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Review Paper

A Comprehensive Review on Herbal Cosmetics

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ABSTRACT

Herbal cosmetics are increasingly being accepted worldwide as consumers show a growing preference for natural products over synthetic chemical-based formulations for personal care. These products are rich in natural nutrients and bioactive compounds, which help enhance skin and hair health while producing fewer adverse effects compared to synthetic cosmetics. Since ancient times, herbal materials have been widely utilized for food, medicinal, and cosmetic purposes due to their safety, cost-effectiveness, easy availability, and proven efficacy. Various plant parts including flowers, leaves, fruits, roots, bark, seeds, bulbs, rhizomes, and whole plants are used to obtain active constituents for herbal cosmetic formulations. These bioactive ingredients possess physiological properties such as smoothing, conditioning, nourishment, and improvement of overall appearance. Botanical components like vitamins, alkaloids, proteins, and terpenoids contribute significantly to the maintenance and protection of skin and hair. Herbal cosmetic products such as shampoos, conditioners, soaps, face washes, and creams are formulated to enhance skin texture and hair quality while minimizing adverse reactions like irritation, itching, and burning. Cosmeceuticals represent one of the fastest-growing sectors in the personal care industry, as they combine cosmetic benefits with therapeutic properties derived from plant-based active ingredients. In recent years, the demand for herbal cosmetics has increased substantially due to their mild action, lower toxicity, and improved effectiveness. This mainly focuses on the role of herbal cosmetics in hair care, skin care, oral care, and other personal care cosmetics, about their safety, efficacy, and growing importance in modern cosmeceutical applications.

INTRODUCTION

The term cosmetic is derived from the Greek word “kosm tikos”, which means to arrange, decorate,

or enhance appearance. Since ancient times, cosmetics have been an integral part of human civilization and have evolved continuously over history. In prehistoric periods, around 3000 BC,

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humans used natural colors and materials for body decoration to attract animals during hunting and to protect themselves from enemies by creating fear through body painting. Initially, cosmetics were closely associated with activities such as hunting, religious practices, superstition, and later became connected with medicinal uses (1,2). The concept of cosmeceuticals was first introduced by Raymond Reed, a founding member of the United States Society of Cosmetic Chemists, in 1961. He used this term to describe cosmetics that are based on scientific principles and contain active ingredients. Later, in 1984, Dr. Albert Kligman expanded this concept to include substances that provide both cosmetic and therapeutic benefits. Cosmeceuticals are therefore considered pharmaceutical-cosmetic hybrids that improve skin health, appearance, and biological function by influencing the skin's structure and physiology (3,4). In ancient times, people largely depended on nature, especially the knowledge documented in Ayurveda, for maintaining beauty and health. Ayurvedic science utilized a wide range of herbs and plant materials to prepare cosmetic products for beautification and protection against environmental factors. The natural components present in botanical sources generally do not cause harmful effects on the human body; instead, they nourish the body by providing essential nutrients and beneficial minerals. According to the Drugs and Cosmetics Act, cosmetics are defined as substances intended to be rubbed, poured, sprinkled, sprayed, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering appearance. Cosmetics do not fall under the category of drugs (5). There is a growing belief among consumers that chemical-based cosmetics may be harmful to the skin. This increased awareness has significantly raised the demand for herbal and natural cosmetic products. The rising popularity of plant-based ingredients has created

new opportunities in the cosmeceutical market. As per the Drugs and Cosmetics Act, herbs and essential oils used in cosmetic products should not claim to penetrate beyond the surface layers of the skin or exhibit therapeutic effects (6). Herbal cosmetics are formulated using permitted cosmetic ingredients in which one or more herbal components serve as the base to provide specific cosmetic benefits. Only such formulations can be termed as herbal cosmetics. The history of herbal cosmetics dates back several centuries, especially in European countries. In earlier times, mixtures and pastes were commonly used for whitening the face, a practice that remained popular for nearly four hundred years. However, some early cosmetic mixtures used in Europe were extremely potent and sometimes caused adverse effects such as paralysis or even death. By the 1940s, trends in herbal cosmetics, particularly lipstick shades, changed frequently and became darker with each passing year (7,8). A wide range of herbal cosmetic products are now produced and commonly used for daily personal care. These include herbal conditioners, herbal soaps, herbal face washes, herbal shampoos, and many other formulations that are well accepted by consumers. One of the major advantages of herbal cosmetics is that they are prepared from natural plant sources such as herbs and shrubs. The natural constituents present in herbs generally do not cause adverse reactions in the human body; instead, they enhance overall health by supplying essential nutrients and minerals. Herbal cosmetics contain various plant materials such as saffron (kesar), ashwagandha, sandalwood (chandan), and many other medicinal herbs known for their cosmetic and therapeutic properties. Currently, approximately 400 plant species are utilized for cosmetic purposes worldwide, although only about 70 species are officially recognized (9). Herbs have diverse applications and are used not only in cosmetics but also in food flavoring and medicine. Herbal



products are available in various dosage forms such as teas, tablets, capsules, tinctures, creams, syrups, and liquids. The global herbal industry is estimated to be worth more than US\$100 billion and is growing at an annual rate of 3–4%, mainly due to increased consumption of processed foods, demand for ethnic foods, natural fragrances, and innovative beverage products. The major markets for the production and consumption of herbal products are Europe, followed by Asia (10). Herbal medicines include crude plant materials, herbal preparations, and finished herbal products. In some traditional systems, herbal medicines may also contain natural organic or inorganic substances that are not derived from plants, such as animal or mineral materials. Herbs consist of crude plant parts like leaves, flowers, fruits, seeds, stems, wood, bark, roots, and rhizomes, which may be used either in whole form or as powdered material. Herbal materials may also include fresh juices, gums, fixed oils, essential oils, resins, and dry powders of herbs. These materials may be processed using methods such as steaming, roasting, or boiling in water, alcoholic beverages, or other suitable solvents (11). Herbal preparations form the foundation of finished herbal products and may include comminuted or powdered herbal materials, extracts, tinctures, and fatty oils obtained through processes such as extraction, purification, concentration, or biological methods. Finished herbal products consist of herbal preparations made from one or more herbs. When more than one herb is used, the formulation is referred to as a mixture herbal product. These finished products may also contain excipients in addition to the active herbal ingredients (12).

HISTORY OF HERBAL COSMETICS-:

Herbal cosmetics have been used since ancient times for personal care and beautification. Early

civilizations such as those in India, Egypt, China, and Greece used natural substances obtained from plants, minerals, and animal products for skin and hair care [13]. In India, traditional systems like Ayurveda described the use of herbs such as turmeric, sandalwood, neem, and aloe vera for improving skin complexion and maintaining hair health [14]. Ancient Egyptian records show that oils, perfumes, and herbal preparations were widely used for beauty, hygiene, and protection of the skin [15]. Similarly, Chinese and Greek civilizations used herbal extracts for cosmetic and medicinal purposes due to their healing and nourishing properties [16]. During the medieval period, the knowledge of herbal cosmetics was preserved and practiced using plant-based formulations [17]. In modern times, increasing awareness about the side effects of synthetic cosmetics has led to renewed interest in herbal cosmetics, which are considered safer, eco-friendly, and effective for long-term use [18].

HERBAL COSMETICS -: Herbal cosmetics are made with natural substances from plants, such as flowers, roots, leaves, seeds, and extracts, to improve look and preserve the health of skin and hair with few adverse consequences [19]. Because these products contain biologically active plant ingredients, they provide both medicinal and cosmetic benefits [20].

TYPES OF HERBAL COSMETICS

- Skin
- Hair
- Oral
- Other

CLASSIFICATION OF HERBAL COSMETICS



HERBAL COSMETIC FOR SKIN CARE

The skin is a complex organ composed of various cells and structures, serving as the body's primary protective barrier. It is organized into three main layers: epidermis, dermis, and hypodermis.[21]

Epidermis-: The epidermis is the outermost layer of the skin, with thickness varying depending on the body region. It plays a crucial role in forming a waterproof protective barrier and contributes to skin pigmentation. This layer is divided into five sublayers: stratum basale, stratum spinosum, stratum granulosum, stratum lucidum, and stratum corneum.[23] Keratinocytes, present in the stratum basale, synthesize keratin—a fibrous structural protein responsible for providing strength and water resistance to the skin, hair, and nails. Merkel cells are specialized for sensory perception, particularly touch. Melanocytes produce melanin pigment, which determines skin color and protects underlying cells from ultraviolet (UV)

radiation. The stratum spinosum appears spiny due to the presence of desmosomes that connect adjacent cells.[24] The stratum lucidum is a thin, transparent layer found mainly in thick skin. The outermost layer, stratum corneum, consists of dead keratinized cells and provides protection against environmental factors.[25]

Dermis-: The dermis lies beneath the epidermis and is composed of dense connective tissue. It contains hair follicles, sweat glands, blood vessels, and nerve endings.[26] Collagen, a major protein in this layer, provides tensile strength, elasticity, and structural support to the skin.[27]

Hypodermis-: The hypodermis, also known as the subcutaneous layer, is located below the dermis. It consists mainly of loose connective tissue and adipose (fat) tissue.[28] This layer functions in insulation, energy storage, and cushioning of internal organs, as well as anchoring the skin to underlying structures.[29]

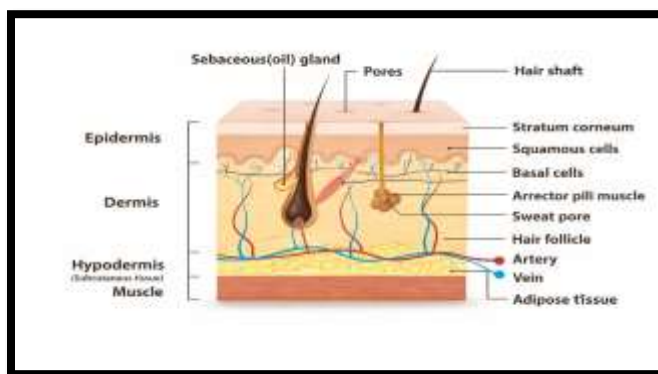


Fig. 1: Anatomy of Skin

Functions of the Skin

- Protection
- Sensation
- Regulation of body temperature
- Prevention of excessive water loss (evaporation control)
- Absorption of substances
- Water resistance [30]

- **Skin Care-:** The skin is regularly exposed to harmful factors such as radiation, toxins, and dirt, which can damage it in various ways. Therefore, different preparations are used to protect, cleanse, and maintain the skin[31]. These also help in improving skin tone, reducing tanning, smoothing the skin, and preventing wrinkles and scars.[32] Some of these pincludes-:

SKIN CARE COSMETICS



- **Skin cleanser -:** the skin cleanser are a product in which the help to remove dead skin cells and dust. Eg-: aloe vera , citrus peels.
- **Sunscreen-:** it helps to protect skin from sunlight. Eg-: aloe vera , chamomile.
- **Anti-wrinkles-:** it help to prevent wrinkles on the skin. Eg-: turmeric , papaya , liquorice.
- **Creams-:** it gives softening effects to the skin. Eg-: almond oil . neem , rosewater.

- **Anti acne-:** it is used to treat acne. Eg:- cucumber gel , vetiver.[33]

VARIOUS HERBS USED IN SKIN CARE COSMETICS

- **Coconut oil:**

Source: Coconut oil is extracted from the dried solid portion of the coconut endosperm obtained from *Cocos nucifera L.*, which belongs to the Palmae (*Arecaceae*) family.[34]

Chemical Constituents: It mainly consists of fatty acids such as caprylic acid (C8:0) at about 8%, capric acid (C10:0) at around 7%, palmitic acid (C16:0) at approximately 8%, along with linoleic acid and other components.

Uses: Coconut oil is commonly used as a hair treatment, including as a hair mask or leave-in conditioner. It helps moisturize and seal the hair, reducing dryness, flakiness, and dandruff. Additionally.[35]



Fig1. Coconut oil

- **Aloe vera:**

Source: Aloe is obtained from the fresh or dried mucilage of the leaves of *Aloe barbadensis*, which belongs to the family Liliaceae.

Chemical Constituents: It contains anthraquinones such as aloin, rhein, and emodin, along with minerals and mucilage. The mucilage is chemically composed of polysaccharides made up of salts of polyuronic acids.

Uses: Aloe is well known for its wound-healing properties and is widely used in skincare. It is commonly included as an ingredient in sunscreens and moisturizing creams due to its soothing and hydrating effects.[36,37]



Fig.2 Aloe vera

- **Citrus peels:**

Source: Citrus peel is obtained from the fresh, ripe fruit of *Citrus limon* Burm., which belongs to the family Rutaceae.

Chemical Constituents: It contains flavonoid glycosides such as neohesperidin, hesperidin, tangeretin, and nobiletin.

Uses: Citrus peel is commonly used as a natural skin cleanser due to its cleansing and refreshing properties.[38]



Fig. 3 citrus peels

- **Neem :**

Source: The source consists of leaves and other aerial parts of *Azadirachta indica*, which belongs to the family Meliaceae.

Chemical constituents: include nimbin, nimbanene, 6-desacetylnimbinene, and nimbandiol.

Uses: Neem is commonly used to treat dry skin and reduce wrinkles and scars. It is also effective in managing acne and reducing associated swelling, while helping to maintain skin hydration for a longer period. Additionally, honey is used as a natural scalp cleanser.[39,40]



Fig. 4 Neem

- **Honey:**

Source: Honey is a sugary substance produced and stored in honeycombs by bees such as *Apis mellifera* and other species like *Apis dorsata*, which belong to the family Apidae.

Chemical constituents: include glucose (30–40%) and fructose (40–50%), along with small amounts of sucrose, dextrin, and formic acid. It also contains proteins, enzymes, vitamins, and coloring substances.[41]

Uses: Honey is widely used as a natural antiseptic and helps in reducing redness[42].



Fig. 5 Honey

- **Papaya:**

Source: Papaya is a cultivated fruit-bearing tree, *Carica papaya*, belonging to the family Caricaceae.

Chemical constituents: such as alkaloids, carbohydrates, proteins, and proteolytic enzymes, and is especially rich in vitamins A, B, and C.

Uses: Papaya is used to reduce dark circles, helps remove dead skin cells, and supports skin renewal. It is also commonly used for its anti-aging properties.[43,44]



Fig.6 Papaya

- **Turmeric: (haldi)**

Source: The source consists of fresh and dried rhizomes of *Curcuma longa*, which belongs to the family Zingiberaceae.

Chemical constituents: include volatile oils, resins, and curcuminoids such as curcumin. Turmeric possesses antiseptic, anti-inflammatory, antioxidant, and skin-conditioning properties.[45]

Uses-: It is widely used in skincare cosmetics and also acts as an antimicrobial and wound-healing agent.[46]



Fig.7 Turmeric

- **Liquorice:**

Source: Liquorice consists of peeled and unpeeled roots, stolons, and stems of *Glycyrrhiza glabra*, belonging to the family Leguminosae.

Chemical constituents: include glycyrrhizin, glycyrrhetic acid, glucuronic acid, liquiritoside, resins, volatile oils, and starch[47].

Uses: Liquorice is known for its soothing effect on the skin and helps to reduce inflammation.[48]



Fig .8 Liquorice

- **Cucumber:**

Source: *Cucumis sativus* is a widely cultivated plant belonging to the family Cucurbitaceae.

Chemical constituent: The oil present in cucumber contains fatty acids such as linoleic acid (22.3%), oleic acid (58.5%), palmitic acid (6.8%), and stearic acid (3.7%). Fresh cucumber is a good source of vitamins C and K, as well as potassium.[49]

Uses: Cucumber is used to revitalize and rejuvenate the skin, reduce tanning, and soothe sunburn. It helps control puffiness around the eyes, minimize dark circles and wrinkles, and treat blemishes and open pores. Additionally, it assists in reducing excess fluid under the eyes and may help improve the appearance of cellulite.[50]



Fig.9 Cucumber

- **Chamomile: (Matricaria recutita)**

Source: Chamomile is obtained from the dried flower heads of *Matricaria chamomilla* L., which belongs to the family Compositae.

Chemical constituents : include apigenin, chamazulene, and bisabolol. It also contains flavonoids, coumarins, sesquiterpenes, and polyacetylenes.

Uses: Chamomile has long been used as an important ingredient in soothing skincare preparations. It helps calm redness, manage acne, and reduce signs of aging when included in a skincare routine.[51]



Fig .10 Chamomile

- **Coffee:**

Source: Coffee beans, or coffee seeds, are the dried ripe seeds of *Coffea arabica*, belonging to the family Rubiaceae.[52]

Chemical constituents: such as oils, wax, caffeine, aromatic compounds, tannic acid, caffeotannic acid, gums, sugars, and proteins. Coffee is known for its anti-aging properties.

Uses: is commonly used to reduce the appearance of cellulite. It acts as an excellent exfoliator and helps in managing acne and blemishes. Additionally, coffee improves blood circulation, promotes skin brightening, and

supports collagen production.[53]



Fig.11 Coffee

Table 1: SKIN TYPES AND THEIR CARE [54,55]

SKIN TYPES	FEATURES	SKIN CARE
Dry skin	Low sebum levels and a tendency toward sensitivity. The skin appears dry and feels tight, with chapping and cracking—indications of severely dry, dehydrated skin.	Aloe vera
Normal skin	Skin has an even tone with a soft, smooth texture, free of visible pores or blemishes. The surface is clear, finely textured, supple, and balanced—neither oily nor dry.	Herbal face wash
Oily skin	Chronically oily skin appears shiny, thick, and dull in color. It typically has coarse texture, enlarged pores, pimples, and other noticeable blemishes, and is prone to blackheads.	Liquorice Cucumber Rose water
Combination skin	Combination skin features both dry and oily areas. Parts of the face may feel dry or flaky, while the central region—the nose, chin, and forehead (T-zone)—tends to be oily. This skin type may also show signs of wrinkles, breakouts, and dryness at the same time.	Turmeric Aloe vera

HERBAL COSMETICS FOR HAIR CARE

- **Hair care:-**A person’s hair color, complexion, and style are important aspects of their physical appearance. Hair care products are applied to the scalp and hair to maintain their health and appearance. These products

contain ingredients that help clean, condition, and nourish the hair, as well as prevent dandruff. There are various types of hair care products available for different purposes.[56]

HAIR CARE COSMETICS



- **Hair cleansers:** Examples include Shikakai and soapnut, which are used to remove dirt and excess oil from the scalp and hair.
- **Conditioners:** Ingredients such as tea, hibiscus, and amla help in softening the hair and improving its texture.
- **Hair growth promoters:** Substances like amla, sesame oil, brahmi, and hibiscus are known to support and stimulate hair growth.[57]
- **Nourishers:** Coconut oil, brahmi, and bhringraj are used to provide essential nutrients and strengthen the hair.
- **Anti-dandruff agents:** Ingredients such as hirda, soapnut, thyme, and behada help in preventing and controlling dandruff.[58]

Uses: It is commonly used as a natural hair cleanser, promotes hair growth, and helps reduce dandruff.[60]



Fig. 1 Soap nut

VARIOS HERBS USED IN HAIR CARE COSMETICS

- **Soap nut:(soap berry)**

Source: Soap nut is obtained from the pods of *Sapindus trifoliatus* and *Sapindus mukorossi*, which belong to the Sapindaceae family.

Chemical constituents: such as mucilage, gums, proteins, and saponins, including compounds like gitogenin, diosgenin, and chlorogenin. [59]

- **Shikakai:- (vimala)**

Source: Shikakai is obtained from the fruit of the plant *Acacia concinna* Linn., which belongs to the Leguminosae family.

chemical constituents: such as lactones, lupeol, acacic acid, and natural sugars like glucose, rhamnose, and arabinose. Additionally, it includes compounds like spinasterone, hexacosanol, oxalic acid, citric acid, tartaric acid, succinic acid, ascorbic acid, and alkaloids such as calyctomine and nicotine.[61]

Uses: Shikakai is commonly used for washing hair. It also has soothing and calming effects due to its strong medicinal properties.[62]



Fig.2 Shikakai

- **Amla:**

Source: Amla consists of both dried and fresh fruits of *Emblica officinalis*, which belongs to the Euphorbiaceae family. It is a rich source of ascorbic acid (vitamin C).

Chemical constituents: such as minerals, tannins, calcium, phosphorus, iron, and pectin.

Uses: Amla is commonly used to promote hair growth and nourish the hair. It is also used in hair conditioners and as a natural hair colorant.[63 , 64]



Fig.3 Amla

- **Hibiscus:**

Source: Hibiscus consists of the dried flowers and leaves of *Hibiscus rosa-sinensis*, which belongs to the Malvaceae family.

Chemical constituents: such as vitamins, flavonoids, anthocyanins, mucilage, quercetin, and albumin.

Uses: It is commonly used to promote hair growth and helps prevent premature greying. Hibiscus also provides a smoothing effect and adds shine to the hair.[65]



Fig. 4 Hibiscus

- **Tea leaves:**

Source: Tea consists of the dried leaves of *Thea sinensis* and *Camellia sinensis*, which belong to the Theaceae family.[67]

Chemical constituents: such as caffeine, catechins, polyphenols, epicatechin, theophylline, and theobromine.

Uses: Tea is commonly used as a natural hair colorant.[68]



Fig. 5 Tea leaves

- **Henna:**

Source: Henna consists of the dried leaves of *Lawsonia inermis*, which belongs to the Lythraceae family.

Chemical constituents: It contains a soluble compound called lawsone, which is responsible for its coloring property. It also includes other

constituents such as xanthenes, tannins, flavonoids, and coumarins.[69]

Uses: Henna is widely used as a natural hair dye and colorant. It also produces a cooling effect on the skin and is traditionally used for treating burns and wounds.[70]



Fig. 6 Henna

- **Brahmi :**

Source: Brahmi consists of the fresh leaves and stems of *Bacopa monnieri* Linn., which belongs to the Scrophulariaceae family[71]

Chemical constituents: such as saponins (bacosides A and B) and alkaloids like brahmine and herpestine.

Uses: Brahmi helps nourish the scalp and improves its overall health. It provides adequate moisture to the scalp, helps reduce dandruff significantly, and gives a soothing effect to the hair.[72]



Fig.7 Brahmi

- **Bhringraj:**

Source: It consists of the whole plant of *Eclipta alba*, which belongs to the family Asteraceae.

Chemical constituents: such as the alkaloid ecliptine, along with amyirin and luteolin.

Uses: It is used to improve skin complexion and is also beneficial for promoting hair growth, strengthening hair, and preventing dandruff.[73,74]



Fig .8 Bhringraj

- **Sesame oil:**

Source: It is a fixed oil obtained from *Sesamum indicum*, belonging to the family Pedaliaceae.

Chemical constituents: such as linoleic acid, oleic acid, palmitic acid, stearic acid, and arachidic acid. It mainly consists of glycerides of these fatty acids and also contains sesamol, a phenolic compound.[75]

Uses: It is used as a softening agent and serves as a nutritive substance for hair. Additionally, it is used in the preparation of soaps, ointments, and pastes, and is widely applied as a hair growth promoter.[76]



Fig. 9 Sesame oil

- **Coconut oil :**

Source: Coconut oil is obtained by expressing the dried solid part of the endosperm of *Cocos nucifera*, which belongs to the family *Arecaceae*. [77]

Chemical constituents: It contains fatty acids such as caprylic acid (C8:0), capric acid (C10:0), palmitic acid (C16:0), and linoleic acid. [78]

Uses: It is widely used as a hair care agent. When applied as a hair mask or leave-in treatment, it helps moisturize and seal the hair. This prevents dryness, flaky scalp, and dandruff, and also reduces split ends and hair breakage. As a result, it makes hair appear shinier, stronger, and longer. [79]



Fig .10 Coconut oil

Source: Almond oil is a fixed oil obtained by expression from the seeds of *Prunus amygdalus var. dulcis*, belonging to the family *Rosaceae*. [80]

Chemical constituents: It contains vitamin E and is a rich source of minerals such as magnesium, phosphorus, and copper. It also exhibits anti-inflammatory properties and helps boost immunity. [81]

Uses: It is used for its softening effect on hair.

Due to the presence of vitamin E, a natural antioxidant, it helps protect hair from environmental damage, making it appear healthier and more youthful. It is also beneficial in treating flaky scalp and scalp psoriasis, and helps reduce hair breakage, split ends, itching, and dryness of the scalp. [82,83]



Fig.11 Almond oil

- **Almond oil :**

OTHER COSMETICS [84]



i. **Perfumes-:** Perfumes are prepared from volatile oils obtained from plants such as rose and sandalwood. These natural oils are valued for their pleasant fragrance and are widely

used in perfumery and cosmetic formulations. [85]

ii. **Talcum powder-:** It consists of talc combined with plant extracts to provide the desired

fragrance and aroma. Examples include sandalwood, rose, and lavender.[86]

iii. Colorants-: Natural colorants, derived from plants and other biological sources, are increasingly used in cosmetics as a safer and eco-friendly alternative to synthetic dyes. They are non-toxic, non-carcinogenic, and environmentally friendly, with added benefits like antioxidants and vitamins. Common sources include henna, turmeric, carrot, red cabbage, and teak.[87]

- **Sandalwood:**

Source: It consists of the heartwood of *Santalum album*, belonging to the family Santalaceae.

Chemical constituents: It contains volatile oils, primarily composed of 95% of two isomeric sesquiterpene alcohols, **alpha- and beta-santalol**. It also contains **santalal, santene, santalone, and santalene**.[88]

Uses: Sandalwood is used in perfumery and as a skin conditioner in creams and powders.[89]



Fig.1 Sandalwood

- **Lavender-:(plum)**

Source-: It consists of *Lavandula angustifolia* and other cultivars of *Lavandula*, belonging to the family Lamiaceae.

Chemical constituents: The main active compounds include monoterpenes such as **linalool, linalyl acetate, lavandulol, geraniol,**

bornyl acetate, borneol, terpineol, and lavandulyl acetate.

Uses: Lavender is primarily used in talcum powders for its fragrance and soothing properties.[89]



Fig .2 Lavender

CONCLUSION

In India, over 70% of the population uses herbal cosmetics for healthcare and personal care. These products are gaining popularity due to their natural ingredients, which include waxes, oils, plant extracts, natural colors, and fragrances. Herbal cosmetics are formulated by combining a cosmetic base with herbal ingredients to treat skin conditions and enhance beauty.

Bioactive components in these products support skin health by providing essential nutrients and influencing biological functions. With proper research and development, there is significant potential to create a wide range of effective herbal cosmetics using the right bioactive substances, fatty acids, essential oils, proteins, and additives. Safety and efficacy are ensured through strict quality control, making herbal cosmetics a reliable and effective alternative to synthetic products.

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