

## ABSTRACT

### **THE EFFECT OF PROPOLIS GIVING TO THE LIVER HISTOPATHOLOGICAL OVERVIEW OF ADULT MALE WHITE RATS (*Rattus norvegicus*) OF THE *Sprague Dawley* STRAIN WHICH WAS INDUCED BY ETHANOL 50%.**

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Propolis is a bee product that has a high antioxidant activity. However, studies regarding its effect on the liver are still rare in Indonesia. This study aimed to determine the effects of propolis on the liver histopathological overview of ethanol-induced rats. This laboratory experimental studies used a randomized controlled design to 25 rats which was divided into 5 groups. Group 1: negative control, Group 2: positive control; Group 3,4 and 5: propolis + ethanol. Ethanol was per oral given to group 2,3,4 and 5 for 14 days. Propolis + ethanol group were given per oral doses of propolis 0.00009 ml / grBB, 0.00026 ml / grBB, and 0.00078 ml / grBB once day 1.5 hours before the giving of ethanol. The liver samples were taken for histopathological examination. The parameters of the liver damage was the form of fat degeneration. The results showed that ethanol caused fat degeneration as compared to the negative control group. Group 3, 4, and 5 showed an improvement in the overview of the rats' liver fat degeneration. And in group 3, there was the most significant decrease on the fat degeneration percentage. It can be concluded that there is an effect of giving propolis to the liver of the rats.

**Keywords:** Propolis, fat degeneration, ethanol 50%.