

TABLE OF CONTENTS

COVER	ii
APPROVAL SHEET	iii
DECLARATION OF AUTHENTICITY	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	x
LIST OF APPENDIXS	xi
INTISARI.....	xii
ABSTRACT	xiii
CHAPTER I INTRODUCTION	1
1.1 Background	1
1.2 Objectives.....	3
1.3 Advantage of the study.....	3
CHAPTER 2 LITERATURE REVIEW	4
2.1 Snake fruit	4
2.2 Quality changes affected by minimally processing	5
2.2.1 Physical quality	6
2.2.2 Chemical quality	7
2.3 Enzymatic browning	9
2.3.1 Enzymes related to enzymatic browning	9
2.3.2 Enzymatic browning reactions	11
2.3.3 Factors affecting enzymatic browning	13
2.4 Anti-browning to control enzymatic browning.....	14
2.4.1 Classification of anti-browning based on its action	14
2.4.2 Application of anti-browning agents in fresh-cut fruit	17
2.5 General Information about snake fruit (cv. Nern Wong)	20
2.6 Hypothesis.....	25
2.6.1 The minimal concentration for effective enzymatic browning reactions inhibition.....	25
2.6.2 Dipping treatment of ascorbic acid, N-acetylcysteine and oxalic acid were not interfere sensory acceptance of fresh-cut snake fruit.....	25

2.6.3 Chemical agent treatments in combination with low storage temperature will reduce enzymatic browning as well as the quality changes of fresh-cut snake fruit during storage.....	25
CHAPTER 3 MATERIAL AND METHODS	26
3.1 Material	26
3.1.1 Plant material	26
3.1.2 Chemical and reagents	26
3.1.3 Equipment	26
3.2 Methods.....	27
3.2.1 To investigate the minimal concentration of some chemical agents for an effective inhibition of fresh-snake snake fruit	27
3.2.2 To evaluate the influence of using chemical agent on sensory acceptance of fresh-cut snake fruits.....	27
3.2.3 To evaluate the effect of some chemical agents and different storage temperature on physical and chemical quality in fresh-cut snake fruits.....	28
3.3 Analysis.....	28
3.3.1 Physical quality	28
3.3.2 Chemical quality	29
3.4 Experimental Design.....	32
CHAPTER 4 RESULT AND DISCUSSION	34
4.1 Minimal concentration of some chemical agents for an effective inhibition of fresh-snake fruit	34
4.1.1 Ascorbic acid.....	35
4.1.2 N-acetylcysteine.....	39
4.1.3 Oxalic acid	41
4.2 Influence of using chemical agent on sensory acceptability of fresh-cut snake fruits	44
4.3 Effect of some chemical agents and different storage temperature on physical and chemical quality of fresh-cut snake fruits.....	46
4.3.1 Physical quality	46
4.3.2 Chemical quality	52
CHAPTER 5 CONCLUSION.....	63
5.1 Conclusion	63
5.2 Suggestion	63
BIBLIOGRAPHY	64
APPENDIX	70