ABSTRAK

UJI DAYA HAMBAT SALEP EKSTRAK KRATOM (*Mitragyna Speciosa Kort.*)TERHADAP BAKTERI *PROPIONIBACTERIUM ACNES*

Muhamad Fikri Amulah[1], Ariffialdi Nurhidayatulloh [1],
Dr. Ns. Khoirul Rista Abidin, M.Biomed[1]
[1]Politeknik 'Aisyiyah Pontianak
amulahfikri@gmail.com

Latar belakang, tujuan Jerawat (*acne vulgaris*) merupakan penyakit kulit inflamasi yang salah satu penyebabnya adalah bakteri *Propionibacterium acnes*. Penggunaan antibiotik jangka panjang dapat memicu resistensi, sehingga diperlukan alternatif berbahan alam. Daun kratom (*Mitragyna speciosa Korth.*) mengandung metabolit sekunder seperti alkaloid, flavonoid, tanin, saponin, dan fenol yang berpotensi sebagai antibakteri. Penelitian ini bertujuan mengevaluasi aktivitas antibakteri salep ekstrak daun kratom terhadap *P. acnes*. **Metode** Penelitian menggunakan desain quasi eksperimental dengan *post-test only control group*. Ekstrak diperoleh melalui maserasi menggunakan metanol 70% dan diformulasikan menjadi salep konsentrasi 5%, 10%, dan 15%. Uji antibakteri dilakukan dengan metode difusi cakram pada media *Mueller Hinton Agar* (MHA). Data dianalisis menggunakan ANOVA dan uji *Games-Howell*. **Hasil** Salep ekstrak daun kratom pada konsentrasi 5%, 10%, dan 15% mampu menghambat pertumbuhan *P. acnes*. Konsentrasi 15% menghasilkan zona hambat terbesar. Terdapat perbedaan aktivitas antibakteri antar konsentrasi perlakuan. **Kesimpulan** Salep ekstrak daun kratom menunjukkan aktivitas antibakteri terhadap *P. acnes* dan berpotensi sebagai alternatif berbahan alami untuk pengobatan jerawat.

Kata kunci: *Jerawat, Mitragyna speciose, Propionibacterium acnes, Salep antibakteri.*

PERPUSTAKAAN
POLITEKNIK 'AISYIYAH PONTIANAK

ABSTRACT

INHIBITORY TEST OF KRATOM (Mitragyna Speciosa Kort.) EXTRACT OINTMENT AGAINST PROPIONIBACTERIUM ACNES

Muhamad Fikri Amulah[1], Ariffialdi Nurhidayatulloh [1],
Dr. Ns. Khoirul Rista Abidin, M.Biomed[1]
Politeknik 'Aisyiyah Pontianak
amulahfikri@gmail.com

Background and Objective *Acne vulgaris is an inflammatory skin disease commonly associated with Propionibacterium acnes. Long-term use of antibiotics may cause bacterial resistance, creating a need for natural alternatives. Kratom leaves (Mitragyna speciosa Korth.) contain secondary metabolites such as alkaloids, flavonoids, tannins, saponins, and phenols with potential antibacterial activity. This study aimed to evaluate the antibacterial activity of kratom leaf extract ointment against P. Acnes.* ***Methods*** *This study used a quasi-experimental design with a post-test-only control group. Kratom leaf extract was obtained by maceration using 70% methanol and formulated into ointments at concentrations of 5%, 10%, and 15%. Antibacterial activity was tested using the disc diffusion method on Mueller-Hinton Agar (MHA). Data were analyzed using ANOVA followed by the Games-Howell post hoc test.* ***Results*** *Kratom leaf extract ointments at concentrations of 5%, 10%, and 15% inhibited the growth of P. Acnes. The 15% concentration produced the largest inhibition zone. Statistical analysis showed differences in antibacterial activity among the treatment concentrations.* ***Conclusion*** *Kratom leaf extract ointment exhibited antibacterial activity against P. acnes and has potential as a natural alternative for acne treatment.*

Keywords *Acne, Mitragyna speciosa, Propionibacterium acnes, Ointment, antibacterial.*

PERPUSTAKAAN NPP. 6171052A9000001
POLITEKNIK 'AISYIYAH PONTIANAK