

ABSTRACT

HEPAR HISTOPATHOLOGY RESPONSE OF MICE INDUCED BY BENZO()PHYREN TO THE ADMINISTRATION OF TAURINE AND LEAF SOURSOP EXTRACT (*Annona muricata*)

By

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Cancer is a disease that is characterized by the existence of damage and cell abnormality in growth and differentiation. Liver cancer is a disorder of hepar tissue derivated from its tumors. Taurine is known as antioxidant but its role as anticancer needs to be explored more as well the role of *Annona muricata* leaf soursop extract which was believed has its role as anticancer substance. This research, therefore, aimed to explore the effect of taurine and *Annona muricata* leaf soursop extract on the hepar histopathology of male mice (*Mus musculus*) induced by benzo()phyren *in vivo*. This research was carried out by using a complete randomized design, which consisted of 5 treatment groups which was repeated 5 times. Group I was given 0.2 ml corn oil for 15 days, group II was induced by benzo()phyren without taurine nor *A. Muricata* leaf soursop extract for 10 days, group III was given 7.8 mg taurine/bw/day (twice a day) starting from the 15th days before the induction of benzo()phyren, group IV, after induced with benzo()phyren, taurine was given with dosage of 7.8 mg/bw/day, group V, after induced with benzo()phyren, soursop leaf extract was given with amount of 277,8 mg/bw/day). Data analyzed by *Kruskal-Wallis* test and one way ANOVA with *Fisher* test ($p>0.05$). The results indicated that taurine had ability to recover the liver tissue induced by benzo()phyren as (carcinogenic) while, *Annona muricata* leaf soursop extract had not shown any recover of tissue damage.

Keywords : benzo()phyren, hepar, histopathology, leaf soursop (*Annona muricata*), taurine