



# FORMULATION AND EVALUATION OF HERBAL SCRUB GEL

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## ❖ ABSTRACT

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.

Thus, in the present work, we formulated a herbal scrub gel which can be easily made with the easily available ingredients. After evaluation, we found good properties for the free from skin irritation and maintained its consistency even after stability storage conditions. Results of the study scientifically verified that herbal scrub gel having enough potential to give efficient glowing effect on skin. The overall study is useful to substantiate product claims due its useful benefits on the human beings.

**Key Words :-** Scrub gel, softening, and cleansing, moisturizing, fairness.

## ❖ INTRODUCTION:

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 use of 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 cosmetic products used as beauty regime to satisfy the purpose of beautification.

Since the ancient era, people are aware of the use of plants for the essential needs of a healthy and beautiful skin. Cosmetics are products used to clean, beautify and promote attractive appearance. Skin of the face is the major part of the body, which is a mirror, reflecting the health of an individual. A balanced nutrition containing amino acids, lipids and carbohydrates are required for the skin to keep it clear, glossy and healthy. In ancient times, women were very conscious about their beauty and took special care of their specific skin types. Even today, people especially in rural areas, and hilly regions go for the natural remedies like plants extracts for various cosmetics purposes like neem, aloe vera, tulsi, orange peel, rose etc. Herbal cosmetics are the products which are used to purify and beautify the skin.

The main advantage of using herbal cosmetic is that it is pure and does not have any side effects on the human body. People have rough skin and when they don't take sufficient care, then the skin turns dark due to overexposure to the sun, other pollutants etc. In this article we have formulated herbal face pack to whiten, lighten and brighten the skin naturally for men and women. This scrub gel has natural skin lightening property and can be easily prepared at home. Scrub gel with natural constituents are rich in vital vitamins that are essential for the health and glow of the skin. These substances have been proven to be beneficial for skin in many ways. Natural facial packs are easy to use. They increase the circulation of the blood within the veins of the face, thereby increasing the liveliness of the skin. A good herbal scrub gel must supply necessary nutrients to the skin, available in the form of free-flowing powder applied facially for the external purpose. It should penetrate deep down the subcutaneous tissues to deliver the required nutrients. Every type of skin is specific for the requirement of skin pack

They are natural in every aspect, having larger shelf life. They have no added preservatives. They can be easily formulated and stored over a larger span of time. Present research article deals with the formulation and evaluation of herbal scrub gel for glowing skin by using natural materials i.e., multani mitti, turmeric, sandalwood, wheat cover powder, orange peel, tulsi, neem, honey.

Nowadays different types of packs are available separately for the oily, normal and dry skin. Scrub gel are used to increase the fairness and smoothness of the skin. It reduces wrinkles, pimples, acne and dark circles of the skin. Scrub gel which are recommended for oily skin prone to acne, blackheads, usually control the rate of sebum discharge from sebaceous glands and fight the harmful bacteria present inside acne lesion. The leftover marks of skin can be reduced by incorporation of fine powders of sandalwood, rose-petals and dried orange peels. Herbal scrub gel are nowadays being used on a large scale, due to the various benefits of them over chemical based packs. They are non-toxic, non-allergic and non-habit forming.

A good herbal scrub gel must supply necessary nutrients to skin and produce glow on face, the process of smearing of these herbs mix on face is known as "mukhalepana". It is a beauty therapy and is very popular name as facial. The different types of skin conditions are need different types of herbal scrub gel because the some scrub gel are not suit for the specific type of skin. The scrub gel are increase the blood circulation of veins of the face and provide the necessary nutrients to the skin for growth of new cells and healthy.

Scrubber is formulated to remain healthy and of good appearance, the skin surface requires frequent cleansing to remove grime, sebum and other secretions, dead cells, crusts and applied make-ups.

A gel is a solid or semisolid system of at least two constituents, consisting of a condensed mass enclosing and interpenetrated by a liquid. Gels and jellies are composed of small amount of solids dispersed in relatively large amount of liquid, yet they possess more solid-like than liquid-like character. The characteristic of gel and jelly is the presence of some form of cutaneous structure, which provides solid-like properties.

#### ❖ Aim And Objective:-

- **Aim:-** Formulation And Evaluation of Herbal Scrub Gel
  
- **Objective:-**
  - As due to increased pollution, allergy, microbe's etc. human skin has become more sensitive and prone to faster aging. An attempt has been made to synthesize a pack ideal for all skin types. After the synthesis, all the parameters have been calculated in order to meet up the quality standards
  - To formulate and evaluate a cosmetic preparation poly herbal scrub gel made from herbal ingredients.
  - Herbal scrub gel or masks are used to stimulate blood circulation, rejuvenates and help to maintain the elasticity of the skin and remove dirt from skin pores.
  - To moisturize, cleanse, tone and rejuvenate your skin. Masks are designed for each skin and age type.

#### ❖ BENEFITS OF SCRUB GEL:

- The scrub gel is providing the Nourishment to the skin
- They help to prevent premature aging of skin.
- They prevent the formation of wrinkles, fine lines and sagging of skin.
- The harmful effects of pollution and harsh climates can be reduced by the use of scrub gel.
- The scrub gel are used regularly for glow, improve skin texture and complexion.
- They help to restore the lost shine and glow of skin in short span of time.
- Helps to reduce, acne, pimple, scars and marks depending on its herbal
- The harmful effects of pollution and harsh climates can be effectively combated with judicious use of face packs.

- Scrub gel usually remove dead cells of skin.

### ❖ PRECAUTIONS TO BE TAKEN WHILE APPLYING SCRUB GEL:

- Select the scrub gel according to your skin type. Take opinion of natural therapist or concerned skin expert before applying scrub gel.
- The scrub gel should not be left on face more than 15 to 20 minutes. Keeping for very long time may result in formation of wrinkles, sagging of skin and Enlargement of open pores.
- Apply scrub gel once in a week. Don't try to peel or scratch the dried face pack. This may harm underlying skin.
- Spray water (which is at room temperature) on face before removing dried face pack. After removing the scrub, roll an ice cube on facial skin. This helps to close open pores and tightens skin. It also tones and sooths the skin.
- Do not scrub face vigorously. This may result in eruption of pimples and dark spots. Stay away from heat when you have applied scrub gel.
- Avoid applying scrub gel near "eye zone". The skin around eye is very delicate. The process of removing scrub gel may damage skin around eyes.

### ❖ METERIALS AND METHOD:

#### ❖ Ingredients of formulations:-

#### A. Multani Mitti (Calcium bentonite):

Multani Mitti are easily available and helps in diminishing pore sizes, removing blackheads and whiteheads fading freckles, soothing sunburns, cleansing skin, improving blood circulation, complexion, reducing acne and blemishes and gives a glowing effect on skin as they contain healthy nutrients. Multani mitti is a best natural source of magnesium chloride.



**Fig. 1:- Multani Mitti**



**B. Turmeric (*Curuma longa*):**

Turmeric has been used in this preparation due to its blood purifying property and helps in wound healing, because of its antiseptic action. It cures the skin diseases occurring due to blood impurities. It is a very good anti-inflammatory and anti-allergic agent. The phytoconstituents, mainly terpenoids present in it helps to lighten the skin tone. Turmeric delays the signs of aging like wrinkles, improves skin elasticity. It cures pigmentation, uneven skin tone and dull skin.

**Fig. 2:- Turmeric****C. Sandal wood (*Santalum alba*):**

The Sandalwood is common in india and it has an antitanning and anti-aging property. It is used in the treatment of skin disease, it has toning effect, emollient, antibacterial properties, cooling astringent property, soothing and healing property.

**Fig.3:-Sandal Wood****D. Wheat cover powder (cereal):**

Wheat flour's absorbent properties make it effective in managing excess oil on the skin. Mixing it with other ingredients like yoghurt or honey can create a natural face mask for oil control.



**Fig. 4:- Wheat cover powder**

**E. Orange peel (Citrus reticulata):**

Orange peel is a covering of citrus fruit which contains different nutritional source such as vitamin C, calcium, potassium and magnesium. It prevents the skin from free radical damage, skin hydration and oxidative stress. Also it has instant glow property, prevent acne, blemishes, wrinkles and aging.



**Fig.5:- Orange Peel**

**F. Tulsi Leaves Powder (Tulsi):**

Tulsi helps in thoroughly cleansing the skin and cleaning out the pores from deep within. It helps to eliminate dirt, impurities, pollutants and excess oil that make home in your pores, and can cause skin problems.



**Fig.6:- Tulsi**

### G. Neem powder (*Azadirachta indica*):

It has an anti-inflammatory, antiseptic activity and highly beneficial for oily and acne prone skin. It is commonly used in antibacterial agents.



**Fig.7:- Neem Powder**

### H. Honey (Shahad):

Honey is an Effective Pore Cleanser and Gentle Exfoliator. Honey is naturally antibacterial and exfoliating. These properties make it an effective natural pore cleanser for removing deep-down dirt and debris that may clog the pores and contribute to skin issues.



**Fig. 8:- Honey**

❖ **METHODS OF COLLECTIONS OF DRUG:****1: Collection of Orange peel powder:**

Fresh orange were collected from college botany garden. The orange were washed well using tap water. The peel is separated, then the pulp of orange was separated and cutting them into small pieces then it was dried in shade for a period of 3-4 days. The dried samples were grinded properly grinder to obtain the powdered form. Pass through sieve no. 60

**2: Collection of Neem leaves powder:**

Fresh neem leaves were collected from college campus. Fresh neem leaves were dried in shade for 4-5 days These leaves are grinded properly using mixture to obtain and pass through sieve no. 60.

**3: Collection of Tulsi leaves powder:**

powder. Pass through sieve no. 60. Fresh tulsi leaves were collected from college campus. They were dried in shade for 3-5 days. Then grinded properly to form

**4: Collection of Wheat cover powder :**

Wheat was soaked in the water for 3-4 days then crushed, squeezed and separated the covers and pass through sieve no. 60

**FORMULATION TABLE OF HERBAL SCRUB GEL:-**

| SR. NO. | CRUDE DRUG          | QUANTITY | USES                        |
|---------|---------------------|----------|-----------------------------|
| 1.      | Wheat cover powder  | 1%       | Provides Nourishment        |
| 2.      | Neem leaves powder  | 1%       | Remove blackheads           |
| 3.      | Tulsi leaves powder | 0.5%     | Cleanser                    |
| 4.      | Turmeric powder     | 1%       | Glowing skin                |
| 5.      | Orange powder       | 1%       | Treat pimples               |
| 6.      | Sandalwood powder   | 1%       | Soothe sunburn              |
| 7       | Multani mitti       | 1%       | Remove blackheads           |
| 8.      | Honey               | 0.5%     | Good for wrinkles and aging |



|     |                 |      |               |
|-----|-----------------|------|---------------|
| 9.  | Carbapol 934    | 0.5% | Gelling agent |
| 10. | Triethanolamine | q.s. | pH adjuster   |
| 11. | Methyl paraben  | 0.2% | Preservative  |
| 12. | Distilled water | q.s. | Vehicle       |

### ❖ METHOD OF PREPARATION OF SCRUB GEL-

1. Carbapol 934 soak for 24 hr. and make gel base. Adjust the PH by using triethanolamine.
2. Add measured quantity of powdered herbs in it.
3. Add methyl paraben as a preservative.
4. Make up the volume and stored in the suitable well- closed container.



**SCRUB GEL**

### ❖ EVALUATION:

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

#### 1. Colour:

The colour of the face scrub gel was checked by visually.

#### 2. Odour:

The formulation was evaluated for its odour by smelling it.

#### 3. Consistency:

It was determined manually.

**4. pH:**

pH of 1% solution of the formulation was measured by using a calibrated digital pH meter at constant temperature.

**5. Washability:**

Formulation were applied on the skin easily remove by washing with water were checked manually.

**6. Spreadability:**

The spread ability of the gel was found manually by applying the on the skin with hand or face gentle rub which easily spread through the face.

**7. Rheological study:**

The viscosity of the developed scrub gel formulation was determined by using Brookfield viscometer (DV- E viscometer) with spindle no.62

**8. Sensitivity:**

The formulated preparation applied on human volunteer's (hand and face) and observe for any side effects.

**❖ RESULT:**

- 1. Colour-** Yellowish- green
- 2. Odour-** Pleasant
- 3. Consistency-** Good
- 4. pH-** pH of formulation was found to be 4.2
- 5. Washability-**Formulation easily removed by washing with water.
- 6. Rheological study-**Viscosity of formulation was found to be 505 cp at 20 rpm, 50% Torque and S-62.
- 7. Sensitivity-**No any irritation, itching and redness occurs when applied on the human skin.



Before applying  
Scrub gel

After applying  
Scrub gel



Comparison after application

### ❖ CONCLUSION:

Natural remedies are the best treatment of any disease, because these are safer than the synthetic ones. At a time, people need treatment for various skin problems without side effects, so natural remedies are best option for this. The herbal scrub gel is used to rejuvenate the muscles, maintain the elasticity of the skin, remove adhered dirt particles and improve the blood circulation. It is used in the treatment of acne, pimple, scars, and marks, and provides a soothing, calming and cooling effect on the skin. The natural scrub gel are used for controlling premature aging to the skin, wrinkles, fine lines and loosening of skin. It can provide natural scrub gel after using this. It is a very good combination of herbal scrub gel containing naturally available ingredients like multanimitti, turmeric, tulsi, wheat cover, sandalwood, orange peel, neem and honey.

After evaluation, we found good properties for the scrub gel, free from skin irritation and maintained its consistency even after stability storage conditions. It has been revealed that herbal scrub gel having enough potential to give efficient glowing effect on skin. The overall study is useful to substantiate product claims due its useful benefits on the human beings. Herbal ingredients opened the way to formulate cosmetics without any harmful effect. Herbal scrub gel are considered as sustaining and productive way to advance the appearance of skin.

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