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The Effects Glycine max L. Merr on Lipid Peroxidation and Kidney's Histopathology In Lead Intoxication Mice.

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ABSTRACT

Intoxication of lead (Pb) causes the formation of free radicals that affect the antioxidative defense system, thus speeding up cell damage. Soybean (Glycine max L. Merr) Ijen is one of the varieties of food containing phenolic compounds and flavonoids, which have antioxidant activity. Experimental animals used in this study were the Mus muscullus Balb / c as much as 25 tails, they were divided into 5 groups: placebo, negative control, positive control, test and comparison groups. The negative control, test and comparison group were given Pb at a dose of 25 mg / kg orally for 7 days. After the stages of intoxication, positive control and test groups were given suspensions extract of soybean Ijen varieties at a dose of 1g/ 1 ml for 7 days, the comparison group was given a suspension of vitamin C supplementation at a dose of 64 mg / kg orally for 7 days, and the negative control group were given mucilago CMC Na 0,5% of 1 ml for 7 days. Liver tissue of mice were used to analyze the activity of the catalase enzyme and malondialdehyde (MDA) level. Kidney's tissues were used for histopathological examination. Extract of soybean (Glycine max L.Merr) Ijen varieties decreases the activity of the enzyme catalase and repair damaged Kidneycells of mice that lead intoxication as effective as vitamin C.

Keywords: Glycine max L. Merr, Pb intoxication, MDA, Catase activity, Kidney's histopathology

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