ABSTRACT

THE EFFECT OF SOURSOP LEAF (*ANNONA MURICATA* L.) EXTRACT TO MALONDIALDEHYDE'S CONCENTRATION OF RAT LIVER INDUCED BY DMBA

By

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Liver cancer can be caused by oxidative stress due to the increase of free radical. Free radical reacts with lipid, resulting lipid peroxidation that will produce malondialdehyde. Soursop leaf extract have anticancer and antioxidant effect. The aim for this research is to determine the effect of soursop leaf extract (*Annona muricata* L.*)* to malondialdehyde's concentration of rat liver that induced by DMBA. This study was an experimental design with 4 groups of intervention. Each group contains 5 female *Sprague dawley* rats treated for 4 weeks, group K (given 1 ml/days of aquadest), A (induced 20 mg/kgBW of DMBA twice a week and given 1 ml/days of aquadest), B (given 20 mg/kgBW twice a week and 20 mg/kgBW/days of soursop leaf extract), and C (given 20 mg/kgBW twice a week and 40 mg/kgBW/days of soursop leaf extract). The rat is terminated to have its liver taken for a malondialdehyd's concentration test. The results showed that the concentrations of group K's malondialdehyde mean = 1,9580 nmol/mg; A = 2,3700 nmol/mg; B = 1,7180 nmol/mg; and C = 1,6680 nmol/mg. Statistical test showed significant differences in between the treatment group ($p < 0.05$), except between groups B and C showed that a dose of 20 mg/kgBW was effective dose that can be given to decrease malondialdehyde's concentration of rat liver induced by DMBA and given soursop leaf extract.

Key word: DMBA, malondialdehyde, rat liver, soursop leaf extract