

TABLE OF CONTENTS

	Page
COVERi
ENDORSEMENT FORM.....	.ii
DECLARATIONiii
IDENTITY.....	.iv
SUMMARYvi
ABSTRACT.....	.viii
ACKNOLEDGEMENTix
TABLE OF CONTENTSxiii
LIST OF TABLES.....	.xvi
LIST OF FIGURESxvii
LIST OF APPENDICES.....	.xviii
ABBREVIATION AND SYMBOLSxix
CHAPTER 1 INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Statement.....	4
1.3 Basic Theory	4
1.4 Research Purpose.....	6
1.5 Research Benefit	6
1.5.1 Scientific Benefit	6
1.5.2 Practical Benefit.....	7
1.6 Hypothesis.....	7
CHAPTER 2 LITERATURE REVIEW.....	8
2.1 Sapudi Ram Review	8
2.2 Sapudi Ram Reproductive System.....	9
2.3 Sapudi Ram Semen and Spermatozoa.....	10
2.3.1 Semen of ram	10
2.3.2 Spermatozoa of ram.....	11
2.4 Spermatozoa Motility.....	13

2.4.1 Mass motility	13
2.4.2 Individual motility	13
2.5 Spermatoza Viability	13
2.6 Spermatozoa Plasma Membrane Integrity	13
2.7 Alpha-tocopherol	14
2.8 Semen Extender	15
2.8.1 Tris-egg-yolk extender	15
CHAPTER 3 MATERIALS AND METHODS	17
3.1 Research Design	17
3.2 Population and Samples	17
3.3 Research Variables	18
3.3.1 Independent Variables	18
3.3.2 Dependent Variables	18
3.3.3 Control Variables	18
3.4 Operational Variables Definition	18
3.5 Time and Location of Research	19
3.6 Materials of Research	19
3.6.1 Research materials	19
3.6.2 Research equipment	19
3.7 Methods of Research	20
3.7.1 Alphatocopherol preparation	20
3.7.2 Semen diluent preparation	20
3.7.3 Semen collection procedure	20
3.7.4 Research treatment	22
3.7.5 Spermatozoa motility evaluation	22
3.7.6 Spermatozoa viability evaluation	23
3.7.7 Spermatozoa plasma membrane integrity evaluation	23
3.8 Data Analysis	24
3.9 Research Framework	25
CHAPTER 4 RESEARCH RESULT	26
4.1 Spermatozoa Motility Evaluation	26
4.2 Spermatozoa Viability Evaluation	27
4.3 Spermatozoa Plasma Membrane Integrity Evaluation	29
CHAPTER 5 DISCUSSION	32
5.1 Effect of Alphatocopherol on Spermatozoa Motility	32
5.2 Effect of Alphatocopherol on Spermatozoa Viability	33
5.3 Effect of Alphatocopherol on Spermatozoa Plasma Membrane Integrity	34
CHAPTER 6 CONCLUSION AND SUGGESTION.....	37
6.1 Conclusion	37
6.2 Suggestion	37

REFERENCES	38
APPENDICES	43