

**PROGRAM STUDI SARJANA FARMASI  
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Judul : Pengaruh Variasi Konsentrasi Ekstrak Infusa Daun Salam (*Syzygium polyanthum* (Wight.) Walp.) Sebagai Anti-inflamasi Yang Diberikan Induksi Panas Pada Mencit Jantan (*Mus musculus*)

**ABSTRAK**

Daun salam (*Syzygium polyanthum* (Wight.) Walp.) merupakan tanaman obat tradisional yang diketahui memiliki kandungan metabolit sekunder seperti flavonoid, tanin, saponin, alkaloid, dan steroid yang berperan dalam aktivitas antiinflamasi. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi ekstrak infusa daun salam terhadap efek antiinflamasi serta menentukan konsentrasi paling efektif pada mencit jantan (*Mus musculus*). Ekstrak infusa dibuat dengan metode infundasi menggunakan pelarut aquades pada suhu 90°C selama 15 menit dengan tiga variasi konsentrasi, yaitu 20%, 40%, dan 60%. Uji karakteristik fisik dilakukan meliputi uji organoleptik, pH, dan kejernihan, sedangkan identifikasi kandungan senyawa aktif dilakukan melalui skrining fitokimia. Uji efek antiinflamasi dilakukan menggunakan metode *hot plate* pada suhu 70°C dengan mengamati respon nyeri mencit berupa waktu menjilati kaki belakang atau melompat. Sebanyak 25 ekor mencit dibagi menjadi lima kelompok, yaitu kontrol negatif (Na-CMC 0,5%), kontrol positif (natrium diklofenak), dan tiga kelompok perlakuan ekstrak infusa daun salam. Data hasil penelitian dianalisis menggunakan uji One Way ANOVA dilanjutkan dengan uji LSD. Hasil penelitian menunjukkan bahwa ekstrak infusa daun salam memiliki aktivitas antiinflamasi yang signifikan dibandingkan kontrol negatif ( $p < 0,05$ ). Konsentrasi 60% menunjukkan efek paling kuat dan mendekati aktivitas kontrol positif. Dengan demikian, ekstrak infusa daun salam berpotensi sebagai alternatif terapi herbal antiinflamasi. Penelitian selanjutnya disarankan mengun-

akan variasi metode ekstraksi lain, misalnya soxhletasi agar diperoleh variasi yang lebih luas.

**Kata kunci:** daun salam, *Syzygium polyanthum*, infusa, antiinflamasi, mencit

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Title : *The Effect of Variations in the Concentration of Bay Leaf (Syzygium polyanthum (Wight.) Walp.) Infussion Extract as an Anti-Inflammatory Given Heat Induction in Male Mice (Mus musculus).*

**ABSTRACK**

*Bay leaf (Syzygium polyanthum (Wight.) Walp.) is a traditional medicinal plant known to contain secondary metabolites such as flavonoids, tannins, saponins, alkaloids, and steroids that play a role in anti-inflammatory activity. This study aims to determine the effect of variations in the concentration of bay leaf infusion extract on the anti-inflammatory effect and to determine the most effective concentration in male mice (Mus musculus). The infusion extract was prepared by the infundation method using aquadest solvent at a temperature of 90°C for 15 minutes with three concentration variations, namely 20%, 40%, and 60%. Physical characteristic tests were carried out including organoleptic, pH, and clarity tests, while identification of active compound content was carried out through phytochemical screening. The anti-inflammatory effect test was carried out using the hot plate method at a temperature of 70°C by observing the pain response of mice in the form of licking their hind legs or jumping. A total of 25 mice were divided into five groups, namely negative control (0.5% Na-CMC), positive control (sodium diclofenac), and three treatment groups of bay leaf infusion extract. The research data were analyzed using One-Way ANOVA followed by LSD. The results showed that bay leaf infusion extract had significant anti-inflammatory activity compared to the negative control ( $p < 0.05$ ). The 60% concentration showed the strongest effect and approached the activity of the positive control. Thus, bay leaf infusion extract has the potential as an alternative herbal anti-inflammatory therapy. Further research is recommended using other extraction methods, such as soxhletation, to obtain a wider variety of results.*

**Keywords:** *bay leaf, Syzygium polyanthum, infusion, anti-inflammatory, mice*