

## ABSTRACT

**Hanum, Rahma Nauma. 2013. Effect of Soursop (*Annona muricata* L.) Leaf Ethanol Extract on the Growth of Neuroglia Cells Baby Hamster were Exposed with 7,12-Dimethylbenz ( $\alpha$ ) Antracene (DMBA) in vitro conditions.**  
Advisor: Kiptiyah, M.Si and M. Imamuddin, M.A

Keywords: Brain Cancer, Dimetilbenz ( $\alpha$ ) Antrasen (DMBA), Leaf Ethanol Extract Soursop (*Annona muricata* L.), Neuroglia Cells from Baby Hamster In Vitro

Brain cancer is one of the causes of death. Tumor brain cell constituent that has the potential to develop cancer are neuroglia cells. One of the compounds carcinogen was 7,12 dimetilbenz ( $\alpha$ ) antrasen (DMBA). Several studies have been conducted for the treatment of cancer by means of anticancer compounds isolated from natural ingredients such as herbs. One of the plants that have the potential as a cancer drug is Soursop (*Annona muricata* L.). Soursop has a potentially active compounds as anticancer is *Annonaceous acetogenin*. This study aimed to investigate the effect and LC<sub>50</sub> values of soursop (*Annona muricata* L.) leaf ethanol extract on the growth of neuroglia cells baby hamster were exposed to 7,12-dimetilbenz ( $\alpha$ ) antrasen (DMBA) in vitro conditions.

This study uses neuroglia cells taken from baby hamster two days old grown in basic medium DMEM (Dulbecco's Modified Eagle's Medium) with and without dimetilbenz ( $\alpha$ ) antrasen (DMBA). Concentration of Soursop leaf ethanol extract used is 10  $\mu$ g/ml, 20  $\mu$ g/ml, 40  $\mu$ g/ml, 80  $\mu$ g/ml and 160  $\mu$ g/ml. The parameters in this study were confluent, viability and cytotoxicity assay using probit analysis to obtain the LC<sub>50</sub>.

The results showed that the ethanol extract of soursop leaf (*Annona muricata* L.) having an effect on the growth of neuroglia cells baby hamster were exposed with 7,12-dimetilbenz ( $\alpha$ ) antrasen (DMBA) in vitro conditions. Soursop leaf ethanol extract can lower percentage of confluent, increase the percentage of deaths and is highly toxic to the cancer cells by probit analysis with LC<sub>50</sub> values of 27.64  $\mu$ g/mL.