THE EFFECT OF PROPOLIS ON HISTOLOGICAL FEATURES OF SMALL INTESTINE OF MICE (*Mus musculus*)

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ABSTRACT

The purpose of this research was to determine the side effect of propolis on histology of small intestine of mice (*Mus musculus*). 25 male mice (*Mus musculus*) aged 12-week-old with average 25-30 gram were used. Mice divided randomly into five groups; each group consisted of five mice. P0 as control group, and other groups; P1, P2, P3 and P4 were given propolisethanolic extract orally with doses as follows; 1.6 mg/0.5ml/day, 3.2 mg/0.5ml/day, 6.4 mg/0.5ml/day and 12.8 mg/0.5ml/day. Treatment were given for two weeks, animal were euthanized and the organs (small intestine) were taken for making the histological specimen using H&E staining. Objects observed were epithelial villi damage, congestion & oedema and neutrophil infiltration. Data were analyzed using Kruskall-Wallis method, continued using Mann-Whitney test if there’s significant difference. The result showed that treatment using different dose of ethanol extracted propolis did not give any significant difference effect toward histological features of small intestine of mice.

Key words: propolis ethanolic extract, small intestine specimens, epithelial villi damage, congestion, oedema, neutrophil infiltration