The Effect of *Alocasia macrorrhiza Linn.* Schott (Biga) Rhizome Organic Extract on the Central Nervous System of the Female Albino Rats

An Undergraduate Thesis Presented to
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In Partial Fulfillment
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Bachelor of Science in Biology

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ABSTRACT

NAME OF INSTITUTION: De La Salle University-Dasmarinas

ADDRESS: Bagong Bayan, Dasmarinas, Cavite

TITLE: The Effect of Alocasia macrorrhiza Linn. Schott (Biga) Rhizome Organic Extract on the Central Nervous System of the Female Albino Rats

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OBJECTIVE OF THE STUDY:

A. GENERAL:

To know the significant effect of Biga rhizome extract on the CNS of the female albino rats.

B. SPECIFIC:

To determine the effect of Biga rhizome extract as a stimulant or depressant on the CNS of the female albino rats.

Scope and Coverage:

This experimental study had determined the effect of Biga plant on the (CNS) using crude extract of 50% against 25 female albino rats with at least 2 months of age and by using Standard Pharmacological Test to determine its effec-

tivity.

METHODOLOGY:

Research Design

This is a experimental study that determined the effect of Alocasia macrorrhiza Linn Schott (Biga) Rhizome Organic Extract on the CNS of the female albino rats.

Research Setting

The study was conducted at the residence of Mr. Shervin R. Sison at Villa Isabel Village, Dasmarinas, Cavite.

Research Procedure:

Harvested Biga rhizomes were throughly washed with water and were cut into small pieces.

Twenty-five albino rats with age 2 months were used for five treatments. Five rats were separately kept for each cage and were given pelleted food and water for daily nourishment.

The thinned-cut rhizome was soaked for at least two days with ethanol. Then, the mixture was filtered by cheesecloth and placed in the Rotary evaporator to separate crude extract from the solvent. From the crude extract, concentration was made by adding distilled water. The extract was kept in a sterilized test tube or bottle with cap at room temperature.

The crude extract of Biga rhizomes was administered through average weight

of the rats and given once by gavage method.

The response of the rats was evaluated using the parameters from Standard Pharmacological Procedures. 4/

FINDINGS:

The result in general showed that the Biga rhizome extract had a highly significant stimulant effect on the CNS of the female albino rats.

CONCLUSIONS:

3/ Based on the findings, it was concluded that

The Biga rhizome extract had a stimulant effect on the CNS of the female albino rats, therefore it had no anesthetic property. The researchers conclude also that the hindbrain, specifically the cerebellum which is in-charge in controlling voluntary and involuntary action of the body was affected by the extract. 3/

RECOMMENDATIONS:

The researchers duly recommend to have a comparative study using different Biga plant parts and its effect on the CNS, extraction and separation of essential component of Biga rhizome and using other methods in administrating the extract on the female albino rat.

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