

## 🛬 De La Salle University - Dasmariñas ( **BIOLOGY PROGRAM**

## **EFFECTS OF TAKIP-KOHOL (CENTELLA ASIATICA)** TO THE CENTRAL NERVOUS SYSTEM **OF SWISS ALBINO RATS**

An Undergraduate Research Presented to the Faculty of the Biological Sciences Department College of Science De La Salle University - Dasmariñas Dasmariñas, Cavite

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#### ABSTRACT

Parkinson's disease is now a prevalent disease, especially acquired by the elders. The only medication taken for this disease is the levodopa, which only suppresses the symptoms but does not totally eliminate the disease. Takip-kohol (Centella asiatica) is an alternative herb for levodopa. Through various concentrations of the crude extract of this plant, its effects to the CNS of Swiss albino mice (whether it is a CNS depressant or stimulant) and the concentration which had the greatest effects to the CNS of the mice were determined. The treatments used were T<sub>0</sub>-water (control); T<sub>1</sub>-0.5mg/mL of takip-kohol extract; T<sub>2</sub>-1 mg/mL takip-kohol extract; and  $T_3$ -0.5mg/mL of levodopa (positive control). Through the Randomized Complete Block Design, the mice were assigned to their respective treatment condition by using an oral gavage needle. The results are shown in Table 1. Data Evaluation (see Appendix D) where it shows that takipkohol had obtained a 131 score on CNS depression, which means it has a depressant effect due to  $T_0$ -water (control) which only had a score of 26. In contrary, levodopa obtained 133, which also means it is a depressant. On the other hand, in CNS Stimulation test, takip-kohol obtained 38 while levodopa obtained 15. As proven by the experiment and statistical analyses, one-way ANOVA and Tukey test, takip-kohol has a potential to be a depressant and alternative for levodopa.

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