

**ABSTRACT****Hypoglycemic Effect of Johar's Leaf Extract (*Cassia siamea* Lamk)  
In Mice (*Mus musculus*) That Induced by Streptozotosin****Dyah Ika Krisnawati**

This thesis examines whether there johar leaf extracts hypoglycemic effect in mice made diabetic by induction streptozotosin. This type of research in this thesis is the experimental research, the design used was Pretest and Posttest Control Group Design. By using Federer formula, the number of samples are 24 mice were divided into 4 treatment groups: the 1<sup>st</sup> group as the control group was given CMC-na 0.5 %, the 2<sup>nd</sup> group were given a dose of 0.5 g/kgBW of johar extract / kg, the 3<sup>rd</sup> Group were given johar extract 1 g / kgBW, and the 4<sup>th</sup> group were given a dose of 2 g johar extract / kgBW. Examination of the blood glucose test was done using NESCO TEST. The results of post-treatment blood sugar outline obtained an increase in blood sugar in group 1 and group 2, while in group 3 and group 4 showed a decrease in blood sugar levels. Normality test results in each group obtained p values > 0.05, so it could be said to be normally distributed data. Homogeneity test results obtained p values > 0.05 was 0.106, so the data can be said to be homogeneous. Observations LSD test on each group whether the group given 5% CMC-Na, given johar leaf extract dose of 0.5 g / kgBW, and dose of 1 g / kgBW obtained p values > 0.05, but the LSD test at johar leaf extract dose of 2 g / kgBW obtained value of p < 0.05 at 3<sup>rd</sup> hour compared to 0 hour so it can be concluded there were an effect of johar leaf extract to decrease blood glucose levels in a dose johar leaf extract 2 g / kgBW.

The conclusion of this study was the provision of johar leaf extract at a dose of 0.5 and 1 g / kg BW did not lower blood glucose levels, but at a dose of 2 g / kgBW lower blood glucose levels of mice (*Mus musculus*) were used as the induction of diabetes mellitus by streptozotosin. There was no correlation between increasing doses of johar leaf extract with blood glucose-lowering effect of mice (*Mus musculus*) were used as the induction of diabetes mellitus by streptozotosin.

Keywords: johar leaf extract, mice, blood sugar levels, and streptozotosin