

INTISARI

RAHMI, 2016, EFEK SARI BUAH TERONG BELANDA (*Cyphomandra betacea* Sendtn.) TERHADAP AKTIVITAS ENZIM ALT DAN AST TIKUS PUTIH JANTAN YANG DIINDUKSI ISONIAZID DAN RIFAMPISIN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Terong belanda mengandung beberapa jenis antioksidan seperti vitamin C, vitamin E, antosianin, dan beta karoten. Antioksidan berperan penting dalam melindungi sel-sel hati dari pengaruh zat toksik. Penelitian ini bertujuan untuk mengetahui efek sari buah terong belanda dalam mencegah peningkatan aktivitas enzim ALT dan AST tikus putih jantan yang diinduksi isoniazid dan rifampisin.

Tiga puluh ekor tikus dibagi dalam enam kelompok: Kelompok kontrol normal diberi CMC 0,5%, kelompok kontrol negatif diberi isoniazid 50 mg /kg BB dan rifampisin 50 mg /kg BB, kelompok kontrol positif diberi isoniazid, rifampisin dan Methicol[®] 22,5 mg /kg BB, sedangkan 3 kelompok perlakuan diberi isoniazid, rifampicin dan sari buah terong belanda dengan variasi dosis 17,5 g /kg BB, 35 g /kg BB dan 70 g /kg BB. Semua kelompok diberi perlakuan setiap hari selama 21 hari. Aktivitas Enzim ALT dan AST ditetapkan pada hari ke-0, 7, 14 dan 21. Data dianalisis menggunakan uji *Two-Way ANOVA* dan dilanjutkan uji *Post Hoc LSD*.

Hasil analisis data secara statistik menunjukkan adanya perbedaan nilai yang bermakna dari rata-rata penurunan aktivitas enzim ALT dan AST antara kelompok perlakuan. Pemberian sari buah terong belanda dapat mencegah peningkatan aktivitas enzim ALT dan AST dan didapatkan hasil terbaik pada dosis 70 g /kg BB.

Kata kunci : *Cyphomandra betacea* Sendtn., isoniazid, rifampisin, ALT, AST.

ABSTRACT

RAHMI, 2016, EFFECT OF TREE TOMATO (*Cyphomandra betacea* Sendtn.) JUICE ON AST AND ALT ACTIVITIES IN MALE WHITE RATS INDUCED BY ISONIAZID AND RIFAMPICIN, THESIS, FACULTY OF PHARMACY, UNIVERSITY SETIA BUDI, SURAKARTA.

Tree tomato contains antioxidants such as vitamin C, vitamin E, anthocyanins, and beta carotene. Antioxidants activity are important to protection the liver cells of toxic substances. The aims of this study were determine the effect of tree tomato juice to ALT and AST activity in male white rats induced by isoniazid and rifampicin.

The thirty rats were devide into six groups. The normal control were given CMC 0,5%; negative control were given isoniazid 50 mg /kg BW and rifampicin 50 mg /kg BW, positive control were given isoniazid, rifampicin and Methicol[®] 22,5 mg /kg BW, and the treatment groups were given isoniazid, rifampicin and tree tomato juice on various doses (17,5 g /kg BW, 35 g /kg BW dan 70 g /kg BW). Each group were given every day for 21 days. The activity of ALT and AST were determined on 0th, 7th, 14th and 21th day. Data were analyzed by Two-Way ANOVA and *Post Hoc LSD Test*.

The result of statistic showed significant difference of average decrease in ALT and AST activity between the treatment groups. Provision of tree tomato juice can prevents increased the activity of ALT and AST. The best doses was 70 g /kg BW.

Keywords: *Cyphomandra betacea* Sendtn., isoniazid, rifampicin, ALT, AST