

**THE EFFECT OF *Mimosa pudica* ROOT EXTRACT TO
HISTOPATHOLOGICAL REPRESENTATION
OF *Rattus Norvegicus* LIVER INJECTED
WITH *Naja sputatrix* VENOM**

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ABSTRACT

The aim of this study is to know the effect of *Mimosa pudica* root extract giving in histopathological representation of *Rattus norvegicus* liver injected by *Naja sputatrix* venom. Thirty rats were divided into five groups containing six rats each. They were two control groups and three treatment groups, which was given 250, 500, and 1000 mg/kg BW of *Mimosa pudica* root extract orally. For the first seven days each group was given aquadest 0,1ml. On the 8th day, the treatment was started with injecting *Naja sputatrix* LD₅₀ (0,13 µL/gram BW) IM in gluteus musculus and then continued with the giving of *Mimosa pudica* root extract orally for the treatment groups. On the same day, 4 hours after the last treatment, histopathological evaluation was done to score liver damage based on hepatocyte degeneration and necrosis using HE stain with 400x magnification. The scoring data was then analyzed using Kruskal Wallis and Mann-Whitney. The result showed 250 mg/kg BW, 500 mg/kg BW and 1000 mg/kg BW dosage of *Mimosa pudica* root extract can reduce liver damage based on hepatic congestion, hepatocyte degeneration and necrosis in Rat (*Rattus norvegicus*) caused by *Naja sputatrix* venom and gave significant difference ($p < 0.05$) among the treatment groups. *Naja sputatrix* venom can cause heart rate and respiratory rate reduction while *Mimosa pudica* can increase the rat heart rate and respiratory rate.

Keywords : *Mimosa pudica*, snake venom, liver damage