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

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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 ± SE (6.9b ± 0.04) in edema, (7.1c ± 0.05) in PMN infiltration, (5.9c ± 0.05) in Goblet cell count, and (7.4b ± 0.24) in epitel integrity. Meanwhile, P4 showed result of Mean Rank ± SE (9.0b ± 0.06) in edema, (8.1bc ± 0.06) in PMN infiltration, (10.5bc ± 0.1) in Goblet cell count, and (7.8b ± 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.