

LIST OF CONTENTS

VALIDITY SHEET	i
LIST OF TABLES	iv
INTRODUCTION	1
1.1 Background	1
1.2 Problem Formulation	2
1.3 Research Objectives	2
1.4 Benefits of research	3
1.5 Originality of research	3
CHAPTER II	5
LITERATURE REVIEW	5
2.1 Theoretical Basis	5
2.1.3 Butterfly Pea Flower	8
2.1.4 Skin Anatomy	12
2.1.5 Soap	14
2.2 Halal Analysis	18
2.3 Theoretical Framework	20
2.5 Hypothesis	22
CHAPTER III	23
RESEARCH METHODS	23
3.1 Types and Design of Research	23
3.3 Research Variables	24
3.5 Tools and Materials	26
3.6 Research Procedures	26
3.6.1 Plant Determination	26
3.6.3 Making Whey Yogurt	26
3.6.4 Making Solid Soap	27
3.6.5.2 pH Test	27
3.6.5.3 Foam Test	27
3.6.5.5 Total Fat	28
3.6.5.6 Ethanol Insoluble Materials	29
3.6.5.7 Free alkali/Free fatty acid	30

3.6.5.8 Chloride content	31
3.7 Data Analysis	32
3.9 Research Flowchart.....	33
3.10 Research Schedule	34
CHAPTER IV	35
RESULTS AND DISCUSSION	35
4.1 Research Results	35
4.1.2 Evaluation of the Physical Quality of Solid Soap.....	35
4.1.2.1 Organoleptic test	35
4.1.2.2 pH Test	36
4.1.2.3 Foam Stability Test.....	38
4.1.2.4 Water content test	40
4.1.2.7 Free alkali test	45
4.1.2.8 Free fatty acid test	46
4.1.2.9 Chloride content test.....	48
CHAPTER V	51
CONCLUSION AND SUGGESTIONS.....	51
BIBLIOGRAPHY.....	52

LIST OF TABLES

Table 1. Research Authenticity	3
Table 2. Whey Content	5
Table 3. Active Compound Content in Butterfly Pea Flowers	10
Table 4. Formula design	23
Table 5. Operational Definition of Variables	24
Table 6. Research Schedule	34
Table 7. Organoleptic Test Results	35
Table 8. The pH value of solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L) dye.....	37
Table 9. High foam value in solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L) dye.....	38
Table 10. Water content test value on solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L) dye	41
Table 11. Total Fat Content Value of Solid Yogurt Whey Soap with Natural Butterfly Pea Flower (<i>Clitoria Ternatea</i> L.) Coloring	42
Table 12. Value of insoluble ethanol content in solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L.) dye	44
Table 13. Free alkali content value in solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L.) dye	45
Table 14. Free fatty acid content in solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L.) dye	47
Table 15. Chloride content value in solid yoghurt whey soap with natural butterfly pea flower (<i>Clitoria ternatea</i> L.) dye	48
Table 16. Halal Product Analysis	49

UNIVERSITAS DARUSSALAM GONTOR

LIST OF FIGURES

Figure 1. Whey	6
Figure 2. Butterfly Pea Flower	9
Picture3. Anthocyanin Structure	11
Picture4. Collection of Nerves in the Skin.....	13
Picture5. Saponification reaction	15
Figure 6. Theoretical Framework.....	20
Figure 7. Conceptual framework.....	21
Figure 8. Flow diagram	33