

ABSTRAK

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Program Studi : Farmasi
Judul : Efek Ekstrak Etanol Suruhan (*Peperomia pellucida* (L.) Kunth) Terhadap Bilirubin dan Urobilinogen Urine Serta Struktur Hati Tikus Diabetes

Suruhan (*Peperomia pellucida* (L.) Kunth) merupakan tanaman yang mengandung metabolit sekunder seperti alkaloid, flavonoid, tanin, saponin, fenol, terpenoid/steroid yang dapat menurunkan kadar glukosa darah. Tujuan penelitian yaitu untuk mengetahui efek dari pemberian ekstrak herba suruhan terhadap kadar glukosa darah puasa, bilirubin dan urobilinogen urine (metode carik celup) serta keadaan struktur hati tikus diabetes (makroskopis). Metode eksperimental induksi dengan Streptozotosin dengan dosis 45 mg/KgBB dan waktu pemberian ekstrak selama 4 minggu dengan menggunakan 30 tikus. Pada kontrol negatif diberi Na-CMC 1%, kontrol positif diberi Sitagliptin 50 mg/KgBB, dan terapi ekstrak herba suruhan dengan dosis 125 mg/KgBB, 250 mg/KgBB, dan 500 mg/KgBB. Hasil uji statistik menunjukkan bahwa ekstrak herba suruhan memberikan efek signifikan ($<0,05$) dalam menurunkan kadar glukosa darah puasa dengan korelasi signifikan ($<0,05$) antara kadar glukosa dan berat badan, dan tidak ada perbedaan signifikan ($>0,05$) pada bilirubin dan urobilinogen urine. Secara makroskopis struktur hati menunjukkan sedikit perubahan warna pada tiap kelompok namun masih dalam keadaan normal.

Kata Kunci : Bilirubin, Diabetes Melitus, Ekstrak Herba Suruhan, Struktur hati, Urobilinogen.

ABSTRACT

Name : Raden Ayu Aisya Rahma Aryani
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Title : The Effect of Suruhan (*Peperomia pellucida* (L.) Kunth) Extract on Bilirubin and Urobilinogen Levels in Urine and Liver Structure in Diabetic Rats.

Suruhan herb (*Peperomia pellucida* (L.) Kunth) is a plant containing secondary metabolites like alkaloids, flavonoids, tannins, saponins, phenols, and terpenoids/steroids, which can lower blood glucose levels. This study aimed to determine the effect of administering suruhan herb extract on fasting blood glucose levels, bilirubin and urobilinogen in urine (using the dipstick method), and the macroscopic structure of the liver in diabetic rats. The experimental method involved inducing diabetes with Streptozotocin at a dose of 45 mg/kg body weight in 30 rats. The extract was administered for 4 weeks. The negative control group received 1% Na-CMC, the positive control group received Sitagliptin at 50 mg/kg body weight, and the treatment groups received suruhan herb extract at doses of 125 mg/kg body weight, 250 mg/kg body weight, and 500 mg/kg body weight. Statistical test results showed that the suruhan herb extract had a significant effect (<0.05) in lowering fasting blood glucose levels, with a significant correlation (<0.05) between glucose levels and body weight. There were no significant differences (>0.05) in urine bilirubin and urobilinogen levels. Macroscopic examination of the liver structure showed slight color changes in each group, but the livers were still in normal condition.

Keywords: Bilirubin, Diabetes Melitus, Liver Structure, Suruhan Herb Extract, Urobilinogen.