

ABSTRACT

EFFECT OF ORAL HERBICIDE PARAQUAT DICHLORIDE TO HEPATOCYTE SWELLING AND SINUSOIDAL CONGESTION IN LIVER OF MALE RATS (*Rattus norvegicus*) *Sprague dawley* STRAIN

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The use of herbicide paraquat dichloride by farmers, is one of effort to increase the production in agricultural sector. Herbicide paraquat dichloride often used by farmers carelessly and there was caution ignorance. Herbicide cause much adverse effect to organs, especially in liver through oral. The purpose of this study is to determine the effect of oral herbicide paraquat dichloride to hepatocyte swelling and sinusoidal congestion in liver of male rats (*Rattus norvegicus*) *Sprague dawley* strain.

In this experimental study, 25 male rats (*Rattus norvegicus*) *Sprague dawley* strain are divided randomly into 5 group and treated for 2 days. K1 is group of controlled, K2, K3, K4, K5 are given herbicide paraquat dichloride 25 mg/kgBW, 50 mg/kgBW, 100 mg/kgBW, and 200 mg/kgBW.

The results showed that the average number of hepatocyte swelling and sinusoidal congestion in liver was increasing. In *Kruskal Wallis* test and Post Hoc Mann Whitney test found significant difference $p=0.000$ ($p<0.005$). There are significant effect of oral paraquat dichloride to hepatocyte swelling and sinusoidal congestion in liver of male rats (*Rattus norvegicus*) *Sprague dawley* strain.

Key words: hepatocyte swelling, paraquat dichloride, sinusoidal congestion, white rats liver