ABSTRACT

Hakim, Arif Luqmanul. 2012. Potential Several Dosage Forms Centella (Centella asiatica (L.) Urban) Preview Against Pancreatic Antioxidant Levels Histological and White Rat (Rattus norvegicus (L.) were Induced Alloxan. Supervisor: Dr. Drh Bayyinatul Muctaromah, M.Si, Umaiyatus Syarifah, MA

Keywords: Gotu kola (*Centella asiatica* (L.) Urban), histological pancreas, levels of antioxidants.

The purpose of this study was to determine whether the preparations were processed traditionally able to repair the alloxan-induced pancreatic histologic, levels of antioxidants compared to other forms of Centella asiatica extract.

This study is an experimental research using completely randomized design factorial pattern consisting of 2 factors with 3 replications. The first factor in this study is the dosage of gotu kola leaves are composed of three dosage forms is the form of extracts, boiled water and fresh. The second factor is the duration of administration dosage of gotu kola leaf (28 days and 42 days). Treatment of the mice in the study were untreated (negative control), mice without the administration of Centella asiatica (positive control), rats were given extracts of Centella asiatica necrosis for 28 and 42 days, the mice were given fresh gotu kola necrosis for 28 and 42 days, and rats were given water necrosis stew gotu kola for 28 and 42 days. The data obtained were analyzed using two-way ANOVA. If the analysis shows a significant effect, then continued with 1% HSD test.

The results of this study indicate that the provision of various forms of administration dosage forms gotu kola (*Centella asiatica* (L.) Urban) is a form of extract, fresh leaves and boiled water affect histologic improvement alloxaninduced pancreatic and can increase levels of antioxidants SOD, and decreased levels of MDA results of free radicals induced in rats alloxan, because in the gotu kola plant containing the active ingredient in the form quersetin flavonoids as antioxidants that can protect the body against free radicals that can lower blood glucose levels and improve insulin and improve Langerhans islet cells of the pancreas.