

**PROGRAM STUDI SARJANA FARMASI
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Judul : Pengaruh Variasi Konsentrasi Ekstrak Infusa Daun Salam (*Syzygium polyanthum* (Wight.) Walp.) Sebagai Antidepresan Pada Mencit Putih (*Mus musculus*) Jantan Dengan Menggunakan Metode Forced Swim Test.

ABSTRAK

Depresi merupakan gangguan mental yang ditandai dengan perasaan sedih, putus asa, dan kehilangan minat, yang berdampak negatif terhadap kualitas hidup. Penggunaan obat antidepresan sintesis dapat menimbulkan efek samping sehingga diperlukan alternatif dari bahan alam. Daun salam (*Syzygium polyanthum* (Wight.) Walp.) diketahui mengandung flavonoid, alkaloid, saponin, tanin, dan terpenoid yang berpotensi sebagai antidepresan. Penelitian ini bertujuan mengetahui pengaruh variasi konsentrasi ekstrak infusa daun salam terhadap aktivitas antidepresan pada mencit putih jantan (*Mus musculus*) dengan metode *Forced Swim Test* (FST). Sebelum dilakukan pengujian, penelitian ini telah memperoleh persetujuan etik penelitian (*Ethical Clearance*) dari Komisi Etik Penelitian Universitas Imelda Medan dengan nomor surat persetujuan etik No.686/KEPHA-FMIPA/2025, sebagai bentuk kepatuhan terhadap prinsip etika penggunaan hewan coba. Penelitian menggunakan 25 ekor mencit yang dibagi dalam lima kelompok: kontrol negatif (Na-CMC 0,5%), kontrol positif (*Flunarizine* 0,065 mg/kgBB), serta perlakuan infusa daun salam konsentrasi 10%, 20%, dan 40%. Parameter yang diamati adalah *immobility time*. Hasil menunjukkan bahwa kontrol negatif tidak mengalami penurunan bermakna, sedangkan kontrol positif (*Flunarizine*) menurun secara signifikan. Ekstrak infusa daun salam dosis 10% dan 20% juga menurunkan *immobility time*, namun paling optimal ditunjukkan oleh dosis 40%. Analisis statistik ANOVA membuktikan adanya perbedaan signifikan antara rerata kelompok ($p < 0,05$). Berdasarkan hasil uji LSD (*Least Significant Difference*) menunjukkan dosis 40%, 20% dan 10% tidak berbeda signifikan dengan kontrol positif ($p > 0,05$) sebagai antidepresan.

Kata kunci: Daun salam (*Syzygium polyanthum* (Wight.) Walp.), antidepresan, *Forced Swim Test*, mencit putih.

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Title : *The Effect of Variations in the Concentration of Bay Leaf Infusion Extract (Syzygium polyanthum (Wight.) Walp.) as an Antidepressant in Male White Mice (Mus musculus) Using the Forced Swim Test Method.*

ABSTRACT

Depression is a mental disorder characterized by feelings of sadness, hopelessness, and loss of interest, which negatively impacts the quality of life. The use of synthetic antidepressant drugs can cause side effects, so alternatives from natural ingredients are needed. Bay leaves (Syzygium polyanthum (Wight.) Walp.) are known to contain flavonoids, alkaloids, saponins, tannins, and terpenoids that have the potential as antidepressants. This study aims to determine the effect of varying the concentration of bay leaf infusion extract on antidepressant activity in male white mice (Mus musculus) using the Forced Swim Test (FST) method. Before testing, this study has obtained research ethics approval (Ethical Clearance) from the Research Ethics Commission of Imelda University Medan with the ethics approval letter number No. 686 / KEPHA-FMIPA / 2025, as a form of compliance with the ethical principles of the use of experimental animals. The study used 25 mice divided into five groups: negative control (0.5% Na-CMC), positive control (0.065 mg/kgBW of Flunarizine), and bay leaf infusion treatment at concentrations of 10%, 20%, and 40%. The parameter observed was immobility time. The results showed that the negative control did not experience a significant decrease, while the positive control (Flunarizine) decreased significantly. Bay leaf infusion extract at doses of 10% and 20% also reduced immobility time, but the most optimal dose was shown by the 40% dose. ANOVA statistical analysis demonstrated a significant difference between the group means ($p < 0.05$). The Least Significant Difference (LSD) test showed that the 40%, 20%, and 10% doses were not significantly different from the positive control ($p > 0.05$) as an antidepressant.

Keywords: *Bay leaf (Syzygium polyanthum (Wight.) Walp.), antidepressant, Forced Swim Test, white mice*