

THE COMPARISON OF TAPIOCA AND RICE
PASTES AS RESIST AGENTS FOR PRINTING AND
RUST DYEING ON SILK FABRIC

BY

NUR SYAZA BINTIMD ZAIN

&

NAZURAH BINTI CHE AWANG

Final Year Project Report Submitted
in Partial Fulfillment of the Requirement for the
Degree of Bachelor of Science (Hons.) Textile Technology
in The Faculty of Applied Sciences
Universiti Teknologi Mara

JULY 2015

ACKNOWLEDGEMENTS

Alhamdulillah, Thanks to Allah SWT, who with His willing giving us the opportunity to complete this Final Year Project which is title The Comparison of Tapioca and Rice Pastes as Resist Agents for Printing and Rust Dyeing on Silk Fabric. This final year project report was prepared to complete a partial fulfilment of the requirement for the Degree of Bachelor of Science (Hons.) Textile Technology in The Faculty of Applied Sciences University Technology Mara.

We would like to express our gratitude and appreciation to all those who helped us in completing this report. A special thanks to our final year project (I) supervisor, Prof Dr. Wan Yunus Wan Ahmad and to our final year project (II) supervisor, Associate Prof Dr. Khadijah whose help, stimulating suggestions and encouragement, helped to coordinate our project especially in writing this report. We also would like to acknowledge with much appreciation the crucial role of the staff of Textile Laboratory, Encik Zainal who gave the permission to use all required laboratory equipment and the necessary material to complete this project. We would also appreciate the guidance given by other lecturers as well as the panels especially in our project presentation that has improved our presentation skills by their comment and tips.

Deepest thanks and appreciation to our parents, family, and others for their cooperation, encouragement, constructive suggestion and full of support for the report completion, from the beginning till the end. Also thanks to all of friends and everyone, that has contributed by giving us support and help throughout the final year project progress till it is fully completed.

TABLE OF CONTENTS

TITLE	PAGE
DECLARATION	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENT	iii
LIST OF FIGURES	v
LIST OF TABLES	vi
ABSTRACT	vii
ABSTRAK	vii
 CHAPTER 1 INTRODUCTION	
1.1 Background of Study.....	1
1.2 Problem Statement.....	2
1.3 Objective of Study.....	3
1.4 Significance of Study.....*	3
1.5 Scope and Limitation.....	3
 CHAPTER 2 LITERATURE REVIEW	
2.1 Resist Agents.....	5
2.1.1 Wax and Beeswax.....	5
2.1.2 Paraffin.....	7
2.1.3 Rosins.....	7
2.2 Alternative Resist Agents.....	8
2.2.1 Tapioca Flour Agent.....	8
2.2.2 Rice Flour Agent.....	8
2.2.3 Application of Tapioca and Rice Paste in Printing.....	9
2.2.3 Factors Affecting The Performance of Resist Agents in Printing.....	9
2.3 Batik.....	10
2.3.1 The Origin of Batik.....	11
2.3.2 Batik in Malaysia.....	12
2.3.3 Traditional Batik Printing Technique.....	12
2.3.4 Materials Used for Batik in Malaysia.....•	14
2.4 Rust Dyeing.....	15

ABSTRACT

In the study, alternative resist agents made of tapioca and rice flour were used in batik processing. The main purpose of this project was to find the right ratio of the resist agent made of flour and water to be used as the alternative resists agent that have the same function with wax in batik industries. The effectiveness of the tapioca paste and rice paste as resist agent were compared according to their formulation with different ratios respectively. Based on the ease of application during canting, ability to resist dye during colouration and easy of removal after application, the resist paste made of tapioca flour at a ratio of 1:20 was the best alternative to wax in batik making. Nevertheless, more studies should be made to determine the perfect ratio that would give best resist effect and produce very fine outline. The handling of resist agents on fabrics seem to be easier and safer. The application can be done at room temperature.