

## INTISARI

Telah dilakukan penelitian tentang pengaruh praperlakuan jangka pendek ekstrak etanol daging buah makuto dewo (*Phaleria macrocarpa* (Scheff.) Boerl ) terhadap hepatotoksisitas parasetamol pada mencit jantan. Penelitian ini bertujuan untuk membuktikan apakah praperlakuan jangka pendek ekstrak etanol daging buah makuto dewo dapat memberikan efek hepatoprotektif dan seberapa lama waktu efektif yang diperlukan untuk memberikan efek hepatoprotektif

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah. Empat puluh ekor mencit jantan dibagi secara acak menjadi 8 kelompok perlakuan. Kelompok I sebagai kontrol positif, diberikan parasetamol dosis hepatotoksik (250mg/kgBB). kelompok II sebagai kontrol negatif, diberikan larutan CMC 1% dosis 333,3 mg/kgBB. Kelompok III sebagai kontrol perlakuan diberi ekstrak etanol dosis 2,519 g/kg BB. Kelompok IV-VIII diberi perlakuan ekstrak etanol daging buah makuto dewo dosis 2,519 g/kg BB secara peroral masing-masing ½, 1, 2, 4, dan 6 jam sebelum pemberian dosis hepatotoksik parasetamol yakni 250 mg/kg BB. Hewan uji kemudian diambil darahnya dari sinus orbitalis mata selang 24 jam pemberian parasetamol untuk kemudian diukur aktivitas GPT serumnya. Sesaat kemudian hewan uji dikorbankan, diambil heparnya dan dibuat preparat histopatologi. Data aktivitas GPT serum dan berat hati relatif dianalisis dengan Kolmogorov Smirnov untuk mengetahui distribusi datanya. Jika distribusi data normal, analisis dilanjutkan dengan analisis varian pola searah dengan taraf kepercayaan 95%. Data skoring histopatologi sel hati dianalisis menggunakan analisis non parametrik Kruskal Wallis dan Mann Whitney

Hasil analisis aktivitas GPT serum menunjukkan bahwa kelompok IV, V, VI, VII dan VIII mampu memberikan efek hepatoprotektif sebesar berturut-turut 13,83%, 79,39%, 86,40%, 92,82% dan 88,38%. Hasil analisis skoring menunjukkan % proteksi sebesar berturut-turut 17,86%, 57,14%, 53,57%, 46,43% dan 10,71%. 1 jam adalah waktu praperlakuan yang efektif.

Kata kunci : *Phaleria macrocarpa* (Scheff.) Boerl, Hepatoprotektif, Parasetamol

## ABSTRACT

An experimental study of the hepatoprotective effect of ethanolic extract of makuto dewo (*Phaleria macrocarpa* (Scheff.) Boerl ) fruit flesh as a pretreatment on male mice induced by acetaminophen had been conducted. This experimental study had an aim to determine the hepatoprotective effect of ethanolic extract of makuto dewo pretreatment and to identify the initial time needed by the ethanolic extract of makuto dewo fruit flesh pretreatment to produce the hepatoprotective effect.

A pure experimental study was done following the direct sampling design and was analyzed using one way varian. Fourthy male mice were randomly divided into eight groups of the same number. The first group as positive control group was given acetaminophen suspension in CMC 1% with the dose of 250 mg/kg BW. The second group as negative control group was given suspension of CMC 1% with the dose of 333,3 mg/kg BW. The third group as a treatment control was given ethanolic extract of makuto dewo (*Phaleria macrocarpa* (Scheff.) Boerl ) fruit flesh with the dose 2,519 g/kg BW. The fourth to eighth groups were given ethanolic extract of makuto dewo fruit flesh in the dose of 2,519 g/kg BW during ½, 1, 2, 4, 6, hour respectively before they were given acetaminophen in dose of 250 mg/kg BW orally. After 24 hours the blood samples were taken from the eyes's sinus orbitalis from the first to the eighth groups to determine the alteration of sGPT levels. The mice then were sacrificed and their livers were taken for the histopatological evaluation. The data of the sGPT levels and relative livers weight data were analyzed based of Kolmogorov Smirnov test to know the data distribution. If the data distribution is normal, the analysis is continued using one way varian analysis at 95 % significance level. The Liver histopatology scoring data were analyzed using Kruskall Wallis and Mann Whitney's non parametrik statistical test.

The statistical analysis of sGPT levels showed that the fourth until the eighth groups were able to give the hepatoprotective effect in the percentage 13,83%; 79,39%; 86,40%; 92,82%; 88,38% respectively. The analysis of histopatological scores showed that the fourth until eighth groups were able to give the protection values in percentage 17,86%; 57,14%; 53,57%; 46,43%; 10,31% respectively. An hour was most effective pretreatment.

Keywords: *Phaleria macrocarpa* (Scheff.) Boerl, hepatoprotective, Acetaminophen