

INTISARI

Penelitian tentang pengaruh variasi komposisi dari PEG 400 dan PEG 4000 pada aktivitas antibakteri dalam salep minyak atsiri sereh wangi Jawa terhadap *Staphylococcus epidermidis* telah dilakukan. Selain untuk mengamati pengaruh komposisi PEG pada aktivitas antibakteri terhadap *Staphylococcus epidermidis*, penelitian ini juga bertujuan untuk membuat formulasi sediaan salep minyak atsiri sereh wangi Jawa dan mengetahui sifat fisiknya.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan penelitian acak lengkap pola dua arah. Salep minyak atsiri sereh wangi Jawa dibuat dalam 2 formula dimana sifat fisik dan zona hambat sebagai respon dari variasi komposisi PEG 400 dan PEG 4000. Dalam penelitian ini sifat fisik sediaan salep minyak atsiri sereh wangi Jawa diteliti. Hasil penelitian dianalisis secara statistik menggunakan metode ANAVA dua arah, dimana diikuti dengan uji *Tukey* untuk mengetahui perbedaan tiap formula dan kelompok kontrol menggunakan software R 2.14.1.1.

Hasil penelitian menunjukkan salep minyak atsiri sereh wangi Jawa menghasilkan aktivitas antibakteri terhadap *Staphylococcus epidermidis*. Aktivitas antibakteri salep minyak atsiri sereh wangi Jawa tidak terpengaruh oleh variasi komposisi dari PEG 400 dan PEG 4000.

Keywords: *Cymbopogon winterianus*, salep, aktivitas antibakteri, diameter zona hambat.

ABSTRACT

The study of effect of variation composition of PEG 4000 and PEG 400 on the antibacterial activity of Citronella Java oil ointment against Staphylococcus epidermidis had been done. Beside to observe the effect of PEG composition on the antibacterial activity against Staphylococcus epidermidis, this study also aimed to provide ointment formulation for Citronella Java oil which met physical ointment.

This study was a pure experimental study using randomized study design complete two directional pattern. The Citronella Java oil ointment was designed into 2 formulas which physical ointment and inhibition zone as response of variance composition of PEG 400 and PEG 4000.

In this study, the physical properties of Citronella Java oil ointment were investigated. The result were analyzed statistikally by using two-way ANAVA method, which was then followed by Tukey's test to observe the differences between each formula and the control group using the software R 2.14.1.1

The results showed that the Citronella Java oil ointment provided antibacterial activity againt Staphylococcus epidermidis. The antibacterial activity of Citronella Java oil ointment was not affected by the variation composition of PEG 400 and PEG 4000.

Keywords: *Cymbopogon winterianus, ointments, antibacterial activity, inhibition zone diameter.*