

## ABSTRACT

**Pratiwi, Kevin Hary. 2013. Effect of Ethanol Leaf Extract Soursop (*Annona muricata* L.) Against the Mammary Gland Preview Histology Mice (*Mus musculus*) induced 7,12-Dimetilbenz( $\alpha$ )Antrasen (DMBA) In Vivo.** Final project / thesis. Department of Biology, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang. Supervisor: (I) Dr. drh. Hj. Bayyinatul Muchtaromah, M.Si. (II) Dr. Ahmad Barizi, M.A

**Keywords:** Leaf Soursop (*Annona muricata* L.), Histology of the mammary gland, *Mus musculus*

Leaves soursop (*Annona muricata* L.) is one of the tradisional medicinal plants which are used as traditional medicine cancer. Soursop leaves containing active ingredients called *acetogenins* which have cytotoxic properties against cancer cells, including breadt cancer. The active ingredient is able to control mitochondria (producing energy organ cells) required for cancer cells to grow. This study aimed to determine the effect of ethanol extract of leaves of soursop (*Annona muricata* L.) on histological mammaey glands of mice (*Mus musculus*) induced 7,12-Dimetilbenz( $\alpha$ )Antrasen (DMBA) in vivo.

This is an experimental study using a completely randomized design (RAL) with 6 treatments 4 replications. The treatment used is the (K-) negative control, (K+) positive control, (P1) 100 mg / kg, (P2) 150 mg / kg, (P3) 200 mg / kg and (P4) 250 mg / kg and 7,12-Dimetilbenz( $\alpha$ )Antrasen (DMBA) 20 mg / kg BW. Animals used were 24 female mice tails  $\pm$  40 days old. Research data include mammary duct epithelium thick, thick alveolar epithelial mammary, mammary ductal lumen diameter, lumen diameter mammary alveoli of mice (*Mus musculus*). Data were analyzed by one-way ANOVA, where there is a very real difference then followed by Duncan test.

The results showed that the leaf extract of soursop (*Annona muricata* L.) effect on mammary gland histology (*Mus musculus*). This study showed that the leaf extract of soursop (*Annona muricata* L.) effect on the proliferation of mammary ductal epithelial cells and alveolar mammary epithelial cells was found at a dose of 200 mg / kg, but increased proliferation of mammary ductal epithelial cells and alveolar epithelial cells and mammary epithelial cells encountered at doses of 100 mg / kg and 150 mg / kg BW.