ABSTRACT

Kumalasari, Hasnia Prihna. 2012. **Effect of Preparation Gotu kola (Centella asiatica (L.) Urban) on Histological of Rat Brain Neurons (Rattus norvegicus) Which Get Necrosis.** Adviser: Dr. drh Bayyinatul Muchtaromah, M. Si, Dr. Munirul Abidin, M.Ag.

Keywords: gotu kola (Centella asiatica (L.) Urban), necrosis of brain neurons, brain histology

The purpose of this study was to determine whether stocks are processed traditionally capable of repairing histologic brain neurons that get necrosis compared with gotu kola extracts that have been studied scientifically.

This study is an experimental study using completely randomized design (CRD) factorial pattern consisting of two factors with three replications. The first factor in this study is the preparation of gotu kola leaf consisting of three of the dosage form 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 in the study were mice without treatment (negative control), rats without necrosis of gotu kola (positive control), rats fed extracts of *Centella asiatica* necrosis for 28 and 42 days, mice fed Centella asiatica fresh necrosis for 28 and 42 days and rats fed necrosis gotu kola boiling water for 28 and 42 days. The data obtained were analyzed using ANOVA Two Way. If the analysis shows the real effect, then continued with the test BNJ 1%.

The results of this study indicate that administration of various dosage forms of gotu kola (*Centella asiatica (L.) Urban*) was able to increase the number of pyramids and neuroglia cells in the cerebrum and hippocampus of rats (*Rattus norvegicus*) induced aloksan. As for the duration of gotu kola and interactions between gotu kola dosage forms and duration of administration had no effect on rat brain neurons ganbaran particularly histologically pyramids and neuroglia cells in the cerebrum and hippocampus of rats (*Rattus norvegicus*).