

ABSTRAK

Irma Sinthia Simanjuntak, NIM 4212220002 (2021). Pengaruh Ekstrak Bunga Kecombrang (*Etilingera elatior*) terhadap Kadar Kolestrol dan Gula darah Tikus Putih (*Rattus novergicus*) yang di Induksi Aloksan.

Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak bunga kecombrang (*Etilingera elatior*) terhadap kadar kolestrol dan gula darah tikus putih (*Rattus novergicus*) yang di induksi aloksan. Penelitian ini merupakan penelitian eksperimental dengan rancangan acak lengkap (RAL) yang dibagi dalam 5 kelompok dengan masing-masing 5 ulangan dengan total 25 tikus putih jantan. Sebelum diberikan perlakuan, semua kelompok di induksi Aloksan 120 mg/kgBB dengan dosis tunggal. Setelah 3 hari masa induksi dan tikus putih dinyatakan diabetes, lalu masing-masing kelompok diberikan perlakuan kecuali kelompok I. Kelima kelompok terdiri dari Kelompok I Kontrol Negatif (K-) hanya diberikan pakan dan minum, Kelompok II Kontrol Positif (K+) diberikan Glibenklamid, Kelompok III, IV dan V diberikan ekstrak bunga kecombrang, berturut-turut 100 mg/kgBB, 200 mg/kgBB dan 400 mg/kgBB selama 14 hari. Dilakukan pengukuran berat badan, kadar glukosa darah dan kadar kolestrol pada saat sebelum induksi, setelah induksi, hari pengamatan ke 7 dan 14 menggunakan glukometer. Data dianalisis menggunakan uji one away ANOVA dan dilakukan uji lanjut DMRT untuk melihat perbedaan antar perlakuan. Hasil penelitian menunjukkan bahwa ekstrak bunga kecombrang dengan dosis 400 mg/kgBB (P₃) berpengaruh sangat signifikan dalam menurunkan kadar gula darah dan kolestrol tikus putih dibandingkan P₁ dan P₂. Kesimpulan dari penelitian ini menunjukkan bahwa pemberian ekstrak bunga kecombrang (*Etilingera elatior*) selama 14 hari mampu menurunkan berat badan, kadar glukosa darah, dan kadar kolesterol secara signifikan pada tikus putih (*Rattus norvegicus*) yang mengalami diabetes akibat induksi aloksan.

Kata kunci: *Etilingera elatior*, Aloksan, Glibenklamid, Kadar Gula Darah, Kadar Kolestrol.

ABSTRACT

Irma Sinthia Simanjuntak, NIM 4212220002 (2021). The Effect of Torch Ginger (*Etilingera elatior*) Flower Extract on Cholesterol and Blood Glucose Levels in Alloxan-Induced White Rats (*Rattus norvegicus*).

This study aimed to determine the effect of torch ginger flower extract (*Etilingera elatior*) on cholesterol and blood glucose levels in white rats (*Rattus norvegicus*) induced with alloxan. This research was an experimental study using a Completely Randomized Design (CRD), divided into five groups with five replications each, totaling 25 male white rats. Prior to treatment, all groups were induced with a single dose of alloxan at 120 mg/kg body weight (BW). After three days of induction and confirmation of diabetic status, each group received its respective treatment, except Group I. The five groups consisted of: Group I (Negative Control) which received only feed and water; Group II (Positive Control) received Glibenclamide; Groups III, IV, and V were treated with torch ginger flower extract at doses of 100 mg/kg BW, 200 mg/kg BW, and 400 mg/kg BW, respectively, for 14 consecutive days. Measurements of body weight, blood glucose, and cholesterol levels were conducted before induction, after induction, on day 7, and day 14 using a glucometer. Data were analyzed using one-way ANOVA, followed by Duncan's Multiple Range Test (DMRT) to determine significant differences between treatments. The results showed that torch ginger flower extract at a dose of 400 mg/kg BW (P3) had a highly significant effect in reducing blood glucose and cholesterol levels compared to doses of 100 mg/kg BW (P1) and 200 mg/kg BW (P2). In conclusion, the administration of torch ginger flower extract (*Etilingera elatior*) for 14 days significantly reduced body weight, blood glucose, and cholesterol levels in white rats (*Rattus norvegicus*) with alloxan-induced diabetes.

Keywords: *Etilingera elatior*, Alloxan, Glibenclamide, Blood Glucose Level, Cholesterol Level.