

UNIVERSITI TEKNOLOGI MARA

**FORMULATION AND EVALUATION OF BOTANICAL
BUTTER LIP BALM**

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ABSTRACT

Nowadays, most of the lip balms on the market contain synthetic or chemical ingredients that can cause harmful effects if it is used for a long period. Due to various side effects of available chemically synthesized lip balm, many consumers prefer to use a natural-ingredient based lip balm. The natural-ingredient based lip balm refers to the lip balm that produced from the plants or animal sources. In this study, a natural-ingredient based lip balm was formulated by using botanical butter and the botanical butter used in this study was mango butter and cocoa butter. The texture analysis study using penetrometer test and cantilever rig test was performed to evaluate the physical characteristic of the six lip balm samples and one control lip balm. The result shows that lip balm formulated with 25% mango butter (M2), 15% mango butter (M3) and 20% cocoa butter (C3) were almost comparable to control lip balm. The sensory evaluation or panel acceptance test was conducted to investigate the most preferred lip balm samples among three lip balm samples selected from the texture analysis study. The result shows that the lip balm with 20% cocoa butter (C3) showed the most acceptable lip balm compared to the control lip balm and other formulations.

CHAPTER 1

INTRODUCTION

1.1 Background of study

Cosmetics are substances that are used to enhance the appearance of the body and it is commonly being used by women (Kamairudin, Gani, Masoumi, & Hashim, 2014). Examples of cosmetics are lip balm, hair sprays, skin-care creams, lotions, perfumes and so on (Mishra & Dwivedi, 2012).

Lip balm is a semisolid composition that are used to be applied onto the lips that have protective and moisturizing properties (Beri, Pichot, & Norton, 2014). The main ingredients of lip balm are waxes, fats, oils and butters, antioxidant and flavoring agent (Fernandes et al., 2013). The lip balm has long been used to prevent lip dryness and protect the lips from the adverse effects of the environment such as sunlight and cold (Lane, 1996).

Nowadays, most of the lip balms on the market contain synthetic and chemical ingredients that can cause harmful effects if it is used for a long period. Lip balm commonly contains phenol which is a chemical that also used as a pesticide and it can be easily absorbed by the skin and may cause side effects such as vomiting, nausea, rashes, swelling and hives (Yusof & Ali, 2008). The lip balm may also contains plasticizers such