

**THE THERAPEUTIC EFFECT OF *Spirulina platensis* EXTRACT ON HISTOPATHOLOGICAL APPEARANCE OF ETHANOL-INDUCED KIDNEY INJURY IN RATS (*Rattus norvegicus*)**

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**ABSTRACT**

The aim of this study was to prove the potential of *Spirulina platensis* extract in decreasing the kidney injury induced by ethanol in rats (*Rattus norvegicus*). Twenty male rats were divided into five groups (n = 4). They were two control group and three treatment groups which was given 200, 400, and 800 mg/kg BW of *Spirulina platensis* extract perorally. For the first seven days each group was given 50% ethanol 10 ml/kg BW except for control group, then continued for 14 days with *Spirulina platensis* extract for the treatment groups and 0.5% CMC Na solution for control groups. 24 hours after the last treatment, histopathological observation was done to score kidney injury based on the appearance of congestion, hemorrhage, degeneration, and necrosis. The data was analyzed using Kruskal Wallis and Mann-Whitney Test. The result showed that *Spirulina platensis* 200 mg/kg BW extract significantly decrease ethanol-induced kidney injury in rats (*Rattus norvegicus*) and gave significant difference ( $p < 0.05$ ) among the treatment groups.

**Keywords :** *Spirulina platensis*, ethanol, kidney injury