

**THERAPEUTIC EFFECT OF *Spirulina platensis* EXTRACT AGAINST
GASTRIC DAMAGE INDUCED BY ETHANOL IN RATS
(*Rattus norvegicus*)**

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ABSTRACT

The aim of this study is to prove the potential of *Spirulina platensis* extract in reducing gastric damage induced by ethanol in Rats (*Rattus Norvegicus*). This experimental search used twenty male rats which were divided into five groups, each group consisted of four rats. They were two control group, negative (C-) and positive (C+) control and three treatment groups which were given 200mg/kg BW (T1), 400mg/kg BW (T2) and 800mg/kg BW (T3) of *Spirulina platensis* extract per orally. For the first seven days each group (C+,T1,T2 and T3) was given with 50% ethanol 10 ml/kg BW except for negative control (C-), then continued for 14 days with *Spirulina platensis* extract administration for the treatment groups and CMC Na 0.5% solution for negative control groups. 24 hours after the last treatment, histopathological evaluation was done to score gastric damage based on epithelial damage and submucosal edema. The data was analyzed using Kruskal Wallis test . If there was a significant result, then it was continued using Mann-Whitney test. The result showed 200 mg/kg BW dosage of *Spirulina* extract can reduce gastric damage induced by ethanol in Rat (*Rattus norvegicus*) and gave significant difference result ($p < 0.05$) among the treatment groups.

Keywords : *Spirulina platensis*, ethanol, gastric damage