ABSTRAK

UJI AKTIVITAS ANTIBAKTERI SEDIAAN *CLAY MASK* EKSTRAK ETANOL 96% DAUN GELINGGANG (*Cassia alata* L.) Terhadap Bakteri *Cutibacterium acnes* (oleh Nurul Aulia Nasution; Pembimbing Fitriyanti dan Putri Kartika Sari; 2024; 129 Halaman)

Jerawat sering disebabkan oleh *Cutibacterium acnes* dan penggunaan antibiotik menyebabkan resistensi dan efek samping. Daun gelinggang (*Cassia alata* L.) berpotensi sebagai alternatif karena diduga memiliki kandungan senyawa antibakteri flavonoid, fenol, alkaloid, saponin, steroid, dan tanin. Oleh karena itu, penggunaan bahan alam semakin diminati sebagai alternatif pengobatan. Ekstrak daun gelinggang diformulasikan dalam sediaan *clay mask* dengan tujuan untuk mengetahui nilai diameter zona hambat dan kategori penghambatan *clay mask* ekstrak etanol 96% daun gelinggang terhadap *C.acnes*. Ekstrak daun gelinggang dibuat dengan maserasi menggunakan etanol 96%. Uji aktivitas antibakteri dilakukan dengan metode sumuran pada konsentrasi 5%, 7%, 9%, dan 11%. Hasil skrining fitokimia ekstrak daun gelinggang positif mengandung senyawa flavonoid, fenol, alkaloid, saponin, steroid, dan tanin. Hasil daya hambat menunjukkan formula konsentrasi 5%, 7%, 9%, dan 11% berturut-turut 7,17 mm, 7,57 mm, 7,95 mm, dan 8,3 mm dengan kategori penghambatan yaitu sedang untuk semua formula. Hasil uji SPSS menyatakan terdapat perbedaan signifikan antar formula (sig<0,05). *Clay mask* ekstrak daun gelinggang menunjukkan aktivitas antibakteri sedang terhadap *C.acnes* dengan peningkatan efektivitas seiring kenaikan konsentrasi.

Kata Kunci : Daun gelinggang (*Cassia alata* L.), *clay mask*, *Cutibacterium acnes*, zona hambat.

ABSTRACT

The Antibacterial Activity Test of Clay Mask Preparation with 96% Ethanol Extract of Gelinggang Leaves (Cassia alata L.) Against Cutibacterium acnes **(by Nurul Aulia Nasution; Advisor Fitriyanti and Putri Kartika Sari; 2024; 129 Pages).**

Acne is often caused by *Cutibacterium acnes*, and the use of antibiotics can lead to resistance and side effects. Gelinggang leaves (*Cassia alata* L.) are potential alternatives due to their suspected antibacterial compounds, including flavonoids, phenols, alkaloids, saponins, steroids, and tannins. Consequently, natural ingredients are increasingly preferred for treatment. This study aims to determine the inhibition zone diameter and inhibition category of a clay mask formulated with 96% ethanol extract of Gelinggang leaves against *C.acnes*. The Gelinggang leaf extract was prepared using maceration with 96% ethanol. Antibacterial activity was tested using the well diffusion method at concentrations of 5%, 7%, 9%, and 11%. Phytochemical screening of the extract confirmed the presence of flavonoids, phenols, alkaloids, saponins, steroids, and tannins. The inhibition zones for concentrations of 5%, 7%, 9%, and 11% were 7.17 mm, 7.57 mm, 7.95 mm, and 8.3 mm, respectively, all classified as moderate inhibition. SPSS analysis indicated significant differences between the formulas (sig < 0.05). The clay mask with *Cassia alata* extract showed moderate antibacterial activity against *C.acnes*, with effectiveness increasing with higher concentrations.

Keywords: Gelinggang leaves (*Cassia alata* L.), *clay mask*, *Cutibacterium acnes*, inhibition zone.