

**THE EFFECT OF EXTRACT MENIRAN (*Phyllanthus niruri* Linn.)
TO ILEUM HISTOPATHOLOGICAL CHANGES IN RATS
INDUCED BY ALCOHOL**

Angga Pratomo Cahyadi

ABSTRACT

Meniran is one of the traditional medicine plant. It has function as antioxidant, anti-inflammation, antipyretic, antitoxic, and antibacterial. Solution of extract meniran can minimalize damage of organ, for example ileum. The aim of this study was to investigate the positive effect of *Phyllanthus niruri* Linn extract on histopathological ileum of *Rattus norvegicus* strain *Wistar* induced by alcohol.

Twenty *Rats* with an average at 200 grams were induced by alcohol in 25% concentration. *Rats* on three groups (P2 0.63mg/rats/day, P3 2.7mg/rats/day, and P4 6.26mg/rats/day) induced by *Phyllanthus niruri* Linn for 7 days then induced by *Phyllanthus niruri* Linn and alcohol 25% for 14 days, group P0 induced by CMC Na 1 % for 21 days, group P1 induced by alcohol 25% for 14 days. Where P0 was negative control group. Experimental design using a completely Federer design with five replications on each treatment. The data of histopathological changes of ileum was analyzed with *Kruskall Wallis* test and *Z* test.

The research showed there were no significantly differences of ileum histopathological changes between P0 and P4. P0 showed result of Mean Rank \pm SE ($6.9^b \pm 0.04$) in edema, ($7.1^c \pm 0.05$) in PMN infiltration, ($5.9^c \pm 0.05$) in Goblet cell count, and ($7.4^b \pm 0.24$) in epitel integrity. Meanwhile, P4 showed result of Mean Rank \pm SE ($9.0^b \pm 0.06$) in edema, ($8.1^{bc} \pm 0.06$) in PMN infiltration, ($10.5^{bc} \pm 0.1$) in Goblet cell count, and ($7.8^b \pm 0.4$) in epitel integrity. It was proved that P4 was most effective dose in reducing histopathological changes.

Keywords : *Phyllanthus niruri* Linn, *Ileum* histopathology, Alcohol.