

UNIVERSITI TEKNOLOGI MARA

**FORMULATION AND EVALUATIONS OF
TRANSPARENT SOAP BARS LOADED WITH
PANDANUS AMARYLLIFOLIUS AQUEOUS
EXTRACT**

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**Dissertation submitted in partial fulfilment of the
requirements for the Bachelor of Pharmacy (Hons.)**

Faculty of Pharmacy

July 2016

ACKNOWLEDGEMENTS

A very praises to Allah for His blessing and strength, I could finish and complete my research project and thesis writing. I would like to express my gratitude to my supervisor and co-supervisor Dr Azzyati Mohd Suhaimi and Dr Tommy Julianto Bustami Effendi who teach and guide me throughout my research project and writing. Their comments, suggestions, sharing expertise, encouragement and motivation really helped me to understand better in this research.

I also would like to thanks to Dean of Faculty of Pharmacy, Dr Aishah Adam, lectures, and staffs that give their supports and helps in my research project. Not forgotten, thanks a lot to my friends and my family that give a lot of moral supports and helps to me to complete this research. It cannot be denied that this research required a lot of commitments and dedications.

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ABSTRACT

This research study was based on the idea of the incorporation of pandan or *Pandanus amaryllifolius* leaves extracts into soap bar formulation for natural colour, fragrance and anti-dandruff properties. To prove pandan leaves has antidandruff property to combat *Malassezia furfur*, zone inhibition study made where the result was insignificant. There were also a few evaluations were carried out on the soap which was hardness, pH, wear rate, lather, appearance, fragrance, colour, bar feel and after wash evaluation. The results were compared with either control soap or/and soap available in the market. From this evaluation, it was found and should highlight that soap bar with pandan extracts had natural fragrances and colourant. Besides, pandan extracts also contributed to the soap bar lathering with reasonable hardness to a soap bar.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Shampoo is a detergent which means a cleansing agent that removes dust, grease, and grime in a present of water. Shampoo products are available for many forms from opaque to translucent liquid to a bar soap. There are many classifications of shampoo according to their functions such as cleaning shampoo, conditioning shampoo, anti-dandruff shampoo, and baby shampoo. The major classifications are also usually produced in combination to produce 2 in 1 or 3 in 1 shampoo.

Dandruffs are the result from an abnormal shedding of scalps where its' produces flakes that are big and being noticeable in hair, shoulders and even beard that only can be solved by anti-dandruff shampoo. Formulation of a medicated dandruff shampoo do not to treat hairs but to treat scalps. Besides, natural anti-dandruff shampoos needs to have an anti-microbial property. Tea tree oil shampoo is an example of already available anti-dandruff shampoo. 5% of tee tree oil in shampoo effective in treatment of dandruff with no side effects or adverse effects (Satchell et.al, 2002). Modern and natural shampoo must achieve some requirement such as mild detergency, has aesthetic value, preserved enough, can be a good conditioning and forms comparable foams/lathers with present products on the market. However, to formulate a shampoo that made up from all