

ABSTRACT

THE INFLUENCE OF GIVING ETHANOL EXTRACT OF SOURSOP LEAVES (*Annona muricata* Linn) AGAINST DYMETHYLBENZ(*a*)ANTHRACENE (DMBA) INDUCED APPEARANCE OF HEPAR HISTHOPATOLOGY

By

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Leaves of the soursop (*Annona muricata* Linn) is a plant that has many benefits and also used as hepatoprotective. Soursop leaves contain flavonoids, alkaloids and acetogenis that can neutralize free radicals or ROS (*reactive oxygen species*) and also as a cytotoxic. This study aimed to investigate the effect of the leaves extract of soursop (*Annona muricata* Linn) against liver cell damage rats (*Rattus norvegicus*) Sprague Dawley strain by DMBA-induced.

In this study, 25 rats were divided into 5 groups and treated for 30 days. GI (given only distilled water), GII (DMBA only given 75 mg/kg), GIII (DMBA were given 75 mg/kg soursop leaves extract 100 mg/kg), GIV (DMBA were given 75 mg/kg and soursop leaves extract 200 mg/kgBW), and GV (DMBA were given 75 mg/kg and extracts of soursop leaves extract 400 mg/kg).

The result showed that the mean number of liver cell damage are GI: 1.20 ± 0.837 ; GII 13.20 ± 0.837 ; GIII 11.80 ± 0.837 ; GIV 10.80 ± 1.643 ; GV 10.40 ± 1.140 . ANOVA test found a significant difference p value = 0.001 for all groups. In the Post Hoc LSD test found significant differences in GI or p value = <0.05 , the GII compared with GIII and GIV was not significant compared with GV also not significant. But if be compared GII with GIV and GV was significant. These results indicate that the ethanol extract of leaves of the soursop can reduce cell damage DMBA-induced rat liver due to its antioxidant content.

Key words: *Annona muricata* Linn, antioxidant, DMBA