

PERBEDAAN EFEKTIVITAS EKSTRAK DAN INFUSA DAUN SALAM (*Eugenia polyantha*) TERHADAP KADAR MALONDIALDEHIDA (MDA) DARAH TIKUS GALUR WISTAR YANG DIINDUKSI ALOKSAN

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Abstrak

Hiperglikemia kronik pada DM (diabetes melitus) akan menyebabkan peningkatan stress oksidatif. Daun salam diketahui memiliki efek antioksidan. Penelitian bertujuan untuk mengetahui perbedaan efektivitas ekstrak dan infusa daun salam terhadap kadar malondialdehida (MDA) darah tikus galur Wistar yang diinduksi aloksan. Metode penelitian menggunakan *true experimental post control group design*. Hewan uji yang digunakan adalah 25 ekor tikus jantan galur Wistar berusia 2 – 3 bulan, berat badan 150 – 250 gram, yang dibagi menjadi 5 kelompok dengan pemberian perlakuan selama 14 hari. Kelompok I: kontrol negative; Kelompok II: kontrol positif yang diinduksi aloksan; Kelompok III: diinduksi aloksan dan diberi ekstrak daun salam dosis 500 mg/KgBB; Kelompok IV: diinduksi aloksan dan diberi infusa daun salam konsentrasi 20%; Kelompok V: diinduksi aloksan dan diberi glibenklamid dosis 0,09 mg/200gBB. Efek antioksidan diukur berdasarkan kadar malondialdehida (MDA) darah menggunakan spektrofotometer pada panjang gelombang 530 nm. Uji statistik menggunakan ANOVA dan *Post Hoc LSD* dengan $\alpha = 0.05$. Hasil analisis statistik menunjukkan kelompok ekstrak daun salam (K-III) tidak memiliki signifikansi yang bermakna terhadap kontrol positif sebesar ($0.094 > 0.05$). Sementara, kelompok infusa daun salam (K-IV) memiliki signifikansi yang bermakna terhadap kontrol positif sebesar ($.017 < 0.05$).

Kata kunci : Aloksan, Ekstrak Daun Salam, Infusa Daun Salam,
Malondialdehida

THE DIFFERENCE IN EFFECTIVENESS OF EXTRACT AND INFUSION OF BAY LEAF (*Eugenia polyantha*) TO MALONDIALDEHYDE (MDA) BLOOD LEVELS IN WISTAR STRAIN RATS INDUCED BY ALLOXAN

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Abstract

Hyperglycemia chronic in diabetes mellitus (DM) will cause an increase in oxidative stress. Bay leaf are known to have antioxidant effects. The aim of this study was to determine the difference in effectiveness of extract and infusion of bay leaf to MDA blood levels in Wistar strain rats induced by alloxan. The research method used was true experimental post control group design using 25 male Wistar strain rats, age 2–3 months old, weighing 150–250g, which were divided into 5 groups which were treated for 14 days, I: negative control; II: positive control that were induced by alloxan; III: induced by alloxan and given 500mg/kgBW bay leaf extract; IV: induced by alloxan and given bay leaf infusion with concentration of 20%; and V: induced by alloxan and given 0,09mg/200gBW glibenclamide. Antioxidant effects were measured based on MDA blood levels using spectrophotometer with wavelength of 530 nm. Statistic tests were done using ANOVA and *Post Hoc* LSD with $\alpha=0.05$. The result of statistical analysis showed that group III wasn't significant to positive control ($0.094>0.05$). Meanwhile, group IV was significant to positive control ($0.017<0.05$).

Keyword : Alloxan, Bay Leaf Extract, Bay Leaf Infusion, Malondialdehyde