

EFEK EKSTRAK AIR BUNGA TELANG (*Clitoria ternatea* L.) TERHADAP PERILAKU DAN PROFIL TROMBOSIT MENCIT ALBINO *Mus musculus* (Linnaeus, 1758) JANTAN SERUPA DEPRESI

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INTISARI

Depresi merupakan kondisi ketika seseorang mengalami ketidaknyamanan emosional seperti sedih, putus asa, dan perasaan tidak berdaya yang dapat menurunkan motivasi dalam menjalani aktivitas sehari-hari maupun hubungan sosial. Saat ini, telah banyak tersedia obat antidepresan sintetik, tetapi penggunaannya sering menimbulkan efek samping, sehingga diperlukan alternatif antidepresan berbahan alami. Bunga telang (*Clitoria ternatea* L.) diketahui mengandung fitokimia seperti flavonoid dan antosianin yang memiliki potensi efek antidepresan. Penelitian ini bertujuan untuk mengevaluasi potensi efek antidepresan ekstrak air bunga telang pada mencit albino *Mus musculus* (Linnaeus, 1758) jantan serupa depresi dengan menganalisis waktu imobilitas melalui uji perilaku serta menganalisis profil trombosit (PLT, PDW, P-LCR) sebagai indikator perifer. Sebanyak 24 ekor mencit dibagi ke dalam enam kelompok perlakuan meliputi kontrol normal, kontrol positif (*fluoxetine*), kontrol negatif (akuades), serta tiga kelompok dosis ekstrak air bunga telang (625; 1.250; dan 2.500 mg/kg BB). Model serupa depresi dibuat melalui induksi stres berulang dengan metode *Tail Suspension Test* (TST) selama tujuh hari, diikuti pemberian perlakuan dan uji perilaku menggunakan metode *Forced Swim Test* (FST) selama dua hari. Profil trombosit diukur menggunakan *hematology analyzer*. Data dianalisis dengan *one way ANOVA* dan uji non-parametrik sesuai distribusi. Hasil penelitian menunjukkan pemberian ekstrak air bunga telang pada mencit albino jantan serupa depresi dapat menurunkan rerata waktu imobilitas serta parameter profil trombosit (PLT, PDW, dan P-LCR), tetapi penurunan tersebut belum signifikan secara statistik ($p > 0,05$). Hasil ini dapat disimpulkan bahwa ekstrak air bunga telang memiliki potensi aktivitas antidepresan serta efek modulasi jumlah dan aktivasi trombosit yang relatif lemah.

Kata kunci: antidepresan, *Clitoria ternatea*, depresi, *Forced Swim Test*, trombosit

*EFFECT OF BUTTERFLY PEA FLOWER (*Clitoria ternatea* L.)
WATER EXTRACT ON BEHAVIOR AND PLATELET PROFILE
IN DEPRESSION-LIKE MALE ALBINO MICE *Mus musculus*
(Linnaeus, 1758)*

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ABSTRACT

*Depression is characterized by persistent emotional distress, such as sadness, hopelessness, and helplessness, which can diminish motivation for daily activities and social interactions. Although numerous synthetic antidepressants are available, their use often produces adverse side effects, highlighting the need for natural alternatives. Butterfly pea (*Clitoria ternatea* L.) flower contains phytochemicals—flavonoids and anthocyanins—with potential antidepressant properties. This study aimed to evaluate the antidepressant potential of a water extract of butterfly pea flower in male albino mice *Mus musculus* (Linnaeus, 1758) exhibiting depression-like behavior by measuring immobility time in behavioral tests and analyzing platelet profile parameters (PLT, PDW, P-LCR) as supportive indicators. Twenty-four mice were divided into six treatment groups: normal control, positive control (fluoxetine), negative control (distilled water), and three extract doses (625; 1.250; and 2.500 mg/kg body weight). Depression-like behavior was induced by repeated stress via the Tail Suspension Test (TST) for seven days, followed by treatment administration and behavioral assessment using the Forced Swim Test (FST) over two days. Platelet profiles were measured with a hematology analyzer. Data were analyzed by one-way ANOVA or nonparametric tests, as appropriate. The results showed that administration of the aqueous extract of butterfly pea flower in male albino mice with depression-like conditions reduced the mean immobility time as well as platelet profile parameters (PLT, PDW, and P-LCR), although the reductions were not statistically significant ($p > 0.05$). These findings indicate that the aqueous extract of butterfly pea flower has potential antidepressant activity and a relatively weak modulatory effect on platelet count and activation.*

*Key words: antidepressants, *Clitoria ternatea*, depression, Forced Swim Test, platelet*