

ABSTRAK
PENGARUH PEMBERIAN FORMULASI SALEP EKSTRAK DAUN
BAKAU (*Rhizophora apiculata*) TERHADAP PENYEMBUHAN
LUKA SAYAT PADA TIKUS PUTIH (*Rattus norvegicus*)
GALUR SPRAGUE DAWLEY

Oleh

Made Ayu Wardina

Latar Belakang: *Rhizophora apiculata* memiliki efek antiinflamasi, analgetik, antioksidan dan antibakteri diduga membantu proses penyembuhan luka. Perlu dikembangkan lebih lanjut potensi ekstrak daun *Rhizophora apiculata* yang diformulasikan dalam bentuk salep terhadap penyembuhan luka sayat.

Tujuan: Mengetahui pengaruh pemberian salep ekstrak daun *Rhizophora apiculata* terhadap penyembuhan luka sayat pada tikus putih galur *Sprague dawley*

Metode: Eksperimental pendekatan *Post Test Only Control Group Design*. Salep dibuat dengan variasi konsentrasi ekstrak daun *Rhizophora apiculata* 20%, 30%, 40%, dan basis salep. Salep diamati pengaruhnya terhadap penyembuhan luka sayat pada tikus putih jantan galur *Sprague dawley* selama 14 hari. Data diuji statistik menggunakan uji *one way ANOVA* dan uji *Kruskal wallis* dan uji *post hoc*.

Hasil: Salep ekstrak daun *Rhizophora apiculata* memiliki efek terhadap penyusutan panjang luka sayat pada fase proliferasi. Pengamatan infeksi lokal dan reaksi alergi berdasarkan skor Nagaoka pada salep ekstrak daun *R. apiculata* tidak berbeda bermakna dengan kontrol normal dan kontrol positif. Konsentrasi 30% dan 40% memiliki pengaruh penyembuhan luka yang sama baik dengan obat luka sayat standar (oxoferin) dan formula optimum yaitu konsentrasi 30%.

Simpulan: Salep ekstrak daun *Rhizophora apiculata* memiliki pengaruh terhadap percepatan penyembuhan luka sayat pada tikus putih galur *Sprague dawley*.

Kata kunci: bakau, *Rhizophora apiculata*, salep, luka sayat

ABSTRACT
EFFECT OF MANGROVE LEAF EXTRACT OINTMENT
FORMULATION (*Rhizophora apiculata*) ON WOUND
HEALING IN WHITE RATS (*Rattus norvegicus*)
SPRAGUE DAWLEY STRAIN

By

Made Ayu Wardina

Background: *Rhizophora apiculata* has anti-inflammatory, analgesic, antioxidant and antibacterial effects which are thought to help the wound healing process. It is necessary to further develop the potential of *Rhizophora apiculata* leaf extract which is formulated in the form of an ointment for healing cuts.

Objective: To determine the effect of giving *Rhizophora apiculata* leaf extract ointment on wound healing in *Sprague dawley* white rats

Method: Experimental approach to Post Test Only Control Group Design. Ointments were made with various concentrations of *Rhizophora apiculata* leaf extract 20%, 30%, 40%, and an ointment base. The ointment was observed for its effect on wound healing in male white rats of *Sprague dawley* strain for 14 days. Data were statistically tested using one way ANOVA test and Kruskal wallis test and post hoc test.

Results: *Rhizophora apiculata* leaf extract ointment has an effect on shrinking the length of the incision in the proliferative phase. Observation of local infections and allergic reactions based on the Nagaoka score on *R. apiculata* leaf extract ointment was not significantly different from normal controls and positive controls. Concentrations of 30% and 40% have the same wound healing effect as standard wound medicine (oxoferin) and the optimum formula is a concentration of 30%.

Conclusion: *Rhizophora apiculata* leaf extract ointment has an effect on accelerating wound healing in *Sprague dawley* white rats.

Keywords: mangroves, *Rhizophora apiculata*, ointment, cuts