

**PENGARUH KOMBINASI SEDUHAN BAWANG DAYAK (*Eleutherine Palmifolia*) DAN MADU TERHADAP PENURUNAN KADAR KREATININ SERUM PADA TIKUS (*Rattus Norvegicus*) INDUKSI STREPTOZOTOCIN**

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**ABSTRAK**

Latar Belakang: Nefropati diabetik merupakan kerusakan vaskuler pada ginjal akibat gangguan metabolisme karbohidrat atau intoleransi gula seperti hiperglikemia. Mekanisme terjadinya karena kadar radikal bebas dalam tubuh meningkat. Salah satu tandanya adalah peningkatan kadar kreatinin dalam darah. Kombinasi bawang dayak (*Eleutherine Palmifolia*) dan madu dapat menurunkan kadar kreatinin darah karena mengandung flavonoid, asam fenolik, tanin, mineral, dan alkaloid yang membentuk antioksidan untuk menangkal radikal bebas dalam tubuh. Tujuan Penelitian: Mengetahui pengaruh kombinasi seduhan bawang dayak (*eleutherine palmifolia*) dan madu terhadap penurunan kadar kreatinin serum pada tikus (*rattus norvegicus*) induksi streptozotocin

Metode penelitian: Penelitian ini menggunakan metode true experiment dengan pretest-posttest with control group design. Sampel yang digunakan 30 ekor tikus putih yang dibagi menjadi 6 kelompok. Kelompok A kontrol sehat, kelompok B kontrol negatif, kelompok C diberikan perlakuan dosis seduhan 0,1 g/KgBB bawang dayak dan 1 ml/KgBB madu, kelompok D diberikan perlakuan dosis seduhan 0,2 g/KgBB bawang dayak dan 1 ml/KgBB madu, kelompok E diberikan perlakuan dosis seduhan 0,4 g/KgBB bawang dayak dan 1 ml/KgBB madu, dan kelompok F diberikan metformin dosis 45 mg/kgBB tikus. Perlakuan ini dilakukan selama 14 hari.

Hasil : Hasil penelitian menunjukkan bahwa pemberian kombinasi seduhan bawang dayak dan madu terbukti menurunkan kadar kreatinin serum tikus induksi streptozotocin. Rerata penurunan kadar kreatinin pada dosis masing-masing adalah  $1,01 \pm 0,08$ ,  $0,71 \pm 0,06$ ,  $0,69 \pm 0,09$ ,  $0,99 \pm 0,05$  dengan dosis paling efektif untuk menurunkan kadar kreatinin serum adalah dosis 0,2 g/KgBB dan madu 1 ml/KgBB.

Kata Kunci : Hiperglikemia, kreatinin, bawang dayak, madu, kombinasi bawang dayak dan madu.

EFFECT OF COMBINATION OF ONION CREAM (*Eleutherine Palmifolia*)  
AND HONEY ON THE REDUCTION OF SERUM CREATININE LEVELS IN  
RAT (*Rattus Norvegicus*) STREPTOZOTOCIN INDUCTION

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ABSTRACT

Background: Diabetic nephropathy is vascular damage to the kidneys due to carbohydrate metabolism disorders or sugar intolerance such as hyperglycemia. The mechanism of occurrence is because the levels of free radicals in the body increase. One of the signs is an increase in creatinine levels in the blood. The combination of Dayak onions (*Eleutherine Palmifolia*) and honey can reduce blood creatinine levels because they contain flavonoids, phenolic acids, tannins, minerals, and alkaloids that form antioxidants to ward off free radicals in the body. Objective: To determine the effect of a combination of infusion of Dayak (*eleutherine palmifolia*) and honey on reducing serum creatinine levels in rats (*rattus norvegicus*) induced streptozotocin.

Methods: This study used a true experimental method with a pretest-posttest control group design. The sample used 30 white rats which were divided into 6 groups. Group A was healthy control, group B was negative control, group C was given steeping dose treatment of 0,1 g / KgBB of dayak onions and 1 ml / KgBB of honey, group D was given steeping dose treatment of 0,2 g / KgBB of dayak onions and 1 ml / KgBB of honey, group E The treatment was given a steeping dose of 0,4 g / KgBB of dayak onions and 1 ml / KgBB of honey, and group F was given a dose of metformin 45 mg / kgBB of rats. This treatment was carried out for 14 days.

Results: The results showed that the combination of infused Dayak onion and honey was proven to reduce serum creatinine levels in streptozotocin-induced rats. The mean reduction in creatinine levels at each dose was  $1.01 \pm 0.08$ ,  $0.71 \pm 0.06$ ,  $0.69 \pm 0.09$ ,  $0.99 \pm 0.05$  with the most effective dose to reduce serum creatinine levels. is a dose of 0,4 g/KgBB and honey 1 ml / KgBB.

Keywords: Hyperglycemia, creatinine, Dayak onions, honey, combination of Dayak onions and honey.