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Novel Herbal Drug Delivery in Cosmetics

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Abstract: *Cosmetics made from plants or herbs that are a combination of many different natural chemicals or compounds are referred to as herbal cosmetics. The specifications of the herbal ingredients, the formulation's structure, and the manufacturing procedure are, in this context, crucial factors that influence the final quality and stability of herbal cosmetics. If a cosmetic is natural or organic, it must also be manufactured in accordance with the applicable international standard for technical definitions and criteria of natural and organic cosmetic ingredients and products (ISO 22716). (ISO 16128).Vesicular, particular, and emulsifying agent drug delivery systems are the most favored drug delivery systems among the many used in herbal cosmetics. The benefits of such systems for herbal cosmetics include higher efficacy, increased stability, and a decreased allergenic potential of specific herbal compounds. Thus it is possible to increase the efficacy, stability, and safety of the finished product by selecting an appropriate drug delivery system for a herbal cosmetic. The fulfilment of quality requirements during production, after packing, and during shelf life would be crucial in order to meet long-term stability and dermatological safety, in addition to the advantages previously mentioned. Since herbal cosmetics have become more challenging.*

Keywords: Natural sources, novel delivery techniques, standards, herbal cosmetics

I. INTRODUCTION

The word cosmetic is derived from the Greek word “kosmtikos,” which means to be able to organise and decorate. As man evolved throughout history, a consistent story about the beginning of cosmetics emerged. In prehistoric times (3000 BC), man utilised colour as adornment to entice the prey he wanted to pursue. He also used colour to shield himself from attack by the enemy by decorating his body and colouring his skin (whether man or animal). Cosmetics have their roots in superstition, religion, hunting, and fighting, with later associations with medicine. Finally, the knowledge separated itself from medicine and turned to pharmacy Ayurvedic medicine made cosmetics for both beauty and weather protection using a variety of plants and herbs. Instead of having any negative effects on the human body, the natural components of botanicals nourish it with vitamins, minerals, and other healthful ingredients. Cosmetics are defined as substances that are intended to be rubbed, poured, sprinkled, sprayed, injected into, or otherwise applied to the skin under the Drugs and Cosmetics Act. the entire body or any portion of it in an effort to enhance, promote, or alter look. Cosmetics are not covered by the pre-drug licencing. Products manufactured with phytochemicals obtained from various botanical sources that influence skin functions and give nutrients for healthy skin or hair are referred to as "herbal cosmetics Products manufactured with phytochemicals obtained from various botanical sources that influence skin functions and give nutrients for healthy skin or hair are referred to as "herbal cosmetics." Natural herbs used for their aromatic properties in the manufacture of cosmetics are used to create products known as herbal cosmetics.The desire for natural materials and natural extracts in cosmetic preparations was sparked by the widespread notion that cosmetics with chemical bases are unsafe for the skin and by customers becoming more aware of the benefits of herbal products. New opportunities in the cosmeceutical business have been opened up by the rising demand for natural products. According to the Drug and Cosmetics Act, herbs and essential oils used in cosmetics cannot make any claims that they can penetrate deeper than the skin’s outer layers or have any therapeutic benefits. The growing demand for natural goods has created new prospects in the cosmeceutical industry. The Drug and Cosmetics Act prohibits herbs and essential oils used in cosmetics from making any claims about their ability to penetrate the skin's outer layers or about their therapeutic potential. The legislative standards and regulatory procedures that apply to other chemical ingredients in cosmetic formulations also apply to herbal cosmetics. Herbal ingredients were originally employed in cosmetics and aromatic items during the Pre-Christian Hellenistic era, according to historians. Aloe vera gel was a skin treatment

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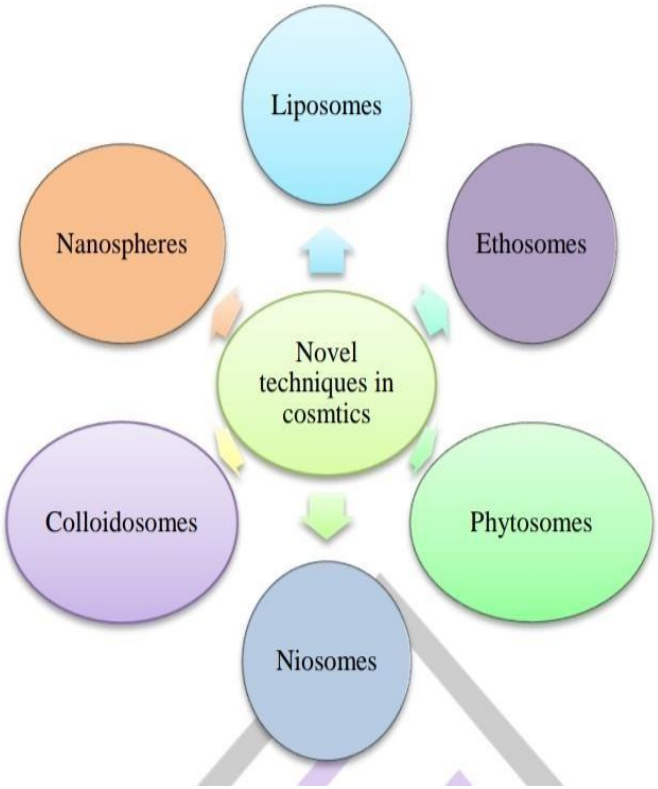
lotion utilised by Queen Cleopatra, a symbol for the pinnacle of cosmetics and beauty. In his Encyclopedia "Natural History," Pliny the Elder (A.D. 23–79) included a fascinating section on perfumes and fragrant substances. In the 16th century, Cornelius Celsus, a Roman physician who lived from B.C. 7 to A.D. 53, talked on the state of skin cleanser. The Queen Elizabeth assisted women in making powders, sachets, and scented washes (a floral essence combined with other aromatic stuff) and urged them to tend gardens. During Elizabeth's reign, red ocher or vermilion was frequently used as rouge, and crushed orris was frequently used as an element in face powder. Sandalwood or Brazil wood extracts were regarded as a very innovative and clever cosmetic. The pimples were treated by being covered for an hour in a mixture of turpentine and sulphur powder, and then being anointed with fresh butter. The golden-red, reddish, and yellowish hair that became popular was produced by soaking the hair in a warm alum solution first, followed by the addition of rhubarb, turmeric, and burberry bark. Many cosmetic formulations based on herbs and herbal oils have been created. Indian women have long used henna to dye their hair and herbs like sandalwood and turmeric to care for their complexion. The materials used in cosmetics in India date back to the earliest phases of the country's medicinal and cosmetic arts Aloes, costus, frankincense, lac, myrrh, camphor, musk, saffron, the use of rose water as attar, and sandalwood were ingredients that were widely used in the early times.

The necessities for basic skin care-

- **Cleansing agent**: removes debris, dead skin cells, and dust from the skin that clogs pores. Vegetable oils including coconut, sesame, and palm oil are some of the popular cleaners.
- **Use of Toners**: Toners tighten the skin and protect it from exposure to various airborne toxins and other environmental pollutants. Witch geranium, sage, lemon, ivy burdock, and essential oils are a few herbs used as toners.
- **Moisturizing**: Moisturizing makes the skin supple and silky. Moisturizing results in a healthy glow and reduces the risk of ageing. Vegetable glycerin, sorbitol Water, jojoba oil, aloe vera, and iris are a few of the natural moisturisers.

Novel Approaches to Cosmetic



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- **Niosomes**-also known as non-ionic surfactant vesicles, are microscopic lamellar structures with advantages such as targeted, controlled distribution, and increased penetration. Niosomes spread across the stratum corneum layer. Niosomes result in the loss of stratum corneum cells and promote drug penetration. Quercetin's solubility, photostability, and skin permeation capacity are all enhanced by niosomes.
- **Ethosomes** - Phospholipid, ethanol, and water are found in lipid vesicles called ethanolosomes. Permeation through the skin is increased. Ethanol in ethosomes increases cell membrane fluidity, which enhances penetration. The uptake of EGCG from green tea leaf extract may be increased by the ethosomal gel.
- **Phytosomes** - Phytosomes are standardised extracts complexed with a phospholipid, which increases activity and enhances bioavailability. It also has benefits including good drug entrapment and improved percutaneous absorption of cosmetic preparations. Sericoside and PA2 phytosomes, which include proanthocyanidin, are used to treat wrinkled skin. Sericoside-containing phytosomes are utilised as a skin-improving product.

The Use of Herbs in Cosmetics

- **Aloe Vera**: Because of its hydrating and anti-inflammatory characteristics, aloe vera is employed in the cosmetics sector.Due of its healing abilities, it is used for a variety of skin issues, including wounds, rashes, and sunburn. Sterols, tannins, polysaccharides, saponin, and sterols are all present in aloe vera gel.

- **Minerals and Vitamins:** The growth factor receptor is influenced by glucomannan and gibberellin, which enhances collagen synthesis and aids in the healing process. Aloe Vera Gel was developed by Abdul Wadood Khan et al. (2013) for the treatment of wound healing. They tested an excision wound model and discovered that Aloe Vera gel had improved wound healing and anti-inflammatory propertie.
- **Elder**- The term elder comes from Flowers, leaves, and berries from Sambucus candensis are utilised for a variety of cosmetic applications. Elder leaf water is applied topically to the skin to cool and soften it. Black hair dye is created when berries are cooked in wine or vinegar. The flower is used to soothe itchy skin. It mostly comprises anthocyanins, which are polyphenols with antioxidant properties. Sambucus nigra was studied for its antioxidant and tyrosinase inhibitory activity, which summarises the anti-aging properties of elder. Rosa et al.

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- **Henna**-Hair, as well as the skin of the hands and feet, are dyed with henna powder. It provides a shiny texture to hair. Lawsone is Responsible for dying property Other components of gallic acid include sugar, henna, white resin, and tannins. Lawsone, which is present in commercially used henna paste, reaches the skin's outermost layer and leaves a reddish-brown stain. Due to the interaction of hydroxyl with the proteins and carbohydrates in the bacterial wall, it also exhibits antibacterial activity. Lawsoniainermis essential oil's antioxidant properties were demonstrated by Elague et al. in 2019.

- **Neem**- Neem is used in the formulation and production of lotion, toothpaste, shampoo, and other products due to its antibacterial and antifungal qualities. It might also. It can also treat a number of skin-related issues, including eczema, psoriasis, and itchy skin. Azadirachtin, nimbin, nimbidin, salodin, and nimbidinB are the primary chemical components of neem.Neem has an inhibiting effect. Bacterial cell wall breakdown has an impact on microbial development and controls the activity of pro-inflammatory enzymes like cyclooxygenase (COX) and lipoxygenase (LOX), which also has an anti-inflammatory effect. In 2019, Sunday et al. created a soap and cream. Contains Azadirachtindica secondary metabolites and exhibits an inhibiting action antioxidant properties on pathogens such E. cloacae, L. ivanoxii, and S. aureus.

- **Amla** – The vitamin C content of amla fruit makes it beneficial for skincare. The fruit's oil is beneficial for a variety of scalp and hair issues. Amla also contains minerals and amino acids in addition to vitamin C. Albumin, tannin, and gallic acid are other components. The tannins embilicanin-B, embilicanin-A, punigluconin, and pedunculagin offer defence against oxygen radicals. Antioxidant action is caused by the recycling of the sugar moiety and the transformation of polyphenol into medium and high molecular weight tannins. Amla Extract increases the proliferation of fibroblasts and also induces the formation of procollagen, according to research by Takashi Fujii et al.

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- **Roses-**are utilised as a moisturising ingredient, both in rosewater and oil. Vitamin C level in rose oil is considerable, and it is also very moisturising. Alcohol is present in rose oil in the forms of citronellol, geraniol, nerol, and 2-phenylethanol. Essential oils, hydroalcoholic extracts, and ethanolic extracts all exhibit antioxidant action. Rosa Damanscena's antioxidant properties are demonstrated by G.ozkan et al. (2004) using the phosphomolybdenum technique.

- **Lavender:** Skin can benefit from lavender oil's moisturising properties. Lavender's lovely aroma makes it ideal for fragrances, bath treatments, and body care items. Additionally, it has antibacterial qualities. Camphor, borneol, and linalool are among the ester and high percentage of alcohol that make up lavender's major components. In a model system using linoleic acid, Hui et al. (2010) demonstrated the high antioxidant and antibacterial properties of lavender essential oil.

- **Jojoba**-The oil extracted from the plant shares all the same characteristics as the sebum on human skin. As a result, it is primarily utilised in face creams. It also moisturises the skin while enhancing skin suppleness. Jojoba oil has been shown by Malgorzata et al. (2015) to boost the moisturising properties of creams by adding to their viscosity

- **Green tea** - it has antioxidant properties that fight against the factors that contribute to skin ageing. Tannins in green tea constrict pores. Green tea's primary constituents are epigallocatechin (EGC), epigallocatechingallate (ECG), epicatechin (EC), and epigallocatechin (ECG). Both the expression of catalase in the aorta and the activity of superoxide dismutase in the serum are elevated.

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- **Sandalwood**: Santalum album, also known as Chandan in Sanskrit and Indian, is used for its volatile oil. It has astringent, cooling, deodorising, hygienic, stimulant, and tonic properties. Sandalwood is beneficial for cutaneous irritation, with its main applications being in skin care.

To reduce skin irritation, act as an antibacterial, soften the skin, and stimulate the skin's peripheral blood flow. It is haemostatic or styptic, treats skin imperfections, and serves as a preventative against allergy and skin problems. It has been used as incense, for embalming, and in cosmetics from ancient times. It was employed in religious rituals in ancient India. cited in the Nirukka, the earliest written Vedic commentary (15th century BC). It is utilised as a perfume in Egypt and India. successful in combating Streptococcus aureus. It reduces skin inflammation and itching, and it also works as an antibacterial for acne. An effective astringent for greasy skin**.**

- **Rose Apple**: A species originated from India, rose apple, also known as Eugenia jambosbianchini, is a popular crop in Florida right now. Its name is derived from the fruit's ability to produce a subtle rose scent when eaten. The rose apple has one to three seeds inside and is similar in size and colour to an apricot. A very related species is Eugenia jambolana, also known as Phalendra in Sanskrit, and it goes by the names Jambul or Jambu in India. The leaves and fruits are utilised. Indian tribal people use jambu as a traditional post-natal face wash and in treatments for facial wounds. Jambu is a distinctive plant from Southern India that can also stimulate the scalp and repair damaged hair.

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- **Shellac**: The term "shellac" solely refers to the purified lac, a natural resin secreted on specific trees and plants, primarily in India and Thailand, by the microscopic insect Kerrialacca. The word "lac" is also the source of the word "lacquer." Perhaps the only naturally occurring resin of animal origin that is used commercially is shellac. It was utilised as a hair lacquer resin in addition to being used to create the vintage 78 rpm records and to insulate electrical windings. The Kusum-trees [Schleicheraoleosa (Lour.) Oken] and another variety of Ber-trees are the Lac host trees in India (LizyphusmauritianaLamk.) The Rain Tree (Samaneasaman (Jac.) Merr.), sometimes known as the Lac host tree, is found in Thailand.The film forming properties make shellac an ideal compound for hair care products, be it fixatives, pump sprays, aerosol sprays or even mascaras. The film may be simply cleaned with washing or shampoo, making it simple to remove the hair from the resin. All common plasticisers work well with shellac

- **Regular Indigo Or Indian Indigo**: Indig of eratinctoria is the plant that yields an essential blue dye in India. It is created during fermentation from another agent already present in the plant, not existing in ready-to-use form. This substance, known as Indocan, is yellow, amorphous, and has an acidic reaction with a nauseous bitter taste. Alkaloids, glycosides, and oleoresin are all present in the plant. It has an anti-microbial effect. Anywhere there is an infectious focus, wild indigo is a herb to take into consideration. The ointment will relieve sore nipples and inflamed ulcers externally. Leucorrhoea can be treated with a douche of the decoction. Henna reng, a mixture of henna and indigo (Indigoferatinctoria) shoots, was used to dye hair and fake beards a youthful blue-black, according to mummified remains from Egyptian tombs. The leaves are what produce the dye, and after several weeks of soaking in water-filled vats, the solution turns a rich shade of yellow. The dried (or fresh) leaves are soaked in water and then typically applied in a paste with henna to deepen the black hair of Indian ladies. This oxidises to generate an insoluble precipitate of indigo.

- **Crimson Pimpernel:** The Angallisarvensis plant bears a vivid scarlet bloom. Greeks of antiquity were people were fond of the flower and utilised it to heal eye conditions. Additionally, dropsy, irritation, and jaundice are treated with the herb. A typical infusion of the plant controls pigmentation and eliminates freckles and other small imperfections when applied as a skin cream. The same lotion is applied to repair hair. An enzyme and several saponins are present in the aerial portions. A crystalline saponin called cyclamine is abundant in the root. However, a tincture made from the fresh plant is used as a cholagogic and diuretic, as well as a treatment

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for skin eruptions and ulcers. Additionally, it is used to treat swellings, stings, and bites as well as nettle and poison ivy rashes.

- **Bhringraj Or Maka**: Eclipta alba Hassk. Is a member of the Asteraceae or Compositae family. The herb, root and leaves are used. Medicinally, bhringraj is indicated for a number of problems including skin diseases. In the cosmetic field it is used as a hair darkener, for skin toning and stimulation, and invigorating peripheral blood circulation of skin. It is traditionally used to check hair loss, stimulate hair growth, and is therefore useful in hair care]. This is a species found across China, Taiwan, Indochina, India, Japan, Philippines. (Syn. Ecliptaerecta L., Ecliptaprostrata L., Ecliptathermalis Bunge., EcliptamarginataBoiss.) The entire plant is officinal. The plant contains nicotine. It is prescribed as an astringent haemostatic. The extracted juice of the fresh herb is applied to the scalp to promote hair growth and taken internally it blackens the hair and beard . It is also found and used in Egypt, where juice of the fresh plant is applied to the scalp to promote hair growth, taken internally it blackens the hair and beard .

- **Withania**: WithaniasomniferaWithaniacoagulans, DunalAswagandha (or Asvagandha) and ashwagandha are two frequent names for Dunal or Withania in India. Vijaya Kala Gandha is its Sanskrit name. Another charming name for it is Hair Flower Tree. It is frequently called "Indian ginseng." The anti-inflammatory properties of the dried fruits and roots allow for topical therapy of edoema and ulcerations. In India, withania flowers are used only as a hair care solution. Other shrub parts are thought to have a variety of uses, such as aphrodisiac, immunostimulant, and treatment for aging-related debility. The herb is useful in treatments against greasy hair and dandruff as well as for improving the structure of the hair and scalp circulation.

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II. FORMULATION AND EVALUATION

Non-herbal substances are frequently utilised in the formulation of cosmetic preparations, although consumers are now accepting more herbal ingredients. Experience should be used while using herbal substances to avoid changing the formulation's qualities. The same processes are used in the development of herbal cosmetics as in the preparation of synthetic cosmetics. The formulations are based on the choice of the best emulsifying agents, the combination of the best ingredients, and customised manufacturing processes to produce the desired result. Excessive processing doesn't affect the bioactivity of botanicals, and herbal cosmetics should nonetheless ensure their availability after application to the skin. Through quality control testing, manufacturers should The main problem with herbal ingredients is that bacteria assault them, making them unfit for human consumption [41–43]. Therefore, care must be made to totally stop the bacterial attack. Herbal cosmetics evaluation is crucial, but there is no strict standard of conduct that can be established for all goods or even all product categories. Cosmetics are assessed to make sure they meet standards for efficiency, storage, processing, and stability. The evaluation of herbal cosmetics is much the same as that of other widely-available cosmetics products. The best grade components should be utilised in cosmetics to reduce sensitivity and irritancy. The quality of the finished products and the raw materials are guaranteed. reaction. The colour, odour, form of physical condition, pH, and net content are among the physical evaluation criteria utilised for herbal cosmetics. The additional assessments for herbal cosmetics include sensitivity, irritability, and grittiness tests. The irritancy and sensitivity test offers alternatives for prophetic or predictive testing as well as diagnostic testing. Analytical assessments are used to support the commercial development and application of new ingredients in order to confirm the quality of created products and to ensure oneself that the process is operating effectively.

The analytical techniques are frequently used by enforcement and regulatory bodies to make sure the products adhere to legal requirements and are safe and appropriately described. The analytical chemist still plays a significant part in deciding on the best approach, managing the data, and deciphering the outcomes. The two main categories of analytical techniques are the classical method and the instrumental approach. The foundation of traditional approaches is the observation and evaluation of analyte chemical reactivity in solution. The foundation of instrumental techniques is a thorough analysis of the physical or physicochemical characteristics of analytes in relation to their atomic or molecular structures. The techniques will offer qualitative information about the chemical makeup of compounds and the identification of particular compounds in cosmetic items.The skin evaluation can be performed visually or by super facial sampling of the skin with image analysis of the cells. . The evaluation of the skin can be done either visually or by super facial sampling of the skin and cell image analysis. The fluoroscan II technology can be used to assess the concentration of cutaneous peroxides and identify the free radical scavenger qualities in cosmetics that can counteract the effect of pollution and UV light on skin. By using skin reflectance spectrophotometry to suppress UVB-induced skin erythema, the free radical scavenging properties may also be assessed. By visual inspection or scientifically using a Minolta Chromameter or Dia-stron Erythema/Melanin Meter, the skin tanning agents employed to produce healthy skin without running the danger of the acute and chronic negative consequences of prolonged UV exposure can be assessed. Nine fundamental cosmetic parameters that are connected to the physical or mechanical characteristics of the hair are evaluated when comparing different hair care products. The antibacterial activity, solubility in sebum, penetrability of the hair follicles, and cytostatic action are primarily the focus of evaluations of antidandruff products

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Table 1: Some of the plants used for cosmetic purposes and used product forms.[3,20-22]

Species	Used parts	Active components	Benefits	Product forms
Cocos nucifera	Oil, Fruits, seeds	Fatty acids	Useful for itching and rashes, Moisturizing, Softening	Bath products, eye makeup, hair care products, shaving creams, suntan products, skin care products and lipsticks.
Helianthus annuus	Oil, Flowers, Leaves, Seeds,	Lecithin, tocopherols, carotenoids, waxes	Smoothing	Hair care products, skin care products, creams
Aloe vera	Leaves	Glucomannans, Anthraquinones, lignins	Moisturizing, Softening, Useful for healing, UV protection	Bath products, shaving creams, skin care products and lipsticks. Lotion, cream
Rhodiola rosea	Golden root	Flavanoids, Monoterpernes, Triterpernes, Phenolic acids	Antioxidant, Moisturizing	Skin care products
Daucus carota	Fruits, seeds, flowers, leaves, roots	Vitamin A	Anti-Aging, Revitalizing, Rejuvenating Smoothing	Skin care products
Ginkgo biloba	Leaves, roots	Terpenoids	Antioxidant, tonic	Hair care products, skin care products,
Lawsonia inermis	Leaves, flowers	Lawsone (a dye molecule)	Hair coloring and nourishment	Hair care products,
Azadirachta indica	Leaves, Seeds, Barks	Nimbin, Nimbinin	Antioxidant Antiseptic,	Skin care products,
Camellia sinensis	Leaves, Flowers, Roots, Seeds, sprouts	Catechins	Skin Protectant, Antioxidant,	Oral care products, skin care products,
Curcuma longa	Leaves, Rhizomes, Roots	Curcuminoids	Skin protectant, Antioxidant, Antiinflamatory, Perfuming	Eye care, skin care products, creams
Emblica Officinalis	Fruits	Vitamin C, phosphorus, iron, calcium	Anti-aging, Skin Lightening, Skin protectant, Photoproctectant, Antioxidant	Skin care products, creams
Prunus dulcis	Oil	Omega-3, phenolic compounds	Nourishing, softening, cleansing, antioxidant	Bath products, hair care products, cleasing products
Rosa Damascena, Rosa centifolia	Flowers, Leaves, fruits	Beta-damascenone, beta-damascone, beta-ionone	Perfuming, tonic	Bath products, skin care products, hair care products, cleasing products
Eucalyptus	Leaves, Oil	α-Pinene, 1.8-Cineole	Anti-dandruff	Oral care, hair care products, skin care
Castanea Sativa	Barks, Flowers, Leaves, seeds	Rutin, hesperidin, quercetin, apigenin, morin, galangin, kaempferol, isoquercitin	Antioxidant Antiaging	Skin care products
Juglans regia L.	Seeds, Flowers, Leaves,	phenolic compounds	Antioxidant	Hair products
Olea Europaea	Barks, Flowers, Fruits, Leaves, seeds	Hydroxytyrosol, tyrosol	Antioxidant, Softening	Skin care products
Vitis vinifera	Seeds, Flowers, Fruits, Leaves	Proanthocyanidins	Antioxidant, Skin protecting Rejuvenating	Skin care products

III. APPLICATIONS FOR HERBAL COSMETICS

- **Herbal Skin Care Products:** Lavender Silk Soaps, Lotions, Creams, Body Powder, Lavender Herbal Body Powder, and 7 Skin Care Creams.
- **Herbal hair care product**: Henna (LawsoniaInermis), Amla (Emblica Officinalis), Shikakai (Acacia Concinna), Bhringraj (Eclipta Alba), Brahmi (Bacopa Monnieri), and guar gum (Cyamopsis tetragonolobus.
- **Herbal lip care cosmetics**: Herbal lip products include lipstick, lip gloss, lip balm, and lip plumper Benefits over the current procedure or product: Aroma Sensual, uplifted mood, anti-depressant, and anti-stress

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Providing pleasure, inspiring original thought, and anxiety Reducing, revitalising, stimulating, calming, odorous, and antimicrobial. Moisturizing impact has improved with composition.

- **Herbal eye care cosmetic**: Eye Make Up, Eye Shadows, Eye Gloss, Liquid Eye Liners Herbal Creams, Lotions, Gel: Creams: Aloe Moisturizing Hand Cream, Rich Face And Hand Cream, Herbal Moisturizers
- **Herbal oil:** Herbal oils work well for dandruff, patchy balding, dropping hair, thinning hair, irritation and itching of the scalp, and maintaining a fine head of hair
- **Herbal perfumes & fragrances:** Citrus Fragrance: Citrus notes (bergamot, Orange, lemon, petitgrain, mandarin, etc.) are known for their light, fresh characteristics. These notes are frequently combined with more feminine smells (flowers, fruits, and chypre). Based on a woody, mossy, and floral complex, occasionally with characteristics, Chypre scents have a slightly dry, unsweet scent. Oceanic Lifestyle: Active, youthful, joyful, and energising

REFERENCES

[1]. Burlando B, Verotta L, Cornara L, Bottini-Massa E. Herbal Principles in Cosmetics: properties and mechanisms of action. New York: CRC Press; 2010. 56-97.
[2]. Plants in Cosmetics. Council of Europe Publishing, Strassbourg Cedex;2001
[3]. AlğınYapar E, İnal Ö, Erdal S. Design and in vivo evaluation of emulgelFormulations including green tea extract and rose oil. ActaPharmaceutica 2013;63(4):531-44.4.
[4]. Masand S, Madan S, Balian S. K. Modern concept of storage and packaging Of raw herbs used in Ayurveda. Int J Res Ayurveda Pharm. 2014; 5(2):242-5.
[5]. D'Amelio FS. Botanicals: a phytocosmetic desk reference. USA: CRC Press;
[6]. ISO 22716:2007 Cosmetics – Good Manufacturing Practices (GMP) – Guidelines on Good Manufacturing Practices
[7]. ISO 16128-1:2016 Guidelines on technical definitions and criteria for natural And organic cosmetic ingredients and products – Part 1: Definitions for Ingredients
[8]. Shrikumar S, Maheshwari U, Sughanti A, Ravi TK. WHO guidelines for herbalDrug standardization, 2006
[9]. AlğınYapar E. Cosmetovigilance and global approaches. ClinExpHealth Sci. 2016;6(2):93-7.
[10]. Arul jothy M, Shanmuganathan S, Nagalakshmi. An Overview OnNiosome As Carrier In Dermal Drug Delivery. Journal Of Pharmaceutical Science & Research. 2015;7(11):923927
[11]. Singh P, Ansari H, Dabre S. Niosomes- A Novel Tool For Anti-ageing Cosmeceuticals. Indo American Journal ofPharmaceutical Research. 2016; 6(10).
[12]. Lu B, Huang Y, Chen Z, Ye J, Xu H, Chen W, Long X. NiosomalNanocarriers for Enhanced Skin Deliveryof Quercetin With Functions of Anti-Tyrosinaseand Antioxidant Molecules. 2019; 24, 2322.
[13]. Pawar P, Kalamkar R, Jain A, Amberkar S. Ethosomes: A Novel Tool for Herbal Drug Delivery. International Journal of Pharmacy and Pharmaceutical Research Human. 2015; 3(4):191-202.
[14]. Ramadon D, Wirarti GA, Anwar E. Novel Transdermal Ethosomal Gel Containing Green Tea (Camellia sinensis L. Kuntze) Leaves Extract: Formulation and In vitro Penetration Study. Journal of Young Pharmacists. 2017; 9(3): 336-340
[15]. Vinod KR, Sandhya S, Chandrasheka J, Swetha R, Rajeshwar T, David B, Anbuazaghan S. A Review On Genesis And Characterization Of Phytosomes. International Journal of Pharmaceutical Sciences Review and Research. 2010;4(3).
[16]. Kumar A, Kumar B, Singh SK, Kaur B, Singh S. A review on phytosomes: Novel approach for herbal phytochemicals. Asian Journal of Pharmaceutical and ClinicalResearch. 2017;10(10):41-4
[17]. www.ayurvedic-herbal-products.com/henna-products.html
[18]. www.premiumcosmetic.com/fragrancestips/ -Natural-Perfume.html
[19]. Schier, W., Sachsa, B., Schultze, W. DtschApoth.Ztg. 1994
[20]. WHO, Basic Tests for Drugs, Pharmaceutical Substances, Medicinal Plant Materials and DosageForms. World Health Organization, Geneva, 1998.