

TABLE OF CONTENTS

	Page
ENDORSEMENT FORM.....	ii
DECLARATION	iii
SEMINAR ASSESSMENT	iv
SUMMARY	vi
ABSTRACT.....	viii
ACKNOWLEDGEMENTS	ix
TABLE OF CONTENTS	xii
LIST OF TABLES	xv
LIST OF FIGURES	xvi
LIST OF APPENDICES	xvii
ABBREVIATION AND SYMBOLS	xviii
CHAPTER 1 INTRODUCTION	1
1.1 Background of Research	1
1.2 Problem Statement	4
1.3 Aim of Research.....	4
1.4 Outcome of Research	4
1.4.1 Theoretic Outcome.....	4
1.4.2 Practice Outcome	4
1.5 Theoretical Base	5
CHAPTER 2 LITERATURE REVIEW	7
2.1 <i>Peranakan Etawa</i> (PE) Goat.....	7
2.1.1 Classification of <i>Peranakan Etawa</i> (PE) goat	7
2.1.2 Characteristic of <i>Peranakan Etawa</i> (PE) goat	8
2.1.3 <i>Peranakan Etawa</i> (PE) goat milk	8
2.2 Raw Milk.....	10
THESIS	xii
	COLIFORM COUNTS OF... ANGEL JELITA B.Y

2.2.1	Milk composition	10
2.2.2	Raw milk quality	11
2.3	Bacteria in Milk.....	12
2.4	Bacterial Contamination in Milk.....	12
2.4.1	Standards for bacterial contamination limits in goat milk	14
2.5	<i>Coliform</i>	14
2.5.1	<i>Coliform</i> definition.....	15
2.6	Most Probable Number (MPN).....	16
2.6.1	Step assay in Most Probable Number (MPN) test	17
2.7	Prevention to Bacterial Contamination in Milk	17
2.8	Veterinary Public Health Aspect.....	18
CHAPTER 3 MATERIALS AND METHODS.....		20
3.1	Research Design.....	20
3.2	Sample and Sample Size	20
3.3	Research Variable	20
3.3.1	Independent variable	20
3.3.2	Dependent variable.....	21
3.3.3	Controlled variable.....	21
3.4	Operational Variable Definition.....	21
3.5	Research Location and Time.....	22
3.6	Research Materials and Equipment.....	22
3.6.1	Sampling method	22
3.6.2	Research materials	22
3.6.3	Research equipment	23
3.7	Research Procedure.....	23
3.7.1	Sample preparation.....	23
3.7.2	Sample dilution	23
3.7.3	Sample planting.....	24

3.7.4	<i>Coliform</i> counts	24
3.8	Data Analysis	24
3.9	Research Flowchart	25
CHAPTER 4 RESEARCH RESULT		26
CHAPTER 5 DISCUSSION		33
CHAPTER 6 CONCLUSION AND SUGGESTION		37
6.1	Conclusion	37
6.2	Suggestion	37
REFERENCES		38
APPENDICES		44

LIST OF TABLES

Table	Page
Table 2.1 Composition of human milk, cow milk, and goat milk	9
Table 4.1 <i>Coliform</i> Counts Result.....	27
Table 4.2 The Result of <i>Coliform</i> Counts for Each Farm Using Kruskal Wallis.	28
Table 4.3 The Result of Mann Whitney Test to Find Out the Differences Between Each Farm.....	29
Table 4.4 Observed Parameters	30

LIST OF FIGURES

Figure 2.1 *Peranakan Etawa* (PE) goat 7

LIST OF APPENDICES

Appendix	Page
Appendix 1. Table of McCarty	44
Appendix 2. SNI 7388:2000 Maximum Limit of Microbial Contamination in Raw Milk	44
Appendix 3. Data Interview from Each Farm.....	47
Appendix 4. Data Analysis with Kruskal Wallis and Mann Whitney	50
Appendix 5. Research Documentation.....	74

ABBREVIATION AND SYMBOLS

BGBB	: Brilliant Green Bile Broth
BPW	: Buffered Pepton Water
CFU	: Colony Form Unit
cm	: Centimeter
EMBA	: Eosin Methylene Blue Agar
gr	: Gram
kg	: Kilogram
L	: Liter
LB	: Lactose Broth
mg	: Miligram
mL	: Mililiter
MPN	: Most Probable Number
PE	: <i>Peranakan Etawa</i>
°C	: Degree celcius
%	: Percent