

RICE (JEERAKASHALA) AS A NATURAL EXFOLIATOR IN LIP SCRUB

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ABSTRACT

Oryza sativa L. (Jeerakashala rice), a traditional aromatic rice variety widely cultivated in Kerala, is a natural source of carbohydrates, proteins, vitamins, minerals, and bioactive compounds with potential cosmetic benefits. The present study focuses on the preparation and evaluation of Jeerakashala rice powder as a natural exfoliating agent for lip scrub formulation. The rice grains were processed, dried, and finely powdered to obtain a suitable exfoliating material. The prepared rice powder was incorporated into a lip scrub formulation along with natural moisturizing and nourishing ingredients. The formulation was evaluated for appearance, colour, odour, texture, homogeneity, pH, spreadability, washability, exfoliating ability, and stability. The fine particles of rice powder are expected to assist in the gentle removal of dead and dry skin cells while the other natural ingredients help maintain lip softness and moisture. The study highlights the potential of Jeerakashala rice powder as a simple, economical, and naturally derived exfoliating ingredient for cosmetic lip-care applications.

INTRODUCTION

In recent years, there has been a significant increase in consumer preference for herbal and natural cosmetic products due to growing awareness about the potential adverse effects associated with prolonged use of certain synthetic cosmetic ingredients. Conventional exfoliating agents used in cosmetic formulations may sometimes cause irritation, dryness, or

discomfort when used excessively or when coarse particles are present. In addition, the increasing demand for environmentally friendly and sustainable cosmetics has encouraged researchers and cosmetic manufacturers to explore natural, biodegradable, and easily available alternatives. Natural plant-based materials are therefore gaining considerable attention as potential ingredients in cosmetic formulations because of their traditional use, accessibility, and functional properties.

Among the various natural materials that can be utilized in cosmetic preparations, **rice** (*Oryza sativa* L.) has gained interest because of its nutritional, traditional, and potential cosmetic applications. Rice contains carbohydrates, proteins, minerals, vitamins, and other naturally occurring compounds. Rice-derived ingredients have traditionally been used in various personal-care practices, particularly for cleansing and improving the appearance and smoothness of the skin. When rice is finely powdered, its particles can provide a physical exfoliating effect and can therefore be explored as a natural alternative to synthetic or harsh exfoliating materials.

Jeerakashala rice, a traditional aromatic rice variety associated with Kerala, is known for its characteristic aroma and cultural and nutritional importance. The utilization of Jeerakashala rice in cosmetic formulations provides an opportunity to add value to a traditional and locally available agricultural resource. After suitable cleaning, drying, and powdering, Jeerakashala rice can be incorporated into cosmetic preparations as a natural particulate ingredient. The particle size and texture of the powder are important factors in obtaining a comfortable and effective exfoliating preparation.

A lip scrub is a cosmetic preparation intended to remove accumulated dead and dry cells from the surface of the lips and improve their smoothness and softness. The lips are particularly delicate and are frequently exposed to environmental factors such as sunlight, wind, cold weather, and dry conditions. These factors may contribute to dryness, roughness, and accumulation of dead skin cells. Regular and gentle exfoliation can help improve the surface texture of the lips and enhance the overall appearance of lip-care products.

The incorporation of Jeerakashala rice powder as the main exfoliating ingredient in a lip scrub may provide gentle mechanical exfoliation through its finely powdered particles. The rice powder can be combined with natural moisturizing and nourishing ingredients such as sheabutter, virgin coconut oil, honey, beetroot powder, and vitamin E to improve the consistency, moisturization, nourishment, antioxidant protection, and overall acceptability of the formulation. The combination of exfoliating and moisturizing ingredients may help

produce a lip-care preparation that improves smoothness while reducing the dry and rough feeling of the lips.

The present study focuses on the formulation and evaluation of a herbal lip scrub using Jeerakashala rice powder as the main exfoliating ingredient. Different formulations may be prepared by varying the concentration of rice powder to obtain a suitable texture and exfoliating effect. The prepared formulations can be evaluated for their appearance, colour, odour, texture, homogeneity, pH, spreadability, washability, exfoliating ability, skin/lip feel, and stability. These evaluation parameters help determine the physical quality, performance, and consumer acceptability of the developed formulation.

The development of a Jeerakashala rice powder-based lip scrub may provide a simple, economical, natural, and locally relevant approach to lip care. It also promotes the value-added utilization of a traditional rice variety in cosmetic science and supports the growing interest in plant-based and naturally derived cosmetic formulations. Therefore, Jeerakashala rice powder has potential for further investigation as a natural exfoliating ingredient in herbal lip-care products.

Botanical classification:

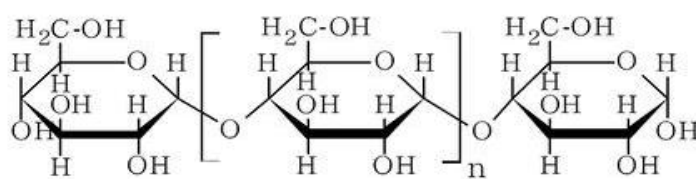
- **Kingdom:** Plantae
- **Division:** Magnoliophyta
- **Class:** Liliopsida
- **Order:** Poales
- **Family:** Poaceae
- **Genus:** *Oryza*
- **Species:** *Oryza sativa* L.



CHEMICAL CONSTITUENTS

Rice powder (*Oryza sativa* L.) is composed primarily of starch, consisting of amylose and amylopectin, which serves as its major chemical constituent and provides gentle exfoliating

properties. It also contains proteins, carbohydrates, essential fatty acids, dietary fiber, and vitamins such as vitamin E and B-complex vitamins. In addition, rice powder is a good source of minerals including potassium, magnesium, phosphorus, calcium, iron, and zinc. Bioactive compounds such as gamma-oryzanol, ferulic acid, and phytic acid contribute significant antioxidant, anti-inflammatory, and skin-brightening properties. These chemical constituents make rice powder a valuable natural ingredient in cosmetic formulations, particularly lip scrubs, where it acts as a mild exfoliant while helping to nourish, protect, and soften the lips.



Structure of Amylose

In cosmetic applications, Jeerakashala rice powder can be used as a natural exfoliating ingredient in lip scrubs. Its fine particles help mechanically remove dead and dry cells from the lip surface, improving smoothness and softness. It can be combined with moisturizing ingredients such as shea butter, coconut oil, honey, and vitamin E to develop a herbal lip-care preparation. Thus, the use of Jeerakashala rice powder provides a potential value-added application for a traditional local rice variety in natural cosmetic formulations.

Storage Conditions: Store in a cool, dry place in an airtight container. Protect from moisture, insects, excessive heat, and direct sunlight to maintain quality and prevent spoilage.

USES OF JEERAKASHALA RICE

Jeerakasala rice (*Oryza sativa* L.) has potential applications in the pharmaceutical industry mainly because rice is a source of starch, carbohydrates, proteins, and other nutritional components. Rice starch can be used as a pharmaceutical excipient, particularly as a binder, diluent, and disintegrant in tablet formulations. Rice-based ingredients may also be incorporated into powder preparations and oral formulations where suitable. Jeerakasala rice can be explored as a traditional plant-based raw material for developing value-added pharmaceutical and nutraceutical products, although specific pharmaceutical applications require appropriate standardization and quality evaluation.

Jeerakasala rice (*Oryza sativa* L.) can be used as a natural ingredient in various cosmetic and personal-care formulations, particularly in the form of finely powdered rice. Its powder can act as a mild physical exfoliating agent, helping to remove dead skin cells, impurities, and flaky skin from the surface. It can be incorporated into facial scrubs, body scrubs, face packs, cleansing products, and herbal cosmetic preparations. In lip-care products, Jeerakasala rice powder can be used in lip scrubs to gently remove dead and dry skin, leaving the lips smoother and softer.

In lip-care formulations, rice powder helps to gently remove dead and dry skin, thereby improving the smoothness and softness of the lips. The use of Jeerakasala rice in herbal cosmetic formulations also provides an opportunity to develop natural, plant-based, and value-added cosmetic products while promoting the utilization and preservation of traditional rice varieties.

The finely powdered rice can be combined with other natural ingredients such as turmeric, honey, aloe vera, sandalwood, or milk to prepare face packs. The fine particles of rice powder help in gentle cleansing and removal of dead surface cells, while the other herbal ingredients may provide additional skin-conditioning properties. Such formulations can help improve the smoothness, softness, and overall appearance of the skin.

CONCLUSION

Jeerakasala rice (*Oryza sativa* L.) is a traditional aromatic rice variety with significant nutritional, culinary, cosmetic, and pharmaceutical potential. Its pleasant aroma, natural composition, starch content, and nutritional value make it a valuable traditional plant resource. Finely powdered Jeerakasala rice can be explored as a natural exfoliating ingredient in herbal cosmetic formulations, particularly lip scrubs, facial scrubs, and face packs. Rice starch also has potential pharmaceutical applications as an excipient in tablet and other formulations. The utilization of Jeerakasala rice in value-added products can promote the use of traditional plant resources while providing opportunities for the development of natural, economical, and innovative herbal formulations. Further research and standardization are required to establish its specific applications, quality, stability, and safety in pharmaceutical and cosmetic products.

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