



**COMPARATIVE STUDY ON THE ANGIOGENIC EFFECT OF THE CRUDE
LEAF EXTRACT OF *Sandoricum koetjape* Merr. (SANTOL) AND
Chrysophyllum cainito Linn. (STAR APPLE) ON THE
CHORIOALLANTOIC MEMBRANE
OF A 10 DAY-OLD DUCK EMBRYO**

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ABSTRACT

Angiogenesis is a normal and important process in the body both during normal and pathological conditions. It literally means the formation of new blood vessels. The study tested two plant samples to determine their angiogenic effects on a 10 day-old duck embryo via chorioallantoic membrane assay. The leaves of Santol (*Sandoricum koetjape* Merr.) and Star Apple (*Chrysophyllum cainito* Linn.) are the plant samples used, wherein 500 grams of each sample are collected. The samples were homogenized and extracted using cheesecloth. Different concentrations of 100 ppm, 200 ppm, and 300 ppm of each plant extract were prepared and administered to the chorioallantoic membrane of the duck embryo. After 48 hours of incubation, the CAM of the duck embryos was harvested and the number of collaterals was counted. The collaterals of the control group were compared to the different plant concentrations of the experimental plants groups. The results showed that both plant exhibited an inhibitory effect because there is a decreased number of collaterals. Compared to both plant, *S. koetjape* has decreased more collaterals than *C. cainito*. Based on statistical analysis 300 ppm of *S. koetjape* has better angiogenic effects than the rest for its leaves contains koetjapic acid that is not present in *C. cainito*.

Key words: Angiogenesis, Sandoricumkoetjape, Chrysophyllumcainito, Santol, Star apple



TABLE OF CONTENTS

Title Page	1
Abstract	2
Approval Sheet	3
Acknowledgments	4
Table of Contents	6
List of Tables	8
List of Plates	9
CHAPTER 1 INTRODUCTION	
1.1 Background of the Study	10
1.2 Conceptual Framework	12
1.3 Statement of the Problem	12
1.4 Scope and Limitations	13
1.5 Hypotheses	14
1.6. Significance of the Study	14
1.7 Definition of Terms	15
CHAPTER 2 LITERATURE REVIEW	
2.1 Conceptual Literature	17
2.2 Related Studies	23
CHAPTER 3 METHODOLOGY	
3.1 Research Design	25



3.2	Research Setting (or Instrument)	25
3.3	Research Procedure	26
3.4	Data Gathering and Statistical Analysis	28
CHAPTER 4 RESULTS AND DISCUSSION		
4.1	Results	29
4.2	Discussion	32
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS		
5.1	Conclusions	37
5.2	Recommendations	38
Cited References		39
Appendices		47
A.	Standard Procedure	48
B.	Photo Documentation	51
C.	Raw Data and Statistical Analysis	58
D.	Curriculum Vitae	63



LIST OF TABLE

1. Table 4.1 *Average Number of Collaterals from Treatment of S. koetjape and C. cainito* 31



LIST OF PLATES

1. CAM of Test Eggs from Different Samples	30
2. <i>Sandoricum koetjape</i> Merr.	51
3. <i>Chrysophyllum cainito</i> Linn.	52
4. Researchers Performing the Procedures	54