



E-ISSN: 2788-9270
 P-ISSN: 2788-9262
www.pharmajournal.net
 NJPS 2022; 2(2): 110-114
 Received: 04-05-2022
 Accepted: 08-07-2022

Seema Baraiya
 Sigma Institute of Pharmacy,
 Ajwa Nimeta road, Bakrol,
 Vadodara, Gujarat, India

Nensi Raythatha
 Sigma Institute of Pharmacy,
 Ajwa Nimeta road, Bakrol,
 Vadodara, Gujarat, India

Umesh Upadhyay
 Sigma Institute of Pharmacy,
 Ajwa Nimeta road, Bakrol,
 Vadodara, Gujarat, India

A newer paradigm in cosmetics-herbal cosmetics: A review

Seema Baraiya, Nensi Raythatha and Umesh Upadhyay

Abstract

Because they are more effective, easily available, and are believed to have less side effects, customers favoured herbal cosmetics. The personalised care category with the fastest growth is herbal preparations. Cosmetic treatments that contain physiologically active ingredients or components derived from plants are known as cosmetics, and they are the personal care product category that is growing the fastest. The gentle action, lower toxicity, and greater efficacy of herbs have led to an increase in their appeal in cosmetics during the past few years. A sizable market for herbal cosmetics was created by people's quest for appearance and beauty. The demand for herbal cosmetics and Cosmeceuticals has directly increased due to the desire to seem younger than one's actual age and to be attractive, youthful, engaging, and fair. Therefore, the use of herbal cosmetics and cosmeceuticals is disregarded in the evaluation. In relation to herbs, it is also known as cosmetic. It could be intended for both skin care and cosmetic purposes.

Keywords: Herbal cosmetics, organic, extrate, shampoo, lip balm, oral care

Introduction

Plants have been used to make cosmetics for a very long time. Traditional cosmetic uses for plants include scented skincare products and infusions, poultices, and other applications. Scientists have focused on plants over the past century to learn more about their safety and usefulness in the cosmetics industry. Vitamins, antioxidants, oils (both essential and non-essential), hydrocolloids, proteins, terpenoids, and other bioactive components are frequently abundant in herbal sources, and these substances have positive effects on the skin in terms of anti-aging, antioxidant, emollient activity, and other properties^[1].

Herbs can be used in a range of cosmetic applications, including:

1. A component of the plant.
2. The complete extract of the herb.
3. A specific part's extract.
4. Pure substances made from extracts.

Depending on the combination of herbal raw components, herbal cosmetics comprising one or more herbal substances exhibit a variety of actions or qualities^[2]. The main ingredients in phyto cosmetics, which are goods made entirely from plants and / or herbal components, are: crops, derived from plants; volatile oils; distillates; fragrant bodies of water; juices; aqueous extracts; tinctures; resins; gums; and herbal oils; lipids; waxes; mucilage; vegetation carbs; or purified plant parts. Antioxidant, anti tyrosinase, and antibacterial activity are examples of actions in phyto cosmetics. Because the phyto formulation is a blend of several active ingredients, it is important to carefully assess the durability characteristic for phyto cosmetics and herbal cosmetic products. Ayurvedic Pharmacopoeia of India, Chinese Pharmacopoeia, and other internationally recognised references must be used to develop quantitative requirements for each herbal component. Important elements affecting the production method, composition, and supply in this field, it is important to perform tests for raw herbal materials' quality as well as studies for herbal cosmetics' production processes and results. Herbal cosmetic / Phyto cosmetic production procedures must adhere to Cosmetic Good Manufacturing Practices (ISO 22716) as a primary requirement.

The following are a few crucial concerns in brief:

- Every essential component and production technique needs to be standardised and documented.
- A method for quality control must be established. Natural or organic cosmetics must meet the related international standards ISO 16128-1 and ISO 16128-2, which provide

Corresponding Author:
Seema Baraiya
 Sigma Institute of Pharmacy,
 Ajwa Nimeta road, Bakrol,
 Vadodara, Gujarat, India

guidelines on nomenclature and requirements for healthy and herbal cosmetic materials and products, in addition to adhering to excellent cosmetic production practises.

- In this context, the following monitoring and analysis techniques may be used on herbal constituents and raw materials:
- Physical safeguards, product packaging, batch numbers, harvest dates, and organoleptic and botanical control (resolution, fluorescence analysis, swelling index, foaming index etc.)^[3].

History

The Greek word "kosm tikos," which means "power to organise, ability in decorating," is where the word "cosmetic" originates^[4]. Throughout human history, there has been a consistent narrative on the development of cosmetics. Around 3000 BC, man began using colour as adornment to entice the prehistoric animals he wanted to hunt. He also used colour to defend himself from attackers and to frighten them away (whether man or animal). The initial associations made with cosmetics were with fighting, hunting, religion, and superstition^[5].

The natural knowledge found in Ayurveda was the only thing on which they could rely. In Ayurvedic study, many herbs and plants were employed to create cosmetics for

Types of herbal cosmetics

The herbal formulation include:



Skin care

Coconut oil: Coconut oil is a miracle moisturiser and softener for the skin. The fruit or seed of the *Cocos nucifera* palm tree, which accounts for 60–65% of the oil, is used to extract coconut oil. Lower chain fatty acid glycerides are widely present in coconut oil. Since coconut oil can be used in both solid and liquid forms and has a melting point of 24 to 25 °C (75- 76oF), it is widely used in baking and cooking^[10].

Olive oil: The *olea europaea* plant, a member of the oleaceae family, produces this oil, which is a fixed oil, in its fruits. The main components include triolein, tripalmitin, trilinolein, tristearate, monostearate, triarachidin, squalene, sitosterol, and tocopherol. In cosmetics like lotions and shampoos, it serves as a skin and hair conditioner. It more effectively encourages fatty acid penetration.

Aloe vera: A species of herbal plant belonging to the Liliaceae family is aloe vera. Because it heals, moisturises, & calms the skin, it is utilised in a range of cosmetic products. To get the calming gel, simply split an aloe vera leaf in half^[11]. Aloe vera has antioxidant activity in addition

defence against outside effects and attractiveness. The organic components of botanicals have no adverse effects on the human body; rather, they saturate it with nutrients and beneficial components^[6]. Cosmetics are described as "items intended to be rubbed, poured, sprinkled, or sprayed on, injected into, or otherwise administered to the human body or any portion for washing, beautifying, increasing attractiveness, or changing appearance" in the Drugs and Cosmetics Act. A drug preview licence does not apply to cosmetic products^[7]. Cosmetics are bad for your skin, and as people become more aware of herbal remedies, there is a greater need for natural products and ingredients in cosmetic formulas. The cosmeceutical business now has more opportunities thanks to the growing demand for natural goods^[8].

The history of the herbal cosmetics industry dates back around six centuries and includes particularly dreadful events in Western and European countries. Once more, mixtures and pastes were used to whiten the face; this practise lasted for about 400 years. The early mixtures used in Europe for this purpose were so lethal that they frequently caused paralysis, strokes, or death. The history of herbal cosmetics in the 1940s shows how the fashion or trend in lipstick colours changed every year, getting more and more intensely red with time^[9].

to amino acids like leucine and isoleucine, saponin glycosides that cleanse, vitamins A, C, E, & B, choline, folic acid, and vitamin B12.

Green tea: Asia has been cultivating the tea plant (*Camellia sinensis*) for thousands of years [12]. The four main polyphenolic catechins found in green tea leaves are (2)-epicatechin (EC), EGC, (2)-EC-3-gallate, and EGCG, which is the most abundant. Epigallocatechin (EGC)-3-gallate (EGCG), a specific green tea polyphenol (GTPP), or green tea harvests have been shown to inhibit two-stage chemical carcinogenesis and photo carcinogenesis (induced by UVB).

Calendula: The remarkable antioxidant, anti-inflammatory, and tissue-repair capabilities of calendula officinalis have been demonstrated. According to a previous investigation, the main constituents of calendula essential oil are -thujene, -pinene, 1, 8-cineole, dihydrotagetone, and T-murolool^[10].

Turmeric: It is a substantial layer of dark yellow to orange dust that aids in reducing the number of UVB-induced sunburns. It is antibacterial and protects the skin^[10].

Multani mitts (Fullers earth): It is a substantial layer of dark yellow to orange dust that aids in reducing the number of UVB-induced sunburns. It is antibacterial and protects the skin ^[13].

Oat (*Avena sativa*): Oat oil has a natural moisturising effect and is rich in antioxidants. It can also be found in a number of creams, lotions, and facial oils ^[10].

Chandan: To remove dead skin cells from the face, it was used to washes and face packs. Restore youthful cell development through regeneration. Additionally, it functions as a detanner and a remedy for sunburns ^[10].

Hair Care

Henna: The plant *Lawsonia inermis*, which belongs to the Lythraceae family, produces henna because it contains the colour molecule Lawsone, which is then processed into henna powder. In addition to lawsone, the mixture also contains traces of an alkaloid, Gallic acid, glucose, mannitol, lipids, and resin (2%). The leaves contain an olive oil-green resin and henna tannic acid, both of which are soluble in ether and alcohol. Lawsone fruit can be served on a plate. In addition to the excellent oil extracted from its seeds and pulp and used to treat hair and scalp issues, it is widely known for its high vitamin C concentration. Among other things, it is used to treat children's illnesses, hair loss, and eye issues.

Shikakai: A curative plant called *Acacia concinna* Linn. (Leguminosae) can be found in the tropical forests of southern Asia. The fruits of this plant are used as a purgative, an expectorant, an emetic, and a hair-washing agent. *Acacia Concinna* Linn powder contains saponins, alkaloids, sugar, tannin, flavonoids, and anthraquinone glycosides.

Amla: The fruit of the *Emblica officinalis* tree, a little leafy tree with medicinal properties that is native to India, is called amla. Particularly four rose species are used to produce oil. The Rosaceae family includes the plants *Rosa damascena* Mill. *Rosa gallica* L., *Rosa moschata* Herm. and *Rosa centifolia* L. Both rose water and rose oil have medicinal properties. By calming the mind, rose oil helps to reduce depression, grief, mental stress, and tension. Additionally, it helps skin health and the healing of wounds.

Hibiscus: A reddish tint obtained from a *Hibiscus sabdariffa* extract, a member of the Malvaceae family. Hibiscus contains calcium, phosphorus, iron, and vitamin B1, which are all utilised to promote healthier hair growth and delay the onset of greying.

Walnut: *Juglance regia* is a member of the Juglandaceae family. The leaves are applied topically for conditions like eczema, hair loss, itchy scalp, flaking, and dandruff in traditional medicine.

Antioxidants

Tamarind: The tamarind, also known as *Tamarindus indica* L., is a plant that contains minerals, fatty acids, and amino acids. It belongs to the Fabaceae family, subfamily Caesalpinioideae. The flavour of tamarind, which is delightfully acidic and is caused by tartaric acid, is what makes it unique. In addition to being a great source of carbohydrates, tamarind fruit is also a strong source of

vitamin B, minerals, and antioxidants that appear to be linked to a high phenolic content. As such, it can be a significant dietary source.

Vitamin C: Vitamin C is necessary for the hydroxylation of proline, procollagen, and lysine. Photodamage's effects are lessened by vitamin C. The effects of photoaging on the skin are lessened by vitamin C since it is proven to effectively stimulate collagen repair.

Vitamin E: The most prevalent lipid-soluble antioxidant in plasma membranes and tissue is (alpha-tocopherol). The group of 30 naturally occurring substances known as vitamin E includes 4 tocopherols and 4 tocotrienols, each of which has vitamin E activity. It is believed that its main job is to scavenge fatty peroxy radicals in order to prevent chain propagation and lipid peroxidation, protecting the cell membrane from harm.

Essential oils

Rose oil: Roses are often regarded as the world's favourite flower, owing to its wide range of plant habitats & floral qualities. There are four primary rose species that are utilised for oil extraction. *Rosa damascena* Mill. *R. gallica* L., *R. Moscato* Harm., and *R. centifolia* L. are the species. Rose oil and rose water both have therapeutic effects. Rose oil relaxes the mind and helps to alleviate sadness, bereavement, mental stress, and tension. It also aids in wound healing & skin health.

Eucalyptus oil: There are approximately 700 distinct species of Eucalyptus in the globe, at least 500 of which generate a form of essential oil. It is made by steam distillation from the leaves of Eucalyptus species like *E. cinerea* F. Muell., *E. baueriana* F. Muell., *E. smithii* R. T. Baker, etc. They are commonly used to make liniments, inhalants, cough medicines, ointments, toothpaste, and medicinal tastes.

Oral care

Meswak (*Salvadora persica*): Chewing sticks are extensively employed in the Indian region, and Meswak, a product of the Arak tree, is employed as a historical toothbrush for dental hygiene by many persons from many ethnicities. It is useful for cleaning teeth, is relatively inexpensive, and has recently made its way into dentifrices as an antiplaque & anti-gingivitis agent. Chewing on these stems is thought to stimulate salivary secretions, which may aid in mouth cleansing and plaque removal.

Red Clover (*Trifolium pratense*): Red clove mouthwash calms inflamed and diseased gums. After brewing red clove tea, dry the petals and leaves and prepare an ointment. Apply the antibiotic-containing ointment in abscessed gums developed through sores, root canal therapy, or other dental work.

Peppermint Oil: Menthol, acrylic acid, tannic acid, & Vit C are all found in peppermint. To relieve toothache, soak a cotton ball in peppermint oil and apply it in the cavity or rub it on the tooth. Peppermint mouthwash can help in gum inflammation.

This all cosmetics are herbal in which we will use all herbal ingredients



Cold cream

Cold cream is just an emulsifier that, when applied to the skin, produces a chilling effect due to the gradual evaporation of the water included in the emulsion. They are typically made by emulsifying oils and water. Cold cream was usually made by animal fats & vegetable oils ^[14].

Advantages of herbal cold cream

- Application ease.
- Convenient to all the population.
- Avoidance of risk.
- Avoid drug level fluctuations as in case of intra- and inter-patient changes.
- No special risks or technicians is required for product application.
- Efficacy obtained with a lower total daily drug dose.
- High patient compliance.

Disadvantages of herbal cold cream

- Drugs with larger particles can indeed be quickly absorbed through to the skin pores.
- Chances of skin irritation of contact dermatitis due to any drug interactions.
- Poor absorption may result due to the poor permeability of some drugs through the skin.
- Any drug interactions may irritate skin or contact dermatitis.
- It is most beneficial for medicines which require very small plasma level.
- Drug denaturation is caused by the presence of the enzymatic in the epidermis.

Nail Polish

Nail polish is a lacquer which can be used to adorn and safeguard the human nail plates. Nail laquare is the most often used and popular method of manicure preparations ^[15].

Advantage of nail polish

- Keep the nail from becoming scratched.
- Increase nail strength.
- It was used to keep fungi and germs at bay, as well as to beautify hands.
- It has a lengthy sating.
- It does not harm the nail;
- It is simple to remove;
- It saves time.
- There is no smear.
- Nail paint seems to be organic on the nails.

Disadvantage of nail polish

- Nail discolouration,
- false leukonychia
- Contact dermatitis from allergies (local and distal)

- Microbiological colonisation
- Inaccurate pulse oximetry measurements
- Cross-reactivity and sensitization to methacrylates,
- Rhinitis/wheezing,
- Nail brittleness
- Thinning
- Flammability
- Mask nail bed

Lip Balm

Natural cosmetics production has increased in today's rapidly growing civilization due to growing demand for natural goods whose creation is safe for the environment. Lip balm is a beauty product comparable to lip gloss which is intended to prevent dry lips and to guard against potentially harmful environmental elements ^[16].

Advantages of natural lip balm

- Natural lip balms assist to maintain the natural healthiness and attractiveness of the lips.
- Natural lip balms can be utilized by both men and women.
- Natural lip balms assist to prevent lips against cold sores, chapping, and dryness.
- The application of organic lip balm cosmetics to improve the appearance and health of the skin.

Disadvantages of natural lip balm

- Lip balms containing low-quality ingredients may cause significant harm to the lips.
- Lip balm dependency.
- As compared to commercially produced lip glosses, handmade lip balms tend to last less time on the lips.
- Natural oils have other disadvantages such as greasier and less spread ability.
- Common Natural Lip Balm Ingredients

Shampoo

Shampoo is a type of hair care product that is typically available in the form of the viscous liquid and is used to cleanse hair. The purpose of shampoo is to eliminate the undesired build-up within the hairs without removing so much sebum that the hair becomes unmanageable. The most popular type of hair care is shampooing. Shampoos are basically cleaning solutions for such hair and scalp ^[17].

Advantages of herbal shampoo

- Herbal shampoo is manufactured from pure and organic materials with no chemical ingredients or surfactants and has no negative effects.
- Are biodegradable and ecologically friendly.
- It doesn't cause irritation to the eyes.
- It is cost friendly, not much expensive.

- Regular usage of herbal shampoo can do wonders for your hair
- By using herbal shampoo, you can get the perfect oil balance.
- They are made out of natural essential antiseptic properties that prevent our hair and scalp from the harsh u. v rays of the sun thus preventing skin infections ^[18].

Disadvantages of herbal shampoo

- Odor and taste might be difficult to conceal at times.
- Herbal drugs having slower effect than allopathic drug hence require long term therapy.
- Manufacturing process is time consuming and complicated.

Hair colour

Hair colouring or dying are methods of altering the colour of one's hair. The primary reasons for this are cosmetic, such as restoring white and grey hair, changing the colour to something more fashionable or attractive, or restoring the natural colour after it has been decolored by hair dressing or sun bleaching. The produced herbal dye has all of the benefits of natural substances ^[19].

Advantage of herbal hair colour

- Natural appearance of use of real human hair fibre.
- May be styled as a natural hair.
- Able to colour and perm.
- Moves like natural hair.
- Less susceptible to heat damage.

Disadvantages of herbal hair colour

- More expensive
- Need more maintenance and care
- Requires styling
- May be heavier in weight than synthetic wigs, which may be lead to itching.
- More susceptible to sunlight fading and environmental damage.

Reference

1. Varma Sujith. General review on herbal cosmetics. International Journal of drug formulation and research. 2011;2:140-165.
2. Sharma Sheetal, Jigar Vyas, Umesh Upadhyay. Herbal extracts in Novel Drug Delivery System: A Magical Combo: A Brief Review. Research Journal of Pharmaceutical Dosage Forms and Technology. 2022; 14(2):150-156.
3. Masand S, Madan S, Balian SK. Modern concept of storage and packaging of raw herbs used in Ayurveda. Int J Res Ayurveda Pharm. 2014; 5(2):242-5.
4. Hughes GR. J Soc. Cosmet. Chem, 1959;10:159.
5. Encyclopaedia. Britannica, 14th Edn; c1929.
6. Rohit Kumar Bijauliya, Shashi Alok, Mayank Kumar, Dilip Kumar Chanchal, Shrishti Yadav. A comprehensive review on herbal cosmetics, Bijauliya *et al.*, IJPSR. 2017;8(12):4930-4949.
7. Kapoor VP. Herbal Cosmetics for skin and hair care. Natural Product Radiance, 306-314.
8. Sankholkar DS: Current Regulations and Suggested Way Forward, The Pharma Times. 2009;41(8):30-31. www.ayurvedic-herbal-products.com/herbalextracts.html
9. Dongare Prajakta, Bakal Dr, Ajmire Prashant, Patinge Prerna, More Manisha, Manwar Jagdish. An overview on herbal cosmetics and cosmeceuticals. International Journal of Pharmaceutical Sciences Review and Research. 2021;68(10):47583. /ijpsrr.2021.v68i01.013.
10. Gediya SK, Mistry RB, Patel UK, Blessy M, Jain HN. Herbal plants: used as cosmetics, J Nat Prod Plant Resour. 2011;1:24-32.
11. Kuroda Y, Hara Y. Anti-mutagenic and anti-carcinogenic activity of tea polyphenols, Mutation Research / Reviews in Mutation. 1999;436:69-97.
12. Chauhan Jaydeep, Vyas Jigar, Choudhary Urvish, Dabgar Yash. 'Formulation and evaluation of multani mitti peel off mask' world journal of pharmacy and pharmaceutical sciences. 2020;9(6):1351-1356. doi: 10.20959/wjpps20206-16314
13. Shital V Sirsat, Nikita M Rathi, Anjali S Hiwale, Punam B Shelke. A review on preparation and evaluation of herbal cold cream, World Journal of Pharmaceutical Research, Volume 11(5):690-697.
14. Mohite, Kharat Jasmita, Deshmukh Sukanya, Kashid Gauri. Formulation and evaluation of herbal based nail polish. Cross Current International Journal of Medical and Biosciences. 2022;4:20-28. 10.36344/ccijmb.2022.v04i02.004.
15. Kokil Suruchi, Kadu Mayuri, Vishwasrao Dr, Singh Dr. Review on Natural Lip Balm. International Journal of Research in Cosmetic Science. 2014;5:1.
16. Miss. Waghmode Monika Vasant1, Dr. Hingane L. D.2, "Formulation and evaluation of herbal shampoo", international journal for research in applied science & engineering technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 10 Issue VI June 2022- Available at www.ijraset.com, DOI: <https://doi.org/10.22214/ijraset.2022.44982>
17. Sravanthi K, Kavitha N, Sowmya K, Naazneen S, Vaishnavi U, Anil CH. A review on formulation and evaluation of herbal antidandr, International Journal of Pharmaceutical Research and Applications. 2021;6(3): 1300-1311. www.ijprajournal.com
18. Jaydeep Chauhan, Dr. Jigar Vyas, Dr. Um Uphadyay. A review on premature hair greying: reasons to remedies doi: 10.20959/wjpps202011-17746