



# Formulation and Evaluation of Herbal Face Scrub Containing *Coffea Arabica*, *Myrstica fragrans*, *Lens culinaris*

Sneha.M.Nalavade ,Aarti.D.Mohite, Vishranti.Y.Mohite, Nikita D. Nanavare,

smt.Avani.K.Shewale

Research scholar

Rajarambapu college of pharmacy, kasegaon, Sangli 415404

## Abstract

The research aimed to produce an herbal facial scrub. The use of natural components in a facial scrub is a great way to promote healthy skin without exposing it to harsh chemicals. Coffee is indeed a great source of antioxidants and can provide exfoliating properties. Nutmeg is also known for its antibacterial properties, while masoor dal and rice flour can provide gentle exfoliation. The addition of glycerin can help to moisture and soothe the skin. it's important to note that before any skincare product is used, it should be patch tested on a small area of the to ensure that, there are no adverse reactions. Additionally, it's recommended to consult with a dermatologist before introducing any new skincare products into a routine, especially if there is any underlying skin condition. Overall, it's great to see research being done on natural and safe skincare alternatives.

**Keywords:** Herbal scrub, coffee, Nutmeg, Masoor dal

## Introduction

By eliminating peripheral dead cells and support to the development of cells in the sub-epidermal layer. Herbal exfoliating scrub reduces age related problems & nullifies the environments destruction. Scrub can use for clean the surface technically with the use of herbal products containing Antioxidant, Vitamins, Antiseptics, Anti-aging, Antibacterial characteristics that contribute help depth to clean the skin and make it shiny and glowing and Exfoliates dead skin cells, using a facial scrub is simple first, choose a regular scrub that is suitable for your skin type then apply the scrub onto moisturized skin and gently rub it in for one minute, finally rinse it off with water. The use of a scrub is suitable for all skin types, but the choice of essential oil used as an ingredient in the scrub should vary depending on the individual's skin type. There are the three types of skin i.e. oily, dry, sensitive skin. Yes, a gentle massage with a scrub gel can help stimulate blood circulation and oxygenation of the skin and production of new skin calls. By removing dead skin cells, it can help smooth out rough or uneven patches and reveal brighter, more radiant, looking skin.

## Ideal Properties of Herbal Scrub

Removing the dead skin cells, dirt and impurities from the skin. It contain moisturizing agent which help to hydrate the skin. It nourishes the skin. It is an anti-inflammatory. It is aroma therapeutic..It must be non-toxic, non- irritating, on sticky and capable of removing dead skin cells. Improve the skin texture and appearance.

## Benefits of Scrubbing Skin

- Scrubbing the skin helps to remove dead skin cells.
- Scrubbing the skin improve blood circulation.
- Scrubbing the skin can helps to prevent and reduces in grown hairs particularly in areas such as the legs and bikini area.
- Remove dead skin cells.
- Remove of acne scars.

## Composition of herbal scrub

table: composition of herbal scrub

Sr. No.	Ingredient	Scientific name	Quantity
1	Coffee	Coffee Arabica	4.5gm
2	Nutmeg	Myristica fragrans	3.5gm
3	Masoor dal	Lens culinaris	2.5gm
4	Rice flour	Oryza sativa var glutinasa	3gm
5	Glycerin	-	2ml
6	Rose water	-	Q.S

## MATERIALS AND METHODS

### Coffee



fig:1 coffee arabica

Coffee has relaxing properties. it reduces inflammation .Improve blood circulation. Remove dead skin cells. Making skin smoother and brighter.

### Nutmeg



fig:2 myristica fragrans

Nutmeg is well known for its anti-inflammatory, antiseptic, and antibacterial properties. Reduces pigmentation. Acne and spot should be treated. smoothen and soften the skin promote fairness and prevent rashes, burns.

### Masoor Dal (Red lentil)



fig: 3 lens culinaris

Masoor dal exfoliates dead skin cells giving a healthy glow. It is an excellent skin cleanser. Natural bleaching agent and helps in remove of tan. Improve skin texture and moisturizes it. Give skin new lease of life.

### Rice Flour



fig: 4 oryza sativa var gultinasa

It works on signs of aging. take care of sun damage. It offers a cooling effect to the skin and relieves the inflammation caused due to scars and severe acne.

### Rose water



fig: 5 rose water

Toning with rose water will help remove oils, dirt and debris accumulated on your skin. It helps to maintain PH balance of the skin. Rose water has astringent properties which clean up your face pores and prevent issues like blackheads, whiteheads and acne.

## METHOD OF PREPARATION

All the ingredients are powdered and Weighed according the quantity given in above formulation table.

3.5 gm of coffee and 2gm nutme↓ are mixed in a glass beaker.



Then added the remaining ingredient one by one and mixing properly.



1ml of glycerin was added then mixes properly and add rose water in sufficient quantity.



Then all the ingredient is homogenously mixed until smooth texture appear.



Then the prepared scrub was filled in air tight container and stored in cool and dry place away from sunlight.

## Characteristics of Facial scrub

PH, Physical appearance, Colour, Odour, Texture, Irritability, Viscosity, Spredability, and washability, were evaluated as evaluation parameters for Facial Scrub-Formulation.

Sr.No	Parameter	Results
1	Color	Brown
2	Odour	Lush
3	Texture	Good
4	Smoothness	Good
5	Consistency	Good

## Organoleptic characteristics

Colors: The formulation's colors was carefully assessed and observed.

Odour: The smell of the product was tested when it spread on the palm.

Consistency: The consistency of the the formulation and particles were used to evaluate the texture and homogeneity of the preparation on the skin, such as grittiness, greasiness effect.

## Evaluation:

table:evaluation test

Herbal formulation	Colors	Odour	Spreadability	pH	Irritancy	Wash ability	Effectiveness
1	Brownish red	characteristic	Easily spreadable	6	Non - irritant	Easily washable	Smooth and glowing skin

## Spreadability

It seems that the spreadability of a certain material was tested using a method that involves placing 1 gram of the material between two horizontal glass plates of dimensions 10cm x 20 cm. A Standard weight of 20 grams was placed on top of the upper glass plate. The material was allowed to spread and the spreading diameter was measured. Visual inspection was used to assess the quality of the spreading.

## Skin irritation

A small amount of the mixture was placed on the dorsal side of the hand and sometimes left before being discovered.



fig:6 skin irritation test

## pH

A pH paper was used to determine the pH of a 1% aqueous formulation solution, and the result was 6.



fig:7 pH

## Wash ability

In this type of the test, a small of amount of the preparation is applied to the skin and left in place for a specified period of time. After the exposure period, the preparation is washed away with plain water, and the skin is evaluated for signs of irritation or sensitivity, such as redness, itching, or swelling.



fig:8 prepared herbal scrub

## RESULT AND DISCUSSION

The herbal scrub was thoroughly evaluated and found to be comparable to the scrub with several parameters like colors, odour, consistency, pH, spreadability, irritability, washability.

Colors: shade of the scrub, which can affect its overall appearance and appeal to consumers. Odour: The fragrance of the scrub, which can impact its perceived effectiveness and desirability.

Consistency: It refers to the texture or thickness of the scrub, which can affect how easily it can be applied and spread on the skin.

pH : The acidity or alkalinity of the scrub, which can affect how well it balance the skin's natural PH levels.

Spreadability: It refers to how easily the scrub can be spread over the skin's surface, which can affect how effectively it exfoliates and cleans.

Irritability: It refers to how likely the scrub is to cause skin irritation or sensitivity, which can be a major concern for people with sensitive skin.

Wash ability: How easily the scrub can be washed off the skin, which can affect how well it cleanses and exfoliates.

## CONCLUSION

Based on the results presented, it seems that the new scrub formulation is a safe and effective option for exfoliating the skin .the use of coffee powder as a scrubbing agent is promising. And the fact that the majority of the ingredient is natural makes it a preferable choice for individuals with different skin types.The study suggests that the scrub is suitable for dry, oily, and normal skin and it is likely to produce better results than other conventional scrubs. Additionally, the mixture was tested on the dorsal area of the hand, and it was found to be non-irritating and without any adverse effects, indicating that it is safe for use.

However, it is important to note that more extensive testing on a larger group of individuals with different skin types may be necessary to fully determine the safety and effectiveness of the new scrub formulation

## REFERENCE

1. Aburjai T, Natsheh FM. Plants used in cosmetics. *Phytother Res* 2003; 17:987-1000.
2. [https://www.researchgate.net/publication/366152322\\_Formulation\\_and\\_Evaluation\\_of\\_Herbal\\_Face\\_Scrub\\_containing\\_Coffea\\_arabica\\_Linn\\_Myristica\\_fragrans\\_and\\_Lens\\_culinaris\\_as\\_an\\_Antioxidant\\_and\\_Antiseptic\\_Activity](https://www.researchgate.net/publication/366152322_Formulation_and_Evaluation_of_Herbal_Face_Scrub_containing_Coffea_arabica_Linn_Myristica_fragrans_and_Lens_culinaris_as_an_Antioxidant_and_Antiseptic_Activity)
3. <https://ijcrt.org/papers/IJCRT2203364.pdf>
4. [https://ijprajournal.com/issue\\_dcp/Formulation%20and%20Evaluation%20of%20Herbal%20Face%20Scrub.pdf](https://ijprajournal.com/issue_dcp/Formulation%20and%20Evaluation%20of%20Herbal%20Face%20Scrub.pdf)
5. Ravindra S.Dukare, Sachin B.Aglawe : Preparation And Evaluation Of Polyherbal Facial Scrub.
6. Rathod HJ, Mehta DP. A Review on Pharmaceutical Gel. *International Journal of Pharmaceutical Sciences*. 2015; 1 (1):33-47.
7. Mehta.R.M, "Parmaceutics", vallabhprakashan, 3rd edition, reprint 2008,21-25
8. J. Prathyusha , N. S. Yamani, G. Santhosh, A. Aravind, B. Naresh, Formulation and Evaluation of Polyherbal Face Scrubber for Oily Skin in Gel Form, *Int. J. Pharm. Sci. Drug Res*. July-August, 2019, Vol 11, Issue 4 (126-128)
9. Mary P. Lupo. Antioxidants and Vitamins in Cosmetics. *Clin Dermatol*, 2001; 19: 467-473.
10. Zinnia. Ayurvedic Face Packs for Glowing Skin. *Style Craze*, Feb 2017 [cited 2017 Apr 24]. Available from: <http://www.stylecraze.com/articles/5-ayurvedic-face-packs-for-glowing-skin>.
11. [https://www.researchgate.net/publication/332256660\\_Preparation\\_and\\_evaluation\\_of\\_polyherbal\\_facial\\_scrub](https://www.researchgate.net/publication/332256660_Preparation_and_evaluation_of_polyherbal_facial_scrub)
12. <https://ijcrt.org/papers/IJCRT2203364.pdf>