

**PROTECTIVE EFFECT OF RED DRAGON FRUIT (*Hylocereus polyrhizus*)
PEEL EXTRACT TO DUODENAL ULCER INDUCED BY ETHANOL**

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ABSTRACT

This study was aimed to investigate the protective effect of red dragon fruit (*Hylocereus polyrhizus*) peel extract on histopathological changes of duodenal ulcer induced by 75% ethanol 0.5 ml/100g BW per oral. Twenty-five BALB/C male mice were randomly divided into five groups and administrated through oral gavage with different treatments for 9 days. C(-) was negative control group that received CMC Na 0.5% + aquadest, C (+) was positive control group that received CMC Na 0.5% + 75% ethanol 0.5 ml/100g BW, T(1) was treatment group that received *Hylocereus polyrhizus* peel extract 250 mg/kgBW for 7 days + 75% ethanol on day 9, T(2) was treatment group that received *Hylocereus polyrhizus* peel extract 500 mg/kgBW for 7 days + 75% ethanol on day 9, T(3) was treatment group that received *Hylocereus polyrhizus* peel extract 1000 mg/kgBW for 7 days + 75% ethanol on day 9. The treatment was conducted for 3 days of adaptation and 9 days of total treatments. At the end of the research, all mice were sacrificed and duodenum were collected. Duodenum tissues were processed into histopathological preparation using Hematoxylin-Eosin staining. The data was analyzed by Kruskal Wallis and Mann-Whitney Test. The research showed significant different ($p < 0.05$) among the treatment groups. The conclusion of this research is dragon fruit (*Hylocereus polyrhizus*) peel extract as antioxidant could reduce duodenum damage which induced with ethanol. The optimum dose in this research was 250 mg/kgBW.

Keyword: Duodenal ulcer, ROS, *Hylocereus polyrhizus*, Antioxidant