

Review Article

A Comprehensive Review Article on Herbal Cosmetics

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Abstract: Nowadays, Herbal cosmetic is growing rapidly as most women prefer natural products rather than chemicals products for their personal care. Herbal cosmetic contains natural nutrients to improve and provide consumers satisfaction due to relatively fewer side effects compared to synthetic cosmetics. The herbal Cosmetics have been the first choice of the customers, for being more potent, easily available and thought to be less side effective. These were used for food, medicine, or cosmetics. Flower, leaf, fruit, root, bark, inner stem, wood, beans, rhizome, endosperm, bulb, seed or whole plant are used to produce bioactive ingredients Herbal cosmetic are the beauty products, which having a physiological activities, such as smoothening, appearance, enhancing and conditioning properties, because of Herbal excipients. The bioactive components from botanicals contains vitamins, alkaloids, proteins, and terpenoid which serve as cosmetics for caring of body and it's body part. The Herbal cosmetic contains herbal shampoo, herbal hair conditioner, herbal soap, herbal face wash etc. That's are used to improve skin appearance. Used in skin care and used in hair herbal cosmetic products avoid the adverse effects such as itching, burning or irritation the skin. Cosmeceuticals is the fastest growing segment of the personal care products these are cosmetic preparations which contain biologically active principles or ingredients of plant origin. In recent years there is an increased demand for the use of herbs in cosmetics due to their mild action and less toxic in nature and they are found to be more effective.

Keywords: Cosmetics, Herbal Cosmetics, Skin Care, Hair Care.

INTRODUCTION

The Greek word "Kosmetikos," which means to have beauty, create ability, or to garnish, is from which the word "cosmetic" derives [1]. Cosmetics are available in a variety of types, comprising cream, lotions, perfumes, skin-cleansing products, and decorative cosmetics. In so many cosmetic preparations, natural substances are used [2]. Understanding cosmetic action principles is now becoming highly significant as developers attempt to develop more complex products, including skincare products [3]. Skincare is a type of cosmetic product defined as Cosmeceuticals.

It means that such as measurable biological performance in the skin, related to the a drug, but is regulated as a cosmetic; and is traditionally used for wrinkles, anti-aging, hyperpigmentation, and hair damage [4]. The beauty products industry is expanding and improving with new technologies such as nanotechnology, which has the potential to significantly alter the cosmetics market [5-7]. Herbal cosmetic products are created by combining various cosmetic ingredients and going to allow one or more herbal ingredients to form abase that delivers the wanted beneficial properties [8, 9]. Herbal cosmetics are intended to improve health as well as provide patient satisfaction because they all have minimal side effects than synthetic beauty products. Herbal beauty care components are produced by combining a few restorative

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parts that make up a framework about which at least one locally made chemical is used to treatment of a variety of skin problems. Plants are regularly used in the creation of new personal care products and curative brands. Homemade skincare products will replicate spices in aspects of their crude or concentrated structure [10]. Herbal skincare items are products that are created done by using various Alright superficial components to frame the premise, then after at least one home grown material is added to offer designated suitable remedial advantages just, and thus are actually referred to as "Locally made Cosmetic products" [11].

Cosmetics containing physiologically active substances and compounds from plants are known as cosmeceuticals, and they are the category of personal care products that is expanding at the fastest rate. A new scientific field called "Cosmetic Phytognosy" has been created to investigate the functions and effectiveness of organically derived components used in cosmetics. This field deals with the biochemical properties of ingredients produced from plants that are used in herbal cosmetics. Any substance or preparation intended to be rubbed, poured, sprinkled, sprayed, introduced into, or applied to any part of the human body for cleaning, perfuming, beautifying, promoting, attractiveness, or altering the appearance is prohibited under the Drug and Cosmetic Act of 1940, which also includes any substance intended for use as a cosmetic component. For better results, natural herb ingredients are gradually being used in personal health care products. Recent study has demonstrated that herbal are more powerful yet gentle and calming. Despite being effective, powerful synthetic preparations and chemicals place a harmful strain on the human body. Effective herbal cosmetics are made using herbal cosmetics, often known as products made from diverse natural herbal elements. Herbs cannot provide easy solutions. They provide such a means of balancing the body with nature [12].

COSMETICS

The term "cosmetic" is difficult to define with how widely it can be applied to various body areas. In order to improve, clean, and alter the skin appearance, cosmetics are meant to berubbed, sprayed, or dusted on it. Cosmetics' main objective is to enhance the appearance of the face and other body parts by decreasing the likelihood of skin issues. It is used to improve or maintain the health of the skin and hair. Men and women who use cosmetics appear more impressive, attractive, and intellectual [13].

Preparations of Cosmetics

The cosmetics formulations are mainly divided into three categories:

1. Solid
2. Semisolid
3. Liquids

Talcum powders, Face powders, face packs, masks etc. are included in solid category. Creams, liniments, ointments, wax base creams etc. are included in semi-solid category.

Lotions, hair oil, moisturizers, conditioners, cleansing milk, shampoos, mouthwashes, liniments, deodorants, sprays, etc. are included in liquid category [14].

Cosmeceuticals

The strongest area of the cosmetics industry is cosmeceuticals. Cosmeceuticals are restorative drug preparations that aim to improve the health and appearance of the skin by achieving a specific goal, including such reducing skin inflammation across the board, providing sun protection, or providing anti-wrinkle and anti-aging advantages. They function as both a skin protectant and a skin irritant [15].

What are Herbal Cosmetics?

These are cosmetics that are created using plant-based ingredients with cosmetic properties. Because of their mild effect and lack of toxicity, botanical extracts have recently gained popularity in cosmetics. Ingredients both natural and artificial are used in cosmetics. Products produced with organic materials include, among other things, oils, extracts, and secretions. Phyto-ingredients are unadulterated substances obtained by various means [16].

Herbal Cosmetic

Herbal cosmetic are defined as these are the cosmetics and are prepared by using naturalproductswhicharehavingphysiologicalactivitiesuchasbeauty, smoothening, appearance, skin healing enhancing and conditioning properties because of Herbal excipients [17].

History

The history of the herbal cosmetic contains chapter in European and western countries from about six centuries back. Mixture and paste were then using to whitening and smoothing to the face, A practice which remained popular till over four hundred years later [18]. Herbal medicine contains Herbal preparation, herbs, herbal materials, and finished

Herbal products. Herbs contain crude plants material such as fruits, leaves, seeds, flowers, bark, stem, root which may be whole fragmented or powdered.

Herbal materials contains in addition to essential oils, resins, herbs, gums, and fry powder of herbs. Herbal cosmetic preparations such as Herbal shampoo, Herbal face wash, Herbal soap, herbal conditioner etc. Some of the natural products used for in ancient times. The use of aloe as skin protectant. The use of haldi and chandan as face pack. Henna, Tea, Hibiscus is used as hair colorant and hair conditioner [19].

Types According to Site of Application: [20]

- Skin
- Hair
- Dentifrice
- Nail
- Eye

Classification of Cosmetics:

1. Cosmetics for the skin:

- Moisturizers
- Sunscreen
- Facewash

2. Cosmetics for the hairs:

- Hair cleanser
- Hair conditioner
- Oilyscalp hairtonic
- Hair colorant

3. Types of Herbal Cosmetic:

- Skin care
- Hair care
- Other cosmetic

Basic Skin Care

Skin is composed of a variety of cells and structures and is divided into three primary layers as the body's first line of protection. Epidermis: A skin's outer surface, varies in thickness all across the body develop our skin complexion and a waterproof layer.

Epidermis is divided into five layers.

Keratin is a protein made and deposited by keratinocytes that are organisms inside the stratum basal. Hair, nails, and skin everyone has keratin, a fibrous protein that gives them hardness and water resistance. Keratin is really a protein produced and stored by keratinocytes, which are cells in the stratum basal. Hair, nails, and skin all have keratin, a fibrous protein that gives them hardness and water resistance. Sensory neurons excitation is the function of the Merkel cell. Melanocytes produce the melanin pigment that gives skin its colour and protect epidermal living cells to UV rays. The stratum spinosum's spiky shape is a result of the cellular functions that connect the cells with each other via desmosomes. The stratum lucidum is the smooth, visible layer of the epidermis. The stratum corneum, the outermost layer, is exposed to the elements. Hair, nails, and skin all have keratin, a fibrous protein that gives them hardness and water resistance. The dermis, which again is composed of sturdy connective tissue, contains hair cells and sweat glands. There is also collagen, a protein that gives skin its suppleness and strength.

Hypodermis: Under the epidermis is the hypodermis, a covering off at and connective tissue. The fat in the body serves as insulation.

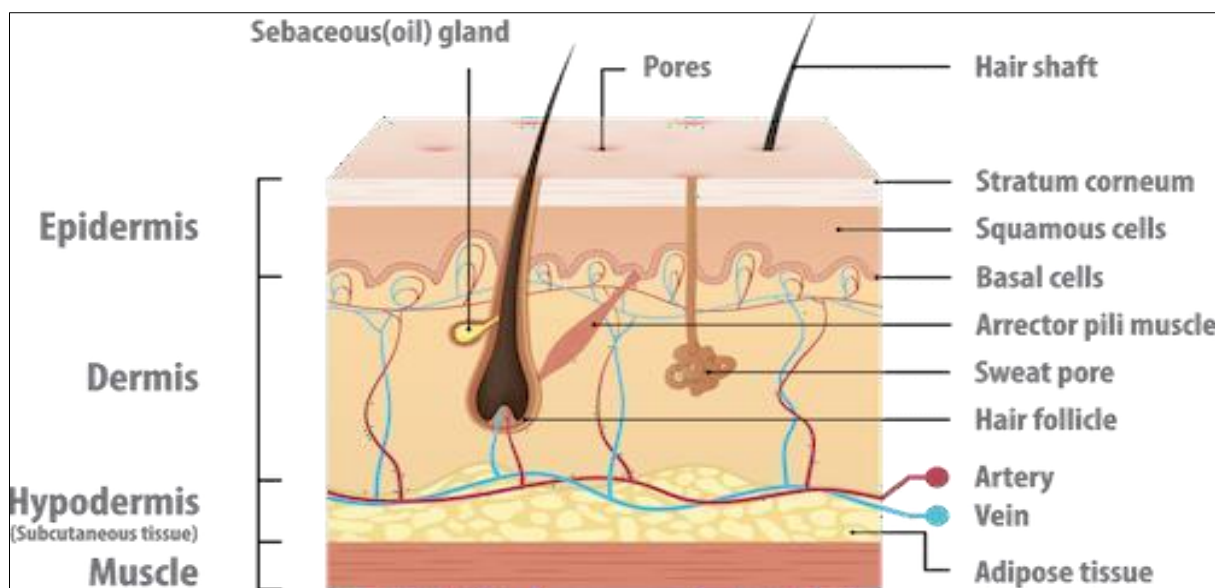


Fig. 1: Anatomy of Skin

Functions of Skin:

- Protection
- Sensation
- Regulation of heat
- Control of evaporation
- Absorption
- Water resistant [21]

Herbs used in cosmetics/ Cosmeceuticals:

1. Skin care

Skin is constantly exposed to radiations, toxin, exposed to dirt which can affect the skin in many ways. Hence to protect the skin, cleanse it and restore the tone, inhibition tanning, smoothing skin, prevent wrinkles and scar formation, various preparation are used which are enlist are as follows:

- i. Skin cleaners: - which removes the dead cells and dust Eg: Aloe, Citrus peels
- ii. Hand lotion: - softening effects to the skin. Eg: Almond oil, Neem, Rosewater.
- iii. Nourishers: - which give nourishment to the skin Eg: Honey.
- iv. Soothing Agents: - gives smooth effect to the skin Eg: Aloe vera.
- v. Sunscreen: - protection of skin from sunlight Eg: Aloe vera, Chamomile.
- vi. Anti-wrinkle and anti-ageing: - prevent wrinkles on the skin. Eg: Aloe vera, Licorice Turmeric, Papaya
- vii. Anti acne agents: - which are used to treat acne the Eg: cucumber gel, vetiver. [22]

1. Coconut Oil:

The dried coconut chunk, which has 60–65 percent oil, is pounded to create it. The Arecaeae family is excited by the name "Coccus nucifera." Lower chain unsaturated glycerides are present in coconut oil.

The natural substance or seed of the coconut palm tree is where coconut oil is obtained. Coconut oil is widely used in cooking and baking due to its liquefying point from 24 and 250 °C, allowing it for use in both liquid and solid structure.

Coconut oil is a wonderful skin moisturiser and conditioner [23]. According to research, applying pure virgin coconut oil as lotion is beneficial and danger, with no unpleasant side effects [24].



Fig. 2: Coconut oil

2. Aloe Vera:

The liliaceae family of plants contains aloe vera, a plant that is commonly seen in cosmetics. It can moisturise and soften the complexion and has a healing effect on the skin's wounds. Leucine and isoleucine, as well as the glycosides saponin and other ingredients like vitamins and folic acid, are amino acids in aloe vera that have cleaning properties.

These ingredients also have antioxidant properties that prevent the start of early indications of ageing. The antibacterial and moisturizing qualities of aloe vera shield skin from microbial deterioration and prevent it from becoming dry and rough. Aloe vera's cooling properties provide a refreshing sensation and prevent sunburn from developing [25].



Fig. 3: Aloe Vera

3. Sunflower Oil:

It is a non-unstable oil produced from sunflower seeds related to the Asteraceae family's *Helianthus annuus*. Sunflower oil also contains each of the tocopherols, carotenoids, waxes, and lecithin that is needed. Similar to carotenoids and waxes, it is suggested to test with biochemical ability (endocrine aggravation) [23].

It is noncomedogenic and has calm properties. Simple yet effective oil that has been utilized for a long time in a wide range of emulsions for beauty and personal care products [26].



Fig. 4: Sunflower oil

4. Green tea

Asia has been cultivating the tea plant (*Camellia sinensis*) for thousands of years¹¹. Green tea leaves contain (2)-epicatechin (EC), EGC, (2)-EC-3-gallate, and EGCG, which is the most prevalent of the four main polyphenolic catechins. The two-stage chemical carcinogenesis, such as that caused by 7,12-di-methylbenz(a)anthracene [DMBA] and 12-O-

tetradecanoylphorbol 13-acetate [TPA], and photo carcinogenesis, were found to be inhibited by green tea extracts or a specific green tea polyphenol (GTPP), especially epigallocatechin (EGC)-3-gallate (EGCG) (induced by UVB).



Fig. 5: Green tea

5. Multanimitts (Fullersearch)

It is baby powder made by nature. One of the first materials to be used as a beauty mask was clay. Its uses included removing pimple marks, treating sunburn, cleaning the skin of flakes and dirt, and acting as a natural moisturiser for hair, teeth, gums, and hair.



Fig. 6: Multanimitti

6. CHANDAN

It was administered to the face as face packs and scrubs to exfoliate dead skin cells. Rejuvenates the growth of new cells and imparts youth. In treating sunburns, it is also used as a detanning agent.



Fig. 7: Chandan

1. Citruspeels: (Lemon Peel):

Citrus peel taken from the fresh, ripe fruit of Citrus Limon Short form, a part of the Rutaceae family. Flavonoids glycosides of the royal type are neo-hesperidin, hesperidin, tangerithin, and nobiletin. Citrus peel is used to clean the skin [27].



Fig. 8: Lemon Peel

1. Neem (Nimb)

It is made up of *Azadirachta indica* leaf as well as other aerial parts, that belongs to the Meliaceae family. Active compounds include nimbandiol, nimbin, nimbanene, and 6- desacetylnimbinene. Neem is used to cure acne and acne-related edoema. It is also used to treat dry skin, wrinkles, and scars. It is also used to hydrate skin for a prolonged period of time, which helps to reduce dryness. Honey is used to clean the scalp [28].



Fig. 9: Neem

2. Honey: (Madhu)

The sugary fluid that bees leave in the honey combs called honey. *Apis mellifera* and other *Apis dorsata* species that are members of the Apidae family.



Fig. 10: Honey

3. Turmeric: (Haldi)

It is made out of curcuma rhizomes from the zingiberaceae family, both fresh and dried. Chemical composition: It includes resins, curcuminoids like curcumin, volatile oils, and volatile oils. Utilizations Turmeric has anti-bacterial and anti- inflammatory, antioxidant, and skin-conditioning effects. Cosmetics for skin care contain it. In addition, it functions as an antibacterial and a wound healing agent [22].



Fig. 11: Turmeric

4. Papaya:

Carica papaya is a cultivated fruiting tree. Alkaloids, carbohydrates, proteins, proteolytic enzymes, and vitamin A, B, and C are supplements constituents of papaya, which is a member of the Salicaceae family. Papaya is used to treat dark circles. Papaya regulate nd kill dead skin cells. Use of papaya for anti-aging property [30].



Fig. 12: Papaya

5. Chamomile: (*Matricaria recutita*)

It is made from dried *Matricaria* flower heads. Composite family of *Chamomilla* L. Chemical component: Chamomile's active components are apigenin, chamazulene, and bisabolol. Sesquiterpenes, polyacetylenes, flavonoids, and coumarins are all present.

Chamomile has long been a staple in calming skin care products. Chamomile can be used to your skin care regimen to diminish age symptoms, acne, and redness [31].



Fig. 13: Chamomile

6. Liquorice: (*Glycyrrhiza*)

Liquorice is made up of Peeled and Unpeeled Roots, Stolons, And Stems from the *Glycyrrhiza glabra* linn family Leguminosae. Glycyrrhizin, Glycyrrhithic acid, gluconic acid, liquiritoside, resin, volatile oils, and starch are among the chemical constituents. Liquorice is said to have a soothing effect on the skin and to help with inflammation [22].



Fig. 14: Licorice

7. Cucumber: (Cucumber vine)

Cucumis Sativus is a widely cultivated plant in the *Cucurbitaceae* family of fruits. Chemical constituent- Cucumber oil contains 22.3% linoleic acid, oleic acid (58.5%) Palmitic acid (6.8%). Stearic acid (3.7%). the recent Cucumber is high in vitamin C, vitamin K, and potassium. Cucumber contains vitamins B6 and A, along with folate, pantothenic acid, magnesium, phosphorus, potassium, copper, and manganese. Uses-Revitalize skin, Reverses skin tanning and reduces eye puffiness. It relieves sunburn. Skin is revived. Take care of open pores Cellulites flights Reduce the look of the dark circles and treat blemishes. Remove wrinkles around the eyelids disposing of extra water under eye bags [32].



Fig. 15: Cucumber

8. Coffee: (*Coffea*)

The dried ripe seed or *coffea arabica* Family *Rubiaceae* is known as a coffee bean or coffee seed. Beans contain oil, wax, caffeine, aromatic oil, tannic acid, caffetannic acid, gum, sugar, and proteins. Coffee is used for its anti-aging properties. It is used to reduce cellulite. Coffee is a fantastic exfoliator. It's fantastic for acne and blemishes. Coffee aids in the improvement of blood circulation. Used to brighten the skin and stimulate collagen production [33].



Fig. 16: Coffee

9. Carrot:

It is derived from the plant *Daucus carota*, which belongs to the *Apiaceae* family. It has been a beneficial plant for many years due to its high nutrient content and other important nutrients. Carrot seed oil is a reestablishing, energising,

and maturing- inhibiting substance. Carotene is used to make carote, which contains less –carotene and-carotene. Carotenes are a type of carotene that is orange in colour. Carotenes are partially converted into vitamin A in humans [34].

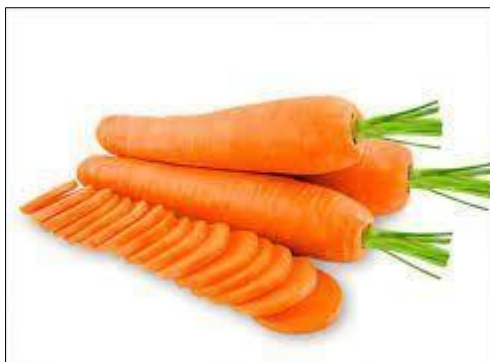


Fig. 17: Carrot

10. Ginkgo

Formillennia, the leaves and nuts of the Ginkgo biloba(G.biloba) tree have been used to treat a variety of ailments, including helpless blood dissemination, hypertension, helpless memory, and wretchedness, particularly in children. It is also gaining a reputation as a cell reinforcement and calming agent. It is a member of the Ginkgoaceae family [35].



Fig. 18: Ginkgo

11. Kelor leaf (Moringaoleifera):

Kelor leaves contain seven times more vitamin C than oranges, ten times more vitamin A than carrots, seventeen times more calcium than milk, nine times more protein than yoghurt, fifteen times more potassium than bananas, and twice as much iron as a bay. Ascorbic acid, -carotene, tocopherol acid, flavonoids, phenolics, carotenoids, hydroxylamine acid derivatives, and flavonoid are also present, making kelor leaves a natural antioxidant source. As a result, it can be used in the preparation of anti-aging cosmetics [36].



Fig. 19: Kelor leaf

Table 1: Skin types and their care [42]

Skin Type	Features	Suitable skin care
Dry skin	Level of sebum low and proneto sensitivity. Hasa parched look, feels tight chapping and cracking Are signs of extremely dry, dehydrate skin.	Aloe Vera
Normal Skin	Has even tone soft, smooth texture, no visible pores or blemishes and no greasy patches or flaky areas. Hasaclear, fine textured, supply and Smooth surface which is neither greasyn or dry.	Herbal facewash
Oily Skin	Shiny, thick and dull coloured chronically oily skin has coarse, pores and pimples and other Embarrassing blemishes prone to black heads.	Liquorice Cucumber Rosewater
Combination Skin	Some parts of your face are dry or flaky, while the centre part of your face, nose, chin, and forehead (called the t-zone) is oily. Combination skin can also described condition where wrinkles and Break out and dry skin are present at the same time.	Turmeric Aloevera.

Table 2: List of plants with cosmetics application for skin care

Common name	Part used	Uses
Aloevera	Leaf	Moisturizers, sunscreen, Emollient
Neem	Leaf	Antiseptic Reduce dark spot Antibacterial.
Turmeric	Rhizome	Antimicrobial Antioxidant.
Liquorice	Root	Anti inflammatory Decrease Pigmentation on marks.
Sandalwood	Wood	Antiseptic Fragrance.
Tulsi	Entire herb	Antibacterial Decrease dark spot
Cucumber	Fruit	Refreshes Invigorates and cool the skin
Lemon	Fruit	Regulation of pH Antioxidant A effect Regulation
Coffee	Beans	Prevention of the development Of photo aging and inflammatory skin disorders
Papaya	Fruit	Papain degrades dead cells in the outermost skin layer, thus improving skin health, hygiene
Tea	Leaf	Common ingredient of anti-age formulationsand products Influencing microvessel system

1. Hair Care:

The physical attributes of a person, such as their hair colour, complexion, and style, are quite essential. The scalp and hair are treated using topical hair care products. These have excipients that either clean, condition, nourish, or prevent the growth of dandruff on the hair. The following are different hair care products:

- i. Hair cleanser: - Eg. Shikakai, Soapnut.
- ii. Conditioner: - Eg. Tea, Hibiscus, Amla.
- iii. Hair growth promoters: - Eg. Amla, sesameoil, Brahmi, Hibiscus.
- iv. Nourisherse: - Eg. Coconut oil, Brahmi, Bhringraj.
- v. Antidandruff: - Eg. Hirda, Soapnut, Thyme, Behada [22].

Various oils derived from vegetable and mineral sources, and are used in cosmetics. Examples of vegetables oils are almond oil, arachis oil, castor oil, olive oil, and coconut oil. Examples mineral oils are Light and Heavy paraffin.

1. Soapnut:-(Soapberry)

The Sapindus Trifoliatus and Sapindusmukorassi pods, members of the Sapindaceae family, makeup soap nuts. Chemical components: Gitogenin, diosgenin, and chlorogenin are among the saponins, along with mucilage, gums, proteins, and proteins.

It is employed as a hair cleaner. It serves as a stimulant for hair growth. It serves as a dandruff preventative [22].



Fig. 20: Soap Nut

2. Amla:

The plant *Emblica officinalis*, which belongs to the Euphorbiaceae family, provides amla. Amla is high in vitamin C, tannins, and minerals including calcium, iron, and phosphorus, which nourish hair and also make it darken [37].



Fig. 21: Amla

3. Coconut oil:

This oil was made from the dried, solid endosperm of the palmea plant, *Cocos nucifera*. In the winter it is a white or pearl-white unctuous mass, while in the summer it is colourless.



Fig. 22: Coconut Oil

4. Almond oil:

The *Prunus dulcis* plant produces the almond oil. It moisturizes and improves the hair and is incredibly nutritious. Additionally, almond oil appears to be an outstanding disinfectant.



Fig. 23: Almond Oil

5. Arachis oil:

This is another fixed oil that is made from the seeds of the leguminous plant *Arachis hypogea*. The oil has a light nutty aroma and is pale yellow in colour. It is used to make “Brilliantines” and hair oils.



Fig. 24: Arachis Oil

6. Castor oil:

This oil is derived from the Euphorbiaceae family member *Ricinus communis* seeds. In the production of lipstick, natural oils, creams, and lotions, it acts as an emollient.



Fig. 25: Castor Oil

7. Eucalyptus Oil:

The distilled oil from the leaves of the genus *Eucalyptus*, a member of the plant family Myrtaceae, is known as eucalyptus oil. Dandruff can be eliminated with eucalyptus oil, and this will help to encourage healthy hair development.



Fig. 26: Eucalyptus Oil

8. Rose oil:

The most well-known essential oil is arguably rose oil, which is made from the petals of *Rosa centifolia* and *Rosa damascena*, both members of the Rosaceae family. Rose absolute is the name of the solvent-extracted product, whereas steam-distilled rose oil is referred to as "rose otto." The use of it in perfumery is more frequent. Beta-damascenone, beta-damascone, beta-ionone, and oxide are the main flavouring substances that are responsible for the characteristic aroma of rose oil.



Fig. 27: Rose Oil

9. Citronella Oil:

It is one of the essential oils that may be extracted from the leaves and stems of various *Cymbopogon* species in the *Cardiopteridaceae* family. This oil's crisp, rich citrus or lemon-like perfume dispels body odour and is used in deodorants and body sprays, however only in very small amounts because excessive use could cause skin irritations. It can also be added to bath water to create a revitalising, body-odor-curing soak.



Fig. 28: Citronella Oil

10. Hibiscus: (Jaswandi)

Source-It is made up of the dried flowers and leaves of the *Malvaceae*-family member *Hibiscus Rosqsinensis*. Vitamins, flavonoids, anthocyanins, mucilage, quercetin, and albumin are among its chemical components. Hibiscus contains calcium, phosphorus, iron, vitamin B1, riboflavin, niacin, and vitamin C, which are used to promote the growth

of thicker hair and delay the onset of greying. It is employed as a hair growth enhancer. Hair is smoothed and made lustrous with hibiscus [22-38].



Fig. 29: Hibiscus

11. Tealeaves: (Chai)

It is made up of dried leaves from *Thea sinensis* and *Camellia sinensis*, both members of the Theaceae family. Caffeine, catechin, polyphenols, epicatechin, theophylline, and theobramine are all chemical components of tea. Tea is employed as a hair dye. Additionally, it is utilised as a hair dye [22].



Fig. 30: Tealeaves

12. Henna: (Mehedi)

It consists of dried leaves of *Lawsonia inermis* from the family Lythraceae. Chemical composition: Henna contains a substance known as Lawsone that is soluble. It is in charge of the colour. Xanthones, tannins, flavonoids, and coumarins are also present. Henna is used as a hair colourant and as well as a hair dye. It gives the skin a cooling effect. Burns and wounds are treated with henna [22-39].



Fig. 31: Henna

13. Brahmi:-(Brambhi)

It is made out of newly cut *Bacopa monieralinn* plants from the Scrophulariaceae family. Saponin, Bacoside A and B, Alkaloids Brahmin, and Herpestin are the chemical components. Brahmi effectively nourishes the scalp and

improves its health. Additionally, it adds enough moisture to it to handle any problems with moisture and substantially lessen dandruff. It has a calming impact on hair.



Fig. 32: Brahmi

14. Bhringraj:-(Bring)

It is made up of the complete *Eclipta alba* herb, which is a member of the Asteraceae family. Its chemical makeup includes the alkaloids ecliptine, amyryn, and luteolin. It is used to improve the complexion of the skin. It is used to strengthen hair, encourage hair growth, and avoid dandruff [22].



Fig. 33: Bhringraj

15. Sesameoil:-(Linseedoil)

Source- It is a fixed oil made from the family Pedicaceae plant *sesamum indicum*. Its chemical makeup includes linoleic, oleic, palmitic, stearic, and arachidic acids. It includes fatty acid glycerides. In addition, it has phenol and sesamol. Uses include acting as a softening agent and providing nutrients for hair. It is employed in the production of pastes, ointments, and soaps. Sesame oil is also used to encourage hair development [22].



Fig. 34: Sesame oil

16. Neem:

Blood purifier and beauty enhancer properties have been discovered in the herb *Azadirachta indica*, family Meliaceae. The typical dandruff treatment. The dandruff- treating properties of neem's antifungal, antibacterial, pain-relieving, and anti compounds [40].



Fig. 35: Neem

17. Walnut:

Family of Juglance Regia the leaves of the juglandaceae family are used intraditional medicine for skin conditions such eczema, hair loss, itching, peeling, and dandruff [41].



Fig. 36: Walnut

Table 3: List of medicinal plants used for hair care [42]

Common Name	Part used	Uses
Shikakai	Pods	Promotes hair growth Preventing dandruff.
Brahmi	Entire herb	Hair Growth
Bhringraj	Plant	Promoting hair growth
Neem	Whole plant	Hair and scalp care
Henna	leaves	Used to colour the hairs
Amla	Fruits	Used as a hair nourisher Used as hair conditioner.
Hibiscus	Flowers	It is used as hair growth.
Soapnut	Pods	Used as hair cleanser
Tealeaves	Leaves	Used as hair colorant
Sesame oil	Fixed oil	Used as hair growth promoters.

Table 4: Marketed Products of Herbal Cosmetics [43]

Product	Brandname
Facepack	Amazine Herbal Scars Face Pack
Massagege	Amazine herbal fruit massagege
Gel	Dr. Jain's forest cucumber
Face wash	Combineem Face wash
cream	Vicco turmeric cream
Faces crub	Aloeindica face scrub
Cold cream	Gayatri papaya &strawberry cold cream

Advantages of Herbal Cosmetic: [44]

1. Herbal cosmetic are easily incorporated with skin and Hair.
2. They are easily available and found in large variety of and quantity.
3. They do not generate allergic reaction and not have any side effects.
4. In small quantity herbal cosmetic are very effective as compared to synthetic cosmetic.

CONCLUSION

In India, herbal cosmetics are used by more than 70% of the population for health care. Herbal cosmetics have been more popular in the personal care industry, and there is a high demand for them in everyday life. Herbal cosmetics are created using cosmetic ingredients as a base, and one or more herbal ingredients are then added to treat various skin conditions and enhance skin beauty. The chemical compositions of each of these cosmetic products contain a variety of natural components, including waxes, oils, natural colours, natural smells, and plant parts like leaves, among others. More research and development is needed in the area of herbal cosmetics to show efficacy and create a safety profile for herbal cosmetics.

The use of bioactive components in cosmetics influence biological function of skin and provide nutrients necessary. There is a huge opportunity to introduce a variety of herbal cosmetics employing the right bioactive substances and the right fatty acids, essential oils, proteins, and additives. The ability and safety of herbal cosmetics products are subject to strict quality monitoring. Therefore, a quality control test needs to be done for herbal cosmetics. Therefore, we can conclude from all of the research on herbal cosmetics that they are the most effective alternative for the artificial cosmetic.

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