ABSTRACT

MOHAMMAD AMIR, Department of Health Polytechnic of Jember, July 16, 2013. **Effects Test Blood Glucose Levels Decrease with Skin Juice Red Apples In hyperglycemic mice**. Supervising Commission, Chairman: Ir. Heri Warsito, MP Members: dr. Adhiningsih Yulianti

This study aimed to determine the effect of red apple skin juice to decrease blood glucose levels in mice (mus muscullus, l) hyperglycemic.

Juice red apple skin contains fiber (pectin), which can stimulate the release of insulin that is not excessive, so that could add to the work process in the pancreatic beta cells to stimulate insulin. This research is experimental (true experimental) with pre and post test control group design using analysis of variance test (Annova) with 4 treatments and 6 replications per treatment and further tested using HSD 5%. Treatment consists of: (1) positive control group (P +), are fed pellets, water, (2) treatment group (P1), are fed pellets, water and juice red apple skin 0.4ml/hr dose, (3) treatment group (P2) were fed pellets, water and juice red apple skin 0.5ml/hr dose, (3) treatment group (P3) were fed pellets, water and antidiabetic drugs methformine. Showed that 1) mice blood glucose levels (mg / dl) before treatment is that p = 0.068 between groups showed that the treatment has a value of P> 0.05. It can be interpreted that there is no effect of an increase in blood glucose levels while significantly among the four treatment groups after induction of alloxan. So no need to proceed to trial Honestly Significant Difference (HSD). 2) mice blood glucose levels (mg / dl) after treatment showed that p = 0.578 between groups showed that the treatment has a value of p> 0.05. The figure shows that there is no effect of lowering blood glucose levels during the fourth anatara significant treatment group after the administration of apple juice red skin. So it is not necessary to test Honestly Significant Difference (HSD).

Key words: juice red apple skin, blood glucose levels, male mice