



**EFFECTS OF *Synsepalum dulcificum* (Schumach. & Thonn.) Daniell
(MIRACLE BERRY) FRUIT AND LEAF EXTRACTS ON THE
BLOOD GLUCOSE LEVEL OF HYPERGLYCEMIC
ALBINO RATS (*Rattus norvegicus*)**

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ABSTRACT

This is a research study on the effects of *Synsepalum dulcificum* Daniell (miracle berry) fruit and leaf extracts on the blood glucose level of hyperglycemic albino rats (*Rattus norvegicus*). The study evaluates the potential of miracle berry fruit and leaf extracts. Fifty percent and one-hundred percent concentrations were prepared for each plant part. Twenty-five albino rats were induced with type 2 diabetes mellitus using commercially available drugs, alloxan and were treated with miracle berry fruit and leaf extracts that are subjected to rotary evaporator. Blood glucose level was analyzed and indicated that both plant parts are effective in reducing the blood glucose level ($p \leq 0.05$). This may be due to the natural compound miraculin in the fruit and flavonoids in the leaves. Therefore, the findings suggest that miracle berry fruit and leaf extracts can be used as an alternative supplement for metformin in reducing hyperglycemia conditions.

Keywords: Alloxan, diabetes mellitus, flavonoids, miraculin, rotary evaporator



TABLE OF CONTENTS

Title Page	1
Abstract	2
Approval Sheet	3
Acknowledgements	4
Table of contents	5
CHAPTER 1 INTRODUCTION	
1.1 Background of the study	7
1.2 Conceptual Framework	9
1.3 Statement of the Problem	9
1.4 Hypothesis	10
1.5 Scope and Limitations	11
1.6 Significance of the Study	11
1.7 Definition of Terms	12
CHAPTER 2 LITERATURE REVIEW	
2.1 Conceptual Literature	13
2.2 Related Studies	22
CHAPTER 3 METHODOLOGY	
3.1 Research Design	30
3.2 Research Procedure	30
3.3 Data Gathering and Statistical Analysis	34



CHAPTER 4 RESULTS AND DISCUSSION

4.1 Results 35

4.2 Discussion 37

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion 41

5.2 Recommendations 41

Cited References 42

Appendices

A. Test Plant 50

B. Raw Data 51

C. Figure 56

D. Statistical Analysis 57

E. Photo Documentation 62

Curriculum Vitae 65

