

DEVELOPMENT AND ASSESSMENT OF AN HERBAL LIP EXFOLIATOR AN ADVANCED STUDY

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ABSTRACT

To maintain healthy and radiant skin, regular cleansing is essential to remove dirt, sebum, dead cells, makeup residue, and environmental pollutants caused by changes in weather and lifestyle habits. Chemical based skincare products can accelerate skin deterioration if used excessively. Therefore, a suitable and immediate solution is needed that not only benefits the skin but also ensures long-term beauty. Natural or herbal cosmetics, which utilize plant-derived ingredients known for their antimicrobial, antioxidant, anti-tan, and anti-aging properties, are ideal for achieving these goals without causing skin irritation or rashes. In our study, we focused on developing a natural scrub using these principles. The formulation was evaluated for various parameters such as appearance, pH level, spreadability, washability, and irritability, all of which met the required standards. The results were highly satisfactory, indicating that the scrub effectively controls oil secretion, removes tan, and promotes a healthy and glowing complexion. Herbal cosmetics like this scrub are safe for daily use, influencing the biological functions of the skin positively and with no adverse side effects.

Key Words: Herbal Lip Exfoliator, pH level, Spreadability, Washability, Irritability.

INTRODUCTION

The lips are integral to the human face, serving crucial functions in facial expression, speech, sensation, chewing, physical attractiveness, and intimacy. The upper lip is referred to as labium superius oris, while the lower lip is known as labium inferius oris. The surface of the lip is divided into four distinct zones:

- a. Hairy skin
- b. Vermilion border
- c. Vermilion
- d. Oral mucosa

These zones collectively contribute to the lips' structural integrity and their various roles in everyday human activities and aesthetics.

The lips are covered by vascularized, nonkeratinized stratified squamous epithelium, typically three to five cell layers thick, compared to the 16-layer thickness of facial skin. Chapped, dry, or cracked lips are a common cosmetic issue, particularly during the winter season.

Many individuals experience dry lips due to cold and dry weather conditions in their regions. Dehydration can also contribute to chapped or dry lips. According to the Better Health Channel, approximately 30% of the population suffers from dry mouth, which can exacerbate lip dryness issues.

People, particularly teenagers, often resort to using lip balm, lip scrub, and other therapies to restore the softness and smoothness of their lips. However, these cosmetics may contain chemicals that could worsen dryness or cause injury to the lips. This concern prompted the researcher to undertake a study aimed at providing people with access to an affordable, natural, and effective lip scrub to address these issues[1].

Herbal Lip Exfoliator:

A lip exfoliator or scrub is a cosmetic product crafted from natural ingredients, typically herbs and other plant-based materials, aimed at gently exfoliating and moisturizing the lips.

These exfoliators often incorporate ingredients such as sugar or salt to delicately eliminate dead skin cells, complemented by oils and herbs that provide nourishment and hydration to the lips[2].

Their purpose is to refine the texture and appearance of the lips, leaving them feeling soft, smooth, and revitalized.

The rationale behind using a lip scrub lies in its ability to exfoliate. Similar to the skin on the rest of the body, lips can accumulate dead skin cells over time, resulting in dryness and roughness, especially during changes in weather conditions.

Moreover, exfoliating the lips enhances the efficacy of lip moisturizers and helps prevent chapping. Consistent use of a lip exfoliator contributes to keeping the lips healthy and well-conditioned[3].

Causes of dry and chapped lips include:

- Sunburn
- Cold weather
- Hot or dry weather
- Frequent licking of lips
- Medical conditions or reactions to medications
- Vitamin deficiency (iron, vitamin B)
- Dehydration

To create mint leaves and beetroot fruit powder:

Start by washing the mint leaves and beetroot fruit thoroughly, then peel and grate the beetroot[4].

Allow the grated beetroot and mint leaves to dry naturally at room temperature for approximately 2-3 days.

Once dried, separately grind each ingredient into a fine powder.

EVALUATION OF HERBAL LIP EXFOLIATOR-

Physical Appearance

The sample have been organize and their bodily look became evaluated.

Colour: Red Form: Paste/Scrub

Odour: Pleasant



Figure 1: Physical Appearance of formulation

pH Test

Firstly product dissolved in the water and measure the pH by using the digital pH meter.

The evaluation pH was 6.05[5].



Figure 2: pH Test

Consistency: It applies smoothly on the skin.

Washability: A small amount of scrub is applied to the skin and rinsed off with water. It washes off easily.

Viscosity: The viscosity was measured using a Brookfield viscometer. The ideal viscosity of the Lip Exfoliator was 1000 cps (centipoise) or higher.

The viscosity of the product measured 5640 mPas at 20 RPM and 65 seconds.

Skin Irritation Test: The scrub was applied to the skin for 5 minutes, and it did not cause any irritation.



Figure 3: Skin Irritation test

Spreadability was assessed by placing the scrub between two Petri plates and applying a weight on the top plate. The spreadability was measured to be approximately 4 cm[6].

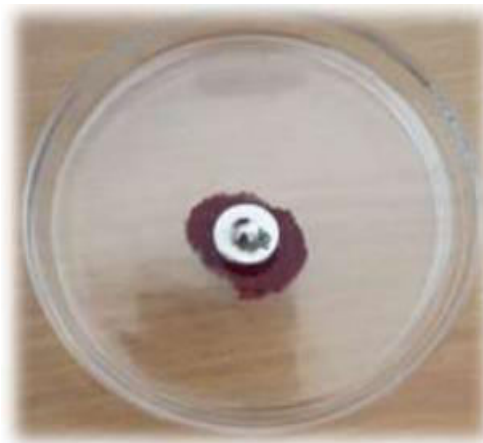


Figure 4: Spreadability Test

FINAL FORMULATED PRODUCT:



CONCLUSION:

The aim of this study was to develop and evaluate a herbal lip exfoliator to mitigate the potential drawbacks associated with synthetic, chemical-based alternatives currently available. The formulated lip exfoliator underwent comprehensive characterization including assessment of color, odor, form, shape, pH, washability, and consistency, meeting all necessary criteria for lip application.

Thus, the developed formulation proves effective as a scrub to promote healthy and glowing lips. While lip exfoliators offer a quick solution to flaky lips, their potential downsides warrant careful consideration. Emphasizing gentle care and hydration helps maintain lip health and beauty without the risks posed by harsh exfoliants.

The exfoliating agent removes dead skin cells to smooth the lips, while emollients provide essential hydration to nourish and refine them. Crafting a lip exfoliator using simple and natural ingredients offers an affordable and personalized alternative to traditional products.

By harnessing sugar's exfoliating properties combined with nourishing elements like honey, coconut oil, or essential oils, this formulation ensures a luxurious experience for lip pampering.

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