Formulation and Evaluation of Polyherbal Facial Scrub

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Abstract: Cosmetics are defined as products used for the purpose of cleaning, beautifying, enhancing attractiveness, or changing the appearance. Plant-based cosmeceuticals usually contain some of the plants with antibacterial, antioxidant, and anti-aging properties. Herbal cosmetics are the safest everyday products with no side effects, and cosmeceuticals are products that affect the biological function of the skin. In this preparation, amla, green tea, cinnamon, Tulsi powder, Multani powder, Kasturi halad, ghee walnut and coffee are used as active ingredients and incorporated into gels prepared with different grades of Carbopol. Other ingredients such as propylene glycol, triethanolamine, and ethyl benzoate were added to the gel along with sodium lauryl sulphate. In this study, various herbal powders were used to formulate herbal face scrubs and evaluated with parameters such as smoothness, appearance, spread ability, irritating pH, detergency, and irritability.

Keywords: Polyherbal, Antioxidant, Anti-Aging, Less Abrasive, Skin Exfoliate Organ gels, Hydrogels, Polymers, Antiseptic, Antimicrobial

I. INTRODUCTION

The word cosmetics comes from the Greek word "kosmos". It represents any part of cleaning, glittering, fascinating, or careful appearance as an object intended to be rubbed, poured, sprinkled, sprayed, or present on the human body. Since ancient times, various herbs have been used to purify and purify beauty. Cosmetics come in many forms, each of which has a role to play on the skin. The skin is the largest part of the body. It provides protection, water exchange, lubrication and temperature control. The skin does not become dull or hot for various reasons. This can be successfully overcome by applying a scrub. Two types of scrubs, face scrub and body scrub, are applied to the skin. Face scrub oil consumption is high due to the very poor exfoliation and exfoliation of old dead skin cells. Skin is divided into three types: dry skin, oily skin, and sensitive skin. Regular use of peels will make the skin glow and smooth due to dead skin cells. Skin exposure to external agents can be prevented by applying the topical agent directly to the lateral skin. Makeups such as face packs, face creams, sunscreens and face scrubs can be modified with the right foundation. Scrubs can be applied directly to the sink or with a small makeup pad. A gentle massage is recommended when applying the peeling gel. This improves blood circulation and promotes oxygenation of the entire skin surface. India's Chinese herbal medicine industry is probably the oldest pharmaceutical system in the world. The history of ancient herbal medicine, which also mentioned ancient herbal remedies in the ancient Indian religious textbook Vedas. Traditional healing methods of Ayurveda and Unani deal with the use of herbs and natural products to treat health problems. In ancient times, people used Panchamrit before scrubs were made. These cottage cheeses, honey, milk, gee and sugar moisturize, bleach herbal remedies for Western therapists and doctors. Although seemingly new, many medicines, even those prescribed today, contain plant extracts. Currently, countries around the world appreciate this kind of traditional medicine, and Indian herbal medicine is in great need, leading to its rapid growth, proving a growth rate of about 30 percent per year. doing. In recent years, global demand for herbal remedies, skin care products and even cosmetics has increased significantly.

1.1 Advantages of Face Pack

1. It supplies essential nutrients to the skin and nourishes the skin
2. Removes dead skin on your skin.
3. Scrub the skin to make it smooth and smooth, and improve the texture of the skin.
4. Peeling contains natural whitening ingredients, which makes it even more effective.
5. Ingrown hair is always a problem and scrubbing is the solution to prevent this problem.

II. MATERIAL AND METHOD

Table 1: Material Table

| Sr. no. | Name                  | Figure | Medical Use                                      |
|---------|-----------------------|--------|-------------------------------------------------|
| 1.      | Amla powder           | ![Amla Powder](image1.png) | The antioxidants and Vitamin C in amla help to tone, tighten the skin, and make it firm. |
| 2.      | Green tea             | ![Green Tea](image2.png)  | Fights premature aging. Reduces redness and irritation. Treats acne. Moisturizes skin. |
| 3.      | Cinnamon bark         | ![Cinnamon Bark](image3.png) | Antibacterial, Antifungal, Antioxidant, Heal acne. |
| 4.      | Tulsi leaves powder   | ![Tulsi Leaves](image4.png) | Prevents acne and pimples Improve skin texture Cleanser |
| 5.      | Fuller’s earths       | ![Fuller’s Earths](image5.png) | Nourishes skin Reduce oiliness Remove blackheads |
| 6.      | Kasturi Haldi         | ![Kasturi Haldi](image6.png) | Antiseptic and improves Fairness, Fight acne |
| 7.      | Antiseptic and improves Fairness, Fight acne | ![Antiseptic and improves Fairness, Fight acne](image7.png) | Antiseptic and improves Fairness, Fight acne |
|   | Ingredient     | Function                                      |
|---|----------------|-----------------------------------------------|
| 8 | Walnut shells  | Exfoliating agent, protects skin from UV rays reduce inflammation |
| 9 | Coffee         | Anti-oxidant, Anti-aging, reduce inflammation. Remove dark circle, treat acne |
| 10| Carbopol       | Gelling agent                                 |
| 11| Propyl paraben | Preservative                                   |
| 12| Triethanolamine| Neutraliser                                    |
| 13| Propylene Glycol| Moisturiser                                    |
| 14| Sodium Lauryl Sulfate | Foaming agent                  |
2.1 Formulation of Herbal Face Pack

Table 2: Formulation Table

| Sr. No. | Name of Ingredients   | Taken Quantity |
|---------|-----------------------|----------------|
| 1       | Amla powder           | 10             |
| 2       | Green Tea             | 4              |
| 3       | Cinnamon Powder       | 5              |
| 4       | Tulsi powder          | 5              |
| 5       | Fuller’s earths       | 9              |
| 6       | Kasturi halad         | 9              |
| 7       | Ghee                  | 10             |
| 8       | Walnut shells         | 7              |
| 9       | Coffee                | 3              |
| 10      | Carbopol              | 8              |
| 11      | Methyl paraben        | 4              |
| 12      | Propylene glycol      | 7              |
| 13      | Sodium lauryl sulfate | 8              |
| 14      | Triethanolamine       | 4              |
| 15      | Distilled water       | q.s            |

2.2 Preparation of extract commonly used Methods in the Extraction of Medicinal Plants

A. Maceration
This is an extraction process in which Coarsely Powdered drug material, leaves or stem bark or root bark, are placed inside a container; menstruum is poured up until it is completely absorbed by the drug. The container is then sealed and stored for at least three days. The contents are shaken periodically, and when packaged inside the bottle it must be shaken from time to time to ensure complete release. At the end of the extraction, the micelle is separated from the marc by filtration or separation. Next, the micelle is then separated from the menstruum by evaporating in the oven or over a water bath. This method is simple and very suitable for thermolabile plant materials.

B. Evaluation Parameters
The prepared face wash gel was evaluated for various parameters as follows.

- **Colour:** The colour of the face wash gel was checked visually.
- **Odour:** The formulation was evaluated for its odour by smelling it.
- **pH:** pH of the prepared gel was evaluated. Small amount of the gel was applied on the pH paper.
- **Consistency:** It was determined manually.
- **Spread Ability:** Small amount of the gel was placed on the glass slide and another glass slide was placed on the gel. A wooden weight was placed on it. The time required for the gel to spread and the area was measured. The amount and the area of gel on the glass slide represents the efficiency of spreadability.
- **Extrudability:** Small amount of gel was taken into a collapsible ointment tube. One end closed and the other end kept opened. Slight pressure was applied on the closed side. The time taken to extrude and the amount of
gel extruded was noted.

- **Irritability**: Small amount of the gel was applied on the skin and kept for few minutes and found to be non-irritant.
- **Washability**: Formulations were applied on the skin easily remove by washing with water were checked manually.
- **Grittiness**: The product was checked for the presence of any gritty particles by applying it on the skin.
- **Foamability**: Small amount of gel was taken in a beaker containing water. Initial volume was noted beaker was shaken for 10 times and the final volume was noted.
- **Grittiness**: The product was checked for the presence of any gritty particles by applying it on the skin.

### III. RESULT

1. **Color**: Yellowish-green
2. **Odour**: Characteristic
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.

### IV. CONCLUSION

In the current study herbal face scrub was formulated, evaluated for various parameters. The results indicated that the formulation passed the tests. The prepared poly-herbal formulation nourish, moisturize, cleanses, protect the skin against premature aging, acne, and pimples. Thus, the developed formulation can be used as an effective scrub for using it to bear a healthy and glowing skin. In this all natural ingredients were used, so that they had no side effects or fewer side effects. The prepared herbal scrub was found to be satisfied for the application on the skin to make it healthy and glowing. The application of the scrub gel which helps to improve blood circulation and increases oxygen supply to all surface of the skin. After application of scrub, skin becomes softer, cleaner and refreshed.

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