



**EFFECT OF FRESH EXTRACT OF *Centella asiatica* (BIG TYPE)
AND *Centella asiatica* (SMALL TYPE) IN LEARNING AND
MEMORY ENHANCEMENT.**

BY

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DECLARATION

I hereby declare that this thesis is my original work and has not been submitted previously or currently for any other degree at UiTM or any other institutions.

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ABSTRACT

EFFECT OF FRESH EXTRACT OF *Centella asiatica* (BIG TYPE) AND *Centella asiatica* (SMALL TYPE) IN LEARNING AND MEMORY ENHANCEMENT.

Centella asiatica is a small, herbaceous, and creeping plant that ubiquitously growth in moist area around South East Asia that known to possess the neuroprotective agent that help in learning and memory enhancement. The present study aims to demonstrate the effect of different type of *Centella asaitica* (big and small type) fresh extarct on learning and memory enhancement by using histological finding. Both type of *Centella asiatica* fresh extract were given orally 6, 12 and 24 mg/kg for 6 weeks. After the treatment, the rats were sacrificed, their brain were removed and the brain hippocampus impregnated with cresyl violet staining. The brain sectioning were observed for thickness of dentate gyrus and neuronal cell death by using light microscope. The result obtained showed that both type of *Centella asiatica* showed increased in thickness of dentate gyrus as compared to control group. For neuronal cell death, both type of *Centella asiatica* showed reduced in number of cell death at hippocampus region. In conclusion, this study indicate that both type of *Centella asiatica* fresh extract possessed neuroprotective agent that help in learning and memory enhancement.

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