

ABSTRACT

Esmawati, Elis. 2015. **The Leaf Soursop (*Annona muricata* L.) Extract Effect Against Blood Glucose and Pancreas Histology Rat (*Rattus norvegicus*) The Alloxan induced.** Thesis, Biology Department, Faculty of Science and Technology, State Islamic University (UIN) Maulana Malik Ibrahim Malang. Biology Lector: Kholifah Holil, M.Si; Religion Lector: Umaiatus Syarifah, MA

Keywords: Leaf Soursop (*Annona muricata* L.), Blood Glucose, Alloxan, Rat

Soursop (*Annona muricata* L.) is a plant that originated from South American countries, namely Mexico. Plants soursop (*Annona muricata* L.) has spread throughout Indonesia and widely used by the public as an herbal remedy various diseases one antidiabetic. The content contained in this plant are useful as antidiabetic namely flavonoids. This study aims to determine the effect of leaf extract of soursop (*Annona muricata* L.) on blood glucose levels and pancreatic histology rat (*Rattus norvegicus*) induced by alloxan.

This study was an experimental study using a completely randomized design (CRD) with 4 treatments 3 replications. The treatments used were rat induced by alloxan 120 mg / kg BW followed extract soursop leaf K + (0 mg / kg BW), S1 (50 mg / kg BB), S2 (100 mg / kg BW) and S3 (150 mg / kg BW). Experimental animals used were rat (*Rattus norvegicus*), aged 2 months with an average weight of 200 grams. The parameters used were blood glucose levels and histological amount rat pancreas. Data blood glucose levels (mg / dL) were analyzed with analysis of Covariance (ANKOVA) and histology of cell number β the pancreas were analyzed by analysis of variance (ANOVA). If there is any real difference then continued with Duncan test 5%.

The results showed that the leaf extract of soursop (*Annona muricata* L.) effect on blood glucose levels and pancreatic histology rat (*Rattus norvegicus*) induced by alloxan. Soursop leaf extract doses effective in reduction of blood glucose levels of mice is 50 mg / kg BW, while the histology for improvement of pancreatic cells was 150 mg / kg BW.