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A REVIEW OF HERBAL COSMETICS USED FOR SKIN CARE AND HAIR CARE

SONAL PATEL¹, HITESH KUMARKHANIYA² AND BHARAT
MAITREYA³

1. PG student, Department of Botany, Bioinformatics and Climate Change Impacts Management, University School of Sciences, Gujarat University, Ahmedabad-380009, Gujarat, India.
2. PhD scholar, Department of Botany, Bioinformatics and Climate Change Impacts Management, University School of Sciences, Gujarat University, Ahmedabad-380009, Gujarat, India.
3. Professor, Department of Botany, Bioinformatics and Climate Change Impacts Management, University School of Sciences, Gujarat University, Ahmedabad-380009, Gujarat, India.

Corresponding author's e-mail: drmuktajain1@gmail.com

ABSTRACT:

In the review paper, I delve into the world, India, and Gujarat levels of cosmetics. Firstly, I define herbal cosmetics and explore various aspects related to them, including skin care cosmeceuticals such as cleansers, emollients, antioxidants, skin protection, anti-aging treatment, and Lip and Nail care. Following that, I discuss hair care cosmeceuticals in detail, focusing on sub-topics like dandruff treatment, natural dyes, hair growth tonics, and herbal hair oils. Next, I explore essential oils and their usage in both hair care and skin care, highlighting oils such as Levander, lemon, jojoba, and peppermint, for skin care and Rosemary, lemongrass, Patchouli, Coconut, Ceserwood for hair care. Furthermore, I investigate the plants from which these oils are extracted, providing insights into their botanical origins. From this comprehensive analysis, I present a well-crafted abstract for the review Paper, encapsulating the essence of the research findings and discussions in a concise manner.

KEYWORDS: Herbal cosmetics, India, Gujarat, Cosmeceuticals, Skincare, Hair care, Essential oils, Botanical Origins, Herbal plants etc.

INTRODUCTION:

The idea of cosmetics and beauty has existed since the dawn of human society. Herbal cosmetics are typically also known as natural cosmetics. In 1961, Raymond Reed, a founding member of the US Society of Cosmetics chemist, coined the term “cosmeceuticals.” He briefed the science-based and active cosmetics using that word. In 1984, Dr. Albert Kligman utilized the aforementioned word to further describe drugs that have both medicinal and cosmetic effect (Joshi & Pawar, 2015).

In the 1990s, a cosmetics producer reinterpreted the term “cosmeceuticals” to mean that people's skin and hair are beautiful because of their care, habits, daily activities, and environmental factors. all of the natural wisdom and information gathered in Ayurveda was all they needed to rely on. numerous herbs and plants have been used by the science of Ayurveda to make cosmetics that are both aesthetically pleasing and protective against outside threats (Vyavhare & Ravsahe, 2023).

The skin is the largest organ in the body and performs a multitude of vital functions, such as protection, percutaneous absorption, temperature, and disease control. Natural beauty is a blessing and an indicator of a healthy life, and plants contribute to the preservation and enhancement of human beauty and personality (Johnsy *et al.*, 2012).

A synthetic product has been created using chemical processes and contain chemicals that have been chemically altered and taken from naturally occurring plants, animals, and minerals. These products increase the risk of skin cancer. However, herbal cosmetics preserve the integrity of skin, enrich it with nutrients, and improve its beauty without having the negative side effects that synthetic makeup does. Many plant sources that improve the appearance of good skin have been recognized by ancient sages (Alwis, 2020).

In recent years, there has been a resurgence of interest in herbal hair care products as people seek natural alternatives to conventional treatments. This dissertation aims to examine the efficacy and potential of herbal hair care in modern times, this study seeks to contribute to our understanding of natural approaches to hair maintenance and provide valuable insights for consumers and the cosmetics industry (Sexena *et al.*, 2022).

Many hair issues, including hair thinning, hair baldness, hair loss, and scalp itching, are treated with these herbal oils. Herbal can include any parts of the plant, including the bark, rhizomes, fruits, flowers, seeds, and flowering tops. Any stage or form of the herb in which plant material is utilized

is referred to as herbal ingredients. For example, consider extract, essential and fixed oil, powder, juices, etc (Kaur *et al.*, 2020).

Global perspective of Herbal cosmetics:

A continuous story about the evolution of human history is created by the invention of cosmetics. around 4000 BC Egyptians first used cosmetics. position improves Japan in the market for cosmetics. In the future, India, China, and Japan will be Asian countries players that are also very popular in the world. (Agarwal *et al.*, 2013). Asia is the fastest growing quickest cosmetics market or rates. Malaysia, Philippines, Indonesia, Thailand, and Vietnam are South Asia's 5 countries. It has skincare, makeup, hair care, fragrance, and many things aimed at cosmetics products. Malaysia every year has a 13% & MYR 3 billion market value in cosmetics.

Cosmetics trends in Malaysia: 60,000 local cosmetics markets accessible in Malaysia, and many personal Stores, sales, and marketing sold through (Hassali *et al.*, 2015). Very very costly herbal makeup items in Thailand, but Herbal items that made the Thai people happy. Selesia is made by hand, skin care, and other products. Only 100% organic accreditation for Beauty items (Thanisorn *et al.*, 2012).

Cosmetics trends in Thailand: selling strategies have popular brands, direct mail, television, magazines, broadcasting, social networks like Twitter, Facebook, the internet, etc., used a marketing strategy of Thailand. the purchase items/products are 100% satisfied and, in that case, products are not good, then in 28 days refunded (Thanisorn *et al.*, 2013).

Conditions demand: Thailand is one of the top three markets for skin care, and hair care products followed by Singapore, Indonesia, and Malaysia. In Thailand, there are 762 companies in the cosmetics industry and 220,000 workers. In Thailand OEMs, SMEs, and MNCs are classified into three groups in the cosmetics industry (Jinachai *et al.*, 2016).

The world's 2nd richest nation is Indonesia. expanding quickly herbal cosmetic market in Indonesia. Most common plants used in, skin care: in Indonesia 1. *Murraya paniculata* 2. *Curcuma*.

domestica, plants used in lip color 1. *Aloe vera* Linn, 2. Red betal leaf 3. *Orthosiphon aristatus*. plants used for hair care: 1. *Olea europaea*, 2. *Cocos nucifera*, 3. *Apium graveolen*, 4. *Aleurites moluccana* is used for skin whitening. 1. *Glycyrrhiza glabra*, 2. *Pachyrhizus erosus*, 3. *Curcuma xanthorrhiza* (wathoin *et al.*, 2018).

Cosmetics trends in Indonesia: nine components of CVSCLs BMC figuring out the mapping of business model. follow the CV SCI are 1. skincare products, 2. natural skincare products. three types of methods are used for selling products: packaged items sale, sale at retail, selling name, And

Wikipedia, bukalapak, online shops are used as a website, and also used Facebook and Instagram (Oktariani et al., 2020).

IBT 2010, agency the Instituto Biodinamic se certificates Brazilian items accreditation has been, as follows Natural: not all natural materials are organic. 2 Organic, 3 with raw organic. ECOCERT is the second guideline by the French certifying body. any items called organic include Organic components present in a maximum of 95 % and a minimum of 20% present as organic components, according to Cosmos Standard (2011) (Fonseca-Santos *et al.*, 2015).

The main organizations that certify natural and organic goods are 1. Bundesverb and Deutscher Industrie und Handel sunternehmen in Germany, 2. Soil association organic standard in the United Kingdom, 3. Cosmetic organic standard in the European Union, 4. ECOCERT in France, 5. Nation association for sustainable agriculture, Australia in Australia, 6. Istituto per la certificazione eticae ambientale in Italy, 7. Instituto Biodinamico de Certificates in Brazil, 8. Quality assurance international in the United States of America. (Sindhura and Jain., 2018).

Herbal cosmetics in India:

In India present in different seasons like warm seasons and cold seasons, this time body beautification uses many different ingredients. (Patkar, K. (2008) Cosmetic words are not easy to define. Three types of cosmetic methods like 1. Liquids, 2. Solids, 3. Semisolid. liquid like oils, hair oil, shampoo, cleaning milk, liquid spree, etc, and solids are powder, face packs, and makeup, and semi-solids are creams, paste, wax, etc. (Kapoor and V.P., 2005).

Indian Extracts for herbal cosmetics: many methods use an extract of herbs, but many times used herb benefits act as toxicity. 1. Haircare extract, Brahmi, amla, Shikakai, reetha, henna, etc. 2. skin care extracts: Tulsi, aloe vera, multani mitti, neem etc (Pandey *et al.*, 2010).

Telangana 114,800 square kilometers covered medicinal plants first cultivated in south India in Andhra Pradesh. 4 to 5 billion for aromatic plants global Trade in the world (Singh & Vidyasagar, 2015). Growing herbs that are a medical Indian system in Madhya Pradesh. Chhindwara largest district in Madhya Pradesh, with a total 110 km² area covered. In Chhindwara district 72 medicinal plants and 32 families and the maximum plants are Fabaceae. This district tribal people medicinal plant use of cosmetics (Rashid *et al.*, 2020).

Most common plants of Maharashtra, India like *Phyllanthus emblica*, *Prunus amygdalus*, *Withania somnifera*, *Santalum album*, *Curcuma longa*, *Momordica charantia*, *Rosa damascena*, *Azadirachta indica*, *Citrus Limon*, *Carica papaya*, *Cuscuta reflexa*, *Plukenetia volubilis*, *Sesamum indicum*, *Mimosa pudica*, etc (Thombare & Shirsath, 2023).

Nashik -Maharashtra, India in Daily Life's top 10 Herbal cosmetics plants, Amla, neem, Henna, Sandalwood, Almond, Avocado, Aloe vera, Saffron, Elder tree, Lavender (Saudagar et al.,2018).

Herbal cosmetics in Gujarat:

There needs to be more research available in Gujarat on the traditional medicinal herb's uses of plants and ethnobotany. The State of Gujarat's northern region is home to the district of Sabarkantha. Bhil, Dungri Bhil, Dungri Garasia, Bhil Garasia, Chokhla, etc., is the most common Schedule tribe in the region.

This essay gives a general review of the cosmetics industry, discusses its significance, & looks at how many factors, clouding brand loyalty, affect women's cosmetic purchasing decisions. Both the corporate community and dealers in the retailing of cosmetics are locally used and all prepared to beautify the body (Limbad, 2013).

The high activity of herbal cosmetics and their lower side effects profile compared to synthetic cosmetics have always attracted a lot of attention. Regularly made and used herbal cosmetics include cleansers, moisturizers, toners, and other herbal cosmetics. The medicinal qualities of herbal cosmetics can affect the biological activity of the skin based on the skin being healthier, less prone to harm from free radicals, increasing the creation of collagen, and preserving keratin structure (Fale *et al.*,2022).

Farmers will have more possibilities for crop diversification thanks to the current investigation. Additionally, it offers plenty of room for the production of raw materials for enterprises based on medicinal plants, which will lessen the demand for natural forests. The intercropping of medicinal plants under Horti medicinal agroforestry systems would support the development of a sustainable agriculture land use system that will boost south Gujarat farmer's productivity and revenue. (Malek *et al.*, 2020).

The majority of terrestrial ecosystems are based primarily on floristic diversity. Because plants are the only source of energy for humans and other animals, they are unable to convert solar radiation into usable form through the process of photosynthesis. Mandvi forests can help mitigate climate change by sequestering carbon and aiding in proper forest management, which will have a positive impact on forest conservation. (Chaudhari & Pathak., 2022).

Herbal cosmetics:

Cosmetics, as defined by the Medicines and Cosmetics Act, are items that are meant to be rubbed, poured, sprinkled, sprayed, inserted, or applied in other ways to the human body to clean or beautify the body or its parts, make them look more attractive, or alter their appearance.

Several cosmetic substances are combined to create herbal cosmetics, which are then used in one or more combinations to treat a range of skin issues. New medications are frequently developed using plants for use in pharmaceutical and cosmetics applications.

The majority of terrestrial ecosystems are based primarily on floristic diversity.

These days, herbal cosmetics are preferred over chemicals since they provide the body with nutrients that improve health, are devoid of artificial chemicals, and have no negative side effects. The benefits of natural cosmetics over synthetic ones include being safe to use, body-compatible, naturally occurring, reasonably priced, offering a wide range of goods, having no negative effects & not being tested on animals (Kumar and Dhanaraju, 2021).

Raw Materials Generally Used in Herbal Cosmetics:

Oils, Waxes, Gums, Hydrophilic collides, color, perfumes, protective Agents, Bleaching Agents, Preservatives, Antioxidants, And other Auxiliary Agents. The categories for cosmetics are classified based on different substances.

Skincare cosmeceuticals:

The three primary layers of the human body's skin are the dermis, hypodermis, and epidermis. Skin vital functions include moisture, infection, injuries, temperature, UV rays, wrinkles, environmental factors, etc. Examples of cosmetics are skin products like, sunscreen, moisturizer, skin lightening, antioxidants, exfoliants, creams, lotion, powder etc. (Kotnala et al., 2019).

1. Cleansers and Emollients:

Emollients are moisturizer cream and apply directly to smooth and hydrated, skin covered with protective moisture. cleansing agent, which clears the skin of debris, dust, and dead cells that block its pores. Vegetable oils like coconut, sesame, and palm oil are frequently used in cleaning goods. (Ashawat *et al.*, 2009).

Type of skin cream: skin cream is divided into two types 1. oil-in-water and 2. water-in-oil. Creams like cleansing creams-Oily, cold creams -Difficult to rub in, night creams -also popular as location, Moisturizing creams, vanishing creams, and foundation creams-are easily spreadable and rub in quality and available as creams and lotions (Mohiuddin, 2019).

2. Antioxidants:

Vitamin C: Collagen repair is aided by Vitamin C helping to lessen some negative effects of photoaging on the skin. Rich in vitamin C example *Emblica officinalis* L.

Vitamin E: The term Vitamin E refers to a group of 30 naturally occurring substances (4-tocopherols & 4 tocotrienols) that are all involved in the activity of Vitamin E. Its main function is to look for lipids. Its main function is to find lipid peroxidation extremists (Kaur *et al.*, 2021). With its potent antioxidant properties, vitamin E is referred to as the elixir of youth. It can be found in food including raw spinach, hazelnuts, olives, soyabean, walnuts, and wheat germ oil (Wargala *et al.*, 2021).

3. Skin Protection:

1. Turmeric: Women traditionally apply turmeric to their cheeks giving them a naturally radiant golden hue. Hindus use turmeric in many of their festivals. Hindu brides, in particular, would rub turmeric all over their bodies to give them a radiant appearance. *Curcuma longa* is a perennial herbaceous plant, and it's a member of the *Zingiberaceae* family (Sumit *et al.*, 2012).

2. *Aloe vera*: It is a common element in cosmetics. Just cut off a leaf of *Aloe vera* and extract the Aloe gel. *Aloe vera* is a rich source of amino acids, like isoleucine, leucine, and glycoside, which have cleaning properties, and vitamins, A, B, C, E, B12 & folic acid, which have antioxidant properties (Warade & Bhosale., 2023).

3. Green Tea: Green tea is *Camellia sinensis* leaves, which are members of the *Theaceae* family. Green tea is the best skin protector, whether it is used topically, drunk as a beverage, or taken as a nutritional supplement. Research indicates *Thea* green tea catechins possess antioxidant properties that are approximately 20 times more potent than those of vitamin E (Gediya *et al.*, 2011).

4. Anti -Aging treatment:

1. Carrot: The carrot is an *Apiaceae* family plant, *Daucus carota* is the source of vegetables. It is a natural source of important vitamins, like Vitamin -A. It is suggested to use carrot seed oil for anti-aging. because it encourages the skin's new cell growth and lessens wrinkles. Function as the skin's natural toner and revitalizing agent (Singh *et al.*, 2014).

2. Grape seed: Grapes seed extract has tyrosinase-inhibiting activity and is beneficial in skin-lightening and anti-aging cosmetics. Seeds of the *Vitis vinifera* L. is *Vitaceae* family include proanthocyanidins, which are polyphenols.

3. Black tea: From green tea to black tea, the extracts are still helpful in avoiding sunburn and skin thickness, two early indicators of UV B- induced phototoxic consequences (Talal & Feda ,2003).

5. Herbal Lip Care:

Lip balm, Lip plumper, Lip gloss, Lipsticks. (Shivanand *et al.* 2010).

Lalulab: A natural flower extract is frequently found in beauty goods. This extract is used to extract natural oils that are then used in lotions, creams, and sunburn balms, among other beauty items (Bashir *et al.*,2021).

In comparison to the skin on the average face, the top corneum layer of the lip has just three to four layers and is extremely thin. There are many melanin cells in the skin of the lips. Lip balms aid in preserving the lip's natural health and attractiveness. To protect the lip from UV radiation, dryness, and pollution when it comes into contact with the skin. It should allow a homogenous layer of the lips (Kadu *et al.*, 2015).

6. Herbal Nail care:

Nail fungus is a frequent condition with a challenging recovery. A nail fungal infection requires lengthy and costly traditional therapy. Examples are *Melaleuca alternifolia*, *Cymbopogon citratus*, and *Lavandula officinalis*. Nail polish, celluloid all film, Eosine, Amyl Acetate (Saudagar *et al.*, 2018).

Hair care cosmeceuticals:

Smooth, shiny, flexible, and pigmented hair that can resist shearing forces of good health. Hair loss is determined by the cuticle's smooth layering, and strength is determined by the cortex's integrity, which is composed of 15% hard keratin (Mandani & Khan., 2013).

The thing about herbal cosmetics they are made entirely of herbs and shrubs.

1. Dandruff treatment:

The most popular herbs used in Ayurvedic medicine include Henna, Neem, Behada, Bhringraj, Amla, Kapoor Mandor etc.

1. Henna: Because Henna naturally binds to the protein in human hair, it stains the color of the hair shaft. Henna is a member of the Lythraceae family (Gediya *et al.*,2011).

2. Neem: Neem's antifungal & anti-bacterial properties make it a popular therapy for dandruff treatment (Warade & Bhosale.,2023).

Many plants are used in dandruff treatment like *Aloe vera (L.)*, *Annona squamosa L.*,*Bacopa monnieri (L.) Wettst.*,*Berberis aristata DC.*,*Buchanania cochinchinensis (L.)**Citrullus colony nthis (L.)**Schrad* *Coriander sativum L.**Datura fastuosa L.**Datura carota L.**Eclipta prostrata (L.)**Feronia Limonia L.*, *Leucas cephalotes*, *Melia azedarach L.*(Jadeja *et al.*,2006).

2. Hair care:

1. Almond: *Prunus dulcis*, sometimes known as *Prunus amygdalus*, is native to Iran and its neighboring country. It belongs Rosaceae family plants. fruit used to prepare oil. Rich in Vitamin -E and almond oil uses hair strength and cure hair loss. Almond oil contains about 78% fat. In quantities, it contains very small unsaturated omega -3 fatty acids.

2. Jatamansi: It is made up of dried *Valeriana wallichii* rhizomes and roots. and member of the Valerinaceae family. it is a common Ayurvedic treatment and healthy hair development. Help you develop hair verity and encourage hair growth (Kolekar *et al.*, 2021).

3. Natural Hair Dyes:

Literature from the Egyptian, Persian, Chinese, and Hindu cultures depict the use of hair color in ancient societies. Hair Dyes were once made from dried plants, plant extracts, metallic compounds, or a combination of plants and metallic chemicals (Adeel *et al.*, 2018).

1. Henna: Lawsone, reddish-orange coloring components found in dried leaves. it is the main coloring ingredient in Henna. It is suggested that lows one be applied to hair color. in addition, maddar has antirheumatic, blood purifier, and antimicrobial properties. (Shahi *et al.*, 2017).

2. Indigo: For thousands of years, people have utilized indigo, commonly referred to as indigotin (Ci Vat Blue1) vat dye in traditional medicine. freshly cut indigoid plant stems and leaves of “dating” such as *Isatis indigo fort.* *Polygonum tinctorium*, *indigo naturalis*, and *Baphicacanthus cusia* are used in ancient times. (Cui *et al.*, 2022).

3. Coffee: The purpose of the study was to see whether regular application of coffee solution could, 1. cover up any gray hair, 2. stain hair a dark brown color, 3. Feasible, acceptable, and maintainable (Gonot -Schoupinsky *et al* 2020).

4. Herbal Hair Growth Tonics:

1. Hibiscus: Hibiscus blossoms have long been used as analgesics, antipyretics, anti-inflammatory medicines, and anti-asthmatics. It has also been suggested that they have anticancer effects. numerous investigations have demonstrated the anti-oxidant, antifungal, and antibacterial qualities found in hibiscus *Rosa sinensis* flowers. (Missoum, A., 2018).

2. Aloevera: A cosmetics hair tonic is dose that helps people with baldness or hair loss grow more hair. The active constituents of the hair tonic were extracting Aloe vera & licorice extract 2.5 %, to gether with different properties of 96% ethanol, and outcomes of the hedonic test were also taken in to consideration were evaluating dosage from (Indriaty *et al.*, 2018).

3.Amla: Amla plant is Euphorbiaceae family members and its fruit extract oil containing and oil used for hair growth promoters. Amla, known as Indian gooseberry, is a rich source of vitamin C. Applying Amla oil to the hair root improves hair growth and hair colour. A commonly used is to reduce baldness & hair loss.

4. Basil: Holy basil has anti-inflammatory, anti-hair-growth, and circulatory effect when given as an herbal rinse to the hair and scalp. Additionally, it to stimulate the growth of hair (Bashir *et al.*,2021).

5. Herbal Hair oils:

Many plants are often used to treat hair loss, including hibiscus, methi, reetha, lemon, brahmi, shikakai, Tulsi,mahabhringraj, jatamansi, parsley, Rosemary, and thyme.Hair oils are hair care formulas .

1. Bringraj: Bhangra is an Asteraceae family plant,and scientific name *Eclipta alba* .and present at Himalaya region , Bringraj uses for hair oils ,hair nourishment.

2.Gotu kola: It is a Umbelliferae family plant and its scientific name *Centella asiatica*, is present in a wet area of India. And also used for Hair care, Darkening of hair, hair oil (Saraf *et al.*, 2014).

3. Bacopa monnieri: Purpal blossoms adorn the little herbs known as Bacopa monnieri. In tropical places, it thrives near streams and in Sandy, moist areas. With many branches short, mushy, leaves, is a creeping herb. Summertime brings with it fruit and flowers. The plant's stem and leaves are used. Ferulic acid, alkaloids, saponins chemical constituents are present (Jain *et al.*, 2016).

Essential oil:

Essential oils are mostly found in perfume and skin and hair care products when it comes to cosmetics. any material or combination applied to the skin, hair system, nails, lips, or other exterior portions of the human body is considered a cosmetic product under the European Union cosmetics regulations. In 2009, 23 percent of sales were valued (Carvalho *et al.*,2016).

Characteristics of essential oils:

Aromatic plants yield essential oils, which are complex, volatile, and naturally odorous compounds, as secondary metabolites. because of their well-known antibacterial, antiviral, antifungal, and insecticidal quality essential oils plants are herbivores for certain types of vegetation. essential oils are complex natural mixtures with somewhere between 20 &60 constituents in concentration (Bakkali *et al.*, 2008).

The most relevant classification is the following:

1] Cosmetics for skin, hair, and integument care (for external intimate care).

- 2]Protective cosmetics (sunscreen, anti-wrinkle).
- 3] Personal cleaning (soaps, deodorants, shampoo).
- 4] Cosmetics for embellishment (perfume, lip color)
- 5] Maintenance items (moisturizer cream, shaving cream)
- 6]Corrective cosmetic (Beauty masks, hair dyes).
- 7]Active cosmetics (antiseptic). (Halla *et al.*,2018)

Essential oil for skin care:

1. Lavender essential oil:

The blooming tops of *Lavandula angustifolia* Mill are used to steam distill lavender essential oil, which is a clear, colorless pale-yellow liquid. The lavender essential oil comes in two kinds. Traditional lavender oil is expected from *L.angustifolia* flower.& Lavender essential oils are made from flowers of *Latifolia* medium. lavender variety has a strong camphoraceous scent due to its high 1,8 cineol content (Sarkic & Stappen.,2018).

The herb lavender was selected “Herb of the Year 1999” by an herb growing and marketing network in the United States of America, Traditionally, the oil was thought to provide antimicrobial, antifungal, carminative, sedative, antidepressant, healing properties for burns and bug bites (Cavanagh *et.al.*, 2002). There are 200 tons of lavender oils produced annually worldwide. The market for lavender essential oil is dominated by the following nations: Morocco, Spain, France, China, Bulgaria, and the United Kingdom. the complex natural combination of 20 -100 chemicals that are present in varying amounts makes up the essential oil (Lesage -Meessen *et al.*,2015).

2. Lemon essential oil:

Originating in tropical parts of Southeast Asia and China, Citrus species (Rutaceae) currently hold the record for the world's highest fruit production, with over 123 million tons created in 2010. essential oils are one of the Citrus byproducts that have been created for over a millennium. The antibacterial qualities of essential oils are mostly phenolic components. Citrus peel essential oils' purity and concentration are influenced by numerous circumstances (Palazzolo *et al.*, 2013).

Many uses of lemon essential oil, often known as Citrus lemon, are found all over the world such as complementary and alternative medicine, herbal remedies, blood flow, capillary guardianship, hypertension, diuretic, and inhibitory to bacteria and yeast (Chelaru *et al.*, 2015).

Essential oil of lemon balm, extracted from fresh or dried flowers, the essential oil mostly consists of 30% citronellal,33 % citral (Citronellal, linalool), and 2% geranial (Bagdat *et al.*,2006).

3. Frankincense essential oil:

At many pharmacies or herbal stores, twenty samples of frankincense oil were bought. The oil-varied ingredients include alfa-pinene, mycene, sapinene, bita-caryophyllene, limonene, thujene, p-cymene, and Bita-pinene (Van *et al.*, 2010). In India, frankincense derived from *Boswellia serrata* is frequently used as therapy for a variety of ailments, especially infections of the bowl. Myrrh's antibacterial properties were noted by the British Herbal Pharmacopoeia (BHP) in 1996 (Mulugeta Lemenih *et al.*, 2004).

4. Peppermint essential oil:

There are antibacterial, antiviral, and anti-inflammatory qualities in peppermint oil. Along with a strong antifungal potential, it also possesses antioxidant and anticancer properties. It is extensively utilized in pharmaceuticals and goods as well as cosmetics (Abelan *et al.*, 2022).

Mentha piperita L., a hybrid of *M. aquatic* L. (water mint) and *M. spicata* L. (spearmint), is the plant from which peppermint essential oils are produced. Peppermint oil primary active components are - (menthol 33-35%), and - (menthone 14-33%) (Buleandra *et al.*, 2016).

5. Jojoba essential oil:

A wide range of skin applications in *Simmondsia chinensis* oil. An updated analysis of SAO, EPO, and JJOs' recent use in cosmetics and dermatology as "active" substances is what this aims to deliver. It is crucial that the cosmetics industry recess this ingredient in this regard. (Black & Staib, 2022).

First, NMR was used to ascertain the moisture and oil contents of jojoba seed samples that were gathered from seven different locations in Rajasthan. Iodine, peroxide, Acid, Unsaponifiable matter, and saponification value are oil contents present in jojoba oil. (Sandha & Swamini., 2009).

Essential oils for hair care:

1. Rosemary essential oil:

Rosemary is a member of the Lamiaceae family. Rosemary is a potent herb from the Mediterranean region. In India widely not grown is Rosemary plants. It is a delightfully aromatic leaf that led Europeans to introduce its garden plants. Rosemary plants are 20 varieties Golden rain Rosemary, pink Rosemary, white Rosemary, Upright Rosemary, pine-scented Rosemary, creeping Rosemary, and Spice islands Rosemary etc. (Begum *et al.*, 2013).

The leaf is the primary source of the extract. A significant concentration of physiologically active chemicals, including phenolic acids, terpenes, and flavonoids are present. Components of Rosemary have a significant impact on its biological effects. Cosmetics are another area in which Rosemary is

used. the earliest European cosmetics from the 16th century, commonly referred to as “spirits of Rosemary “, the perfume that blended lavender & Rosemary (Pawłowska *et al.*,2020).

2 Lemongrass essential oil:

The primary yeast linked to dandruff is *Cymbopogon citratus*, which has essential oil with minimum concentration. These oils are commonly utilized. Thus, a tonic containing lemongrass oil is tested in this study if it works for participants who have dandruff (Chaisripipat *et al.*,2015).

Lemongrass essential oil included geranyl acetate, myrcene, citronellal, nerol, geranial, terpinolene, and terpinyl methyl heptane in addition to at least 75% citral (Tran *et al.*,2021).

The essential oil known as a lemongrass essential oil is derived from lemongrass parts including the leaves and roots. The *Cymbopogon citratus* is the scientific name. There are roughly 55 species at the moment. The essential oil that collects in the leaves of lemongrass is the primary product (Hien *et al.*,2020).

3. Cedarwood essential oil:

The plant family Pinaceae includes cedarwood, sometimes referred to as *Cedrus atlantica*. Cedarwood needles, leaves, bark, and wood serve as antifungal, astringent, and antiseptic, it also be broken up using the essential oil. It also has calming, insect repellent, lymphatic decongestant, & general tonic properties (Sharma *et al.*,2023).

It increases the flow of blood to both the hair and the scalp. For these reasons, it is the greatest essential oil for issues with the scalp, including dandruff, hair loss, and infection and itching. They mostly comprise chemicals found in cedarwood oil, such as bita-cedrene and cedrol. Even in those with different type of alopecia, oil encourages the creation of new hair (Padole *et al.*, 2022).

Synonyms of cedarwood like Atlas cedarwood, Himalayan cedarwood (Deodar cedar wood), Texas cedarwood, Chinese cedarwood, and Virginian cedarwood.

4. Coconut essential oil:

According to the research on coconut oil's ability to prevent hair damage, this effect might be partly attributed to its capacity to obstruct the diffusion of harmful substances into the structure of hair strands. Given that hair color loss is a result of diffusion, applying oil treatment may help to minimize color loss during shampoo washing. We have attempted to verify this hypothesis in this communication (Kaushik *et al.*, 2022).

5.Patchouli essential oil:

There are 15 recognized ingredients in patchouli oil. Among the chemical components with the highest percentage are patchouli alcohol, guanine, Seychelles, and patchouli cosmetics, which include soap, toothpaste, shampoo, lotion, deodorant, and hair tonic. This developing shampoo product is one approach to incorporate patchouli oil as an antibacterial and binder (Muhmmad *et al.*,2022)

To eliminate moisture and other heavy metals, the patchouli oil utilized in this study had to. First, undergo purification. The way this tool functions is by dividing the ingredients in patchouli oil according to variations in their critical spots. How shampoo bars are made many components are used like Aloe vera, green tea, mica powder, cocoa butter, etc., shampoo & bars have a green color, order fragrance, and texture non-sticky and solid (Muhammad *et al.*,2022).

CONCLUSION:

The world of herbal cosmetics offers a vast array of natural solutions for skincare and haircare needs. From ancient traditions to modern innovation, herbal cosmetics have garnered attention worldwide for their efficacy and minimalistic approach to beauty. In India, where Ayurveda and traditional herbal remedies hold significant cultural importance, herbal cosmetics play a pivotal role in everyday skincare routines. Gujarat, with its rich botanical diversity, has become a hub for herbal cosmetics production, harnessing the power of indigenous plants for beauty formulations. Within the realm of skincare cosmeceuticals, the utilization of antioxidants, skin protection agents, cleansers, emollients, and anti-aging treatments sourced from various plants showcase the versatility and potency of herbal ingredients. Similarly, in hair care cosmeceuticals, plants are extensively used for dandruff treatment, hair care, natural dyes, and herbal hair growth tonics, offering holistic solutions for hair health. Essential oils, derived from plants, serve as potent ingredients in both skincare and hair care formulation, providing nourishment, hydration, and therapeutic benefits. Their multifaceted properties make them indispensable in herbal cosmetics, catering to diverse needs ranging from acne treatment to scalp revitalization. Overall, the integration of herbal cosmetics into beauty routines represents a harmonious blend of alternatives to conventional beauty products. Their emphasis on botanicals continues to gain popularity globally, promoting not just external beauty but also overall well-being and environmental consciousness.

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Table 1: List of Plants Used as Skincare cosmeceuticals:

No	Skincare cosmeceuticals	Scientific name	Reference
1.	Cleansers and Emollients	<i>Cocus nucifera</i>	Ashawat <i>et al.</i> , 2009
		<i>Olea europaea L.</i>	Mohiuddin, 2019
2.	Antioxidant	<i>Emblica officinalis</i> , Vitamin C	Kaur <i>et al.</i> , 2021
		<i>Spinach oleracea</i> Vitamin E	Wargala <i>et al.</i> , 2021
3.	Skin protection	<i>Curcuma longa</i>	Sumit <i>et al.</i> , 2012
		<i>Aloe barbadensis miller</i>	Warade & Bhosale ,2023
		<i>Camellia sinensis</i>	Gediya <i>et al.</i> ,2011
4.	Anti-aging treatment	<i>Daucus carota</i>	Singh <i>et al.</i> , 2014
		<i>Vitis vinifera</i>	Talal & feda., 2003
		<i>Camellia sinensis</i>	
5.	Herbal lip care	<i>Rosa rubiginosa</i>	Bashir <i>et al.</i> , 2021
6.	Herbal nail care	<i>Melaleuca alternifolia</i>	Saudagar <i>et al.</i> , 2018
		<i>Cymbopogon citratus</i>	
		<i>Lavandula officinalis</i>	

Table 2: List of Plant Used as Haircare cosmeceuticals:

No.	Hair care cosmeceuticals	Scientific name	References
1.	Dandruff treatment	<i>Lawsonia inermis</i>	Gediya et al., 2011
		<i>Azadirachta indica</i>	warade & Bhosale., 2023
		<i>Annona Squamosa L.</i>	Jadeja et al., 2006
		<i>Feronia Limonia L.</i>	Jadeja et al., 2006
2.	Hair care	<i>Prunus dulcis</i>	Kolekar et al., 2021
		<i>Nardostachys jatamansi</i>	Kolekar et al., 2021
3.	Natural hair dyes	<i>Lawsonia inermis</i>	Shahi et al., 2017
		<i>Indigofera tinctoria</i>	Cui et al., 2022
		<i>Coffea arabica</i>	Gonot-Schoupisky et al., 2020
4.	Herbal Hair Growth Tonic	<i>Hibiscus rosa sinensis</i>	Missoum, 2018
		<i>Aloe barbadensis miller</i>	Indriaty et al., 2018
		<i>Phyllanthus emblica</i>	Bashir et al., 2021
5.	Herbal hair oils	<i>Ocimum sanctum</i>	Bashir et al., 2021
		<i>Eclipta alba</i>	Saraf et al., 2014
		<i>Centella asiatica</i>	Saraf et al., 2014
		<i>Bacopa monnieri</i>	Jain et al., 2016

Table 3: List of Plants Used as Essential oil used for skin & hair

Skincare essential oils:			
No.	Scientific name	Family	References
1	<i>Lavandula angustifolia</i>	Lamiaceae	Sarkic & Stappen., 2018, Cavanagh <i>et al.</i> ,2005 Lesage-Meessen <i>et al.</i> ,2015.
2	<i>Citrus limon</i>	Rutaceae	Palazzolo <i>et al</i> ,2013; Chelaru <i>et al.</i> ,2015; Bagdat <i>et al.</i> ,2006
3	<i>Boswellia sacra</i>	Burseraceae	Van <i>et al.</i> ,2010, Lemenih <i>et al.</i> , 2004
4	<i>Mentha piperita L.</i>	Lamiaceae	Abelan <i>et al.</i> ,2022, Buleandra <i>et al.</i> ,2016
5	<i>Simmondsia chinensis</i>	Simmondsiaceae	Black & Stain, 2022 Sandha & Swamini, 2009
Hair care essential oils:			
1	<i>Salvia rosmarinus</i>	Lamiaceae	Begum <i>et al.</i> ,2013, Pawłowska <i>et al.</i> ,2020
2	<i>Cymbopogon flexuosus</i>	Poeaece	Chaisripipat <i>et al.</i> ,2015; Tran <i>et al.</i> ,2021; Hien <i>et al.</i> ,2020
3	<i>Cedrus</i>	Pinaceae	Sharma <i>et al.</i> ,2023, Padole <i>et al.</i> ,2022
4	<i>Cocos nucifera (L.)</i>	Arecaceae	Kaushik <i>et al.</i> ,2022
5	<i>Pogostemon cablin Benth.</i>	Lamiaceae	Muhammad <i>et al.</i> ,2022