



Research Article

Herbal Red Lentils Scrub

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ARTICLE INFO

Received: 12 April 2024

Accepted: 16 April 2024

Published: 26 April 2024

Keywords:

Surgical site infection,
Chlorhexidine, Povidone
Iodine, surgical site wound.

DOI:

10.5281/zenodo.11066320

ABSTRACT

The primary goal of the current study was to create a herbal face scrub that included "red lentils" (masoor dal) as the primary active component. The products used to clean, beautify, enhance attractiveness, or alter appearance are called cosmetics. Plants having antibacterial, antioxidant, and anti-aging qualities are frequently used in plant-based cosmetics. Using natural ingredients can help reduce oil release from the skin and may even work as a potential treatment for acne and wrinkles. All of the components in this recipe, including red lentils, orange peels, fuller's earth, sandal wood, and coconut shell powder, were sourced naturally. The herbal face scrub formulation was assessed based on a number of factors, including color, order, PH, irritation, and particle size. In the end, it was discovered that the herbal face scrubber was more affordable, stable, safe, and effective.

INTRODUCTION

The practice of exfoliation is attributed to the ancient Egyptians. With tartaric acid serving as the active ingredient, wine was employed as a chemical exfoliant during the Middle Ages. Exfoliation was first used hundreds of years ago in Asia. The word "exfoliate" derives its derivation from the Latin exfoliare, which means "to strip off leaves" Cosmetics are items that are used to improve or alter a person's facial features, body odor, or texture. A facial care regimen must include facial washes. Typically, a face scrub is a cream-based treatment with tiny bits of exfoliation

that, when rubbed over the skin, physically take off dry, dead skin cells to help smooth the skin. Regular hydration and exfoliation promote healthy skin. Our internal body excretion mechanism uses comparable pores to get rid of the poisonous portions of metabolism that the climate causes to plug in our skin pores with dirt and poisons. Dead skin cell development is prompted by this. Daily exfoliation with a mild, rich herbal exfoliant reduces the surface development of dead skin cells while hastening the aging of new cells. The skin is constantly exposed to harmful light from the sun and attacks from radicals. Daily assaults have the

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Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



potential to accelerate the aging and darkening of skin by damaging cells and increasing melanin production. An important component of general skin care is herbal skin exfoliation. It reduces wrinkles, discoloration, and defects by smoothing and artificially balancing the skin, clearing clogged pores, and encouraging the growth of new cells. This keeps the skin looking and feeling clean, moisturized, and faultless. You'll notice softer, clearer, and more youthful-looking skin. Your skin can feel radiant, silky, youthful, and lovely after using a face scrub. In contrast to ordinary soap or cleanser, a face scrub exfoliates the skin by removing dead skin cells and preparing it for new ones by the use of tiny particles, beads, or chemicals. Using a facial scrub was extremely simple: just chose a chemical or neutral scrub that was appropriate for your skin type, massage it in for a minute on damp skin, and then rinse it off. once or twice a week, repeated. Considering all of its advantages, use a face scrub in your routine for skin care. The process of exfoliation includes removing the oldest dead skin cells from the skin's outermost layer. Every facial, including chemical or microdermabrasion peels, involves exfoliation. Exfoliation can be accomplished chemically or mechanically.[1][2][3][4]

OBJECTIVES

To prepare herbal face scrub powder with the following objectives :

Nourishment of the skin

- To remove dull, dead cells, black heads from the face.
- To inhibit the growth of acne and add moisture to the skin.
- To improve the texture of skin.
- Provides Smoother Skin.

BENEFITS OF SCRUBBING YOUR SKIN [16]

1. For A Squeaky-Clean Skin:

After cleaning, your skin is clear of perspiration, oil, and grime. As a matter of fact, not all of the

dust that builds up in your skin's pores can be removed by the bottles of cleansing milk, face wash, and cleansers. This is effectively accomplished via scrubbing.

2. Frees Your Skin from Flakes:

Itchy skin leads to dry areas. Over time, it permits dead cells to amass. You may effectively manage your flaky skin by giving your skin a good scrub.

3. Helps in Removing Dead Cells:

Your skin seems drained and lifeless due to dead cells. Use a soft brush to gently clean them off.[12]

4. Adds Glow to Skin:

Exfoliation can actually make your skin glow

5. Removes Dark Patches:

Scrub should be used twice a week to see effects. It works particularly well on knees, elbows, and knuckles.

6. Removes Acne Scars:

Exfoliation helps in doing away with acne scars.[13]

7. Prevents Ingrown Hair:

An ongoing issue is ingrown hairs, which can be avoided with regular washing.

8. For Smooth Skin:

The secret to becoming more gorgeous is having smooth skin. Your skin will look immaculately smooth after the scrub, but it will also feel soft and nourished.

9. Improves the Texture of Your Skin:

Your skin seems cleaner, smoother, and has a better texture after you scrub it.[11]

10. Promotes Clear Complexion:

After all of the flakes, dead cells, imperfections, and accumulated contaminants have been removed. The scrub has an even better result because it contains a natural skin-whitening component.[10]

Method of Preparation of Herbal Face Scrub

1. Exact amount of all dry ingredients was weighed properly.



2. All the ingredients such as Red lentils, Orange peels, Sandal wood, Fullers Earth, Coconut shell were taken in the mortar and mixed together.
3. Final product was enclosed in air tight container for evaluation. [1]

Table No. 1 Ingredients Used for Herbal Red Lentils Scrub

Sr. No	Name of Ingredients	Quantity (For 20 gm)	Use
1.	Red Lentils	7 gm	It Helps in Fighting Acne, Blackheads and also Remove Tan Lines, Blemishes, Dark Spots.[7][14]
2.	Orange Peels	2 gm	It Promote Youthful glow, smooth appearance and moisturize the Skin.[5]
3.	Sandal Wood	4 gm	It Used for the Prevent Wrinkles, Heal Wounds and useful in skin Conditions Like Psoriasis, eczema, molluscum Contagiosum and Scabies.[8]
4.	Fullers Earth	4 gm	Helps to remove Excess Oil from the Skin and Prevents pimples as it has Absorbent Property.[6]
5.	Coconut Shell	3 gm	It Helps in Clearing Out Dead cells and Dirt, other Micro Particles from the skin surface.[9]
6.	Water/Rose water etc.	Q.S	

EVALUATION PARAMETERS WITH RESULTS

1. Phytochemical tests[1]

Flavonoids :

Test Name	Procedure	Observation	Inference
Alkaline Reagent Test	Mix the sample with dilute NAOH solution. Yellow Colour turns colorless after Addition HCL.	Colorless	Positive
Lead Acetate Test	Extract + Lead acetate solution	Yellow ppt	Positive

Alkaloids :

Test Name	Procedure	Observation
Drangendroffs Test	Dry Powder/ Extract + 2 ml water + few drops of reagent	Orange brown ppt
Foam Test	Extract or dry powder vigorously with water	Foam Observed

Phenols

Test Name	Procedure	Observation	Inference
Lead Acetate	Extract or dry powder + 2 ml water + 2-3 ml drops of a reagent.	White ppt	Positive





Figure 1. Phytochemical Test

Flavonoids :

- A. Alkaline Reagent Test
- B. Lead Acetate Test

Alkaloids :

- A. Drangendroffs Test

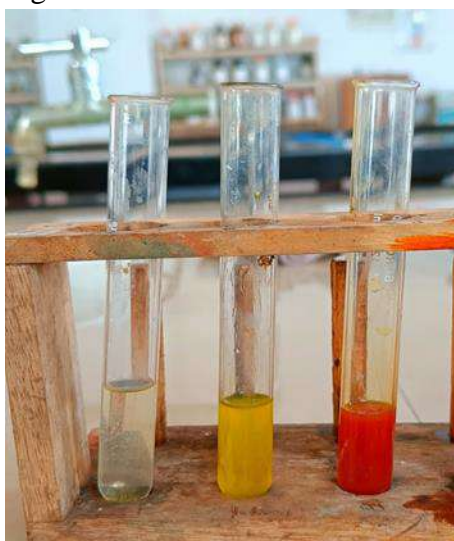


Figure 2. Phytochemical Test

Saponins :

- A. Foam Test

Phenols :

- A. Lead Acetate Test

powder after is has been tapped for a defined period of time.

Tapped Density: Mass/Tapped volume

2. Bulk Density:

Bulk Density is defined as the mass of the many Particles of the material divided by the total

B. Acetic Acid Test

2. Organoleptic Properties

a. Nature :

Nature of the scrub was evaluated manually.[15]

b. Colour:

The Colour of the face Scrub was checked visually. [15]

c. Odour:

The formulation was evaluated for its odour by smelling it. [15]

d. Texture:

Texture of the scrub was determined. [15]

3. Physiochemical Evaluation

1. PH:

pH of the prepared scrub was evaluated small amount of the scrub applied on the ph paper. [17]

2. Ash value:

Ash value are helpful in determining the quality and purity of crude drugs in powder form. the objective of ash value is to remove all traces of organic matter which may interfere in analytical determination. [17]

3. Moisture content:

Moisture content is the quantity of water contained in the material Moisture content is reference to the amount of moisture present in a material this value is often represented as as percentage of the material's mass (such as x%MC) The amount of moisture is an object can be measured in several different ways such as with oven dry tests or moisture meters. [17]

4. General powder characteristics

1. Tapped Density:

Tapped Density of a powder is the ratio of the mass of the powder to the volume occupied by the

volume they occupy the total volume includes Particle volume, inter Particle, void volume, and internal pore volume.

Bulk Density: Mass/Bulk volume

3. Angle of Repose:

The angle of repose is a parameter commonly used for the evaluation of interparticle force. the simplest method for the determination of the Angle of repose is the "Poured" Angle.

Angle of Repose(θ) : $\tan^{-1}(2/d)$

(θ) = Angle of repose

D= Diameter in cm

H=Height in cm

4. Hausner Ratio:

The Hausner Ratio is an indirect measure of the property of a Bulk material to reduce its volume under mechanical influence. It is also a measure of the ability to compress and of the interaction between the Particles.

Hausner ratio: Tapped Density/Bulk Density

5. Carrs Index :

The Carrs index an indicator of the compressibility of a powder. It is named after the Scientist Ralph J. Carr, Jr. The carr index is frequently used in pharmaceuticals are an indication of the compressibility of a powder.

Carrs Index : (Tapped Density – Bulk Density / Tapped Density) * 100

6. Flow Characteristics :

Powder Flow , also known as flowability , is defined as the relative movement of a bulk of particles among neighboring particles or along the container wall surface. In other words, powder flowability refers to the ability of a powder to flow in a desired manner in a specific piece of equipment.

7. Grittiness :

The product was checked for the presence of any gritty particles by applying it on the skin.

8. Washability :

Formulations were applied on the skin easily removed by washing with water were checked manually.

9. Skin irritation :

Small amount of the scrub was applied on the skin and kept for few minutes and found to be non-irritant.[18]

Table No. 2 Evaluation Tests

Sr. No	Parameters	Observations	
1.	Organoleptic Properties	Nature	Powder
		Colour	Light Brown
		Oduor	Pleasant
		Texture	Slightly Gritty
2.	Physiochemical Evaluation	Ph	5
		Ash Value	22.24 % w/w
		Moisture Content	0.6 % w/w
3.	General Powder Characteristics	Tapped Density	0.5 gm/ml
		Bulk Density	0.4 gm/ml
		Angle of Repose	26.79
		Hausner Ratio	1.3
		Carr's Index	27%
		Flow Characteristics	Fair
		Washability	Easily Washable
		Skin Irritation	Not Observed

DISCUSSION

We prepared and assessed the herbal scrub. The lab-formulated herbal face scrub was compared to multiple factors, including appearance, pH,

viscosity, spread ability, washability, and irritation. It was determined that the scrub met all necessary characterisation requirements. As a result, the created mixture works well as a scrub to



help maintain skin that is radiant and healthy. Red lentil powder and multani mitti, which lighten skin tone, minimize dark spots, and remove dust and oil particles, respectively, were included. Red lentils are a natural exfoliant that helps to promote blood circulation, exfoliate dead skin cells from the skin, and give the skin a scrubbing feel. In order to lighten skin tone, red lentil powder helps remove oil, sebum, and other skin secretions. The multani mitti was used to remove grene and dust particles. Skin was certain to feel softer, cleaner, and more invigorated after using the scrub. Skin became radiant, supple, youthful, and lovely as a result. The usage of herbal cosmetics has expanded as a result of their reduced or absent negative effects.

SUMMARY AND CONCLUSION

The goal of the current study was to create a gel-like herbal scrub by employing an appropriate basis. The prepared scrub was evaluated for color, smell, consistency, pH, spreadability, viscosity, irritability, washability, and grittiness. It was determined to meet all necessary criteria for characterisation. As a result, the created mixture works well as a scrub to help maintain skin that is radiant and healthy. Because only natural ingredients were employed, there were either no negative effects or very little. It was discovered that the produced herbal scrub was suitable for applying to the skin to give it a healthy, radiant appearance. the use of scrub powder, which enhances oxygen delivery to the skin's entire surface and helps to promote blood circulation. After using a scrub, skin feels cleaner, softer, and more invigorated.

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HOW TO CITE: Sanika R. Hyalij, Santosh S. Surana, Herbal Red Lentils Scrub, *Int. J. of Pharm. Sci.*, 2024, Vol 2, Issue 4, 1051-1057. <https://doi.org/10.5281/zenodo.11066320>

