



A Review on Natural Herbal Cosmetics for Skin and Hair Care

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Abstracts:

The concept of beauty and cosmetics is an ancient as mankind and civilization. Women are obsessed with looking beautiful. So, they use various beauty products that have herbs to look charming and young. Indian herbs and its significance are popular worldwide. An herbal cosmetic has growing demand in the world market and is an invaluable gift of nature. Herbal formulations always have attracted considerable attention because of their good activity and comparatively lesser or nil side effects with synthetic drugs. Herbs and spices have been used in maintaining and enhancing human beauty. Indian women have long used herbs such as Sandalwood and Turmeric for skin care, Henna to color the hair, palms and soles; and natural oils to perfume their bodies. Not too long ago, elaborate herbal beauty treatments were carried out in the royal palaces of India to heighten sensual appeal and maintain general hygiene. The herbal cosmetics manufactured and used commonly for daily purpose include herbal face wash, herbal conditioner, herbal soap, herbal shampoo etc. The industry is now focusing on the growing segment with a vast scope of manifold expansion in coming years. Herbal cosmetics are defined as the beauty products which possess desirable physiological activity such as healing, smoothing appearance, enhancing and conditioning properties because of herbal ingredient. Here we reported the introduction, classification, common herbs used in cosmetics.

Key Words: Natural Herbs, Skin Care, Hair Care, Traditional Extractions.

INTRODUCTION:

The word cosmetic was derived from the Greek word “kosm tikos” meaning having the power, arrange, skill in decorating. The origin of cosmetics forms a continuous narrative throughout the history of man as they developed. The man in prehistoric times 3000BC used colors for decoration to attract the animals that he wished to hunt and also the man survived attack from the enemy by coloring his skin and adorned his body for protection to provoke fear in an enemy (whether man or animal). The origin of cosmetics was associated with hunting, fighting, religion and superstition and later associated with medicine.

Herbal Cosmetics, here in after referred as Products, are formulated, using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic benefits only, shall be called as “Herbal Cosmetics”.

Beginning 1990's cosmetic manufacturer adapted a term 'cosmeceuticals' to describe the OTC skin care products that claims therapeutic benefit by addition of plant based active ingredient such as alpha-hydroxyl acid, retinoic acid, ascorbic acid and coenzyme Q10. These active ingredients serve many purposes viz. increase in skin elasticity, delay in skin aging by reducing the wrinkles, protection against UV radiation by antioxidant property and to check degradation of collagen respectively.

The skin and hair beauty of individuals depends on the health, habits, routine job, climatic conditions and maintenance. The skin due to excessive exposure to heat will dehydrate during summer and causes wrinkle, freckles, blemishes, pigmentation and sunburns. The extreme winter cause damages to the skin in the form of cracks, cuts, maceration and infections. The skin diseases are common among all age groups and can be due to exposure towards microbes, chemical agents, biological toxin present in the environment, and also to some extent due to malnutrition. The only factor they had to rely on was the knowledge of nature compiled in the Ayurveda. The science of Ayurveda had utilized many herbs and floras to make cosmetics for beautification and protection from external affects. The natural content in the botanicals does not cause any side effects on the human body; instead enrich the body with nutrients and other useful minerals. The cosmetics, according to the Drugs and Cosmetics Act is defined as articles intended to be rubbed, poured, sprinkled or sprayed on, introduced into or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness or altering the appearance. The cosmetic does not come under the preview of drug license. The herbal cosmetics are the preparations containing phytochemical from a variety of botanical sources, which influences the functions of skin and provide nutrients necessary for the healthy skin or hair. The natural herbs and their products when used for their aromatic value in cosmetic preparation are termed as herbal cosmetics. There is common belief that chemical based cosmetics are harmful to the skin and an increased awareness among consumers for herbal products triggered the demand for natural products and natural extracts in cosmetics preparations. The increased demand for the natural product has created new avenues in cosmeceutical market. The Drug and Cosmetics Act specify that herbs and essential oils used in cosmetics must not claim to penetrate beyond the surface layers of the skin nor should have any therapeutic effect. The legal requirement and the regulatory procedures for herbal cosmetics are same as that for other chemical ingredients used in cosmetic formulations.

The requirements for the basic skin care:

- **Cleansing agent:** which remove the dust, dead cells and dirt that chokes the pores on the skin. Some of the common cleansers include vegetable oils like coconut, sesame and palm oil.
- **Toners:** The toners help to tighten the skin and keep it from being exposed to many of the toxins that are floating in the air or other environmental pollutants. Some of the herbs used as toners are witch hazel, geranium, sage, lemon, ivy burdock and essential oils.
- **Moisturizing:** The moisturizing helps the skin to become soft and supple. Moisturizing shows a healthy glow and are less prone to aging. Some of the herbal moisturizers include vegetable glycerin,

sorbitol, rose water, jojoba oil, aloe vera and iris.

Herbal Cosmetics Can Be Grouped in to Following Major Categories:

- Cosmetics for enhancing the appearance of facial skin
- Cosmetics for hair growth and care
- Cosmetics for skin care, especially in teenager (acne, pimples and sustaining)
- Shampoos, soaps, powders and perfumery, etc.
- Miscellaneous products

Table 1: Skin Types and their Care:

Sr. No.	Skin Type	Structures	Herbal Product	Essential oils
1	Normal	Has even tone, soft, smooth texture, no visible pores or blemishes and no greasy patches or flaky areas.	Pomegranate leaves juice, Herbal Face Pack, Gingili Oil	Chamomile, Fennel, Geranium oil, Lavender oil, Lemon, Rose oil, Sandal Wood oil.
2	Dry	Low level of sebum and prone to sensitivity. Has a parched look, feels "tight? Chapping and cracking are signs of extremely dry, dehydrated skin.	Aloe Vera, Olive Oil, Calendula Comfrey	Lemon, Rose, Sandal Wood Patchouli, Almond, Avocado.
3	Oily	Shiny, thick and dull colored Chronically oily skin has coarse pores and pimples and other embarrassing blemishes. Prone to black heads	Aloe Vera, Burdock Root Chamomile Horsetail, Oat Straw, Thyme, Lavender, Lemon Grass, Liquorice, Rose Buds.	Bergamot, Cypress Frankincense Geranium, juniper, Lavender, Lemon, Sage Evening Primrose.
4	Combination	Some parts of your face are dry or flaky, while the center part of your face, nose, chin, and forehead (called the T-zone) is oily.	Menthol, Aloe Vera, Turmeric, Wheat Germ, Sweet Flag	Citrus Oils, Jasmine Oil, Sandal Wood Oil.

Table 2: Special Skin Problems and Herbal Remedies:

Sr. No.	Skin Problem	Structures	Therapies
1	Chapped Skin	Rough texture which sometimes causes the skin to crack	Application of oils of St. John Wart, Olive Oil or Mashed Avocado after bathing or massaging with warm Olive Oil, Mustard or Coconut Oil half an hour before bathing.
2	Faded Skin	Very tough texture, full of wrinkles	Carrot Juice along with a mixture of egg white and honey.
3	Sickly Skin	No color look, skin becomes lusterless and shows lack of vitality React quickly to both heat and cold.	Inclusion of Vitamin B-complex in diet.
4	Delicate Skin	Sunburns and wind burns occur easily. Skins become dry delicate and prone to allergic reactions.	Use of essential oil of Chamomile, Lavender Neroli, Rose and Sandal Wood Oil.
5	Acne	Pockets of infection that manifest as red sores, boils and pimples.	Usage of Red Sandal Wood Oil.

Table 3: List of Plants with Cosmetic Application for Skin Care:

Sr. No.	Scientific Name	Common Name	Part Uses	Uses
1	<i>Aloe vera (Liliaceae)</i>	Manchi Kalabanda	Leaf	Moisturizer, Sun screen.
2	<i>Acarus calamus (Araceae)</i>	Vasa	Rhizome	Aromatic, Dusting powders, Skin lotions
3	<i>Allium sativum (Liliaceae)</i>	Garlic	Bulb	Promotes skin healing, Antibacterial
4	<i>Bauhinia racemosa (Leguminosae)</i>	Tella aare chettu	Bark and leaves	Antiseptic, reduce dark spots, Antibacterial
5	<i>Centella asiatica (Apiaceae)</i>	Saraswathi aaku	Leaf	Skin care, Anti-inflammatory, Antiseptic Creams.
6	<i>Mesua ferrea (Guttiferae)</i>	Naaga Kesaramu	Flower	Skin disorders
7	<i>Zizyphus jujube (Rhamnaceae)</i>	Regu	Fruit	Skin Care
8	<i>Zingiber zerumbet (Zingiberaceae)</i>	Awapuhi	Rhizomes	Skin Care



Aloe vera



Acarus calamus



Allium sativum



Bauhinia racemosa



Centella asiatica



Mesua ferrea

*Zizyphus jujube**Zingiber zerumbet*

Local Extracts for Herbal Cosmetics:

Herbs play a significant role, especially in modern times, when the damaging effects of food processing and over-medication have assumed alarming proportions. They are now being increasingly used in cosmetics, foods and teas, as well as alternative medicines. The growing interest in herbs is a part of the movement towards change in life-styles. This movement is based on the belief that the plants have a vast potential for their use as a curative medicine.

Calendula officinalis - Marigold

Calendula officinalis is a plant known as pot marigold. It should not be confused with other types of plants more commonly known as marigold, such as those in the genus *Tagetes*. A number of ingredients used in cosmetics and personal care products are made from *Calendula officinalis*, including an extract of the whole plant (*Calendula officinalis* Extract) the flowers, flower extract and flower oil (*Calendula officinalis* Flower Extract, *Calendula officinalis* Flower Oil) and the seed oil (*Calendula officinalis* Seed Oil) 28. Of the *Calendula*-derived ingredients, the flower extracts are the most commonly used in cosmetics and personal care products.

Ocimum sanctum - Tulsi

Holy basil, called Tulsi in India, is ubiquitous in Hindu tradition. Perhaps its role as a healing herb was instrumental in its "sacred" implication.

Aloe vera – Manchi Kalabandha

It is a most ingenious mixture of an antibiotic, an astringent coagulating agent, a pain inhibitor and a growth stimulator (also called a "wound hormone"), whose function is to accelerate the healing of injured surfaces. It is used for pain relief and healing of hemorrhoids, applied externally and internally it's also used for sunburn, scratch and a cleansing purge for the body or skin. It is an aid to growing new tissue and alleviating the advance of skin cancer caused by the sun.

Fullers Earth - Multani Matti

It is Mother Nature's own baby powder. Clay was one of the earliest substances to be used as a beauty mask to draw oils from the skin, natural moisturizers for hairs, teeth, gums and hair, to remove pimple marks, treating sunburn, helps unclog pores, to cleanse the skin of flakes and dirt.

Raktachandanam

This was another natural component available in attractive color and hence was used as fresh, red bindi / tika (dot) on the forehead.

Chandanam and Vertiveru

It was used as scrubs and face packs that were applied on face and whole body to remove dead cells, regenerate growth of new cells and give a young look.

Turmeric

It was used as a face pack along with vertiveru and also as an antiseptic.

Ayurvedic Herbs used in Cosmetics:

The medicinal herb mentioned in Ayurveda by experienced sages basically state that the function of Ayurveda herbs is to purify blood and eliminate vitiated doshas (vata, pitta, kapha) from the body as they are mainly responsible for skin disorders and other diseases. Among the written information on Ayurveda like in Charaka Samhita, the sage Charaka stated numerous medicinal plants in Varnya Kashaya. The herbs mentioned can be used to obtain glowing complexion. Various herbs for which description and usage can be found in Ayurveda inscriptions are Chandanam, Nagakesara, Padmak, Khus, Athimadhuram, Manjistha, Sariva, Payasya, Seta (shweta durva), Lata (shyama durva). There is also the mention of various herbs from Usiri Mahakashaya that are effective curatives for skin disorders are Khadira, Abhaya, Amalaki, Haridra, Bhallataka, Saptaparna, Aragvadha, Karavira, Vidanga, Jati. Like the notifications of Charaka and other sages, Sushruta said that Eladi Gana contains, -Ela, tagar, kusstha, jatamansiti, tvak, dhmamaka, patra, nagkeshar, priyangu, harenuka, vyaghranakha, shukti, stouneyaka, choraka, shriveshta, khus, goggol, sarjarasa, turushka, kundaru, agaru, ushira, devdaru, keshara, and padmakeshara. All these herbs can eliminate toxins from the body, clear the complexion that leads to a glow on the skin and alleviates puritus, kusstha and boils (Table 2 and Table 3).

The Assistances of Herbs Are Following

- Boost the physical and mental well-being
- Build up the immune system
- Detoxification
- Help in sleeping and digestion
- Increase stamina and reduce fatigue etc.

Herbal products in cosmetics or herb in cosmetics can also be referred as botanical origin products in cosmetics. According to the Drugs and Cosmetics Act 1940 cosmetics may be defined as, any substance intended to be rubbed, poured, sprinkled, or otherwise applied to human being for cleansing, beautifying, promoting attractiveness. Cosmeceuticals are the cosmetic products which contain biologically active principles or ingredients of plant origin having effect on user or they are combination product of cosmetics and pharmaceuticals intended to enhance the health and beauty of skin. Herbal cosmetics are defined as the beauty products which possess desirable physiological activity such as healing, smoothing appearance, enhancing and conditioning properties because of herbal ingredient (Table 3).

Advantages of Herbal Medicine

- Herbal medicine has long 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 cheaper medicines for the world growing population.
- Availability of medicinal plants is not a problem especially in developing countries like India having rich agro-climatic, cultural and ethnic biodiversity.
- The cultivation and processing of medicinal herbs and herbal products is environmental
- Throughout the world, herbal medicine has provided many of the most potent medicines to the vast arsenal of drugs available to modern medical science, both in crude form and as a pure chemical upon which modern medicines are structured.

Limitations of Herbal Medicines

Like any other branch of science and technology, present scenario of herbal medicine has its own limitations arising out of its own technical constituents. The prominent limitations of herbal medicines can be summarized as follow:

Coconut oil for Skin Treatment

Coconut oil comes from the fruit or seed of the coconut palm tree *Cocos nucifera*, family Arecaceae. The melting point of coconut oil is 24 to 25°C (75-76°F) and thus it can be used easily in both liquid and solid forms and is often used in cooking and baking. Coconut oil is excellent as a skin moisturizer and softener. A study shows that extra virgin coconut oil is effective and safe when used as a moisturizer, with absence of adverse reactions. A study found that coconut oil helped prevent protein loss from the wet combing of hair when used for fourteen hours.

Aloe

A native of southern Africa, the aloe vera plant has fleshy spiny-toothed leaves and red or yellow flowers. It is an ingredient in many cosmetics because it heals moisturizes, and softens skin. Simply cut one of the aloe vera leaves to easily extract the soothing gel.

Green Tea for Skin Protection

Green tea is tea made solely with the leaves of *Camellia sinensis* belonging to family Theaceae. Whether applied topically or consumed as a beverage or dietary supplement, green tea is a premiere skin protectant. It protects against direct damage to the cell and moderate's inflammation, according to research from the Department of Dermatology, Columbia University, New York. Studies suggest that the catechins in green tea are some 20 times stronger in their antioxidant powers than even vitamin E. Men, women and children need to position this super shield on their side against the ravaging effects of the sun.

Turmeric

Turmeric, *Curcuma longa* is a rhizomatous herbaceous perennial plant of the ginger family Zingiberaceae. Turmeric is used in many celebrations of Hindus. Especially in Hindu wedding brides would rub

with turmeric on their bodies for glowing look. New born babies also rubbed with turmeric on their forehead for good luck. Traditionally women rub turmeric on their cheeks to produce a natural golden glow.

Amla for Hair Care

Amla is obtained from the plant *Embllica Officinalis*, Family Euphorbiaceae. Amla is rich in vitamin C, tannins and minerals such as phosphorus, iron and calcium which provides nutrition to hair and also causes darkening of hair. Hibiscus consists of calcium, phosphorus, iron, vitamin B1, riboflavin, niacin and vitamin C, used to stimulate thicker hair growth and prevents premature graying of hair.

Dandruff Treatment

Ayurveda has numerous natural medications wherein the most common herbs include Neem, Kapoor (naphthalene), and Henna, Hirda, Behada, and Amalaki, Magic nut, Bringaraj, Rosary Pea, Sweet Flag, Cashmere tree and Mandor.

Henna

Henna comes from the plant, *Lawsonia inermis* family Lythraceae, which contain a dye molecule called Lawsone, which when processed becomes Henna powder. Henna has a natural affinity with the proteins in our hair, making it able to “stain” the colour onto the hair shaft.

Almond Oil

The almond oil is obtained from *Prunus dulcis*. The almond oil basically contains about 78% of this fat. This oil contains very small amounts of super-unsaturated Omega-3 essential fatty acids. It proves to be very nourishing, and softens and strengthens the hair. The almond oil also proves to be a very good cleansing agent. Almond oil has been used for many centuries, even before it's spread as a commercial agro-product.

CONCLUSION

The information of medicinal plants used by the people of seems to be well known to its culture and tradition. In the present study we acknowledged 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 healing and cosmetic. Quality control test must be carried out for herbal cosmetics. It is anticipated to be safe for longer periods of time.

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