

PENGARUH PEMBERIAN ZAT WARNA RHODAMIN B
TERHADAP KADAR SGOT/SGPT SERUM
DARAH MENCIT (*Mus musculus*)



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ABSTRACT

THE EFFECT OF RHODAMINE B COLOR SUBSTANCE ADMISSION TO SGOT / SGPT LEVEL IN MICE'S BLOOD SERUM (*Mus musculus*)

By

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Rhodamine B is a base basic dyes material that is prohibited to use in foods because of its hazardous contents that is dangerous for health. This research is conducted to prove that the administration of Rhodamine B can damage the liver looking from SGOT and SGPT levels of the mice's blood serum.

This research is conducted at the Laboratory of Pharmacy and Biochemistry of Andalas University from August to December 2016. The research is conducted using 28 mice as samples that were divided into 4 groups, each group consisted of 7 mice. Every mice on negative control (K) group were given aquades, while the treatment group I (P1), treatment group II (P II), and III group (P III) treatment group were given Rhodamine B respectively with dose of 0.059 mg/kg, 0.118 mg/kg and 0.236 mg/kg for 14 days. On the fifteenth day, the Blood serum was drawn and the SGOT and SGPT levels were tested.

The results showed that levels of SGOT and SGPT on K- group was 12.68 U / l and 10.58 U/l, SGOT and SGPT group P1 was 14.59 U/I and 12.44 U/l, SGOT and SGPT P2 group was 26.63 U / I and 20.65 U / I and SGOT and SGPT P3 group was 43.01 U / I and 37.77 U / I. The test results one way ANOVA showed significant differences among the four groups of samples ($p = 0.00$).

The conclusion of this study is administration of Rhodamine B increased the levels of SGOT and SGPT levels of blood serum of the mice.

Keywords: Rhodamine B, levels of SGOT, SGPT levels

ABSTRAK

PENGARUH PEMBERIAN ZAT WARNA RHODAMIN B TERHADAP KADAR SGOT/SGPT SERUM DARAH MENCIT (*Mus musculus*)

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Rhodamin B adalah bahan pewarna dasar yang dilarang digunakan dalam makanan karena bahayanya bagi kesehatan. Penelitian ini dilakukan untuk membuktikan bahwa pemberian Rhodamin B dapat menimbulkan kerusakan pada hati yang dinilai dari kadar SGOT dan kadar SGPT serum darah mencit.

Penelitian dilakukan di Laboratorium Farmasi dan Biokimia Universitas Andalaas pada bulan Agustus-Desember 2016. Penelitian ini menggunakan sampel sebanyak 28 ekor mencit yang dibagi menjadi 4 kelompok. Setiap mencit pada kelompok kontrol negatif (K-) diberi aquades, sedangkan kelompok perlakuan I (P I), kelompok perlakuan II (P II), dan kelompok perlakuan III (P III) diberi Rhodamin B masing-masing dengan dosis 0,059mg/KgBB, 0,118mg/KgBB dan 0,236mg/kgBB selama 14 hari. Pada hari kelima belas, serum darah diambil dan dilakukan pengujian kadar SGOT dan kadar SGPT.

Hasil penelitian menunjukkan kadar SGOT dan SGPT pada kelompok K- adalah 12,68 U/I dan 10,58 U/I, kadar SGOT dan SGPT kelompok P1 adalah 14,59 U/I dan 12,44 U/I, kadar SGOT dan SGPT kelompok P2 adalah 26,63 U/I dan 20,65 U/I serta kadar SGOT dan SGPT kelompok P3 adalah 43,01 U/I dan 37,77 U/I. Hasil uji *one way Anova* menunjukkan adanya perbedaan yang signifikan di antara keempat kelompok sampel ($p=0,00$).

Kesimpulan hasil penelitian adalah pemberian Rhodamin B berpengaruh terhadap peningkatan kadar SGOT dan kadar SGPT serum darah mencit.

Kata kunci : Rhodamin B, Kadar SGOT, Kadar SGPT