

ABSTRACT

Muhammad Thohirun Khabib. 2025. *The Effect of Soursop Leaf Extract (Annona muricata L.) on SGPT (Serum Glutamic Pyruvate Transaminase) Levels in Male Wistar Rats (Rattus norvegicus B.) Induced with 7,12-Dimethylbenz(α)anthracene (DMBA).* Bachelor of Applied Nutrition and Dietetics Study Program, Department of Nutrition, Malang Health Polytechnic.
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Background : Cancer is a degenerative disease often associated with oxidative stress caused by exposure to carcinogenic substances such as DMBA (7,12-Dimethylbenz(α)anthracene). One of the indicators of liver damage due to oxidative stress is the increase in SGPT (Serum Glutamate Pyruvate Transaminase) levels. Soursop leaves (*Annona muricata L.*) are known to contain flavonoid compounds with antioxidant properties that have the potential to reduce SGPT levels. **Objective :** This study aimed to determine the effect of aqueous soursop leaf extract on SGPT levels in male Wistar rats induced with DMBA. **Methods :** This was a laboratory experimental study using a completely randomized design. The sample consisted of 30 young male Wistar rats divided into five groups: negative control (K-), positive control (K+), and three treatment groups (P1, P2, P3) that received soursop leaf extract at doses of 1000 mg/kgBW, 1500 mg/kgBW, and 3000 mg/kgBW, respectively. The extract was administered orally for 4 weeks alongside DMBA induction. Data were analyzed using the Kruskal-Wallis test and one-way ANOVA. **Results :** The soursop leaf extract contained flavonoids (quercetin) at 4.1268 mg EQ/g extract. The Kruskal-Wallis test on SGPT levels showed a p-value of 0.265 ($p > 0.05$), indicating no significant difference among the groups. Food intake did not differ significantly ($p = 0.201$), while water intake and body weight showed significant differences ($p = 0.019$ and $p = 0.002$, respectively). The treatment groups showed a decreasing trend in SGPT levels compared to the positive control, but the results were not statistically significant. **Conclusion :** The administration of soursop leaf extract has not shown a significant effect on reducing SGPT levels in male Wistar rats induced with DMBA. Further research is needed with more mature rats, and a more optimal extraction solvent.

Keywords : Antioxidant, DMBA, SGPT, Soursop Leaf, Wistar Rats.