

ABSTRACT

Hyperuricemia is a condition of increasing uric acid levels in the blood due to high levels of purines in the blood, resulting in the accumulation of monosodium crystals and the formation of uric acid. Belulang grass (*Eleusine indica* L.) is a weed that can damage other plants, but has benefits in the health sector such as overcoming malaria, diabetes, diarrhea, anti-inflammatory, and antimicrobial diseases. The active substances contained in the grass are Luteolin, Vitexin, and Isovitexin which are derivatives of Flavonoids, Alkaloids, Steroids, and Tannins. The purpose of this study was to determine the effect of the administration of Ethanol Extract of Belulang Grass on the decrease in uric acid and to determine the effect of dose variation on the antihyperuricemia effect. The method used was Experimental with Completely Randomized Design (CRD) using 6 treatment groups, namely Normal Control, Positive Control (Allopurinol (2.6 mg/20grBB), Negative Control (Na CMC 0.5%), P1 (200mg/KgBB), P2 (400mg/kgBB), and P3 (600mg/kgBB), induced using chicken liver juice and Potassium Oxonate for 7 days, on day 15 testing was carried out using a Spectrophotometer. Data from the study were analyzed using One Way Anova Duncan's further test. It was found that the Ethanol Extract of Belulang Grass (*Eleusine indica* L.) had an antihyperuricemia effect with a significant value of $P < 0.05$. The best dose was obtained in P3 (600mg/kgBB) at 51.04%, followed by P2 (400mg/kgBB) at 43.22%, and P1 (200mg/kgBB) at 38.54%. It can be concluded that the Ethanol Extract of Belulang Grass has antihyperuricemia activity and variations in the dose given and reduce different percentages.

Keywords: Hyperuricemia, Uric Acid, Belulang Grass.

ABSTRAK

Hiperurisemia merupakan suatu keadaan meningkatnya kadar asam urat didalam darah. disebabkan tingginya kadar purin didalam darah, sehingga terjadi penumpukan kristal monosodium dan terbentuknya asam urat. Rumput Belulang (*Eleusine indica* L.) merupakan gulma yang dapat merusak tanaman lain, namun memiliki manfaat dibidang kesehatan seperti mengatasi penyakit malaria, diabetes, diare, antiinflamasi, dan antimikroba. Kandungan zat aktif yang terdapat pada rumput belulang yaitu Luteolin, Vitexin, dan Isovitexin yang merupakan turunan Flavonoid, Alkaloid, Steroid, dan Tanin. Tujuan dari penelitian ini untuk mengetahui pengaruh pemberian Ekstrak Etanol Rumput Belulang terhadap penurunan asam urat dan mengetahui pengaruh variasi dosis terhadap efek antihiperurisemia. Metode yang digunakan Eksperimental dengan Rancangan Acak Lengkap (RAL) menggunakan 6 kelompok perlakuan, dilakukan yaitu Kontrol Normal, Kontrol Positif (Allopurinol (2,6 mg/20grBB), Kontrol Negatif (Na CMC 0,5 %), P1 (200mg/KgBB), P2 (400mg/kgBB), dan P3 (600mg/kgBB), diinduksi menggunakan jus hati ayam dan Kalium Oksnat selama 7 hari, pada hari ke -15 dilakukan pengujian menggunakan Spektrofotometer. Data hasil Penelitian dianalisis menggunakan *one Way Anova* uji lanjut Duncan. Didapatkan hasil bahwasanya Ekstrak Etanol Rumput Belulang (*Eleusine indica* L.) memiliki efek Antihiperurisemia dengan nilai signifikam $P < 0,05$. Dosis terbaik diperoleh pada P3 (600mg/kgBB) sebesar 51,04 %, di ikuti P2 (400mg/kgBB) sebesar 43,22%, dan P1 (200mg/kgBB) sebesar 38,54%. Dapat disimpulkan bahwasanya Ekstrak Etanol Rumput Belulang memiliki aktivitas antihiperurisemia dan variasi dosis yang diberikan dan menurunkan presentase yang berbeda.

Kata Kunci : Hiperurisemia, Asam Urat, Rumput Belulang.