ALOE VERA WITH HONEY-BASED HYDROGEL LIP BALM

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ABSTRACT

ALOE VERA WITH HONEY-BASED HYDROGEL LIP BALM

Extreme temperatures, wind, and dry air are some of the environmental factors which may contribute to dry or chapped lips. To cope with these issues, moisturizing the lips using products such as lip balm is crucial. This study intends to utilize the moisturizing qualities of hydrogels to produce an efficient lip balm with honey and Aloe vera extract as the main components. This study aims to investigate the optimal formulation of Aloe vera and honey-based hydrogel lip balm and to compare its effectiveness to commercial lip balms. The research involves several key objectives which are extracting aloe vera using a mechanical method, formulating lip balms with varying concentrations of Aloe vera extract (0%, 5%, 10%, 15%, 20% w/v) and using FTIR-ATR to investigate the presence of functional group in the formulated lip balm. Determination of the physicochemical properties of the formulated lip balm and evaluating sensory attributes such as texture, odour, and overall acceptability to determine consumer preferences. The physicochemical properties analysis revealed that the formulated lip balm has suitable pH value for lip skin. Its spreadability and stability of the formulated lip balm are good. The melting point is uniformly in the range between them. The greasiness of formulated lip balm increases uniformly influenced by concentration of lip balm. The three best formulated get all acceptance in this study. This research is significant since it may lead to the development of an organic lip balm that continually hydrates and repairs dry lips. Anticipated results encompass a lip balm that efficiently holds onto moisture, enhances lip health, and provides consumer with a satisfying sensory experience.