



A REVIEW ON: HERBAL FACE SCRUB FOR SKIN EXFOLIATION

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ABSTRACT

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. Herbal cosmetics are the safest product to use routine with no side effects and cosmaceuticals are the product which influences the biological function of skin.

(**Keywords:** Herbal scrub, exfoliants, phyto ingredients, antioxidant, acne, skin).

Introduction

Herbal Cosmetics, here referred as Items, are formulated, using different permissible cosmetic ingredients to form the base in which one or more herbal ingredients are utilized to supply characterized corrective preferences as it were, might be called as "Herbal Cosmetics" Starting 1990's cosmetic manufacturer update a term 'cosmaceuticals' to describe the OTC skin care items that claims therapeutic advantage by addition of plant based active ingredient such as alpha-hydroxy acid, retinoic acid, ascorbic acid and coenzyme These active ingredients serves numerous purposes viz. increase in skin flexibility, delay in skin aging by decreasing the wrinkles, protection against UV radiation by antioxidant property and to check degradation of collagen respectively.

The word cosmetic was obtained from the Greek word “kosm tikos” meaning having the power, order, ability in decorating. The birth of beauty care products forms a continuous narrative throughout the history of man as they created. The man in old times 3000BC used colours for the enrichment to charm the creatures that he wished to chase additionally the man survived assault from the equal by colouring his skin and embellished his body for assurance to incite fear in an enemy (whether man or animal).

The wellbeing, habits, schedule work, climatic conditions and upkeep were capable for people skin and hair beauty. The skin due to excessive exposure to heat will dehydrate during summer and causes wrinkle, spots, blemishes, pigmentation and sunburns. The extreme winter cause harms to the skin and hairs within the form of cracks, cuts, maceration, contaminations and hair fall. The skin diseases are common among all age groups and can be due to exposure towards organisms, chemical agents, biological toxin present within the environment, additionally to a few amplify due to malnutrition. The only factor they had to rely on was the information and data of nature assemble within the ayurveda. The science of ayurveda had utilized numerous herbs and floras to form beauty care products for beautification and protection from outside affects. The beauty care products, according to the Drug and Cosmetics Act is characterized as articles intended to be rubbed, poured, powdered or sprayed on, presents into or other various products.

DEFINITION OF COSMETICS [7]

The cosmetics, according to the Drugs and Cosmetics Act is characterized as articles intended to be rubbed, poured, sprinkled or sprayed on, introduced into or otherwise applied to the human body or any part there of for cleansing, beautifying, advancing attractiveness or modifying the appearance. The cosmetic does not come beneath the preview of drug license”.

Definition of Herbal Cosmetics:

These are the makeup which are prepared utilizing plant products having cosmetic actions. Recently the utilize of botanicals in beauty care products have expanded primarily due to the mild action and non-toxic nature. In cosmetics, both natural and Phyto-ingredients are utilized. Natural products Include oils, extracts, secretions etc. Phyto-ingredients include unadulterated constituents obtained by different process.

Herbal Cosmetics for Various Types of Skin [7]

1. For Dry Skin*Example of Herbs*

- Rubia Cardifolia (Manjista),
- Triphala,
- Tulsi,
- Glycerihza glabra in sesame oil.
- Fruit face mask
- Banana or avocado pulp.

2. For Sensitive Skin*Example of Herbs*

- Usheero,
- Curcuma longa,
- Triphala,
- Azadircta indica mustaka,
- Nimba in coconut oil.
- Fruit face mask
- Banana or pineapple pulp.

3. For Oily Skin*Example of Herbs*

- Tulsi,
- Idhora,
- Nimba,
- Curcuma longa.
- Fruit face mask
- Strawberry or papaya pulp.

Ideal Properties of Scrub An ideal scrub is accepted to possess the following properties [8]

- It should be Non toxic
- Possess small gritty particles
- Mild abrasive
- Non irritating
- Non sticky Able to remove dead skin cell

ADVANTAGES OF FACE SCRUB

- Healthy, glowing skin, minimise spore, reduces breakout and acne, Hides wrinkles
- Allows absorption of the products, improve your tan, Maintain body pH.
- Scrubbing is the removal of dry/ dead skin cells on the surface of the skin and is one of the most important of skincare routine for face.
- Scrubbing not only helps many skin problems, it also increases blood circulation, which in turn helps you to achieve healthy and glowing skin.
- Abrasive scrub cleansers are used for mechanical exfoliation.

Disadvantages of scrub

- Hard scrubbing motions and hard scrubbing chemicals may cause skin irritation including redness, inflammation. If you have a sensitive skin one can also have allergic reactions to the chemicals present in the synthetic scrubs as well.
- Over scrubbing can result in open pores which are exposed to pollution and UV rays at the same time. It also leaves your skin more prone to infections and tanning.

DIFFERENCE BETWEEN HERBAL AND SYNTHETIC PRODUCTS:

Herbal Scrub	Synthetic scrub
Herbal products are completely free from all the harmful chemicals as they are naturally derived.	Synthetic product are maybe slightly harmful chemicals as they are Synthetically derived.
Herbal refer to products that are prepared from plants for their medicinal value	Synthetic refer to product that are prepared from chemicals
safe to use as compared to chemical-based cosmetics.	They may be harmful for sensitive skin
Synthetic refer to product that are prepared from chemicals	More side effect than herbal product
E.g. Plum Green Tea gentle revival face scrub	E.g. Cetaphil Extra gentle daily scrub

Table No. 01

Materials can be used as active ingredient [9]

1) Wheat cover powder



Fig no.01

- Synonym – cereal.
- Biological source- It consists of dried seed covers of *Triticum aestivum* belonging to family Poaceae.
- Description Colour – White, Odour – Sweet, taste- sweet
- Chief chemical constituents Bran fibre, Cellulose and pentosans
- Uses - Provides Nourishment, Protects Against Sun Damage, Fights Acne

2) Neem leaves powder



Fig.no 02

- Synonym - Neem
- Biological source It consists of dried leaves of *Azadiracta indica* belonging to family Meliaceae.
- Description Colour - Green Odour - Pungent Taste - Bitter
- Chief chemical constituents Nimbinin, Nimbidin, Quercetin

- Uses Skin toner, lightens skin blemishes, Remove blackheads

3. Tulsi leaves powder



Fig.no 03

- Synonym- Tulsi
- Biological source -It consists of dried leaves of *Ocimum sanctum* L belonging to family Lamiaceae.
- Description Colour - Green Odour - Aromatic Taste – Pungent
- Chief Chemical constituents -oleanolic acid, ursolic acid, rosmarinic acid
- Uses Prevents acne and pimples, Improve skin texture, Cleanser

4. Turmeric powder



Fig.no 04

- Synonym-Curcuma longa
- Biological source - It consists of dried rhizomes of Curcuma longa belonging to family Zingiberaceae.
- Description - Colour - Yellow Odour - Aromatic Taste - Bitter
- Chief chemical constituents - Curcumin, Curcuminoids
- Uses -Reduce acne, Glowing skin, Lightens skin.

5. Orange peel powder



Fig no.05

- Synonym - Orange zest
- Biological source -It consists of dried fruits of Citrus sinesis belonging to family Rutaceae.
- Description Colour- Dark orange red Odour - Aromatic Taste – Bitter
- Chief chemical constituents Terpenes, Carotenoids, Flavonoids
- Uses Reduce skin marks, skin spots, help to skin whitening, Treat pimples, acne

6. Sandalwood powder



Fig.no 06

- Synonym- Sandalwood tree
- Biological source – It consists of dried bark of Santalum album belonging to family Santalaceae.
- Description Colour- Brown Odour - Aromatic Taste – Unpleasant
- Chief chemical constituents Santalol, Cedrol, Esters
- Uses – Soothe sunburn, remove suntan, Reduce signs of aging skin

7. Multani mitti



Fig no. 07

- Synonym- Multan clay
- Biological source It consists of hydrous aluminum silicates (clay minerals)
- Description Colour- White Odour - Pleasant Taste – Pleasant
- Chief chemical constituents Montmorillonite, Kaolinite, Attapulgite
- Uses- Nourishes skin, reduce oiliness, Remove blackheads

8. Honey



Fig no.08

- Synonym- Shahad

Biological source -It consists of saccharine liquid prepared from the nectar of the flowers by the Honey-bee *Apis mellifica* belonging to family Apidae.

- Description Colour- Yellow brown coloured liquid Odour - Sweet Taste - Sweet
- Chief chemical constituents Dextrose and laevulose (70-80%) Dextrin (0.06-1.25%) Proteins
- Uses Good for wrinkles and aging Prevent acne Remove dirt from pores

9. Aloe vera



Fig no.09

Synonym- aloe vera, burn plant

Biological source- dried latex of leaves of it also known as cape aloe belong to the family-liliaceae

Decription- Colour- clear to slightly yellow / translucent gold Odour-similar like rotten garlic or onion taste- Bitter

Chemical constituents- aloe emodin

Uses- heals burns and clears acne

What is Exfoliant? [10-12]

A facial scrub uses small particles, beads or chemicals to get rid of the old skin cells and make way for new once in a process known as exfoliation. The agents are used for exfoliation are known as exfoliants. Exfoliating agents are those used to remove dead cells present on the skin and boost blood circulation, giving renewed and glowing skin. It keeps face free from dust, grime and oils which are also beneficial in keeping a skin pore clean. There are two ways to exfoliate the skin. **exfoliation** involves the removal of the oldest dead [skin](#) cells from the skin's surface. The word comes from the Latin word *exfoliate* (to strip off leaves). Exfoliation is involved in all [facials](#) and can be achieved by mechanical or chemical means, such as [microdermabrasion](#) or [chemical peels](#). Exfoliants are often advertised as treatments that promote beauty, youthful appearance, or health.

MAINLY USED EXFOLIANTS

JOJOBA BEADS

As Exfoliator Exfoliation allows the replacement of skin cells and this is also a way to protect and assist the skin in the antiaging process. One way of exfoliating that can be done is by using cleaning particles. Jojoba beads were early onto the market and remain popular, with many manufacturers now offering exfoliant consists of natural hydrogenated jojoba oil. Jojoba beads is a small spherically shaped beads, insoluble in water and has a faint odour. Jojoba bead guarantees effective but gentle exfoliation without abrasiveness, provides comfort in use, and not occlusive.



Fig no. 10

KhusKhus

KhusKhus is an oilseed obtained from the poppy flower. Poppy seeds (KhusKhus) have strong anti-inflammatory ability, and thus actively used in Ayurvedic preparations for treating inflammation. This magical seed treats sleep disorders like insomnia. If insomnia occurs due to emotional issues such as anger or distress, these can also be treated with Khus Khus. It scores high on several accounts like dietary fibre, minerals (calcium and iron), vitamins, and omega-6 fatty acids. This herb has medicinal properties and thus used in bath soaps for external application.

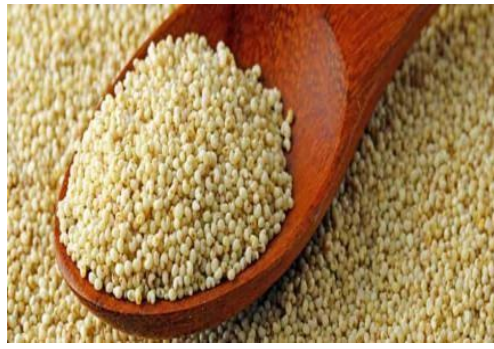


Fig no.11

Sugar and salt

This helps your skin absorb subsequent products better and can help you achieve a brighter, more even complexion. “Salt scrubs tend to boast larger particles that are grittier “Sugar scrubs have smaller particles and tend to be gentler on the skin. They are often less drying and less abrasive than salt scrubs.”

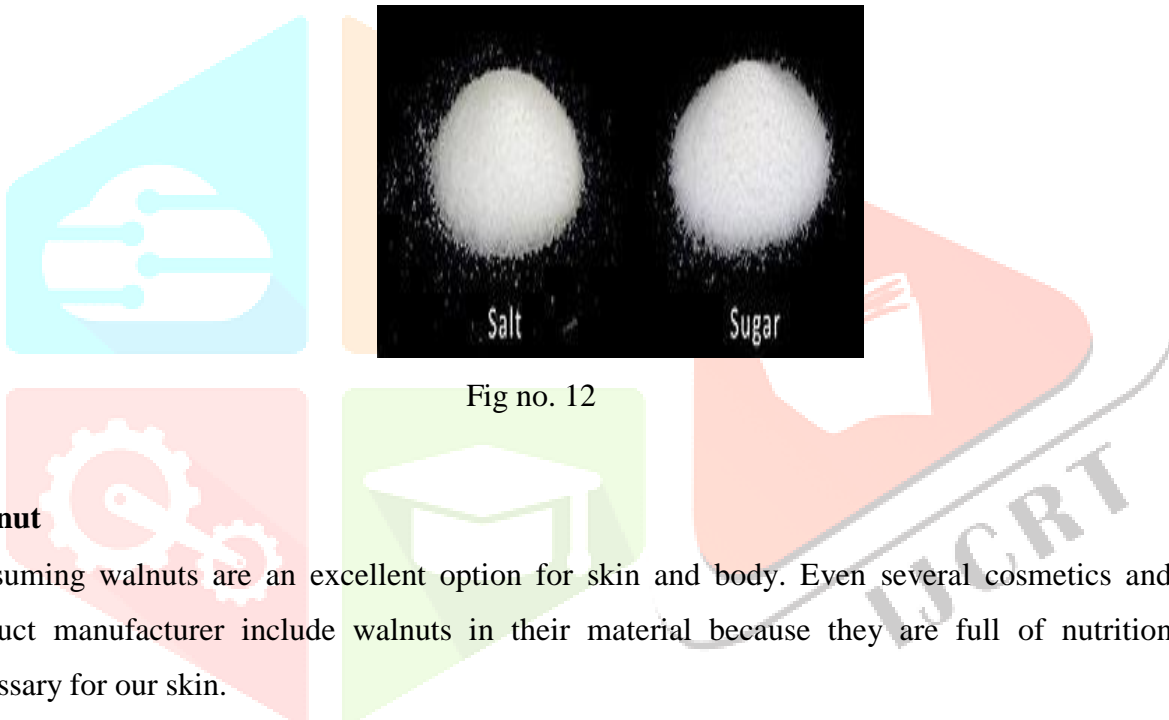


Fig no. 12

Walnut

Consuming walnuts are an excellent option for skin and body. Even several cosmetics and skin care product manufacturer include walnuts in their material because they are full of nutrition which is necessary for our skin.

Besides skin care, walnuts are very popular for hair color too.



Fig no. 13

Methods

Collection and extraction of herbal extract



Phytochemical analysis



Quantitative estimations



Preparation of nanoparticles



Evaluation of nanoparticles

Evaluation of nanoparticles

- UV Visible spectroscopy
- Antioxidant studies
- Anti-microbial activity

Evaluation Parameters [14-15]

Colour: The colour of the face scrub can be checked visually

Odour: The odour of the scrub is checked by smelling it.

pH: The pH of the product can be checked by applying it on ph paper.

Consistency: Consistency can be determined manually.

Spreadability: $S = m \times l / t$

S=Spreadability m=Weight

placed on slide l=Length of the
glass slide t= Time taken in

seconds

Extrudability:

Small amount of scrub can be taken into a collapsible ointment tube. One end closed and the other end kept opened. Slight pressure can be applied on the closed side. The time taken to extrude and the amount of scrub extruded can be noted

Viscosity

Fig no. 13

Brookfield viscometer is used to measure the viscosity of scrub.

Irritability

Small amount of the scrub can be applied on the skin and kept for few minutes and found to be non-irritant

Washability: Formulations can be applied on the skin easily remove by washing with water is checked manually Grittiness The product can checked for the presence of any gritty particles by applying it on the skin

Stability studies

The stability of the formulation can be tested by filling the scrub in plastic containers and placing it in humidity chamber at 45°C and 75% relative humidity. The stability of the formulation can be inspected for 3 months at interval of one month *each*.



Fig no.14

Why the herbal scrub? [16-17]

Herbal medicine has prolonged history of use and better patient tolerance as well as acceptance. Medicinal plants have a renewable source, which is our only hope for sustainable supplies of in- expensive medicines for the world growing population.

Herbal face scrub will not only be safe to use but it will also exfoliate your skin, making it look healthier and more glowing. You can buy these instead of chemical ones because Face scrubs that contain natural ingredients have no side effects and are absolutely safe to use. However, you must avoid exfoliating your skin with a face scrub on a daily basis. This is because when the skin gets exfoliated on a daily basis with scrubs, the cells can get damaged and that will result in rough skin. So, you should know how to use it and what things you need to prevent. By using an herbal scrub through an exfoliation method, you can stimulate the collagen production on your skin and that will help your skin look smoother and give a radiant look to your skin. You can also save your skin from breakouts by using an herbal face scrub. You should make sure that your skin is not coming

into contact with harmful chemical scrubs, so it's better to go with herbal face scrubs than chemical ones.

OTHERS- HOME-MADE REMEDIES FOR HERBAL SCRUB

1. Gentle Oat Scrub

Soothing and anti-inflammatory oats are ideal for sensitive skin. Ground oats gently unclog pores while their natural saponins cleanse and absorb dirt and oil.

- ½ cup old-fashioned oats (uncooked)
- Water

In a blender, pulse the dry oats until finely ground. Place a pinch of the ground oats into the palm of your hand, then add water until a paste forms. Gently massage into your face and neck. Store the ground oats in an airtight container for later use.

Bonus: Instead of water, you can use milk or yogurt, both of which have lactic acid as a chemical exfoliant. Or add apple cider vinegar that contains malic acid for brightening properties.

2.Honey & Brown Sugar Scrub

Honey and sugar are natural humectants (moisture preservers) that make a gentle scrub to buff away flakes, clear out pores, and lock in moisture.

- 1 tablespoon brown sugar (the finer, the better)
- 1 tablespoon honey, preferably raw

Mix the brown sugar and honey together. Then with clean fingertips, very gently apply the scrub to your face in small circular motions to aid in the exfoliation process without damaging the skin. Rinse with warm water and use a washcloth to remove any residual honey, if needed.

3. Baking Soda Add-In

With its superfine texture, baking soda acts like an at-home microdermabrasion for all skin types. This inexpensive ingredient also absorbs excess oil, so it's especially helpful for oily skin.

- 1 teaspoon baking soda
- Your regular liquid skin cleanser

Possibly the easiest scrub to make, just add 1 teaspoon of baking soda into a small amount of your regular cleanser, and you've just made your product work double duty as an exfoliating cleanser.

4.Coffee & Oil Scrub

Leftover coffee grounds are mild enough to use all over the body—even on sensitive areas like the face. Plus, the used grounds are still chock full of caffeine and antioxidants [[source](#)] that leave the skin looking perky and toned.

- 1 tablespoon used coffee grounds
- 1 tablespoon oil ([jojoba](#), olive, or [rosehip](#))

Talk about reduce, reuse, and recycle! Don't throw away the used coffee grounds after making your morning brew. Just add 1 tablespoon of oil to them, and you've got a gentle, collagen-boosting scrub ready to go. [Coffee scrubs](#) (with added essential oil) are also great for cellulite-prone areas of the body [[source](#)].

5.Rice & Egg White Exfoliating Facial Scrub

[Ground rice](#) powder makes an excellent [cleanser](#) for brightening complexions and lightening skin discolorations. [Brown rice flour](#) has oil-absorbing and anti-inflammatory benefits that help treat oily and sensitive skin. Combine with a tablespoon of [ground almonds](#) if you're battling aging.

- 2 tablespoons brown rice
- 1 egg white

Using a coffee grinder, grind brown rice grains until fine. Add an egg white and whip to create a paste. Then gently massage the scrub into the skin in small circular motions to exfoliate dead cells. Rinse with warm water to remove.

6. Aloe Vera Gel & Sugar Facial Scrub

Superfine sugar is a great kitchen ingredient to add to your scrub, the finer in grit, the better for your skin. Aloe vera is known to be soothing and healing [source] for all skin types.

Combine the two ingredients, and after gently massaging them into your skin, leave the mixture on for a few extra minutes and then rinse well to remove.

- 1 tablespoon aloe vera gel
- a sprinkle of superfine sugar

7. Almond Jojoba Scrub

Another easy to find kitchen ingredient is raw almonds. While you will need to grind them very finely in a coffee grinder or food processor, the end result will be skin smoother than when you started. Jojoba oil is non-comedogenic and great to use on skin prone to breakouts.

- 12 raw almonds
- 1–2 tablespoons jojoba oil

After grinding the raw almonds to a fine powder, add in the jojoba oil and gently exfoliate in circular motions. Remove with a warm washcloth.

8. Flax Seed Scrub

Flax seeds are both anti-inflammatory internally and externally [source]. You can add a number of options to a handful of flax seeds and create a scrub so simple and effective.

- 1 teaspoon ground flax seeds or flaxseed meal
- 1 tablespoon carrier ingredient (aloe vera gel, yogurt, honey, jojoba oil, rosehip oil)

Mix well with a mortar and pestle and then remove with warm water.

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