ABSTRACT

THE EFFECT ETHANOLIC EXTRACT OF NONI (*Morinda citrifolia L*)
FRUIT AGAINST MICE (*Mus musculus*) LIVER HISTOPATHOLOGY
INDUCED BY PARACETAMOL

Liver is an organ that metabolizes most of drugs in the body. Paracetamol is a drug that is often used in daily life. However, consumption of paracetamol in long period can cause liver damage. Noni is a herbal medicine that found in Indonesia and has hepatoprotective effect. The research intended to determine whether the ethanolic extract of noni (*Morinda citrifolia L*) fruit can prevent liver cell damage of mice (*Mus musculus*) induced by paracetamol. This research used 30 mice that divided into 3 groups: control group (K), the first treatment group (PI), and the second treatment group (PII). K will be given paracetamol with dose 5 mg / 20 g. PI will be given ethanolic extract of noni fruit with dose 1.3 mg / 20 g & paracetamol 5 mg / 20 g. PII will be given ethanolic extract of noni fruit with dose 2.5 mg / 20 g & paracetamol 5 mg / 20 g. Each group was treated for 14 days. On day 15 mice were sacrificed. Each group was treated for 14 days. On day 15, mice were sacrificed. Liver cell damage assessed by a score of hepatocyte degeneration and necrosis. Data were analyzed by One Way ANOVA test showed significant differences in liver cell damage (*p* <0.05) between the K-PI & K-PII and there was no significant difference in liver cell damage between PI-PII. In conclusion ethanolic extract of noni fruit can prevent liver cell damage of mice induced by paracetamol. Increase ethanolic extract of Noni fruit dose showed no significant difference in liver cell damage.

**Keywords:** ethanolic extract of noni fruit, *Morinda citrifolia L*, liver histopathology, paracetamol