

ABSTRACT

Jamilah, Ummul. 2015. **The Effect of Mulberry Leaf (*Morus alba* L.) Infusion to the Histology Picture of Hippocampus of White Mouse (*Rattus norvegicus*) Diabetic Mellitus cronic which is Inducted by Alloxan.** Thesis Department of Biology, Faculty of Science and Technology, Maulana Malik Ibrahim State Islamic University of Malang. Supervisor of Biology: Dr. drh. Bayyinatul Muchtaromah, M. Si. Supervisor of Religion: Dr. H. Ahmad Barizi, M. A.

Key Words : Mulberry Leaves (*Morus alba* L.), Hippocampus, White Mouse (*Rattus norvegicus*), Alloxan.

Leaves of mulberry (*Morus alba* L.) is a traditional plant which has *antihyperglycemic* and *antioxidant*. Those compounds function are to decrease the high blood glucose level and to repair the damage of organ from free radical which is caused by hyperglycemic condition. The aim of this research is to know the effect of Mulberry leaves (*Morus alba* L.) infusion to the histology picture of hippocampus white mouse (*Rattus norvegicus*) which is induced by Alloxan.

This is an experimental research that uses complete random program with 6 different treatment and 4 times repetition. The different treatment are K (+) positive control, K (-) negative control, P1 (400 mg/kg weight), P2 (600 mg/kg weight), P3 (800 mg/kg weight), and P4 (1000 mg/kg weight). Animal that is used in this research is 24 heads of Strain Wistar white mouse, 2 month with average-weight 100-200 grams. The research data are pyramid cell amount. In addition, the data is analyzed by ANOVA One Way with 0,01 (1%) significance, if there are very real different the research is continued by advance duncan α 1% test.

The result of research shows that Mulberry leaves (*Morus alba* L.) infusion are very real influence to re-increase pyramid cell amount to the mouse which induced by alloxan. The optimal doses of Mulberry leaves (*Morus alba* L.) infusion that influence for increasing pyramid cell CA1 amount of induced by alloxan mouse is P4 (1000 mg/kg weight).