MASK ETHANOL EXTRACT  
70% LEAVES SEMBUNG RAMBAT (*Mikania micrantha Kunth*) AGAINST  
BACTERIA *Staphylococcus aureus* AS ANTIACNE**

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*Sembung rambat leaves (*Mikania micrantha Kunth*) is a weed plant with very fast growth, containing alkaloids, phenols, flavonoids, saponins, steroids, terpenoids, and tannins. In vitro studies, sembung rambat leaf extract has been shown to have antibacterial activity against gram-positive bacteria, one of which is *Staphylococcus aureus*. The research was conducted with the idea of making a gel preparation formulation of the ethanol extract of sembung rambat leaves with a combination of base concentrations, namely HPMC and carbopol 940 with a ratio of (70%:30%), (50%:50%), and (30%:70%). The method was carried out experimentally in a laboratory related to antibacterial testing of Sembung Rambat leaf extract, making mask gel preparations, as well as testing the physical properties of the preparations including organoleptic tests, homogeneity, spreadability, pH, and viscosity of the preparations. The results showed that the gel mask preparation of 70% ethanol extract of Sembung Rambat leaves in formula one (F1) was able to meet the parameters of the physical quality of the gel organoleptically, homogeneity, spreadability, pH, and viscosity of the preparation. Mask gel preparations that provide the physical properties of the gel are suitable for F1 with a gelling agent ratio of (HPMC: Carbopol 940), namely (70:30) with the addition of an extract concentration of 5000 ppm which is good at inhibiting *Staphylococcus aureus* bacteria with an inhibition zone of 10,10 ± 0,73 mm.*

**Keywords:** Antibacterial, Antiacne, Sembung rambat leaves, Gel mask, *Staphylococcus aureus*

**References :** (1986-2023)