

TABLE OF CONTENTS

APPROVAL SHEET	i
ABSTRACT	ii
FIGURE LIST	x
TABLE LIST	xi
CHAPTER I.....	1
INTRODUCTION.....	1
1.1 Background	1
1.2 Problem Formulation	5
1.3 Research Objectives	5
1.4 Research Benefits	5
1. Theoretical Benefits	5
2. Practical Benefits	6
1.5 Authenticity of Research.....	6
BAB II	8
KAJIAN PUSTAKA	8
2.1 Landasan Teori	8
2.1.1 Cheese Whey.....	8
Gambar 1.Whey	9
2.1.2 Yogurt	10
Gambar 2. Yogurt	10
Image 3. <i>Lactobacillus Bulgaicus</i>	13
.....	14
Gambar 4. <i>Streptococcus thermophiles</i>	14
2.1.3 Soap Preparation.....	15
Gambar 5. Saponification Reaction.	20
2.1.4 Paper Soap	21
Image 7. <i>Paper Soap</i>	22
2.1.5 Antibacterial Test.....	23
2.1.6 Natural Dyes	29
Image 10. Red Dragon Fruit Peel (<i>Hylocereus polyrhizus</i>).	32

2.1.8 Halal Product Analysis	32
2.1.9 Theoretical Framework	34
2.1.10 Conceptual Framework	34
2.1.11 Hypothesis.....	35
CHAPTER III	36
RESEARCH METHODS	36
3.1 Research Type and Design.....	36
Image 11. Location of Paper Disks according to the number of repetition treatments	37
3.2 Time and Place of Research.....	37
3.3 Research Variables.....	38
3.5 Research Tools and Materials	39
3.6 Research Procedure	40
1. <i>Making Whey Yogurt</i>	40
2. <i>Simplisia Collection and Plant Determination</i>	40
3. <i>Paper Soap Making</i>	40
4. <i>Evaluation of Paper Soap Preparation</i>	42
5. <i>Bacterial activity test</i>	44
.....	45
Image 12. Manitol Salt Agar (MSA).....	45
.....	46
Image 13. Bacterial suspensions that are compared for turbidity with Mc.Farland.	46
Table 4. Classification of bacterial growth inhibition responses.	48
3.7 Data Analysis	48
3.8 Halal Product Analysis	49
3.9 Research Flow Chart	50
3.8 Research Schedule	51
Table 5. Research Schedule.....	51
CHAPTER IV.....	52
RESULTS AND DISCUSSION	52
4.1 Discussion of Research Results.....	52

4.2 Evaluasi sediaan <i>paper soap Whey Yogurt</i> dengan pewarna alami kulit buah naga (<i>Hylocereus polyrhizus</i>)	52
a. Organoleptic Test	52
c. Moisture Content Test	55
d. Uji Busa	56
e. Uji Alkali Bebas	57
f. Inhibition test of Whey Yogurt paper soap preparation formulation with natural coloring dragon fruit peel (<i>Hylocereus polyrhizus</i>) against the growth of <i>Staphylacoccus aureus</i>	58
4.3 Analisis Halal Produk	60
CHAPTER V	61
CONCLUSIONS AND SUGGESTIONS	61



FIGURE LIST

Gambar 1. Whey	9
Gambar 2. Yogurt	10
Image 3. <i>Lactobacillus Bulgaicus</i>	13
Gambar 4. <i>Streptococcus thermophiles</i>	14
Gambar 5. Saponification Reaction.....	20
Image 6. The form of soap, generally divided into 2, namely solid soap and liquid soap.	21
Image 7. <i>Paper Soap</i>	22
Image 8. <i>Staphylacoccus aureus</i> bacteria.....	24
Image 9. Red Dragon Fruit (<i>Hylocereus polyrhizus</i>).....	31
Image 10. Red Dragon Fruit Peel (<i>Hylocereus polyrhizus</i>).....	32
Image 11. Location of Paper Disks according to the number of repetition treatments	37
Image 12. Manitol Salt Agar (MSA).....	45
Image 13. Bacterial suspensions that are compared for turbidity with Mc.Farland.	46
Image 14. Inhibition Zone Diameter Measurement	47

TABLE LIST

Table 1. Authenticity of Research.....	6
Table 2. Operational Definition	38
Table 3. Paper Soap Formulation	41
Table 4. Classification of bacterial growth inhibition responses.	48
Table 5. Research Schedule	51
Tabel 7. Organoleptic Test.....	52
Tabel 8. pH of whey yogurt soap paper with dragon fruit peel (Hylocereus polyrhizus) natural coloring	53
Tabel 10. Moisture content of whey yogurt paper soap with dragon fruit peel (Hylocereus polyrhizus) natural coloring	55
Tabel 12. Foam test of whey yogurt paper soap with natural coloring of dragon fruit peel (Hylocereus polyrhizus)	56
Tabel 14. Alkali-free test of whey yogurt paper soap with natural coloring of dragon fruit peel (Hylocereus polyrhizus)	57
Tabel 16. Inhibition Test of Yogurt Whey Paper Soap against the Growth of Staphylococcus aureus Bacteria	58

