



FORMULATION AND EVALUATION OF HERBAL SCRUB

Irshad Ahmad Mohd. Salim^{1*}, Shruti M. Meshram², Mohd. Bilal Sufi³, Shrishti S. Gawande⁴, Shravani S. Kumbharkar⁵ and Susmita W. Khandalkar⁶

¹HOD of Pharmaceutics New Montfort Institute of Pharmacy Ashti, Wardha.

²Students of New Montfort Institute of Pharmacy Ashti, Wardha.

³Department of Pharmaceutics, New Montfort Institute of Pharmacy Ashti, Wardha.

^{4,5,6}Students of New Montfort Institute of Pharmacy Ashti, Wardha.



*Corresponding Author: Irshad Ahmad Mohd. Salim

HOD of Pharmaceutics New Montfort Institute of Pharmacy Ashti, Wardha.

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ABSTRACT

It is necessary to clean the skin's surface on a regular basis to keep it clean and healthy. This includes removing facial makeup, dead cells, crusts, dirt, sebum, and other secretions, as well as changes in the atmosphere, and an uneven lifestyle. Applying topical treatments with a chemical base accelerates the degradation of the skin and its appendages. This calls for an appropriate, quick fix that can not only improve the skin's appearance over time but also prolong its effects. Evaluation criteria for the scrub were skin radiance, deep pore cleaning, soothing effect, and pimple effect. This is a clinical study to evaluate transdermal safety and efficacy of the herbal formulation. The results obtained were highly satisfactory. Natural or herbal cosmetics are made with natural substances to treat acne, wrinkles, regulate oil secretion, and get rid of tan lines.

KEYWORDS: Facial Scrub, Antioxidants, Skin Exfoliate, Spreadibility.

INTRODUCTION

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. Moreover, facial scrubs are a great way to maintain the smoothness of the neck skin, which facilitates simpler exfoliation. It will be easier to use if you glance upwards when exfoliating to get good, taut skin on the neck. For all skin types, facial scrubs are a great thorough cleansing and exfoliating treatment that are especially helpful for oily skin. Any neutral face scrub helps to get rid of extra oil, grime, and pollutants. You can use this multipurpose mixture as a face mask or as a facial scrub. Combine with water or a herbal infusion, apply to the face, and then give it a gentle rinse. 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 old cells and making room for new ones by the application 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. Every facial, including chemical or microdermabrasion peels,

involves exfoliation. Chemical or mechanical methods can be used to exfoliate skin.^[1]

Herbal exfoliates remove superficial skin cells and promote sub-epidermal cell growth, which mitigates age-related changes and environmental assault. The rate of cell turnover significantly decreases with age. Because most dead cells on the face's surface stay there for a longer amount of time, fine lines can be accentuated and the complexion can appear lifeless and dull. Frequent wiping of the skin's surface is necessary to keep it healthy and attractive by removing dead cells, crusts, sebum and other fluids, dirt, and applied makeup. Exfoliating the skin to physically remove these dead skin cells by using a scrub or by employing herbal cures that have anti-aging, anti-oxidant, anti-septic, and vitamin characteristics to help make the skin radiant and appealing by giving it a thorough cleansing.^[2]

Herbs

Mother Nature has given humans, God's favorite creation, everything they need to survive on this planet: water to slake their thirst, air to breathe, grains to feed their hunger, fire to light, and so forth. Any plant or plant extract that has nutritional and therapeutic properties, such as leaves, bark, berries, roots, gums, seeds, stems, and flowers, is referred to as a herb. Mother Nature's gift, herbs have been utilized for medicinal purposes across

many eras and societies in mankind history. According to the Ayurveda, the oldest system of natural medicine, states that herbs function by balancing the three elements of the human body—Vata, Pitta, and Kapha—and by the body's self-correcting mechanism. Herbal therapy keeps the body in good condition and heals illnesses so that a person can live a long, healthy life. In traditional medicine, including Ayurvedic, homeopathic, naturopathic, traditional oriental-inspired, and Native American Indian medicine, herbal extracts are the most important ingredient.^[3]

Definition of herbal cosmetics

These are cosmetics made with substances derived from plants that have cosmetic properties. The moderate effect and non-toxic nature of botanicals have led to a recent increase in their use in beauty product. Both naturally occurring component and Phyto-ingredients are employed in cosmetics. Organic products consist oils, extracts, fluids etc. Pure components acquired through diverse methods are referred to as phyto-ingredients.^[4]

Facial scrub

Cosmetics come in a wide variety, and each one serves a specific purpose on the skin. A variety of factors can contribute to dull, non-glowing skin, but these can be successfully addressed with the use of scrubs. Facial and body scrubs are the two types of scrubs that are applied to the skin. The only thing separating these two is amounts of sugar and oil added to each. Face scrubs use a large amount of oil, which resulting in less abrasive. it removes cellular debris from the skin and exfoliates it. scrub can be applied to any type of skin. The only component of a scrub that changes depending on the kind of skin is the essential oil. Regular use of scrubs leaves skin smoother and more radiant as they remove dead skin cells, revealing new ones. a mild abrasive agent is one of the primary ingredients in the face scrub's formula. Scrubs can be put directly on the skin or through the use of a tiny cosmetic pad .It is suggested to massage the skin gently after using the scrub gel, as this enhances blood circulation and the distribution of oxygen throughout the skin's surface

Ideal properties

The following characteristics are considered ideal for a scrub: It should be

- ✓ Harmless
- ✓ have tiny gritty particles
- ✓ mildly rough,
- ✓ Not irritating
- ✓ Non sticky
- ✓ remove dead cells.^[5]

Advantage of herbal scrub

1. Gently and Nourishing: Herbal scrubs are formulated with organic and natural components that are kind to skin; they don't include any harsh chemicals and artificial fragrances that can damage the skin

2. Effective exfoliation: Herbal scrubs contain natural exfoliants such as sugar or salt that gently Remove dead skin cells gently, clear clogged pores, encourage cell renewal, leaving the skin looking brighter and smoother.
3. Moisturizing: Herbal scrubs contain natural oils and humectants that contribute to the skin's hydration and nourishment, leaving it feeling supple, moisturized, and soft.
4. Suitable for all skin types: Herbal scrubs are generally safe and suitable for since they don't contain harsh chemicals that can irritate skin, they are suitable for all skin types, even those with sensitive skin.
5. Environmentally friendly: Herbal scrubs are made from natural and biodegradable ingredients, making them a more environmentally friendly option than synthetic scrubs.

Disadvantage of herbal scrub

1. Compared to synthetic scrubs, herbal scrubs manufactured from premium, natural components may be more costly, rendering them less affordable for certain individuals'
2. May not be as effective as synthetic scrubs: While herbal scrubs can be effective at exfoliating the skin and promoting cell renewal, they may not be as effective as synthetic scrubs that contain stronger exfoliants.
3. May cause irritation: Although herbal scrubs are generally safe for most skin types, some people may become irritated or have allergic reactions to specific components. to make sure the product is safe for your skin type, it is crucial to patch test it before using it.
4. Short shelf life: Herbal scrubs made with natural ingredients may have a shorter shelf life than synthetic scrubs, which can contain preservatives that extend their shelf life. This means that herbal scrubs may need to be used up more quickly to avoid spoilage.^[6]

Selection of scrub based on skin type

- For greasy skin: People with oily skin usually experience acne problems when too much sebum oil clogs their skin pores. It necessitates a face scrub with anti-pimple properties in addition to removing dead skin cells.
- For dry skin: Anyone using a face cleanser that contains ingredients intended to remove dead skin cells should have dry skin look for a glycolic acid-containing face scrub that hydrates the skin to enhance it.
- For combination skin: Since combination skin is a cross between dry and oily skin, selecting a face scrub may be difficult. However, experts advise people with combination skin to use a face scrub to get rid of extra oil without overly drying out their skin.

- For sensitive skin: Those with sensitive skin need to exercise more caution while selecting skincare products. If one has sensitive skin, an antibacterial and anti-inflammatory face scrub is ideal. Propylene glycol has resistance to both bacteria and fungi. Turmeric and yogurt are both natural foods that have anti-inflammatory qualities. It's widely believed that sugar scrubs are great for sensitive skin. Sugar works well as a natural exfoliant to help get rid of dead skin cells.^[7]

Need

Why face scrub

- ✓ Face scrub helps to rid the skin of the impurities that are exposed to bacteria, pollutants, and dirt throughout the day.
- ✓ Face scrub exfoliates the skin which helps to deep cleanse the skin and open the clogged pores which enhances the penetration of drugs and moisturizers making the skin to glow and appear attractive.
- ✓ Herbal cosmetics have no adverse side effects and don't cause allergic reactions.
- ✓ Ingredients used for herbal formulations are easily available and cheap.
- ✓ Herbal products or extracts containing vitamins, antioxidants, antiseptics, anti-acne and anti-ageing properties incorporated in face scrub gel which helps

to enhance the anti-acne activity and slow down the ageing process of the skin.

Objective

- To prepare a scrub that is multipurpose and integrated into gel.
- To reduce clogged pores, remove dirt, oil, and sebum, and prevent wrinkles.
- To Prevents Ingrown Hair.
- To reduce wrinkles, fine lines, and other signs of aging while maintaining its tolerability.
- To nourish and beautify the skin.

METHODOLOGY

Stability testing cosmetic products is done to make sure that, when stored under the right conditions, a new or modified product fulfills the intended standards for physical and chemical quality, functionality, and aesthetics. Due to the short development cycle of cosmetic products, each manufacturer needs to have tests available that are appropriate for their activity to prevent the testing activity from becoming economically disproportionate given the number of new products launched annually.

Preparation

- All ingredients were taken with quantity in the given table no.1.

Table no. 1

Sr. no.	Name of ingredients	F1	F2	F3	F4
1	Almond powder	5gm	5.2gm	5.5gm	6gm
2	Coffee powder	0.25gm	0.30gm	0.35gm	0.40gm
3	Lemon	0.5ml	0.6ml	0.5ml	0.8ml
4	Rice flour	1.25gm	1.30gm	1.30gm	1.35gm
5	Gram flour	1.25gm	1.25gm	1.30gm	1.30gm
6	Turmeric powder	0.5gm	0.8gm	0.7gm	0.8gm
7	Calcium bentonite	1.15gm	1.20gm	1.25gm	1.30gm
8	Honey	q.s.	q.s.	q.s.	q.s.
9	Milk	q.s.	q.s.	q.s.	q.s.



- In this formulation we use the mortar, pestle and grinder which are properly cleaned before powdering.
- Before grinding all ingredients are pounded in the mortar and pestle.
- By using mixer grinder all ingredients are grinded in the powdered form.
- After grinding powdered ingredients are sieved. But the powdered ingredient should not be fine powder.
- The grinding and sieving was repeatedly done up to complete sieving of powder ingredients.
- After sieving and grinding the powdered ingredients are simultaneously collected in a beaker and mixed with the liquid substance using milk and honey.

- viii. Mix all ingredient together until proper consistency of scrub achieved.
- ix. Finally, the formulation is complete and packed in proper sterile container and should kept at room temperature.
- ii. Apply herbal face scrub evenly on face.
- iii. Massage gently the scrub with using finger.
- iv. Massage for 5 to 8 minutes.
- v. Then rinse face with normal water and wipe face with clean and soft cloth.

How to use herbal face scrub

- i. Rinse your face with normal water and wipe face with clean soft cloth.

RESULT

(Formulation batches)

Sr. No.	Evaluation factor	Observation
1.	Color	Yellow Brown
2.	Odour	pleasant and steady scent
3.	Consistency	Good
4.	Texture	Slightly gritty
5.	washability	Washable with ease
6.	PH	7.3
7.	Spreadability	Easily spreadable
8.	Skin discomfort	No irritant

The herbal scrub was prepared and evaluated. The prepared face scrub met all necessary characterization requirements after being assessed for color, consistency, texture, washability, pH, spreadability, and skin irritation, among other factors. Thus, F1 formulation has been considered to be best, the developed formula works well as a scrub to create skin that is radiant and healthy. skin felt cleaner, fresher, and softer after using the scrub. It gave skin a radiant, young looking, smooth, and lovely appearance. The usage of herbal cosmetics has increased because they have fewer or no negative effects.

Evaluation

Features of organoleptic

- Color:** When the formulation's Color was examined visually, it was discovered to be brown yellow.
- Odor:** by spreading the solution on the hand and inhaling, the formulation's odor was evaluated.

Consistency

Based on the consistency of the formulation and particles, the homogeneity and texture of the preparation on the skin, including its oiliness, roughness, and stiffness effect, were evaluated. Nature provided a semi-solid preparation.

Washability

This assessment was carried out directly on the skin; the formulation was applied, and a quick water rinse allowed the scrub to be easily removed.

pH

A pH of face scrub is evaluated by small amount of scrub is applied on pH paper and the result was found 7.3

Spreadability

The spreadability of the formulations was assessed by sandwiching 1 g of material between two parallel glass

plates (10 cm, 20 cm) and measuring the spreading diameter. On the upper glass plate, a standard weight of twenty grams was placed. On the lower glass plate, a standard weight of twenty grams was placed.

Skin discomfort

For the checking of skin discomfort we perform patch test, the tiny patch of skin received a small application of the formulation, usually on the inner forearm for a while was discovered to be non-irritating and to have no negative side effects.

CONCLUSION

As a scrubbing agent, coffee powder can be used to achieve good results, and the aforementioned outcomes show that using the new scrub formulation is safe. Since most of the ingredients are natural, there is little possibility of negative side effects. All skin types, including normal, oily, and dry, can use it. Better results are attained, and the skin has a more radiant, brighter appearance. When a smaller quantity of the mixture was applied to the hand's dorsal region, it was discovered to be oedema, non-irritating, and free of any negative side effects or redness.

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