

UNIVERSITI TEKNOLOGI MARA

**STUDY ON THE FORMULATION AND
EVALUATION OF THE HERBAL EXTRACTS AS
ANTIDANDRUFF SHAMPOO**

NURUL AFILIANA BINTI ZAHURI

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ABSTRACT

Herbals based shampoo for dandruff treatment has become a trend in the market currently, thus a herbals based shampoo was formulated to know the ability of the herbal formulated shampoos in solving the dandruff problem. This study was aimed to formulate herbal based shampoos as well as performing an evaluation in regards to the properties of the formulated shampoos. The shampoos were incorporated with eight different active herbal extracts that have potential in treating the dandruff. Then, the physicochemical properties of the formulated shampoos were evaluated and the result showed that the formulated shampoos exhibit good viscosity, having a suitable range of pH (3.67-5.50) and excellent foaming ability (>100mL). However, the formulated shampoos were unable to retain its stability when a three months stability test was performed. In addition, the formulated shampoos were able to inhibit three microorganisms (*S.aureus*, *E.coli* and *C.albicans*) by using a well-diffusion method. Therefore, the potential of the formulated shampoos with selected active herbal extracts in treating dandruff were determined in this study.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Cosmetics can be defined as the products that are intended to apply to the body for the purpose of beauty, cleansing, enhance the attractiveness as well as may alter the appearances of the user without affecting the structure of the body and their functions. Some products that are included in this definition are skin moisturizer, lipsticks, makeup preparations, toothpastes, deodorants, conditioner and shampoo as well as the products that is purposely design to use as a cosmetics products (The Federal Food, Drug & Cosmetics Act). All this products can be found in the various forms such as solid (solid bar shampoo, powders, etc.), semi-solid (creams, gels, etc.) and liquid (shampoo, lotions, etc.) preparations (Kapoor, 2005).

One of the major cosmetics that being used by many people is shampoo. This shampoo is usually intended for the purpose of giving benefits in terms of conditioning, smoothens, treat hair problem like hair fall or scalp problem (Prabhamanju, M. Gokul shankar, S. Babu, 2009). The common scalp problem faced by people is the itchiness of the scalp (scalp pruritus) which can be caused by many reasons and one of it is dandruff (Bin Saif, Ericson, & Yosipovitch, 2011). Dandruff is an excessive clinically non-inflammatory scaling of the scalp (Kligman, A. M.