



**THE NEURO-PHYSIOLOGICAL EFFECT OF
Stevia rebaudiana (Stevia) TO IMPRINTING
CONTROL REGION (ICR) MICE**

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ABSTRACT

The use of alternative medicine becomes popular once more in the Philippines and worldwide because nowadays, alternative medicines like herbal medicine are used to treat certain ailments and for disease prevention. *Stevia rebaudiana* which is a herbal food supplement contains high level of sweetening compounds known as steviol glycosides and it is used by people especially diabetic people as an alternative sugar. The study determined the neuro-physiological effect of powdered *S. rebaudiana* leaves on the nervous system of ICR mice. Oral administration of powdered *S. rebaudiana* was done using three doses (0.3g, 0.6g and 0.9g) with three kinds of frequency (once a day, twice a day and thrice a day). After the treatment, stimulation test and hot plate method was conducted to gather scored data and recorded time, respectively. Results in the stimulation test show that powdered Stevia depresses the CNS and after statistical analysis was done, all the treatment groups show no significant differences which indicate that they have the same depressant effect. Moreover, in the hot plate method, the result shows analgesic effect in PNS and after statistical analysis was done, all the doses have significant differences while among the frequency, thrice a day administration exhibited the greatest effects. Furthermore, frequent sleeping and decrease motor activity were also observed to the treated mice and therefore, powdered *S. rebaudiana* was proved to depress the CNS and to produce analgesic effect to the PNS.



TABLE OF CONTENTS

Title Page	01
Approval Sheet	02
Acknowledgement	03
Abstract	04
Table of Contents	05
Lists of Tables	07
Lists of Figures	08
CHAPTER I INTRODUCTION	
1.1 Background of Study	09
1.2 Conceptual Framework	12
1.3 Statement of the Problem	13
1.4 Hypothesis	13
1.5 Scope and Delimitation	14
1.6 Significance of the Study	15
1.7 Definitions of Terms	16
CHAPTER II LITERATURE REVIEW	
2.1 Conceptual Literature	19



2.2 Related Studies	32
CHAPTER III METHODOLOGY	
3.1 Research Design	34
3.2 Research Setting	34
3.3 Research Procedure	35
3.4 Data Gathering and Statistical Analysis	38
CHAPTER IV RESULTS AND DISCUSSIONS	39
CHAPTER V CONCLUSIONS AND RECOMMENDATIONS	
5.1 Conclusions	52
5.2 Recommendations	53
LITERATURE CITED	55
APPENDICES	
A. PICTURE OF THE SPECIMEN	59
B. STANDARD PROCEDURE	60
C. STATISTICAL TABLE	66
D. PHOTODOCUMENTATION	71
CURRICULUM VITAE	72



LISTS OF TABLES

Table	Page
3.1 The Treatment Groups Administered to ICR Mice	36
4.1 A Summary of Mean Scores of the Responses of the ICR Mice to Various Dose	40
4.2 Results of Two-sample t-test among the Treatment Groups in CNS	41
4.3 Results of Two-sample t-test among the Frequencies in CNS	42
4.4 A Summary of the Average Time (seconds) of Reaction of ICR Mice to the Hot Plate Method	46
4.5 Results of Two-sample t-test among the Treatment Groups in PNS	48
4.6 Results of Two -ample t-test among the Frequencies in PNS	49



LISTS OF FIGURES

Figure	Page
1 Paradigm of the study	12
4.1 Bar graph showing the different average time (seconds) of reaction to the hot plate method among the treatment groups	47
4.2 Bar graph showing the different average time (seconds) of reaction to the hot plate method among the frequencies	50