

Abstrak

AKTIVITAS GEL EKSTRAK ETANOLIK TERPURIFIKASI DAUN MANGROVE API-API (*Avicennia marina*) UNTUK PENGobatan LUKA BAKAR PADA TIKUS

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Latar Belakang : Daun mangrove api-api (*Avicennia marina*) mengandung beberapa senyawa metabolit sekunder, antara lain saponin, flavonoid, tannin, steroid dan alkaloid yang berperan dalam proses penyembuhan luka bakar. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi ekstrak etanol terpurifikasi daun mangrove api-api terhadap sifat fisik dan stabilitas sediaan gel, serta memiliki aktivitas untuk pengobatan luka bakar pada tikus.

Metodologi : Penelitian eksperimental ini meliputi ekstraksi dan purifikasi daun mangrove api-api, formulasi sediaan gel, evaluasi sifat fisik dan stabilitas, serta uji aktivitas pengobatan luka bakar. Formula sediaan gel dibuat dengan variasi konsentrasi ekstrak etanol terpurifikasi daun mangrove api-api 2,5%; 0,5%; dan 7,5%. Hasil data evaluasi sifat fisik dan stabilitas serta uji aktivitas untuk pengobatan luka bakar dianalisis secara deskriptif dan dengan uji *one-way* ANOVA.

Hasil Penelitian : Variasi konsentrasi ekstrak etanol terpurifikasi daun mangrove api-api dapat meningkatkan daya sebar serta menurunkan viskositas dan daya lekat sediaan gel, stabil pada uji *Freeze-thaw* dan memiliki aktivitas pengobatan luka bakar.

Kesimpulan : Sediaan gel ekstrak etanol terpurifikasi daun mangrove api-api terbaik yang memenuhi sifat fisik dan stabilitas sediaan gel serta memiliki aktivitas pengobatan luka bakar paling baik yaitu formula III dengan konsentrasi 0,75%.

Kata kunci : *Avicennia marina*, Gel Ekstrak Etanol Terpurifikasi, Pengobatan Luka Bakar, *Image-J*.

Abstract

THE ACTIVITY OF PURIFIED ETHANOLIC EXTRACT GEL FROM MANGROVE LEAVES (*Avicennia marina*) AS THERAPY FOR SKIN BURN IN RATS

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Background : Mangrove leaves (*Avicennia marina*) contains several secondary metabolite compounds, including saponins, flavonoids, tannins, steroids and alkaloids which play a role in the process of healing burns. This study aims to determine the effect of variations in the concentration of purified ethanol extract mangrove leaves on the physical characteristic and stability of gel preparations, and also having activities for the treatment of burns in rats.

Methodology : This experimental research is included the extraction and purification of the mangrove leaves, gel formulation, evaluation of physical characteristic and stability, and also burn treatment activities test. The gel preparation formula was made with variations in the concentration of purified ethanol extract mangrove leaves 2,5%; 0.5%; and 7.5%. The results of the evaluation of physical characteristic, stability and burn treatment activities test was analyzed descriptively and with *one-way* ANOVA test.

Results : Variations in the concentration of purified ethanol extract mangrove leaves could increase spreadability and reduce the viscosity and adhesion of gel preparations, were stable in the *Freeze-thaw* test and also having activities for the treatment of burns.

Conclusion : The best purified ethanol extract mangrove leaves which fulfills the physical characteristic and stability of the gel preparation and has the best burn treatment activity is formula III with a concentration of 0.75%.

Keywords : *Avicennia marina*, Purified Ethanol Extract Gel, Burn Treatment, *Image-J*.