

## INTISARI

Tujuan penelitian ini adalah untuk mengetahui ketoksikan akut sari wortel terhadap fungsi organ hati pada tikus betina galur Wistar yang dinilai dari aktivitas SGPT dan SGOT serta histologi organ hati.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah. Hewan uji dibagi dalam 5 kelompok yaitu kelompok kontrol, kelompok dosis 66,551 g/kg BB; 79,861 g/kg BB; 95,833 g/kg BB; 115 g/kg BB. Penelitian ini mengamati perubahan berat badan, gejala klinis, jumlah tikus yang mati, histologi hati, aktivitas SGPT dan SGOT. Analisis statistik normalitas data menggunakan uji *Shapiro Wilk*. Aktivitas SGPT dan SGOT antar kelompok perlakuan dan data berat organ relatif dianalisis dengan *One-Way ANOVA* atau *Kruskal-Wallis*. Aktivitas SGPT dan SGOT sebelum dan sesudah perlakuan dibandingkan dengan uji *paired T-test* atau uji *Wilcoxon*. Perubahan berat badan dianalisis dengan menggunakan *General Linear Methods-Multivariate*.

Hasil penelitian menunjukkan bahwa sari wortel tidak menyebabkan kematian subyek uji sehingga diperoleh LD<sub>50</sub> semu sari wortel (*Daucus carota* L.) adalah >115 g/kg BB. Pada pemberian sari wortel tidak menimbulkan gejala toksik dan secara histologi tidak menunjukkan perubahan struktur pada sel hati. Pemberian akut sari wortel tidak menyebabkan perubahan aktivitas SGPT dan SGOT.

Kata kunci : ketoksikan akut sari wortel, histologi organ hati , SGPT, SGOT

## ABSTRACT

The purpose of this research is to know the acute toxicity of carrot juice against the function of liver in the Wistar female rat that is rated from SGPT and SGOT activities, and also the histology of liver.

This research is a pure experimental research by completed random of direct-current plan. The tested animals were divided into five treated groups namely control group, dosage groups of carrot juice at 66,551 g/kg bodyweight; 79,861 g/kg bodyweight; 95,833 g/kg bodyweight; 115 g/kg bodyweight. This research observed the change of bodyweight, clinical symptom, the number of the dead rat, the histology of liver, and the activity of SGPT and SGOT. The analytical statistic of normality data used the test of Shapiro Wilk. The activity of SGPT and SGOT of each of the treated groups and the data of relative weight of liver were analyzed by One way ANOVA or Kruskal-Wallis. Before and after treatment the activity of SGPT and SGOT were compared by paired T-test or Wilcoxon test. The change of the bodyweight was analyzed by General Linear Methods-Multivariate.

The result showed that the carrot juice had no death effect to the tested animals so that pseudo LD<sub>50</sub> of the carrot juice is > 115 g/kg bodyweight. Giving the carrot juice didn't cause toxic symptoms. It didn't show the change of any liver cell's structure either.

Giving the accute of carrot juice does not cause the change of SGPT and SGOT activities.

Key word: carrot extract acute toxicity, the histology of liver, SGPT, SGOT