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# Formulation and Evaluation of Face Scrub Powder

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***Abstract:*** ***In the recent years the use herbal face scrub is increasingly in huge amount. These scrubs contain natural ingredients such as rice powder and orange peel powder, coffee powder, which work to exfoliate, whiten, and prevent free radical damage. It exfoliates the skin and stimulates blood circulation, while also eliminates dead skin cells and reveal smoother, brighter complexion. Herbal cosmetics are the safest product to use routine with no side effects. In today's life for both women and men cosmetics plays an important role to beautifying and altering the appearance of skin. The use of natural ingredients to remain healthy and of good appearance, the skin surface requires frequent cleansing to remove oil, sebum and other secretions, dead cells, crusts and applied makeups.***
***Keywords: Herbal, Scrub, , Tamarind Peel Powder, Turmeric Powder, Antitanning, Exfoliant.***

## I. INTRODUCTION

Cosmetics are widely used to improve one's appearance and are available in a variety of forms. Skincare products are formulated to address various skin issues, such as skin protection, sun protection, anti-aging and anti-wrinkle treatments. Since ancient times, people have used herbs or herbal cosmetics to cleanse, beautify, and combat oil, acne, discoloration, and pimples, aswell as dark circles. Herbal cosmetics are prepared by the association of bioactive ingredients and pharmaceutical products. The presence of number of photochemical and botanicals in the herbal products have dual significance, one that they are used as cosmetics for body care and another that photochemical improve the biological functions of human body naturally results in healthy skin. As the realization said that the chemical medicines are not always work as magic bullets and they may have side effects. The current trend moves toward the herbalism and natural products. Indian herbs are the richest source to be used in cosmetic industries. Herbal cosmetics were gaining tremendous demand in the world market. There is a wide range of herbal products used as beauty regime to satisfy the purpose of beautification.

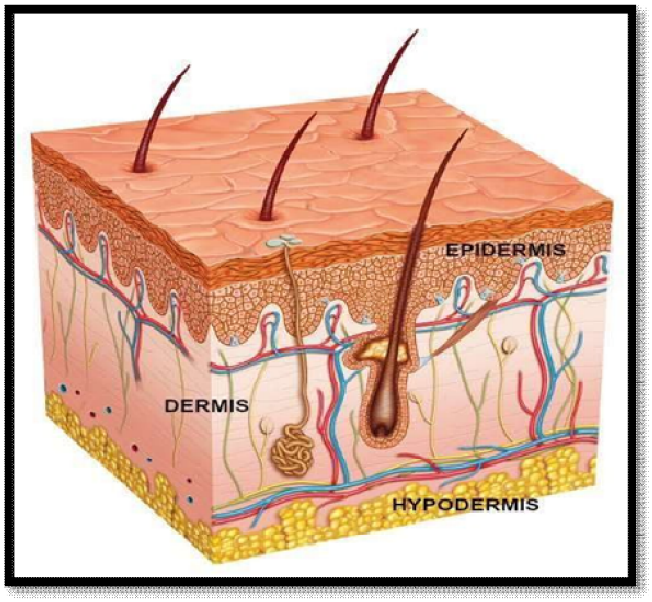


Fig no.1 Layer of skin

### *A. Function of skin:*

The facial skin serves several functions, including protection against external (touch, pressure, temperature), and expression of emotions through facial muscles. It plays a role in immune defense, hydration regulation, and secretion of oils to maintain skin moisture.

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*B. Problem with facial skin:*

Oily skin can also be less prone to wrinkles and aging, as the excess oil helps to keep moisture locked in the epidermis

Several issues can arise with facial skin, including acne, dryness, oiliness, wrinkles, pigmentation irregularities (dark spots or hyperpigmentation), redness, sensitivity. These problems can be caused by various factors, including genetics, hormonal changes, environmental factors, improper skincare routine, stress, and diet. Treatment options depend on the specific issue and may include topical creams, medications, lifestyle changes, and professional .

Regular skincare routines and consulting with a skincare procedure.

dermatologist can help manage and improve facial skin

## II. LITERATURE SURVEY

| Year | Abstract |
|---|---|
| 2019 | Most of the marketed cosmetics when applied on the skin cause dryness of skin after its long term use which results. less life of skin problems of acne and redness. Solution for this problem is use of scrub gel once or twice in week which consist all herbal ingredients which increases cleansing, softening, moisturizing, fairness of skin. In the present work we have formulated the herbal facial scrub by using a different herbal powders and it was evaluated by using the parameters like smoothness, appearance, spreadibility, irritation etc.[8] |
| 2022 | Many of the marketed products when applied on the skin cause dryness of skin after its long-term use which results less life of skin problems of acne and redness. Solution for this problem is use of scrub which consist all herbal ingredients which increases cleansing, softening, moisturizing, fairness of skin. The use of natural ingredients to fight against acne, wrinkle and also to control secretion of oil is known as natural or herbal cosmetics. Herbal cosmeceuticals usually contain the plant parts which possess antimicrobial, antioxidant and anti-aging properties. Cosmeceuticals are the product which influences the biological function of skin.[10] |
| 2022 | The research aimed to produce an herbal facial scrub. The majority of times, the skin on the face is in regular contact with dirt, pollution, and other contaminants. The scrub comprises various natural components that are safe to use, have fewer adverse effects, and have antibacterial, anti-infective, antioxidant, anti-aging, and moisturizing characteristics. The primary ingredient in this scrub is coffee. Coffee contains a lot of antioxidant properties. In addition, coffee grounds have a different aroma and a coarse grain and can be used to remove dirt skin cells that have died. The scrub was made with a simple mixing procedure and a variety of materials, including coffee beans, nutmeg, masoor dal, com starch, and coconut oil mixed in melted beeswax. Other ingredients such as glycerine, light liquid paraffin, stearic acid, tween 80, and a perfuming agent to this formulation with effective results.[11] |
| 2023 | Herbal face scrubs have become increasingly popular in recent years due to their ability to improve skin health and are available at a low cost. These scrubs contain natural ingredients which work to exfoliate, whiten, and prevent free radical damage. Vitamin C, rose water, and almonds are used to hydrate and exfoliate the skin. Neutralizers and herbal preservatives like neem, and rosemary are used in the formulation. The preparation was evaluated for various parameters, such as colour, odour consistency, pH, spreadability, viscosity, and foamability. |

Table 01:- literature survey

## III. MATERIALS

Table no.02 :- Ingredients use in scrub

| INGREDIANTS | QUANTITY | CATEGORY |
|---|---|---|
| Tamarind peel powder | 5g | Exfoliant |
| Multani mitti | 10g | Adsorbant |
| Turmeric powder | 5g | Antiacne |
| Red lentils powder | 10g | Antioxidant |
| Rice flour | 10g | Whitening of skin |
| Liquorice | 5g | Foaming agent |
| Alum | 5g | Antibacterial |

### *A. Methodology*

*1)* Take tamarind peel, shed dry and grid it.
*2)* Take 5 gm of tamarind peel powder.
*3)* 10 gm of multanimitti.
*4)* Take 5 gm of turmeric powder.
*5)* 10 gm of coarse red lentils powder.
*6)* 10 gm coarse rice flour.
*7)* 5 gm liquorice powder
*8)* Take alum 5 gm and grind it.
*9)* Pass the alum powder through sieve (#25) for the uniform size.
*10)* Add all the ingredients and mix it well in the mortar and pestle.

### *B. Instruments*

*1)* Mortar pestle
*2)* Weighing balance
*3)* 25 no sieve

## IV. USE OF INGREDIENTS

| Sr.no. | Crude drugs | Uses |
|---|---|---|
| 1 | Tamarind peel powder | Exfoliate the skin, brighten it's complexion contains alpha hydroxyl acids (AHA)& antioxidants, it helps exfoliate skin,remove dead cells,has anti-inflammatary action which sooth skin reduce irritation |
| 2 | Multani mitti | Known as fuller's earth it was known for its absorbent& cleansing properties Nourishes skin Reduce oiliness Remove blackheads |
| 3 | Liquorice powder | Skin brightening soothing properties,.reducepigmentation,foaming agent |
| 4 | Turmeric powder | anti-inflammatory calm redness,,Reduce acne, Glowing skin, Lightens skin |

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| | | |
|---|---|---|
| 5 | Red lentils powder | Promote healthy glow,.unclogpores,improve appearance and texture of skin |
| 6 | Rice flour | Remove deadskin,exfoliate skin,improve skin texture |
| 7 | Alum | Tightening pores ,reducing oil production ,and treating acne and blemishes |

Table no 03: Use of ingredients in scrub

## V. RESULT

To evaluate the quality of prepared formulation, several quality tests were performed.

| Sr.No | Evaluation Parameter | Face Scrub |
|---|---|---|
| 1 | Organoleptic Properties | Colour:Yellow or slightly brown<br>Odour: slightly aromatic<br>Texture: Rough<br>State: Powder |
| 2 | Consistency | Good |
| 3 | pH | Slightly acidic 6.33 |
| 4 | Washability | Easily removed by washing with water |
| 5 | Skin Irritation Test | No |
| 6 | Spreadability | Good |

Table no 04: Evaluation Parameter

*1)* Organoleptic Properties:The prepared herbal Scrubs were evaluated for organoleptic properties such as color, odour and texture
*2)* Consistency: It was determined manually.
*3)* Determination Of pH: The pH of formulated scrubs was analysed by pH meter.

Fig no.17 :- PH meter

4) Washability: Easily removed by washing with water
5) Skin Irritation Test: No any irritation, itching and redness occurs when applied on the human skin.

Fig no.18 :-Spreadability and skin irritation

6) Spreadability: The spreadability of the scrubs was found manually by applying on the skin of hand or face gentle rub which easily spread through the face.

HOW TO USE FACE SCRUB POWDER :-
To use face scrub powder with rose water, mix a small amount of the powder with enough rose water to form a paste. Apply this paste to your face, massage gently, and then rinse off with lukewarm water. This combination helps exfoliate and hydrate your skin.

Here's a more detailed breakdown:
1) Prepare the scrub:
Measure out the desired amount of face scrub powder. Consider using a clean, dry bowl for mixing.
2) Activate with rose water:
Add rose water to the powder, a little at a time, until you achieve a paste-like consistency.
3) Apply and massage:
Gently apply the paste to your cleansed face, avoiding the eye area. Use circular motions to massage the scrub into your skin, helping to exfoliate and remove dead skin cells.
4) Rinse and pat dry:
Rinse the scrub off with lukewarm water, pat your face dry with a clean towel, and avoid rubbing.
5) Follow with a moisturizer:
You can apply a moisturizer after the scrub to further hydrate and protect your skin.
What Are The Benefits Of Using A Face Scrub?

- Removes Dead Skin Cells.
- Unclogs Skin Pores.
- Removes Flakes.
- Reduces Acne Scars.
- Prevents Ingrown Hair.
- Provides Smoother Skin.
- Improves The Texture Of Skin.
- Better Absorption Of Skincare Product.

## VI. CONCLUSION

The above results suggest that the scrub formulations face scrub are safe to use, and it gets good effects as a scrubbing agent. The majority of the substances are natural, and there are low chances of adverse effects.

The scrub was prepared by using various crude drug powders as polymer and then evaluated by various parameters which report prepared. Formulation have good consistency better result and does not have side effects. It is suitable for all skin types, including dry, oily, and normal.

It produces better results and leaves the skin looking radiant and bright. From the given study, it can be concluded that prepared herbal scrub formulation exhibited satisfactory result.

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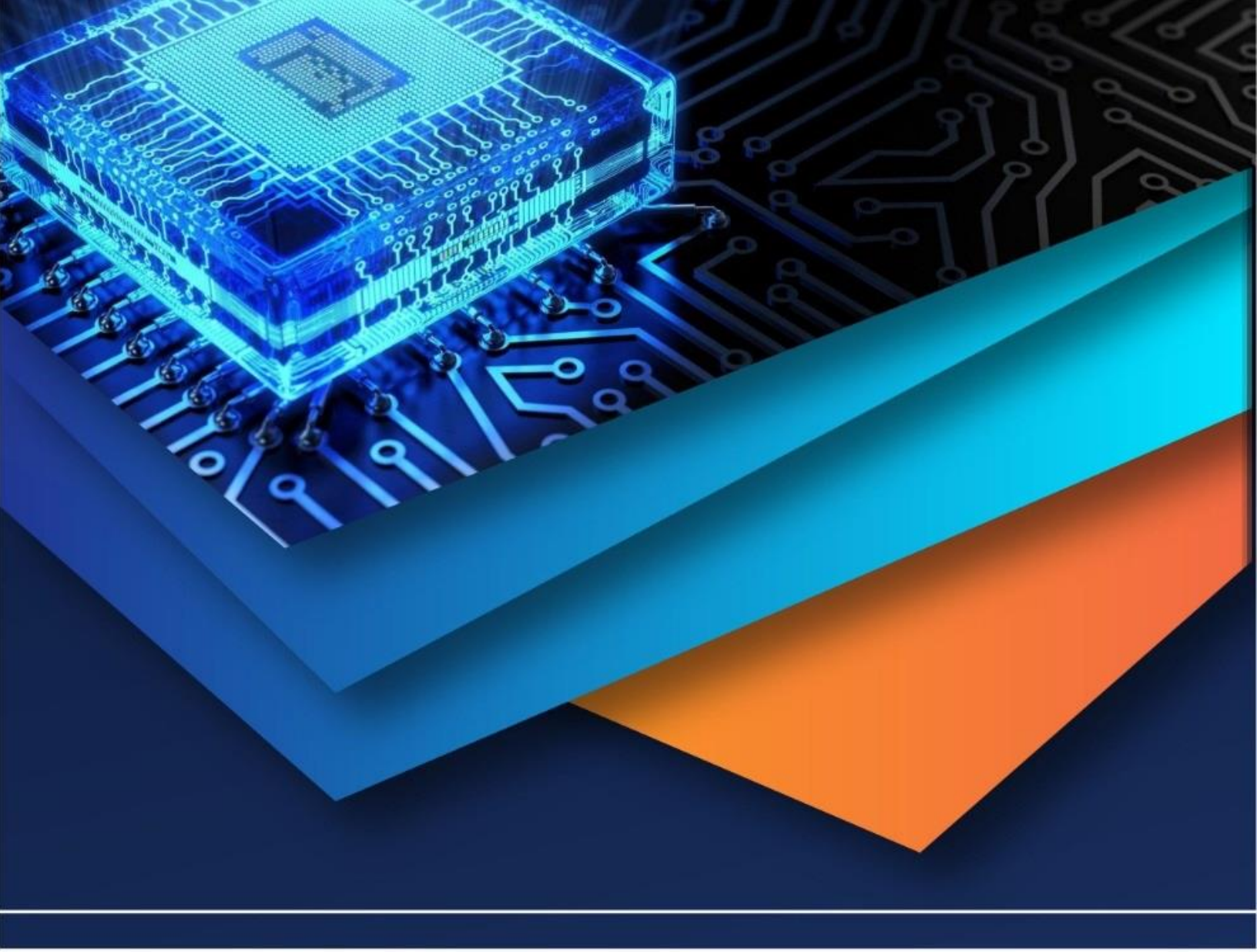

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