

SKRIPSI SARJANA FARMASI

**PENGARUH VARIASI DOSIS DAN LAMA PEMBERIAN GAMBIR
TERPURIKIFIKASI (*Uncaria Gambir* Roxb.) TERHADAP KADAR
Malondialdehyde DAN *Tumor Necrosis Factor- alpha* DARAH TIKUS PUTIH
JANTAN DIABETES**



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ABSTRAK

PENGARUH VARIASI DOSIS DAN LAMA PEMBERIAN GAMBIR TERPURIFIKASI (*Uncaria Gambir Roxb.*) TERHADAP KADAR *Malondialdehyde* DAN *Tumor Necrosis Factor- alpha* DARAH TIKUS PUTIH JANTAN DIABETES

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Penelitian mengenai pengaruh variasi dosis dan lama pemberian gambir terpurifikasi terhadap kadar *malondialdehyde* (MDA) dan *Tumor Necrosis Factor- α* (TNF- α) tikus putih jantan diabetes yang diinduksi aloksan telah dilakukan. 15 tikus putih jantan dibagi menjadi 5 kelompok yang terdiri dari kelompok kontrol negatif, kelompok kontrol positif dan 3 kelompok yang diberi gambir terpurifikasi dengan dosis 2.5, 5, dan 10 mg/KgBB. Gambir terpurifikasi diberikan secara oral selama 14 hari. Kadar MDA diukur dengan metode TBARS pada hari ke-3,7, dan 14. Kadar TNF- α diukur dengan metode ELISA pada hari ke-3 dan 14. Data hasil penelitian di analisis menggunakan ANOVA dua arah dan dilanjutkan dengan uji lanjutan Duncan dengan signifikansi diambil pada tingkat kebermaknaan ($p < 0.05$). Hasil analisis data menunjukkan bahwa gambir terpurifikasi menyebabkan penurunan kadar MDA dan TNF- α secara nyata ($p < 0.05$). Pemberian gambir terpurifikasi selama 14 hari dapat menurunkan kadar MDA, tapi masih menyebabkan peningkatan kadar TNF- α serum tikus diabetes, walaupun peningkatan itu lebih rendah dibandingkan kelompok kontrol. Ini menunjukkan bahwa gambir terpurifikasi efektif dalam menurunkan kadar MDA dan TNF- α serum tikus diabetes.

Kata Kunci : Gambir terpurifikasi, Katekin, Diabetes, Stres Oksidatif, ROS MDA, TNF- α .

ABSTRACT

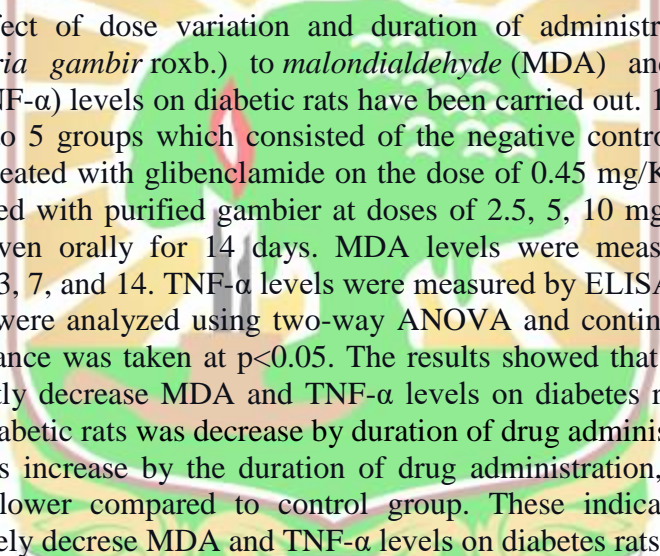
THE EFFECT OF DOSE VARIATION AND DURATION OF ADMINISTRATION OF PURIFIED GAMBIER (*Uncaria Gambir Roxb.*) TO Malondialdehyde AND Tumor Necrosis Factor-alpha LEVELS ON DIABETIC RATS

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The effect of dose variation and duration of administration of purified gambier (*Uncaria gambir roxb.*) to malondialdehyde (MDA) and tumor necrosis factor-alpha (TNF- α) levels on diabetic rats have been carried out. 15 male white rats were divided into 5 groups which consisted of the negative control group, positive control group (treated with glibenclamide on the dose of 0.45 mg/KgBW), and three test groups treated with purified gambier at doses of 2.5, 5, 10 mg/KgBW. Purified gambier was given orally for 14 days. MDA levels were measured by TBARS method on days 3, 7, and 14. TNF- α levels were measured by ELISA method on days 3 and 14. Data were analyzed using two-way ANOVA and continued with Duncan test and significance was taken at $p < 0.05$. The results showed that purified gambier could significantly decrease MDA and TNF- α levels on diabetes rats ($p < 0.05$). The MDA level of diabetic rats was decrease by duration of drug administration, while the TNF- α level was increase by duration of drug administration, eventhought the increation was lower compared to control group. These indicated that purified gambier effectively decrease MDA and TNF- α levels on diabetes rats.

Keywords: Purified Gambir, Catechins, Diabetes, Oxidative Stress, ROS, MDA, TNF- α .