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# Polyherbal Facial Scrub

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**Abstract:** *The main purpose of present study was to prepare a Polyherbal scrub incorporated into gel. In today's life for both women and men cosmetics plays an important role to glowing 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 make-ups. Herbal cosmeceuticals usually contain the plant parts which possess antimicrobial, antioxidant and anti aging properties. It is the safest product to use routine with no side effects and cosmeceuticals are the product which influences the biological function of skin. The prepared gel was evaluated for various parameters such as appearance.*

*Cosmeceuticals are the product that improve the function of skin. Orange peel powder and multani mitti used as active ingredient and incorporated into the polyherbal scrub along with sodium lauryl sulfate into the formulation. The evaluation polyherbal scrub is done by various parameter such as appearance, pH, viscosity, spreadability, washability, irritability, and found to be satisfactory result. Thus, the prepared formulation can be used as an effective scrub which promote healthy and glowing skin.*

**Keyword:** *Polyherbal, cosmeceutical, antimicrobial, multani mitti, sodium lauryl sulfate, etc.*

## I. INTRODUCTION

The word cosmetics is derived from the Greek word "kosmos". It describes as objects intended for rubbing, pouring, sprinkling or spraying or presenting on the human body or otherwise any part of the cleansing, glittering, which promotes attractiveness or a cautious appearance. From ancient times the various herbs used to cleanse and purify beauty. Cosmetics are available in different forms and each has its own role to play in the skin. The skin is the largest organ in the body. Provides protection, water conservation, lubricate and regulates temperature. The skin becomes dull, not hot for a variety of reasons and this can be successfully overcome by applying a scrub. There are two types of scrubs that are applied to the skin such as facial scrubs and body scrubs. Oil consumption is high on facial scrubs because they are so bad they remove dead skin cells and exfoliate the skin. The skin is divided into three types such as dry skin, oily skin and sensitive skin. With regular use of scrubs the skin glows or becomes smoother because dead skin cells are removed and thus produce new skin cells. Exposure of the skin to an external agent can be prevented by using topical agents directly on the skin. Make-up such as a face pack, face cream, sun cream and face exfoliant are corrected by combining the right foundation. The scrubs can be applied directly to the skin or applied with a small cosmetic pad. Mild massage is recommended when applying a scrub gel that helps improve blood circulation and increases oxygen supply to the entire surface of the skin. The herbal drug industry in India is probably the oldest medical care system in the world. The history of herbal medicine in ancient India is so ancient that the ancient form of herbal remedies has even been mentioned in the Vedas, an ancient Indian religious textbook. The ancient methods of traditional healing of Ayurveda and Unani deal with the use of herbs and natural products to address health conditions. In ancient times when Scrub were not manufactured people used to use Panchamrit. In these Curd, Honey, Milk, Ghee, Sugar it Moisturizes the skin, Shows Bleaching effect, Soothing the skin, face and Glowing[1] Herbal remedies seem to be new to Western therapists and physicians, the fact is that many prescribed drugs even today contain plant extracts.[2] Currently, countries around the world appreciate this type of traditional medicine and Indian herbal medicine is well needed which leads to its rapid growth and proves a growth rate of about 45 percent per year. A tremendous increase in the global demand for herbal remedies, skin care products and even cosmetics has been noted in recent years[3] The skin, which is the most exposed part of our body to germs, needs protection from skin diseases, especially the germs that cause acne. Acne mainly affects people with 75% of the skin problems that young people face today. It may even progress into old age and especially affect areas with severe oil shortages such as the face and neck. Acne is most commonly seen in the presence of seborrhea, inflammatory lesions, comedone, excess sebum production and infection of bacteria such as Propionibacterium acnes, Staphylococcus epidermidis, and Malassezia furfur in the follicles. These microorganisms can therefore be targeted for possible treatment of acne. The use of long-acting antibiotics in treatment makes living organisms more resistant to drugs.

This adaptation has many facets and depends on the body's response to treatment and hormonal factors, stress conditions etc. To address this problem, alternative therapies have been studied. Since herbal extracts cannot be used directly for treatment, they were prepared and used as a poly herbal anti-acne face gel. In this study, gels made using Hydroxy propyl methyl cellulose (HPMC) and Carbopol with various concentrations of herbal medicines were tested for their anti-acne and anti-bacterial activity against acne-causing acne.

Cosmetics product are mixture of chemical composition obtained from either its natural or synthetical sources used for cleansing, beautifying, attractiveness Skin indicates the health of individual[1]. On regular use of scrubs, skin become glowing, smooth, soft and healthy because dead cells of skin are removed and exposing new skin cell[2]. Mild abrasive agent is one of the key ingredient in facial scrub formulation[3]. Scrub can be directly applied onto the skin or can be applied with small cosmetic pad and gently massage is recommended on application of the scrub which helps to improve blood circulation and increase oxygen supply to all surface of the skin[3-4]. Nowday's acne, and pimples are major problem of skin and dry skin, wrinkle and dark spot are second most problem. Scrub is used to remove all this skin problem of any type of skin.

## II. BENEFITS OF SCRUBBING YOUR SKIN

- 1) They allow your skin to absorb moisturizer better. By doing dead skin cell buildup, any moisturizer applied afterward will soak into the skin more thoroughly.
- 2) They unclog pores and prevent ingrown hairs. By regularly using a body scrub, you'll unclog your pores, which can prevent razor bumps and ingrown hairs.
- 3) They leave your skin smoother and more even. When dry skin isn't removed, it makes the skin rough to the touch and has a dull, cracked texture and appearance. By removing the dead, dry cells, you should have smoother and more even skin.

## III. AYURVEDIC COSMETOLOGY

Cosmetology is nothing but beauty treatment that will change the appearance of our external beauty. Ayurveda is the ancient system of medicine which heals our physical, mental and spiritual health. According to Ayurveda beauty has the main role. Ayurveda determined beauty by Prakrti(body constitution), Sara (structural predominance), Samhanana (compactness of body), Twak (skin complexion), Pramana(measurement), Dirghayu Lakshana(symptoms of long life).

Ayurveda concentrates on both internal and external beauty. So Ayurveda cosmetology starts from the mother's womb at the time of union of sperm and ovum also the diet and lifestyle which follows during pregnancy. Ayurveda described the diet and lifestyle which has to be followed during pregnancy and what should not be followed it helps in the fetus's physical, mental and spiritual health. A proper balancing of three doshas (Vata, Pitta, Kapha), Saphadhatus and also following proper Dinacharya, Ritucharya, Ratricharya etc in our life helps to maintain healthy skin and youthfulness.

## IV. DIFFERENCE BETWEEN SCRUB AND EXFOLIATOR

The main difference between scrub and exfoliator is that scrub is a cream-based skincare product that contains tiny exfoliating particles while an exfoliator is a mechanical or chemical agent you apply to the skin to remove dead cells from the surface of the skin.

## V. AN EXFOLIATOR

Exfoliating is the process of removing old dead skin cells on the skin's outermost surface and cleaning pores on the skin, which are clogged by impurities. This process can revive your skin while softening and stimulating the regrowth of cells. Exfoliators are skincare products that help you to exfoliate the skin. They can help you to soften your skin, lighten acne scars, as well as, improve skin texture. Moreover, there are two ways to exfoliate skin: mechanical or physical exfoliation and chemical exfoliation.

## VI. A SCRUB

A scrub is a cream-based skincare product that contains tiny exfoliating particles. When you massage a scrub across the skin, it helps to smooth the skin by removing dry, dead skin cells.

When you are choosing a scrub, it is better to choose a scrub with artificial grains like polyethylene grains and jojoba beads, instead of scrubs with natural seeds or shells or ingredients like apricot kernels, which may cause irritations. This is especially true for sensitive and acne-prone skin.

### VII. THE DIFFERENCE BETWEEN FACE SCRUB AND FACE WASH

The key difference between a scrub and a cleanser is that facial scrubs are usually intended to remove dead skin cells through abrasion or chemical dissolution. Not only does this limit how often people with certain skin types should use scrubs, but it also means that washes are useful in different circumstances. Since the skin is constantly regenerating its own cells, dead skin cells can pile up and clog pores, dull the complexion, and contribute to a flaky appearance to the skin. This is why regular exfoliation is helpful, but it has its drawbacks. Facial cleansers or face washes, on the other hand, are less aggressive forms of cleansing that are recommended to remove the daily buildup of oil and debris and prime the skin for the rest of your skincare routine. Exfoliants are also essential parts of a skincare routine, but probably should not be used every day due to their intensity.

### VIII. SELECTION OF SCRUB ACCORDING TO TYPE OF SKIN

#### A. For Oily Skin

If you have extra oily skin, opt for a scrub with ingredients such as sea salt or sugar, which will help to remove excess oil from your skin. Avoid scrubs with heavy oils, like coconut or avocado oil, as these can make your skin even more oily.

#### B. For Dry Skin

Look for scrubs that contain natural oils like olive or jojoba oil, which will help to nourish your dry skin and keep it hydrated. You should also look for moisturizing ingredients like shea butter or almond oil.

#### C. For Sensitive Skin

Look for scrubs with gentle ingredients like oats or honey for sensitive skin. These will help to gently exfoliate your skin without irritating it. Avoid harsh abrasive ingredients, such as walnut shells or apricot kernels, which can be too harsh and cause inflammation.

#### D. For Normal Skin

Normal skin types can use any scrub. You can experiment with different ingredients to find the one that works best for your skin.

### IX. MATERIAL AND METHOD

#### A. Preparation Of Mixture

The mixture was prepared by simple mixing method i.e. by trituration method. orange peel was dried and grinded in fine powder by using grinder. Bees wax melted by double boiler method, melted bees wax and orange peel powder mixed in mortar pestle. Added measured quantity of aloe vera gel, turmeric powder and multani mitti in mortar and continuously mixed with pestle. Rose oil added in that as quantity sufficient. Methyl paraben is weighed and dissolved in beaker containing water and added in preparation as a preservative. Then prepared face scrub was packed in well closed container, labeled and used for further study.

COMMONNAME	CATEGORY	QUANTITY (%)
Orange peel powder	Anti-inflammatory, fight against wrinkle, dark spot, fine lines.	0.5
Bees wax	Natural exfoliator.	0.3
Multani mitti	Remove black heads and white heads.	0.25
Sandalwood powder	Smoothing, cooling effect and improve fairness.	0.2
Turmeric powder	Antiseptic and glowing skin.	0.05
Aloe vera gel	Skin moisturizer.	0.3
Honey	Antioxidant, Antiseptic.	0.2
Sodium lauryl sulfate	Foaming agent.	0.4
Methylparaben	Preservative.	0.4
Glycerin	Skin hydration, softness and relives dryness.	0.2
Rose oil	Vehicle and smelling agent.	Q.S

## X. RESULTS AND DISCUSSION

### A. Appearance

For colour and odour prepared scrub was evaluated. The colour was found to be yellowish brown and odour was found to be pleasant and characteristic.

### B. pH

The prepared scrub was evaluated for its pH by using calibrated digital pH meter at constant temperature of 1gm of product and it found to be 5.7.

### C. Wash Ability

The product applied on skin, by washing with water it was easily removed were checked manually.

### D. Spread Ability

On the glass slide small amount of scrub place and another slide was placed on the scrub. The spreadability of scrub was also checked by manually and after applied scrub on skin with gentle rub and it was easily spreadable.

### E. Viscosity

By using Brookfield viscometer with spindle no. 62 the viscosity of scrub was determined.

### F. Consistency

The consistency was determined manually. It was found to be solid by visual observation.

### G. Sensitivity and Irritability

The preparation of scrub applied on human volunteers and kept for few minutes and observed for side effect. It was observed nonirritant.

### H. Grittiness

In Scrub few small gritty particles were observed.

### I. Foamability

The foamability was measured by small amount of scrub was shake with water in graduated measuring cylinder.

2: EVALUATION OF POLYHERBAL FACE SCRUB SR.NO.	PARAMETERS	OBSERVATION
1	Colour	Yellowish brown
2	Odour	Pleasant and characteristic
3	pH	5.7
4	Consistency	Good
5	Viscosity	1.4580poise
6	Spreadability	5.73g.cm/sec
7	Washability	Easily washable
8	Grittiness	Small gritty particle
9	Irritancy	Nonirritant
10	Foamability	Foam volume 100ml at 6 minutes
11	Extrudability	Easily extruded

## XI. CONCLUSION

The knowledge of medicinal plants used by the people of seems to be well known to its culture and tradition. In the present study we identified many plants used by the people to cure dermatological disorders and as cosmetics. Some of the plants were found to have dual use, both as curative and cosmetic. Quality control test must be carried out for herbal cosmetics. The prepared scrub was evaluated by using various parameters and was found to be satisfactory and good for the application on the skin to make healthy and glowing without any side effect. The prepared scrub is planned to carry out with *in vivo* studies for its irritancy and adverse effects.

## REFERENCES

- [1] Sachin Bhagwat Aglawe, et-al., Preparation & Evaluation of Polyherbal Facial Scrub, Journal of Drug Delivery and Therapeutics, 2019, Vol 9 (2): 61-63.
- [2] Pondey shivanand, et-al., Herbs Play an Important role in the field of Cosmetics, International Journal of PharmTech Research, 2010, Vol 2 No1: 692 - 639. 10. Hamsinah Hasan, et-al., Development formulation of Lemon Syrup (citrus limon L.) in facial Peeling Scrub with variation Concentration of Tea- stearate, Journal of Pharmaceutical of Medicinal Sciences, 2017, Vol 2(2) : 63-67.
- [3] Farheen Begum and Mohammad Idris, Design & Development of Unani Exfoliation facial Scrub (UEFS) for Skin Care, 2016, Vol 5 (12): 699-710.
- [4] Sonia Parashar, et-al., Antimicrobial and Antioxidant Activities of Fruits and Vegetable peels: A Review, Journal of Pharmacognosy and Phytochemistry, 2014 Vol 3(1): 164-164.
- [5] Prathyusha, et-al, Formulation and Evaluation of polyherbal Face Scrubber for Oily Skin in Gel Form, International Journal of Pharmaceutical and Sciences and Drug Research, 2019, Vol 11(4) : 126-128.
- [6] Abdullahi R. Abubakar, et-al, Preparation of Medicinal Plants Basic Extraction and Fractionation Procedures For Experimental Purposes, Journal of Pharmacy and Bioallied Sciences, 2020, Vol 12 (1) : 1-10.
- [7] Shuangshuang Guo, et-al., A Review of Phytochemistry , Metabolite changes, and medicinal uses of the Common Sunflower Seed and Sprouts (*Helianthus annuus L.*), Chemistry Central Journal ,2017:11-95.
- [8] Herbert Wieser, et-al., Wheat - An Exceptional Crop: Botanical Features, Chemistry, Utilization, Nutritional and Health Aspects ,chemical composition of wheat grains) , Woodhead Publishing and AACC International Press, Vol 2020:13-45.
- [9] SK. Kaleem Basha, et-al, Poppy Seed - An Overview, RA Journal of Applied Research, 2016, Vol 2 (10):670-672. 18 . Hui Luo, et-al., Chemical composition and *in vitro* evaluation of the cytotoxic and antioxidant activities of supercritical carbon dioxide extracts of pitaya (dragon fruit) peel, chemistry Central Journal 8, 1, 2014.
- [10] Fatemeh Farouzanlar, et al., Black cumin (*Nigella sativa*) and its constituent (thymoquinone): a review on antimicrobial effects, Iranian Journal of Basic Medical Sciences, 2014, Vol 17(12):929-938.



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