

## ABSTRACT

**ST.NURWISUCHO ASIH; Noni Powder Instant Effect Of Blood Glucose Levels Decrease During hyperglycemic mice; Chairman: Ir. Heri Warsito, MP. Members: dr. Arisanty Nur Setia R**

Research Objectives: Diabetes mellitus is caused by several factors, such as damage to a small part or most of the beta cells of the islands of Langerhans in the pancreas that produce insulin function resulting in insulin deficiency, which resulted in the disruption of the function of insulin in glucose to enter the cells. This condition is very closely related to heredity, wrong diet, obesity and lifestyle is wrong (Harmanto, 2004). There are some medicinal plants including vegetables and fruits are nutritious as hypoglycemic, which are substances that can reduce levels of glucose in the blood. One of these herbs is Noni (*Morinda citrifolia* Linn). The medicinal plants which are of the mechanism of action by stimulating the pancreas so that it can bind to receptors on  $\beta$  cells, which in turn can be enhanced insulin secretion followed by a decrease in blood glucose (MOH, 2004). According to Blanco et al (2005), noni is a substance that can lower blood glucose levels which include: proxeronine and flavonoids. Seronine serves to regenerate cells and receptors present in every cell of the body, including the pancreas (Wang et al, 2002). Flavonoids are found in noni fruit which is a class of flavonol quercetin. Flavonoids may act as an antioxidant that can prevent complications or progesifitas DM by ridding the excessive free radicals, free radicals break the chain (Hafiz Soewonto, 2001). Therefore instant noni powder is also useful for controlling a person is attacked or have the talent genetics of diabetes.

research methodology: This research is an experimental study (True Experimental). The design used was a pre-test and post-test control group design. The experiment was conducted at the Biomedical Laboratory of the Faculty of Dentistry (FKG) College of Jember in early May 2013.

Conclusions : Providing instant powder noni effect lowers blood glucose levels during alloxan-induced mice, however, be seen in the statistical test showed that the decrease in blood glucose levels while not significantly advance of the fifth group.

Keywords: instant powder noni, when blood glucose levels, hyperglycemic mice