ABSTRACT

Bidaah, Asnal. 2013. **Effect of Ethanol Leaf Extract Soursop (*Annona muricata* L.) against Liver Anatomy and Histology of female mice (*Mus musculus*) were induced Dimetilbenz 7.12 (α) Antrasen (DMBA) in In Vivo**. **Thesis, Department of Biology, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang**. Promotor: (I) Dr. Retno Susilowati, M. Si (II) Dr. H. Munirul Abidin, MA.

Keywords: Extract, Soursop Leaf, Liver Anatomy, Liver Histology, 7.12 Dimetilbenz (α) Antrasen (DMBA)

Normal circumstances the liver cells will divide if there is replacement of liver cells that have died and broken. Instead cancer cells will continue to divide resulting in the accumulation of new cells that cause pressure and damage the normal tissue of the liver. Acetogenin compounds in soursop leaves can inhibit ATP transport and the formation of NADH which is selective only to the cancer cells. The purpose of this study was to determine the effect of ethanol extract of leaves of soursop (*Annona muricata* L.) on hepatic histology and anatomy of female mice (*Mus musculus*) induced dimetilbenz 7.12 (α) antrasen (DMBA) in vivo.

This study was an experimental study using a completely randomized design (CRD) with 6 treatments and 4 replications. The treatment used is the negative control (given solvent and solvent extracts DMBA), positive control mice (given solvent extract and DMBA) and DMBA treatment given and given extracts of Soursop Leaf with 4 different doses ie 100mg/kgBB, 150mg/kgBB, 200mg / kg, 250mg/kgBB for 6 weeks. Parameters observed in this study is the anatomy and histology of the liver. Data were analyzed using ANOVA. If the results of the analysis of variance showed significant effect, then followed by Duncan's test 1%.

Results of this study showed that the leaf extract Soursop (*Annona muricata* L) give effect to the anatomy and histology of the liver of female mice (*Mus musculus*) DMBA-induced. Anataomi hepatic liver indicated by the pale color and appearance of scarring of the liver suggests that liver cancer experience. Histological liver cells indicated by the mean level of the final stages of necrosis (piksosis) on treatment liver K + = 31.1%, D1 = 14.1%, = 3.76% D2, D3 = 2.36% and K-= 0, 54%. While the average value of the diameter of the cell nucleus in the treatment of hepatic K + µm = 3.24, D1 = 4.44 µm, D2 = 6.51, D3 = 7.03 µm, and K-= 3.24 µm.