

INTISARI

HEMATOLOGI TIKUS WISTAR DENGAN LUKA DIABETES YANG DIBERI EKSTRAK ETANOL DAUN BINAHONG (*Anredera cordifolia* (Ten.) Steen.)

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Diabetes mellitus merupakan masalah kesehatan yang penting dan sering terjadi di Indonesia. Penggunaan ekstrak tanaman binahong diketahui dapat dimanfaatkan sebagai obat alami untuk menyembuhkan luka diabetes dan menurunkan kadar gula dalam darah. Penelitian ini bertujuan untuk mengetahui efek ekstrak etanol daun binahong pada gambaran hematologi pada tikus dengan luka diabetes. Dua belas tikus wistar jantan umur 3 bulan dibagi 3 kelompok (A, B dan C) masing-masing 4 tikus. Tikus kelompok A (kontrol non diabetes) diinjeksi 0,1M *sodium citrat buffer*, sedangkan tikus kelompok B (kontrol diabetes) dan kelompok C diinjeksi streptozotocin 40mg/kgBB secara intraperitoneal. Satu minggu kemudian dilakukan pembuatan luka eksisi di daerah punggung pada seluruh tikus. Tikus kelompok A dan B diberi 1 ml NaCMC 1% dua kali per hari secara peroral, sedangkan tikus kelompok C diberi 1 ml ekstrak daun binahong dosis 300mg/kgBB dua kali per hari secara peroral. Perlakuan dilaksanakan selama 14 hari. Pada hari ke-14 dilakukan pengambilan darah tikus untuk diukur jumlah eritrosit, leukosit, nilai Hb, trombosit, dan PCV.

Hasil penelitian menunjukkan tidak adanya perbedaan yang signifikan ($P>0,05$) pada jumlah eritrosit, leukosit, trombosit, hemoglobin dan *Packed Cell Volume* (PCV) antara kelompok tikus kontrol non diabetes, kelompok tikus kontrol diabetes, dan kelompok tikus diabetes yang diberi ekstrak etanol daun binahong.

Kesimpulan, pemberian ekstrak daun binahong (*Anredera cordifolia* (Teen.) Steenis secara per oral tidak berpengaruh secara bermakna terhadap gambaran profil darah (sel darah putih, sel darah merah, hemoglobin, PCV, dan trombosit) tikus Wistar dengan luka diabetes selama 14 hari.

Kata kunci: diabetes mellitus, hematologi, ekstrak daun binahong

ABSTRACT

Hematology of Wistar rats with Diabetes ulcer That were gave extract ethanol of binahong leaf (*Anredera cordifolia* (Ten.) Steen.)

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Diabetes mellitus is an important problem that is common occurred in Indonesia. The use of extract binahong leaf was known as a herbal medicine to assist wound healing and can be used to decrease blood sugar level. The research was aimed to determine the effect of extract binahong leaf on haemathology profile in rat with diabetic ulcer. Twelve males of wistar rat at 3 months of age were divided into 3 groups of 4 rats each. Group A (non-diabetic controls rats) were injected 0.1 M *sodium citrate buffer*, while group B (diabetes control rats) and Group C were given an intraperitoneal injection of streptozotocin at dose of 40 mg/kg body weight. A week after injection, an excision wound was made in the back of all rats. Rats of groups A and B were given as much as 1 ml of 1% Na-CMC orally twice a day, while the group C were given as much as 1 ml of binahong leaf extract at dose of 300 mg/kg body weight orally twice a day. The treatment was conducted for 14 days. After 14 days, the sample of blood was taken to measure the amount of erythrocyte, leucocyte, Hb, thrombocyte, and PCV.

The results showed that there was no significant difference ($P > 0.05$) on erythrocyte, leucocyte, Hb, thrombocyte, and PCV measurement between the control group non-diabetic rats, control grup diabetic rats, and the group that treated by extract binahong leaf.

Based on the result, it can be concluded that administration of extracts binahong leaf (*Anredera cordifolia* (Teen.) Steenis) at dose of 300 mg/kg body weight on diabetic rat had no effect to the parameter of haematology profile used (leucocyte, erythhrocyte, Hb, thrombocyte, and PCV).

Keywords: diabetes mellitus, haematology, extracts binahong leaf