

INTISARI

Penelitian ini bertujuan untuk membuktikan aktivitas antihiperurisemia ekstrak kloroform simplisia daging buah makuto dewo (*Phaleria macrocarpa* (Scheff.) Boerl.) terhadap kadar asam urat serum darah ayam hiperurisemia. Penelitian dilakukan mengikuti rancangan acak lengkap pola searah. Untuk itu 40 ekor ayam petelur jenis *Lohman Brown*, berumur 2-4 bulan dengan BB 1-1,5 kg, dibagi menjadi 8 kelompok. Kelompok I sebagai kontrol negatif murni diberi larutan PGA 45%. Kelompok II sebagai kontrol negatif semu diberi larutan PGA 45% dan praperlakuan pakan tinggi (50 g jus hati, 30 g pakan ayam AD2, 10 g biji melinjo). Kelompok III sebagai kontrol positif allopurinol 10 mg/kg BB, kelompok IV kontrol positif ekstrak dosis 7 g/kg BB. Kelompok V-VIII diberi praperlakuan pakan tinggi purin dan ekstrak dengan dosis berturut-turut 0,260; 0,781; 2,343; 7,031 g/kg BB. Darah diambil pada jam ke-0, 2, 4, 6, dan 24 melalui vena sayap, serum darah dipisahkan dan diukur kadar asam uratnya.

Data kadar asam urat dianalisis dengan metode split-plot untuk mengetahui adanya pengaruh perlakuan terhadap penurunan kadar asam urat, dilanjutkan uji Tukey HSD. Data LDDK⁰⁻²⁴ dan data persen penurunan kadar asam urat dianalisis menggunakan uji Kolmogorov-Smirnov untuk melihat distribusi data. Jika distribusi data normal, dilanjutkan analisis varian pola searah (ANOVA), kemudian dilanjutkan dengan uji Tukey untuk mengetahui perbedaan masing-masing kelompok. Taraf kepercayaan penelitian ini adalah 95%.

Hasil penelitian menunjukkan bahwa ekstrak kloroform simplisia daging buah makuto dewo dosis 0,260; 0,781; 2,343 dan 7,031 g/kgBB tidak mampu menurunkan kadar asam urat serum ayam hiperurisemia.

Kata kunci: makuto dewo, ekstrak kloroform, antihiperurisemia

ABSTRACT

This study was aimed to give evidence of antihyperuricemic activity of chloroform extract of dried makuto dewo (*Phaleria macrocarpa* (Scheff.) Boerl.) fruit flesh. The study was done following completely randomized design one direction. Forty breeding cocks, *Lohman brown* strain, in the age of 2-4 month, with 1-1,5 kg body weight, were divided into eight groups. Group I as negative control were given PGA solution 45% with dose 13,33 ml/kgBW. Group II as deceit negative control were given PGA solution 45% with dose 13,33 ml/kgBW and pretreated with high-purine fodder for seven days (50 g liver juice, 30 g fodder (AD₂), and 10 g melinjo). Group III as positive control of allopurinol with dose 10 mg/kgBW. Group IV as positive control of extract with dose 7,031 g/kgBW. Groups V-VIII were pretreated with high purine fodder for seven days and extract with dose respectively 0,260; 0,781; 2,343; and 7,031 g/kgBW. Bloods were taken at 0, 2nd, 4th, 6th, and 24th hours through wing's vein. Blood serum were measured used microlab spectrophotometer followed FS-TBHBA enzymatic method.

Uric acid data were analyzed with split-plot model to identify the effect of treatment to uric acid reduction, continued by Tukey HSD. Data of AUC (Area Under Curve)⁰⁻²⁴ were analyzed by Kolmogorov-Smirnov test to identify distribution of the data. When it is normal, it were continued with analysis of variance (ANOVA) oneway, then Tukey test to identify the difference on each group. The effective median dose (ED₅₀) calculated based on the data of AUC reduction percentage to deceit negative control followed probit analysis. Level of confidence of this study was 95%.

The result showed that extract chloroform of dried makuto dewo fruit flesh for dose 0,260; 0,781; 2,343 dan 7,031 g/kgBW didn't have an antihyperuricemic activity.

Key words: *makuto dewo*, chloroform extract, antihyperuricemia