

SOFTENING OF FABRIC USING NATURAL INGREDIENTS

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CONTENTS

	PAGE
ACKNOWLEDGEMENT	i
CONTENTS	ii
LIST OF TABLES	iv
LIST OF FIGURES	v
ABSTRACT	vi
ABSTRAK	vii
CHAPTER 1: Introduction	
1.1 Background of the study	1
1.2 Problem statement	2
1.3 Objectives of the study	3
1.4 Significance of the study	3
1.5 Scope and limitation of the study	4
CHAPTER 2: Literature Review	
2.1 Fabric softener	5
2.1.1 Types of fabric softeners	6
2.1.2 Mechanism of fabric softeners	7
2.1.3 Effect of fabric softener on fabric properties	7
2.1.4 Effect of fabric softener on the environment	9
2.1.5 Effect of fabric softeners on health	10
2.2 Softening for cotton fabric	12

2.3	Softening for viscose rayon fabric	15
2.4	Alternative softening agent	18
	2.4.1 <i>Pandanus amaryllifolius</i> Roxb leaves	19
CHAPTER 3: Methodology		
3.1	Materials and Chemicals	21
3.2	Methods	21
	3.2.1 Preparation the natural ingredients	23
	3.2.2 Treatment using fabric softeners	23
	3.2.3 Fabric testing	
	3.2.3.1 Weight	24
	3.2.3.2 Drapability	25
	3.2.3.3 Stiffness	25
	3.2.3.4 Tensile Strength	26
	3.2.3.5 Wrinkle Recovery Angle	27
CHAPTER 4: Results and Discussion		
4.1	Weight	28
4.2	Drapability	30
4.3	Stiffness	32
4.4	Tensile Strength	34
4.5	Wrinkle Recovery Angle	36
CHAPTER 5: Conclusion and Recommendation		
5.1	Conclusion	38
5.2	Recommendations	39
REFERENCES		40
APPENDICES		45

ABSTRACT

SOFTENING OF FABRIC USING NATURAL INGREDIENTS

Natural ingredient from pandanus solution prepared with addition of sodium bicarbonate and white vinegar was treated on 100% grey cotton fabric and 100% viscose rayon fabric. The treated fabrics were analysed and evaluated for properties such as weight, drapability, stiffness, tensile strength, and wrinkle recovery angle (WRA). Comparison made to fabric treated with Commercial (Petal) and industrial softeners (Ultratex) showed the natural ingredients can be used as softening agents. Overall, treatment using pandanus solution on cotton fabric resulted in the fabric weight of 146g/m^2 , and drape coefficient of 53.57. Bending length reflecting the stiffness property showed 2.93 cms for warp direction while 2.46 cms for weft direction. Tensile strength that measure by the force needed to break the fabric showed 378.24N in warp direction while 336.52N in weft direction. The value for WRA property was 170° . Treatment using pandanus solution on rayon fabric resulted in the fabric weight of 124g/m^2 with the drape coefficient of 28.43. The bending length was 2.50 cms for warp direction while 2.12 cms for weft direction. Tensile strength showed 295.08N on warp direction while 362.18N on weft direction. The value for WRA property gave 186° .