

LIST OF CONTENT

	Page
ENDORSEMENT FORM.....	ii
DECLARATION.....	iii
IDENTITY PAGE.....	iv
SUMMARY.....	vi
ABSTRACT.....	viii
ACKNOWLEDGEMENT.....	ix
LIST OF CONTENT.....	xi
LIST OF TABLE.....	xv
LIST OF FIGURE.....	xvi
LIST OF APPENDIX.....	xvii
ABBREVIATION AND SYMBOLICS MEANING.....	xviii
CHAPTER 1 INTRODUCTION.....	1
1.1 Background Study.....	1
1.2 Identification of The Problem.....	4
1.3 Aims of The Research.....	5
1.4 Outcome of The Research.....	5
1.4.1 Theoretical Outcome.....	5
1.4.2 Practical Outcome.....	5
1.5 Theoretical Based.....	6
1.6 Research Hypotheses.....	9
CHAPTER 2 LITERATURE REVIEW.....	10
2.1 Green tea (<i>Camellia sinensis</i>)	10
2.1.1 Taxonomy.....	10
2.1.2 Etiology.....	10
2.1.3 Chemical Compounds.....	11
2.1.4 Green tea Antioxidant Activity.....	12
2.2 Merino Sheep.....	15
2.2.1 Taxonomy.....	15

2.2.2 Etiology.....	16
2.3 Ram Reproductive System.....	17
2.4 Semen and Sperm of Ram.....	18
2.4.1 Ram Semen.....	18
2.4.2 Ram Sperm.....	19
2.5 Sperm Motility.....	21
2.6 Sperm Viability.....	22
2.7 Sperm Membrane Integrity.....	22
2.8 Malondialdehyde (MDA)	23
2.9 Semen Extender.....	23
2.10 Frozen Semen.....	24
2.11 Thawing.....	25
CHAPTER 3 MATERIALS AND METHODS.....	26
3.1 Experimental Design.....	26
3.2 Sample and Number of Samples.....	26
3.3 Research Variable.....	26
3.3.1 Independent Variable.....	26
3.3.2 Dependent Variable.....	27
3.3.3 Control Variable.....	27
3.4 Operational Definition.....	27
3.4.1 Green tea Extract.....	27
3.4.2 Sperm Motility.....	27
3.4.3 Sperm Viability.....	27
3.4.4 Sperm Membrane Integrity.....	27
3.4.5 Sperm Malondialdehyde (MDA) Level.....	28
3.5 Location and Time of The Research.....	28
3.6 Research Materials and Equipments.....	28
3.6.1 Research Materials.....	28
3.6.2 Research Equipments.....	29
3.7 Research Methods.....	29
3.7.1 Preparation of Extender.....	29
3.7.2 Treatments.....	30
3.7.3 Collection of Semen.....	30
3.7.4 Semen Examination Before Treatments.....	31

3.7.5	Prefreezing and Freezing.....	31
3.7.6	Thawing.....	31
3.7.7	Sperm Motility Examination Post Thawed.....	31
3.7.8	Sperm Viability Examination Post Thawed.....	32
3.7.9	Sperm Membrane Integrity Post Thawed.....	32
3.7.10	Sperm Malondialdehyde (MDA) Level Post Thawed.....	32
3.8	Data Analysis.....	33
3.9	Research Flowchart.....	34
CHAPTER 4 RESEARCH RESULT.....		35
4.1	Examination of Fresh Merino Sheep Semen.....	35
4.2	Post Thawing Motility Examination of Merino Sheep Sperm.....	36
4.3	Post Thawing Viability Examination of Merino Sheep Sperm.....	37
4.4	Post Thawing Membrane Integrity Examination of Merino Sheep Sperm.....	38
4.5	Post Thawing Malondialdehyde Level Examination of Merino Sheep Sperm.....	40
CHAPTER 5 DISCUSSION.....		41
5.1	Evaluation of Fresh Merino Sheep Semen Examination.....	41
5.2	Evaluation of Post Thawing Motility.....	42
5.3	Evaluation of Post Thawing Viability.....	43
5.4	Evaluation of Post Thawing Membrane Integrity.....	44
5.5	Evaluation of Post Thawing Malondialdehyde Level.....	45
CHAPTER 6 CONCLUSION AND RECOMMENDATION.....		47
6.1	Conclusion.....	47
6.2	Recommendation.....	48
REFERENCES.....		49