

**ABSTRACT**

**The Effect of Giving Dayak Onion Extract (*Eleutherine americana* Merr.) on Prevention of Increase Necrosis Cells Renal Tubules and MDA Level of Mice (*Mus musculus*) Exposed to Lead Acetate by Oral**

The high total phenol and flavonoids contained in Dayak bulb extracts are antioxidants that can counteract free radicals. This study aims to prove the effect of onion bulb extract on the prevention of increased necrosis of epithelial cells of proximal tubular renal and serum MDA levels of mice exposed to lead acetate by oral.

The experimental animals were 30 mice divided into 5 treatment groups. The control group K (-) was given only a placebo of CMC-Na, K (+) which was given only lead, K treatment group K(1) given Dayak extract at 65 mg/kgBW, K(2) with a dose of 130 mg/kgBW, K(3) given Dayak extract at a dose of 260 mg/kgBW.

The results of Brown-Forsythe test for proximal tubular epithelial cell necrosis showed significant differences ( $p = 0.001$ ), while the Games-Howell test results were significantly different between the negative control group and the Dayak 65 mg/kgBW onion extract group, there was a significant difference between the groups positive control with treatment on dayak extract of 130 mg/kgBW and 260 mg/kgBW. It can be proven that the higher doses of Dayak extract can prevent proximal tubular epithelial cell necrosis. Based on One Way Anova test at MDA level there was significant difference ( $p < 0.001$ ) between all groups, where as LSD test showed that there was significant difference between positive control group and all treatment groups of Dayak extract. In the negative control group there were also significant differences to all treatment groups of Dayak extracts.

In conclusion, Dayak bulb extracts prevented the increase in proximal renal epithelial necrosis of the kidney and serum MDA levels of mice exposed to lead acetate by oral.

Keywords: Dayak onion extract, lead acetate, necrosis, MDA