

ABSTRAK

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UJI EFEKTIVITAS ANTIHIPERGLIKEMIK EKSTRAK ETIL ASETAT DAUN BINAHONG (*Anredera cordifolia* (Ten.) Steenis) PADA MENCIT JANTAN (*Mus musculus*) YANG DIINDUKSI GLUKOSA

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(xv + 65 halaman; 4 gambar; 7 tabel; 10 lampiran)

Binahong (*Anredera cordifolia* (Ten.) Steenis) termasuk ke dalam jenis tanaman herbal yang telah banyak dimanfaatkan oleh masyarakat dalam pengobatan berbagai penyakit salah satunya sebagai antihiperqlikemik. Daun binahong telah diteliti kandungan senyawa metabolik sekundernya antara lain saponin, flavonoid, steroid dan terpenoid. Tujuan penelitian ini yaitu untuk menguji secara *in vivo* efektivitas antihiperqlikemik dari ekstrak etil asetat daun binahong terhadap kadar glukosa darah mencit jantan (*Mus musculus*). Daun binahong diesktraksi dengan metode dingin (maserasi) menggunakan pelarut etil asetat dan pengujian antihiperqlikemik dengan metode toleransi glukosa 40 mg/20 gBB menggunakan 25 ekor mencit yang dibagi dalam 5 kelompok perlakuan yaitu kontrol negatif, kontrol positif, ekstrak etil asetat daun binahong dosis 100 mg/KgBB, 200 mg/KgBB, dan 400 mg/KgBB. Hasil yang diperoleh, yaitu persentase rendemen ekstrak etil asetat daun binahong sebanyak 2,64% yang mengandung senyawa metabolit sekunder alkaloid, flavonoid, saponin, dan fenol. Analisis data dilakukan menggunakan *Statistical Product and Service* (SPSS) dengan uji *One-Way ANOVA* diperoleh hasil terdapat perbedaan yang bermakna ($p < 0,05$) yang menyatakan bahwa ekstrak etil asetat daun binahong memiliki efektivitas yang baik dalam menurunkan kadar glukosa darah dengan dosis efektif, yaitu dosis 100 mg/KgBB.

Kata Kunci: Daun Binahong, *Anredera cordifolia* (Ten.) Steenis, Diabetes Melitus, Antihiperqlikemik, Glukosa.

Referensi: 91 (1994 – 2023)

ABSTRACT

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ANTIHYPERGLYCEMIC EFFECTIVENESS TEST OF THE ETHYL ACETATE EXTRACT OF BINAHONG LEAF (*Anredera cordifolia* (Ten.) Steenis) IN GLUCOSE INDUCED MALE MICE (*Mus musculus*)

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*Binahong (*Anredera cordifolia* (Ten.) Steenis) is a type of herbal plant that has been widely used by the public in the treatment of various diseases, one of which is as an antihyperglycemic agent. Binahong leaves have been investigated for the content of secondary metabolic compounds including saponins, flavonoids, steroids, and terpenoids. This study aimed to test in vivo the antihyperglycemic effectiveness of the ethyl acetate extract of binahong leaves on blood sugar levels in male mice (*Mus musculus*). Binahong leaves were extracted by cold method (maceration) using ethyl acetate solvent and antihyperglycemic test with glucose 40 mg/20 gBW tolerance method using 25 mice divided into 5 treatment groups namely negative control, positive control, ethyl acetate extract of binahong leaves dose of 100 mg/KgBW, 200 mg /KgBW, and 400 mg/KgBW. The results obtained were 2.64% yield of ethyl acetate extract of binahong leaves which contained secondary metabolites of alkaloids, flavonoids, saponins, and phenols. Data analysis was performed using Statistical Product and Service (SPSS) with the One-Way ANOVA test. The results showed that there was a significant difference ($p < 0.05$) which stated that the ethyl acetate extract of binahong leaves had good effectiveness in lowering blood glucose levels with an effective dose 100 mg/KgBW.*

*Keywords: Binahong leaf, *Anredera cordifolia* (Ten.) Steenis, Diabetes Mellitus, Antihyperglycemic, Glucose.*

References: 91 (1994-2023)