

ABSTRACT

THE EFFECT OF *Bee pollen* HONEY ON HISTOPATHOLOGY IMAGING OF *Sprague Dawley* STRAIN WHITE RAT'S GASTER THAT INDUCED BY IBUPROFEN

By

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Incidence of gastric irritation is increasing globally, caused of them is use of NSAIDs. Side effects that could be occur in gastrointestinal tract is gastric irritation. Alternative treatment for gastric irritation that quite popular is by consuming honey, like *Bee pollen* honey which is combination of forest honey and pollen from flower pollen. In this study there were 24 samples that divided into 4 groups. Group A is the normal control (distilled water). Group B is negative control (ibuprofen and distilled water). Group C were induced by ibuprofen and *Bee pollen* honey half of the recommended dose (0,77 mL/kg's rat). Group D were given ibuprofen and *Bee pollen* honey with recommended dosage (1,54 mL/kg's rat). Treatment was given for 14 days. Termination was done by anesthesia that used ketamine-xylazine intaperitoneal, then euthanasia by cervical dislocation method, after that gastric was taken and slide was made with hematoxylin-eosin (HE). The results of histopathology imaging classified in a scoring system that is 0 means no necrosis and no inflammatory cells, 1 means there is focal necrosis and there are inflammatory cells lighter, 2 means difuse necrosis and multifocal inflammatory cells and 3 means perforation. The data was abnormal and homogeneous. Non-parametric test was using Kruskal-Wallis test followed by post hoc test of Mann-Whitney. Based on the test results that obtained, there is significantly difference between groups A, B, C and D. *Bee pollen* honey has healing effect on histopathology imaging of *Sprague dawley* strain white rat's gaster that induced by ibuprofen.

Keywords: Honey, *Bee pollen*, gaster, ibuprofen.