

INTISARI

RINI, DP., 2022, FORMULASI EMULGEL EKSTRAK DAUN PEGAGAN (*Centella asiatica* (L.) Urban) DAN UJI AKTIVITAS ANTIBAKTERI *Staphylococcus aureus* ATCC 25923. SKRIPSI, FAKULTAS FARMASI UNIVERSITAS SETIA BUDI, SURAKARTA.

Ekstrak daun pegagan memiliki aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC25923. Ekstrak daun pegagan diformulasikan ke dalam bentuk emulgel. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi karbopol 940 terhadap aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC25923 dan sifat fisik sediaan emulgel.

Penelitian ini menggunakan enam formula dengan kandungan karbopol 940 0,5%, 1,5% dan 2% ditambah dengan tiga kontrol negatif. Sifat fisik emulgel diuji organoleptis, daya sebar, daya lekat, viskositas, pH dan stabilitas. Pengujian antibakteri menggunakan metode sumuran. Metode uji Sifat fisik emulgel dan pengukuran diameter infeksi dianalisis menggunakan Saphiro-Wilk.

Hasil penelitian menunjukkan variasi konsentrasi carbopol 940 berpengaruh terhadap mutu fisik dan nilai daya hambat terhadap *Staphylococcus aureus* ATCC 25923, penurunan nilai pH, dan nilai viskositas yang tinggi dapat mempengaruhi diameter daya hambat sediaan emulgel. Formula emulgel ekstrak daun pegagan dengan konsentrasi carbopol 1,5% memenuhi mutu fisik yang baik dan memiliki daya hambat baik dibandingkan dengan carbopol 940 konsentrasi 0,5% dan 2%.

Kata kunci : Antibakteri, *Staphylococcus aureus* ATCC 25923, Ekstrak, *Centella asiatica* (L.)Urban) ATCC 25923, Emulgel, Antibakteri.

ABSTRAK

RINI, DP., 2022, EMULGEL FORMULATION OF CENTELLA ASIATICA (L.) Urban LEAF EXTRACT AND ANTIBACTERIAL ACTIVITY TEST OF STAPHYLOCOCCUS AUREUS ATCC 25923. SKRIPSI, FAKULTAS FARMASI UNIVERSITAS SETIA BUDI, SURAKARTA.

Centella asiatica leaf extract has antibacterial activity against *Staphylococcus aureus* ATCC25923. *Centella asiatica* leaf extract is formulated into the form of emulgel. This study aims to determine the effect of variations in the concentration of carbopol 940 on antibacterial activity on *Staphylococcus aureus* ATCC 25923 and the physical properties of emulgel preparations.

This study used six formulas with a carbopol content of 940 0.5%, 1.5% and 2% plus three negative controls. The physical properties of emulgel were tested for organolepticity, dispersal power, adhesion, viscosity, pH and stability. Antibacterial testing using the welling method. The pouring media on the saucer was then smeared with the well method and added to each variation in carbopol concentration, positive control and negative control. Test results The physical properties of emulgel and measurement of infection diameter were analyzed using Saphiro-Wilk.

The results showed that variations in the concentration of carbopol 940 affected the physical properties and inhibitory power values of *Staphylococcus aureus* ATCC 25923. The emulgel formula of *Centella asiatica* leaf extract with a carbopol concentration of 1.5% meets good physical properties and has good inhibitory power compared to carbopol 940 concentrations of 0.5% and 2%.

Kata kunci : Antibacterial, *Staphylococcus aureus* ATCC 25923, Extract, *Centella asiatica* (L.)Urban) ATCC 25923, Emulgel.