

A Review on Expeditiously Growing Herbal Cosmeceuticals: Herbal Lipstick

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ABSTRACT

Cosmetics or makeup became a crucial part of everyday reality and most important tool for women's to increasing self-confidence, enhancing the physical appearance. Cosmetics are used as temporarily acting as cleaning, improving appearance while cosmeceuticals are used to treat deeper cause of human skin and gives best results. Cosmetics are designed for beauty purpose only and alter the external appearance of human skin while cosmeceuticals are formulated by using biologically active ingredients which clears the internal human skin and gives long term effect. Recently, used of herbal cosmetics are tremendously increased in young generations as they very health conscious and have faith on natural herbs compatible to all skin types and safer than synthetic cosmetics which made up from artificial ingredients. Lipstick is define the shape of your lips every time when you apply it without negative effects mostly used by women's for add colour to their face, personal style, express the individuality and protects the lips from external damage. An herbal lipstick is a category of cosmetic product contains naturally derived ingredients like oils, waxes, preservatives, fragrance, essences and colours which provide nourishment, glide and moisture and prevent dryness to your lips. The review explains different types of natural herbs with their properties used in herbal cosmeceuticals, naturally occurring perfumes, fragrances and colours used in herbal lipsticks. This also focused on advantages of herbal lipstick over synthetic lipsticks, quality control and

evaluation parameters of herbal lipsticks. Additionally, it gives quick information regarding top brands of herbal, natural and organic lipsticks trending in worldwide market.

KEYWORDS: Cosmeceuticals, Herbal lipstick, Natural plants, Colouring agents, Herbal lipstick market.

I. INTRODUCTION

Cosmetics (Greek term '**Kosmetikos**') means '**Skilled in ordering or arranging**') mean pharmaceutical products, mixtures of chemical substances which are extracted from natural and synthetic sources and used for applied to the human body to improve appearance. **Definition as per the Drugs & Cosmetics Act 1940, Rules 1945**, Cosmetics are specially designed for personal and skin care in various forms that are meant to be rubbed, poured, sprayed or sprinkled topically for cleansing, protecting, beautification and altering appearance of body or skin [1]. **Cosmetics or Makeup** is a category of health and beauty products that are designed to increase appearance and color of person's face mainly used for fashions shows, performances. Makeup is used in various situations and gives positive feel and more confident for that time period so it is proved as main goal of cosmetics is to add a new fresh look to the person after applying it on skin [2].

Across the world, image of makeup wearing women is judged as self- confident, healthier and more attractive than the same women without makeup. Self-decoration used by women's for change the image, enhance facial symmetry

mainly it is associated between cosmetics and beauty. The ladies while they pursue their goals unrealistic resemblance to the thin, attractive model stereotype that occasionally appears in the media [3]. The body into a recognized ideal form and those women normalize their bodies to achieve an image that is accepted as the cultural standard through consumer rituals of self-care. Cosmetics gain a much more importance and become an integral part of everyday life as it makes positive impact on women's life and may be ready with makeup for all the situations and feels as more successful person [4]. Cosmetics are substances used to change the scent or look of human skin. Cosmetics prepared for personal care includes shampoo, soap, body wash, used for cleanse the body. Cosmetics are more useful for skin care to exfoliate and protect the skin includes cleansers, serums, body lotions and moisturizers [5]. Recently

nations has a high need for manufacturing and marketing of lotions, powders, perfumes, fingernails and toy nail paint, eye color contact lenses, hair colures, hair spray and gels, deodorants, baby goods oils, bubble bath, bath salts, butters, and many other types of products [6, 7]. **Cosmeceuticals** is known as cosmetic-pharmaceutical mixture which contains active agents with therapeutic, healing and disease fighting properties. Now a day, cosmeceuticals production has been increased for personal care to enhance health, beauty and protects the skin from photo damage [8, 9]. The concept of beautifying is not for women's only but men's are also aware about their look. There are some cosmeceuticals include astringents, antiperspirant, anti-aging and hair growth products used by men. For women, it includes antioxidants, anti-cellulite, anti-wrinkles, hair removal and skin whitening products [10, 11].

Cosmeceuticals are classified in three categories

Table no 1: Classification of Cosmeceuticals

Types of Cosmeceuticals	Products
Skin Cosmeceuticals	Anti-aging creams, Facial products, Lotions, and Moisturizers.
Hair Cosmeceuticals	Conditioners, Creams, Dyes, Gel, Hair colorants, Shampoos.
Others	Toothpaste, Powders, Lipstick, Nail Polish.

While formulating cosmeceuticals products, use of non-herbal and synthetic compounds is mostly added for giving effective results after applying on the any part of body or skin. But, consumers are very interested in buying herbal based cosmetics preparations. Consumers are believed in naturally derived sources are giving better and more effective than other type of products [12, 13]. An herbal skin care preparation is safest, protecting human skin from external affects and provides good appearance. Dermatologist has proven that herbal cosmetics gives grater therapeutic effect and no side effects shown on human body [14, 15]. **Herbal Cosmetics** defined as after referred as products, containing mixture of derived sources from a variety of natural or botanical sources which provides necessary benefits to skin or hair to maintaining health of body. An herbal cosmetic has various properties like healing, enhancing and smoothing appearance due to physiological action of herbal ingredients which added in products [16, 17]. In India, we have

a long history for using herbal plants to cure disease by natural method as per human body functions, so prolonged use of herbal plants as a medicine shows safety, efficacy and acceptance by all ones. Herbs do not provide faster relief, but they can connect us with nature [18]. Those that are lives in mountainous and rural areas peoples choose plants, some extracts for treatment and cosmetics. After these, herbal medicines has provided worldwide as many more potent medicines in crude and pure chemical forms for designed modern medicines to modern medical science [19, 20].

Herbal medication and cosmetics has more acceptances and large usage by Indian peoples includes more than 60-70% of the population for health care. There are two major benefits of using herbal cosmetics in developing nations like India; it has an availability of medicinal plants due to cultural, agro climatic and ethnic biodiversity. The manufacturing and production of herbal products both one are ecofriendly, nature-friendly [21].

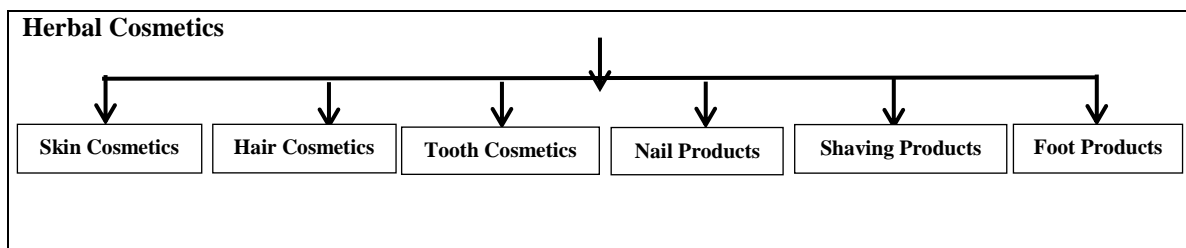


Figure no 1: Classification of Herbal Cosmetics

Herbal Plants Used in Cosmeceuticals

In ayurveda, numerous natural herbs or medicinal herbs are described with their properties as they used to treat skin and other disorders mainly for purification of blood, elimination of doshas from body and maintain physical, mental strength of human. Naturally found ingredients has rich source of vitamins, essential oils, antioxidants, terpenoids and proteins. These ingredients added into skin care formulation due to their various activities like antimicrobial, antioxidant, antiseptic and anti-inflammatory action [22]. Green and Black tea is made up from leaves of camellia sinensis plant may be topically applied, consumed as supplement act as good skin protectant, shows more antioxidant activity than vitamin E. Coconut oil, Sunflower oil and Aloe extracted from seeds,

leaves is acts as skin softener, smoother and excellent moisturizer used for dry skin treatment [23]. Three natural minerals include Zinc oxide, Titanium oxide and Iron oxide is known as physical sunblock's, provides protection against UVA and UVB type radiations. Golden root are valuable herbs currently used as antioxidant, carrot seed oil is known as natural toner, rich in vitamin A and helps to reduce the wrinkles so added into anti-aging formulation. Some herbs namely Cashmere tree, Mandor, Magic nut, Rosary pea, Bringaraj and Sweet flag are added into hair care formulations for dandruff treatment. The Almond oil contains more amounts of fat used in hair care products for softens, nourishing and strengthens the hair [24, 25].

Table no 3: Herbal Plants Used in Skin Care Cosmeceuticals

Herbal Plants	Uses
Coconut Oil	Excellent skin moisturizer
Olive Oil	Skin and hair conditioner
Jojoba Oil	Moisturizer
Carrot Seed Oil	Anti-aging, Rejuvenating and Revitalizing agent
Rose Oil & Rose Water	Heal wound
Chandan	Detanning agent
Aloe Vera	Anti-oxidant, Heals, moisturizes and soften the skin
Turmeric	Skin protecting agent, Antiseptic
Calendula	Anti-inflammatory, Anti-oxidant, Wound healing activity
Oat	Anti-oxidant, Natural emollient property
Quercetin	Anti-inflammatory, Anti-oxidant, Protection against UVA and UVB rays
Multani Mitts	Cleans the skin

Table no 4: Herbal Plants Used in Hair Care Cosmeceuticals

Herbal Plants	Uses
Amla	Hair Care, Prevents greyness
Brahmi	Hair Growth
Benjamin	Hair Oil
Chamomile	Hair Tonic
China Rose	Improve hairs, Prevents premature greyness
Gotu Kola	Hair care, Hair Oil

Hibiscus	Prevent premature greying of hair, Stimulate thicker hair growth
Henna	Treatment of hair and scalp problems
Lemon	Hair Loss
Shikakai	Washing hair, Improve hair growth
Soap Wort	Shampoos
Neem	Anti-bacterial, Anti-fungal agent
Walnut	Treatment of hair loss and scalp itching

Colouring agents are mostly employed to give unique and attractive external appearance to cosmeceuticals. Since ancient times, colour has been employed in cosmetics used as decoration purpose. Colour must be selecting from list of certified dyes established by the Drug and Cosmetic Act, colour is a crucial component of cosmetic products includes naturally derived pigments, soluble dyes and insoluble dyes. The naturally occurring colours are obtained from various plants, fruits, stems, leaves and flowers should have no physiological activity and be non-toxic, non-carcinogenic to human skin [26]. Natural colours must have a distinct chemical composition for showing colouring ability after applying on lips. Colorants must be stable while stored since they must not be impacted by light, tropical temperatures, hydrolysis, or bacteria. Natural colours must be eco-friendly and it

also gives health benefits like rich in vitamin A, anti-oxidants properties [27]. To disguise the four primary taste sensations, flavours or flavouring agents are added into cosmeceuticals. A mixed sense of taste, touch, smell, sight, and sound is referred to as flavour. In each involve with the development of technology in the flavour industry, various fake or imitation flavours have been created. These flavours are a combination of physicochemical and physiological processes that influence how substances are perceived. Acceptable flavour development is more of an art than a science. The taste of the medicine or other components that must be included is taken into consideration while choosing a flavour. Lipstick flavours should not contain any potentially irritating or dangerous ingredient. Naturally extracted essential oils must have unique properties so used as flavouring agent in herbal lipstick [28].

Table no 5: Herbal Perfumes, Fragrances and Natural Colours Used in Cosmeceuticals

Perfumes, Fragrance and Natural Colours	Uses
Chypre	Smells slightly dry, not sweet
Citrus	Light, fresh combine with feminine scents
Essential Oils	Derived from <i>Amyris balsamifera</i> L. <i>Angelia archangelica</i> and <i>Rosewood</i> , flavouring agent
Cochineal	Red dyestuff derived from dried female insect, Carminic acid is main colouring agent
Chlorophyll	Naturally found green colour pigment
Anthocyanins	Blue, purple coloured derived from blueberry, blackberry, grapes and plum
Carotenoids	Orange, yellow and red coloured found in carrot, pineapple, orange and papaya
Saffron	Yellowish powder, flavouring and colouring agent

II. LIPSTICK

Lipstick is a cosmetic product made up from waxes, pigments, emollients and oils with suitable perfumes and flavours which is moulded in sticks form used to apply for coloration, moisturization, protection and texture of human lips [29]. Lipsticks are widely used in nations by women's to looks cool, brighten the color of lips and it will give more confidence of feeling

beautiful. Lipsticks has many other variations like lip balms, crayons, Liners, liquid, pencils, strains and palettes [30]. It formulated as effectively cover lips with colour and apart a gloss for long duration of time, maintain color intensity without any alteration of shade, shows thixotropic properties and it is safe, non- toxic and non- allergic to human lips [31].

History of Lipstick

In early history over 5,000 years ago, Sumerians used crushed gemstones, Indus Valley used rectangular pieces of ochre and applied it on lips as lipstick so both are known as first inventor and wear lipstick. About 1,000 years ago, Chinese work on to protect the skin of lips and they were made up beeswax based lipsticks. In England from 16th-century, lip colouring gain some popularity due to queen Elizabeth brighten her face with red and the women of her court dyed their lips red with mercuric sulphide. In late 19th-century western society, lipstick was colored with carmine dye extracted from cochineal insects [32]. Lipstick and cosmetics in general did not truly attain social acceptance until the 20th century. The cost of cosmetics was decreased by better applicator and metal tube construction. This, together with the general populace's acceptance of the new technology, led to an increase in usage and popularity. Push-up tubes were available by 1915, and the first claims of immortality appeared. Lipstick comes in a wide variety of colours and is designed to appeal to the current fashion trend [33]. In a fragrance oil-wax base, dyes and pigments are used to create lipstick. Lipstick comes in a variety of tubes, from simple plastic dispensers for lip balm to elaborate metal containers. Although sizes vary, lipstick is often offered in tubes that measure 3 inches (7.6 cm) in length and 50 inches (1.3 cm) in diameter. The tube is made up of a base and a cover. Two compartments make up the foundation and by twisting or sliding one of them, the lipstick will be pushed up to be applied. We will solely focus on the maker of lipstick since the production of the tubes uses entirely unique technologies [34, 35].

Types of Lipstick

- **Cream Lipstick**

Cream lipstick contains more wax but not shiny in looks but protect and gives smooth appearance to lips. Those women have small size lips they must use cream type of lipstick.

- **Gloss Lipstick**

Gloss lipstick mostly used by young girls those has thin and small lips gives shiny look to lips, so gloss type can use with traditional lipstick also.

- **Long wearing and Transfer Resistant Lipstick**

Most of the formulations contain moisturizer to maintain dryness of lips, ingredients use while

preparing this type of lipstick should give longest time and perfect freshness for 8 hours. Those women do not use lipsticks daily they can apply long wearing type and brighten the look of lips.

- **Mate and Lipstick**

This type of lipsticks gives younger, smoother effect to lips and it is perfect choice for women which always searching for new colour for her lips.

- **Moisturizing Lipstick**

Moisturizing lipstick contains glycerin, aloe and vitamin E so ingredients shows there properties as wetted, more shiny and helps in maintain soft, smooth for long duration those has dry lips.

- **Pearl and Frosted Lipstick**

Both type of lipstick give best appearance as it luster and reflects the light due to shine of your applied lipstick on lips. But has disadvantage feels as very heavy, causes dryness and cracking the lips so you have moisturizes the lips before using pearl and frosted lipsticks.

- **Satin and sheer Lipstick**

It contains higher oily components, prepared as very darker shade while we looks at this type of lipstick but after applying it gives lighter shade, shine and nourishes your lips [36, 37].

Characteristics of Lipstick

- It should have a bright, smooth appearance that is devoid of perspiration
- It should not irritate or be poisonous to lips.
- It should not dry out while being stored.
- It should give shiny appearance to area of lips.
- It should not include any gritty particles.
- The container should be simple to use and easy to handle.
- Within a range of normal climatic temperature variation, it should not melt or harden [38].

Importance of Herbal Lipstick over Traditional or Synthetic Lipstick

- The natural and safe component is found in the organic lipstick. Additionally, they contain natural nutrients that support to maintain healthy lips.
- They have more stability and purity due to additional herbal extracts and more effective in small quantities.
- They are used to treat leucoderma of the lips and are non-toxic, highly lipophilic, anti-

oxidants, anti-microbial, and anti-inflammatory.

- They give pharmacological action due to decrease in bulk properties of extracted constituents of natural plants.
- A wide variety of originals shades color includes Purplish red, ruby red, beetroot purple, dark violet, pastel red, pale red, purplish red, rose red, deep magenta, dark purple, orange, and deep violet.
- These colors can be combined and blended in many ways to produce various colored shade lipsticks.
- The color of something can be changed to different shades by adding organic and inorganic acids and bases.
- It is shows stability in shelf life time, in chemically and physically also and free from bloom and sweating while stored in specific criteria.
- These lipsticks do not cause any reaction to skin due to do not contain components such as formaldehyde and Paraben [39, 40].

Basic Ingredients used in Herbal Lipstick

The herbal lipstick prepared by using three main ingredients oils, waxes and colouring agents. Oils used in herbal lipstick which provides soften, moisturize the skin. The common oil used in most of the formulations is castor oil. Other contains grape seed oil, palm oil, mineral oil, triglycerides and vegetable oil. Wax is used to provide gloss, shape to lipstick, naturally occurring tallow wax, hydrocarbons like ozokerite, paraffin. Organic colouring agents are easily soluble, dispersible such as lactoflavin, anthocyanins occurs in plants. Inorganic colouring agents are insoluble, dispersed even colour by using suitable technique, it includes pearl powder, zinc oxide and iron oxide [41, 42]. Herbal lipsticks must be withstand longer period of time it mainly happens after addition of preservatives and anti-oxidants in formulations. Fragrances plays main role of masking the undesirable smells arise from oils, fatty acids and added surfactants. Natural plant based essential oils widely used all over the world and strong demand due their ability to impart various range of aromas in products. Some of the essential oils are lavender, citrus, tea tree, other floral oils, white linalool and geraniol mainly used as fragrances in herbal lipstick [43].

Table no 6: List of Various Naturally Derived Herbs Used in Herbal lipstick

Ingredients	Herbal Source
Oils	Almond, Butyl stearate, Castor oil, Coconut oil, Cocoa Butter, Isopropyl Myristate, Olive oil, Sunflower oil
Waxes	Beeswax, Bay berry, Carnauba wax, Chinese wax, Candelila wax, Lanolin, Ozokerite, Shellac wax
Detergents, Soaps	Palm oil, Coconut Oil
Emollients	Glycerine, Camauba Wax
Humectants	Sorbitol, Glycerine
Astringent	Ethanol natural, Witch Hazel Extract
Fungistats	Peel Extract
Surfactants	Sapindusmukorossi
Foaming Agent	Yucca Saponins, Quillaja
Preservatives	Methyl Paraben, Propyl Paraben
Anti-oxidants	BHA, BHT
Colouring Agent	Annatto, Alluminium, Barium, Carotenes, Chlorophyll, Carmine Powder, Curcumin, Eosin, Fluorescein, Paprika Oleoresin, Saffron

Method of Preparation of Herbal Lipstick

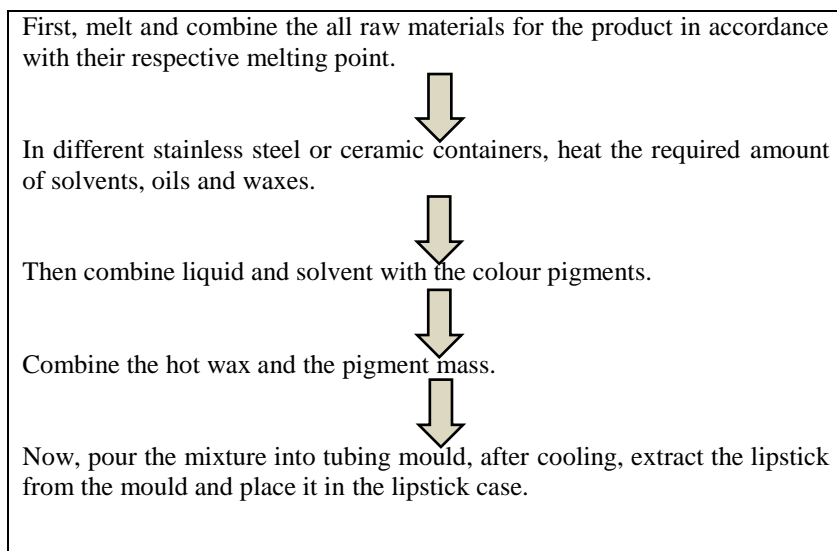


Figure no 2: Method of Preparation of Herbal Lipstick

1) Melting and Mixing

The formulation's ingredients are measured, melted and blended. One of the mixture includes solvents another includes oils and the third includes fats and waxy compounds. They are heated in individual stainless steel containers. Liquid oil and solution of solvents are then combined with the pigments of colour. In order to prevent the lipstick from feeling gritty, the mixture is run through a roller mill to crush the pigments. The pigment mass is pulverized and blended before being added to the heated wax mass to achieve a uniform colour and consistency.

2) Moulding

After the Lipstick mass has been combined and any excess air has been drained, it is prepared to be put into the moulding tubes. A mould made up from the metal or plastic tube and a shaping component that fits snugly with the tube. With the help of bottom of the tube to be at the top of the mould, lipstick is poured upside down. The tube's bottom is sealed when the lipstick has been cooled and removed from the mould. To fix pinholes and enhance the finish, the lipstick is flamed manually or in a flaming cabinet. If necessary, the Lipstick is redone after being visually inspected for air holes, mould separation lines, or flaws.

3) Labelling and Packaging

After the lipstick is retracted and the tube is capped the lipstick is ready for labeling and packaging. The lipstick label makes an impact on consumers so it must be eye catchy and perfectly

fitted to lipstick container. The label contains name of brand, name of product, list of ingredients, and colour shade, details formation of manufacturer. Biaxially oriented polypropylene (BOPP), Polyesters and Vinyl these are widely used material for labels due to its higher moisture resistance, excellent durability and easily fit to any shape of product. Lipstick packaging or lipstick cases has variety of styles may be tubes, sticks and pots typically made from different materials includes plastic, cardboard and metals. The lipstick tubes are divided into two type's full plastic lipstick tubes and aluminium plastic combination tubes. Cardboard must be used for store and ship the product in bulk range and has ability to withstand from damage. Single walled cardboard boxes are mostly used due to lower cost, light weight and double walled cardboard boxes are double layered, heavier than single walled cardboard boxes. The packaging is depends on size, shape, weight and shelf life of product and must be easy to handle, light weighted for consumers [44, 45].

Defects in Preparation of Herbal Lipstick Formulation Related Problem

- **Sweating:** It is occurs due to excessive oil content, poor oil binding and may be cause due to rise in temperature or change in climate.
- **Bleeding:** It is occurs due to separation of colour liquids from the waxy based is known as bleeding.
- **Streaking:** The appearance of a thin band or line of a different colour or material on the finished product [46, 47].

Mould Related Problem

- **Laddering:** After congealing and setting, lipstick looks like multi-layered appearance rather than a smooth or uniform appearance.
- **Deformation:** This is a moulding issue where the lipstick shape appears distorted. It stands out and is visible on both sides of the lipstick.
- **Mushy Failure:** It occurs as lacks and breaks in central core structure of lipstick.
- **Cratering:** It is a split moulding phenomenon that manifests as burning when a stick develops dimples [48].

III. QUALITY CONTROL TEST

Quality control tests for cosmeceuticals are extremely important components for establishing good reputation for brand, maintaining Food and Drug Administration (FDA) standards, equally important for consumers and manufacturers and performed for ensuring safe, accurate, high quality products to market. Quality control is a part of good manufacturing practice specifically carried out for comparison with standard where the cosmetic product within a specified criteria or not. To check melting behavior of oils, fats and waxes of lipsticks is characterized by using Differential Scanning Calorimetry (DSC) thermal analysis process. Lipstick colour control is one of the important parameter for long lasting colour is controlled by using colorimetric technology [49].

Evaluation Parameters of Herbal Lipstick

1) Melting point

The capillary tube method is used to determine it. Open the ends of two capillary tubes made of glass. Put enough lipstick, about 10mm high, into each of the five capillary tubes, and let them stand for the appropriate amount of time and at the appropriate temperature. The melting point is taken to be the temperature that is specified in the capillary tube. Calculate the outcome after doing the operation three more times with the additional four capillary tubes.

2) Breaking point

The breaking point test is used to record tensile strength of lipstick. Put lipstick in a socket horizontally, one inch from the support's edge. A specified weight increase by 10 gm at specific time of 30 seconds and weight it.

3) Force of Application

This test is used to assess how much force should be used when applying. Place a piece of brown paper on a shadow graph balance and lipstick is apply at a 45° angle, completely cover a 1-inch square area. The pressure noted as application force.

4) Penetrometer test

Penetration was measured at several spots on the lipstick's surface, and the average of those measurements was reported in micrometres. The penetrometer needle was set up so that it simply rests on top of the lipstick rod. The penetrating reading was obtained after the needle attachment was withdrawn.

5) Microbial testing

Microbial growth means contamination of raw ingredients, moulds, storage kettles and lipstick containers. A known mass of the sample is plated on two different culture media that are specifically designed for the production of visible colonies through the growth of bacteria and fungus while they are incubated for a predetermined amount of time. The limit is not more than 100µg/gm.

6) Rancidity

Rancidification is the hydrolysis or oxidation of fats, oils, and other lipids. It results in a revolting odour, an unpleasant flavour, a sticky product, and occasionally a change in the product's colour.

7) Solubility test

The prepared formulation dissolved in various solvents and check solubility of herbal lipstick.

8) Determination of thixotropic character

The thixotropic character of lipstick is determined by using penetrometer.

9) pH parameters

The pH of herbal lipstick is tested by using pH meter.

10) Skin sensitivity test

The skin irritation test is performed by apply herbal lipstick on skin for 10 minutes and watch what happens.

11) Determination of surface anomalies
The test was performed for determination of any surface defects includes crystal formation and any contamination by fungus or moulds.

12) Perfume and Aging stability test
The perfume stability test is done after 30 days and noted there fragrance. The Aging stability test, lipstick were stored in hot air oven at 40^oc for

one hour and observe for bleeding, crystal formation and ease of application.

13) Stability to oxidation
The oxidation test of the finished product is for checking the stability of product to oxidation. Extend of oxidation is calculated as number of peroxide of product after exposure to oxygen for specific time period [50, 51, 52].

IV. HERBAL LIPSTICK PREPARED BY USING NATURAL SOURCES AND COLOURS

Table no 7: List of Herbal Lipstick Formulated By Using Natural Plant Extract

Sr. No	Natural Plant	Other Ingredients	Ref. No
1	Red Barrie (Rubus idaeus) Blue Barrie (Rubus ulmifolius)	Bees Wax, Carnuba wax, Lanolin, Peppermint oil, Almond oil, Organce Essence, Vanilla Essence	[53]
2	Beetroot (Beta vulgaris) Sweet Brier (Rosa rubiginosa) Great Bougainvillea (Bougainvillea spectabilis) Saffron (Crocus sativus)	Bees wax, Carnuba wax, White soft paraffin, Castor oil, Coconut oil, Almond oil, Olive oil, Essential oil, Rose essence, Vanilla essence, Strawberry essence	[54]
3	Watermelon (Citrus lantus) Beetroot (Beta vulgaris)	Bees wax, Coconut oil, Olive oil, Castor oil, Vanilla essence, Rose Essence, Lemon juice	[55]
4	Night Jasmine (Nyctanthes arbor-tristis)	Bees wax, Parrfin wax, Acacia, Coconut oil, Vanilla essence	[56]
5	Beetroot (Beta vulgaris)	Bees wax, Acacia, White soft paraffin, Olive oil, Peppermint oil, Orange Juice, Vitamin E.	[57]
6	Beetroot (Beta vulgaris)	Bees wax, Acacia, White soft paraffin, Olive oil, Vitamin E, Lemon juice, Vanilla essence	[58]
7	Rose (Papa meilland)	White bees wax, Olive oil, Castor oil, Cetyl alcohol, Petroleum jelly, Vitamin E. Rose essence.	[59]
8	Malabar Spinach (Basellarubra) Lemon Fruit (Citrus limon)	Bees wax, White paraffin wax, Coconut oil, Castor oil, Aloe vera gel, Ginger powder, Vanilla essence	[60]
9	Prickly Pear (Cactus Fruit)	Bees wax, Liquid paraffin, Coconut oil, Rose essence	[61]
10	Beetroot (Beta vulgaris) Saffron (Crocus sativus) Rose (Rose rubiginosa) Papaya (Carica papaya)	Bees wax, Liquid paraffin, Coconut oil, Almond oil, Clove oil, Acacia, Chocolate essence.	[62]
11	Cinnamon Bark Powder Turmeric Powder	Bees wax, Butter, Coconut oil, Castor oil, Olive oil, Cocoa powder, Lemon juice, Vanilla and Rose essence	[63]
12	Red Rose (Rose rubiginosa) Paper Flower (Bougainvillea spectabills) Beetroot (Beta vulgaris) Saffron (Crocus sativus)	Bees wax, Paraffin wax, Castor oil, Lemon oil, Shikakai powder, Mica powder, Vanilla and Orange essence	[64]

13	Pomegranate (Punica granatum Linn)	Bees wax, paraffin wax, Castor oil, Lemon juice, Vanilla and Orange essence	[65]
14	Red Spinach (Amaranthus dubis)	Bees Wax, Carnuba wax, Lanolin, Cetyl alcohol, Olive oil, Rose essence	[66]
15	Royal Poinciana (Delonix regia) Indian Shot (Canna indica)	Bees Wax, White soft paraffin, Lanolin, Strawberry essence	[67]
16	Hibiscus (Rosa sinensis)	Bees wax, Shreeji wax, Castor oil, Olive oil, Lemon juice, Fragrance	[68]

V. HERBAL, NATURAL AND ORGANIC LIPSTICKS AVAILABLE IN MARKET

Now a day, Consumers follows the vegan lifestyle which impacted on the herbal, natural and organic lipstick market. Lipstick market understand the consumers’ needs towards their personal care, uses free from harmful chemicals based cosmetics products this are reasons and key point for enhancing the market growth of herbal lipstick. As per region, many countries like India, United States, United Kingdom, Japan, Italy, Germany, Spain, China, South Korea and Australia represents the growth and contribution for natural and organic lipstick market. Consumers can purchase cosmetics products easily through visit the stores like drug store, beauty specialty store and department store. The main challenging task of herbal cosmetic market is high price of herbal cosmetics. These cosmetics formulated by using naturally derived extracts, essential oils and no any additional chemicals. So, these are in market with higher cost due to the good quality of raw materials to manufacture herbal cosmetics as per the rules and

regulations made by government. The health Canada and European country responsible for the national health policy, Europeans imports the herbal ingredients companies for produce herbal cosmetics. All this factors are impacted on production of herbal cosmetics and forces to companies for fixed higher price for their product [69]. **Honest Consumer Limited (HCL) company** introduced new product called ‘Ayuga’. These brand products formulated with organic components mainly they focused on ayurvedic herbs. **Loreal SA**, French company manufactured various types of cosmetic products but now they are working on formulating vegan skincare products. **Alna Vedic Company** manufactures all types of herbal skin care products [70]. Five companies who has already on top in natural and organic lipstick market,

- 1) **Lotus Herbs Limited**
- 2) **Vapour Organic Beauty**
- 3) **Beauty Counter**
- 4) **Ecco Bella**
- 5) **W311 People**

Table no 8: Top 10 Brands of Herbal, Natural and Organic Lipsticks [71]

Sr. No	Brand Name	Natural Ingredients
1	Well People	Organic castor oil, Sunflower seed wax, Cupuacu butter
2	ILIA	Organic castor seed oil, Mango seed butter
3	Juice Beauty	Organic sunflower oil, Organic shea butter, Organic jojoba oil
4	Axiology	Organic castor, Sunflower, Hemp seed oils, palm oil, Fragrances
5	100% Pure	Organic cocoa butter, Shea butter, Pomegranate seed oil, Pigments derived from fruits
6	RMS Beauty	Organic castor seed oil, Organic carnauba wax, Organic cocoa seed butter
7	Jones Road	Castor seed oil
8	Cheekbone Beauty	Shea butter, Castor seed oil
9	Kosas	Castor seed oil, Candelilla wax, Cocoa seed butter
10	Beauty Counter	ECOCERT certified organic vanilla, Jojoba esters, Castor seed oil

VI. CONCLUSION

The review concludes that various types of herbal plants are used to prepared herbal lipsticks for give more effective benefits when applied by women's and they believe that herbal lipsticks has more advantages than synthetic lipsticks, easy to use and free from added chemicals. In natural and organic market, the healthcare companies focused on preparing natural ingredients based lipsticks, they have aim towards to fulfill the consumer's need, make it affordable and easily available to customers. Now-a-days, peoples are very conscious and prioritize their health first hence natural herbs gaining popularity due to pharmacological activities and use of herbal cosmetics is increased tremendously in all generations. The Organic castor seed oils, Organic sunflower oil, Olive oil, Coconut oil and Organic carnauba wax, Organic cocoa seed butter, White bees wax, White soft paraffin wax this sources are commonly added into herbal cosmeceuticals which gives proper moisturization effect, hydrate the skin. A natural colour play a significant role as women's made their lipstick shade choice as per style and occasion due to this reason manufacturer focused on different shade pigments like Saffron, Beetroot, Pomegranate, Red Spinach, Red and blue berries which extracted from fruits, flowers, leaves and taproots so it is known as god gifted from nature. Orange essence, Rose essence, Strawberry essence and Vanilla essence this are beneficial ingredients that can deeply protects the skin, best for sensitive skin and has anti-microbial properties. The quality control and evaluation tests of herbal lipsticks must be performed for ensuring, checking quality of product for non-toxic, non-allergic and safest one available to consumers for use in professionalism and everyday makeup. Overall we understand that wearing lipstick is an art of makeup apply on lips for colouration, protection from harmful UV rays as expression of self-care, feel refreshed, enhancing the appearance and mood of every women.

REFERENCES:

- [1]. Lipstick-Wikipedia; <https://en.m.wikipedia.org/wiki/cosmetics>
- [2]. Parish, L-C; Crissey J-T; Cosmetics: A historical review, Clinics in Dermatology 1988; 6(3): 1-6
- [3]. Britton, A-N; The Beauty Industry's Influence on Women in Society, Honors Theses and Capstones 2012; 86: 1-40
- [4]. Cash, T-F., Dawson, D-W; Davis P., and Bowen, M., Effects of Cosmetics use on the Physical Attractiveness and Body Image of American College Women, The Journal of Social Psychology; 129(3): 349-355
- [5]. Mohiuddin, A-K; Cosmetics in Use: A pharmaceutical review, Journal of Dermatology & Cosmetology 2019; 3(2): 50-67
- [6]. Surya, M., and Gunasekaran, S., A Review on Recent Scenario of Cosmetics, International Journal of Pharmaceutical Sciences Review and Research 2021; 68(1): 190-197
- [7]. Philips, L., Cosmeceuticals taking in Europe, Functional Ingredients 2009; <http://360.com/cosmeceutical-taking-root-Europe>
- [8]. Rieger, M-M; Hyaluronic acid in cosmetics, Cosmetics and Toiletries 1998; 113-3542
- [9]. Srikanth, P-V-S; Kumar, D-P; Reddy M-R; Brahmaiah, B., and Sreekanth, N., Mini Review on Cosmeceuticals, Asian Journal of Pharmaceutical Science & Technology 2013; 3(2): 57-61
- [10]. Kadam, V-S; Chintale, A-G; Deshmukh K-P; and Diagambar, N-N; Cosmeceuticals an emerging concept: A comprehensive review, International Journal of Research In Pharmacy And Chemistry 2013; 3(2): 2231-2781.
- [11]. Wanjari, N., and Waghmare, J., A Review on Latest Trend Cosmetics – Cosmeceuticals, International Journal of Pharma & Review 2015; 4(5): 45-51.
- [12]. David, H., Daniel, M-C; DiNardo, J., and Lewis, J., The Role of Cosmeceuticals in Dermatology, Cosmetics Formulation of Skin Care Products 2006; 1 Edition: 211-212
- [13]. Kole, Prashant, L., Jadhav, Hemant, R., Desai, T., Prasad, Nagappa, Naik, A., Cosmetic Potential of herbal Extracts, CSIR 2005; 4: 315-321
- [14]. Bachhav, D-S; Suryawanshi, D-M; Suryawanshi, V-K; Suryawanshi, P-M; and Pawar, V-V; The Review on Herbal Cosmetics, International Journal for Multidisciplinary Research 2022; 4(6): 1-9
- [15]. Kumar, S., Vivek, S., Sujata, S., and Ashish, B., Herbal Cosmetics: Used for Skin and Hair Cosmeceuticals, Inventi Journal 2012; 4: 306-314

- [16]. Joshi L-S; and Pawar, H-A; Herbal Cosmetics and Cosmeceuticals: An Overview, El Mednifico Journal 2015;3(1):1-8
- [17]. Pawar, H-A; and Josh, L-S; Herbal Cosmetics and cosmeceuticals: An Overview, Natural Products Chemistry & Research 2015; 3(2): 1-8
- [18]. Kaur, L., Singh, A-P; Singh, A-P; and Kaur, T., A review on herbal cosmetics, International Journal of Pharmaceutics and Drug Analysis 2021; 9(3): 196-201
- [19]. Khloiya, S., Gangwal, J., and Sharma, R-P; Herbal Cosmetics for Skin and Hair Care in Ayurveda, International Journal of Trend in Scientific Research and Development 2019; 4(1): 1001-1005
- [20]. Sharma, N., Singh, P., and Gupta, S-K; A Review on Role of Various Medicinal Plants in Cosmetics and Cure Health, Current Research in Pharmaceutical Sciences 2019; 9(3): 37-41
- [21]. Sumit, K., Vivek, S., Sujata, S., and Ashish, B., Herbal cosmetics: Used for skin and hair, Inven Journal 2021; 2: 1-7
- [22]. Saudagar, R-B; and Sisodiya, M-H; Review On Herbal Cosmetics, World Journal of Pharmaceutical Research 2018; 7(7): 573-591
- [23]. Pandey, S., Meshya, N., and Viral, D., Herbs play an important role in the field of cosmetics, International Journal of PharmTech Research 2021; 2: 632-639
- [24]. Gediya SK, Mistry RB, Patel UK, Blessy M, Jain HN, Herbal plants: used as cosmetics, Journal of Natural Product Plant Resources 2011; 1: 24-32
- [25]. Sulekova, M., Smrcova, M., Hudak, A., Hezelova, M., and Fedorova, M., Organic Coloring Agents in the Pharmaceutical Industry, Folia Veterinaria 2017; 61: 32-46
- [26]. Ansari, S., Ghildiyal, H., and Mukopadayay, S., Brief review on herbal lipsticks using natural colorants over synthetic colorants. International Journal of Health Sciences 2022; 6(S3): 11064–11076.
- [27]. Kumar, M., Venkatesh, M.-P; and Pramod Kumar, T-M; Colorants and Additives: existing and emerging Safety Concerns, International Journal of Pharmaceutical and Clinical Research 2017; 9: 525-533
- [28]. Amanda Gomes Almeida, S-A; Alessandra Cristina de, M., Pedra Henrique Hermes de, A., and Debora de O., A Review on enzymatic synthesis of aromatic esters used as flavor ingredients for food, cosmetics and pharmaceuticals industries, Trends in Food Science & Technology 2017; 69(A): 95-105.
- [29]. <https://en.m.wikipedia.org/wiki/Lipstick>
- [30]. Bhanage, R-B; and Mali, S-R; Cosmetic Product Lipstick: A Review, International Journal of Research Publication and Reviews 2022; 3(7): 31-36
- [31]. Lipstick Use Through The Ages, <https://phonix-chem.com/lipstick-through-the-ages/>
- [32]. Catherine Dunwoody, A Short History of Lipstick, <https://montecristomagazine.com/beauty/a-short-history-of-lipstick>
- [33]. A Brief History of Lipstick, <https://thesripe.com/history-of-lipstick/>
- [34]. Schaffer, S-E., The History of Lipstick Regulation in Western Sats of Power, Food and Drug Law Journal 2007; 62(1): 165-225.
- [35]. Hayati, F., and Chabib, L., Formulation An Evaluation of Herbal Lipticks from Carrot (*Daucus Cartota L*) Extract: International Journal of Pharmacy And Pharmaceutical Sciences 2016; 8(3)
- [36]. Kumari, D-N; Satyanarayana, T., Sravam, A., Divya sri, A., Nagabhushan Rao, E., Navya, G., Harshitha, K., and Sai Ramya, M., Formulation and Evaluation of Herbal Lipsticks Using Different Herbs, Internal Journal of Pharmaceutical Research and Application 2021; 6(5): 217-224
- [37]. Pradeepkumar, V., Ruby, S., Prakash, S., Praveenkumar, T., and Prathab, S., A Review Article On Herbal Cosmetics, IJPT 2021; 13(1): 7287-7304.
- [38]. Avinash, M-D; Hari A-M; and Pradeep, N-S; Herbal Lipstick Formulation: A New Approach, International Journal of Research in Ayurveda & Pharmacy 2011; 2(6): 1795-97.
- [39]. Uzma, S., Shayesh, K., Sameesh, A., Juveriya, M., and Shahidulla S-M; Herbal Lipstick-An Updated Overview, International Journal of Creative Research Thought 2022; 10(5): 2320-2882

- [40]. Fathima, A., Varma, S., Jagannath, P., and Akash, M., General Review on Herbal Cosmetics; 152-154
- [41]. Jain, S., Trivedi, M., Railwar, M., Lodhi, M., Ali, M-Y; Purohit, A., and Nema, P., A Review on Herbal Cosmetics and Cosmeceuticals, Asian Joyrnal of Dental and Health Cosmeceuticals 2022; 2(4): 9-16
- [42]. Mengoli F., Herbal cosmetic compsns-contg. Herbs in mixt of surfactants, essential oils, etc, 1993.
- [43]. Devi, N., Kumar, A., Garg, A., Hussain, A.,and Khathuriya, R., A Review on Herbal Cosmetics, World Journal of Pharmaceutical Research; 7(8): 298-310
- [44]. Mali, Y-S; Newad, G., and Shaikh, A-Z; Reviw on Herbak Lipstick,Resarch Journal of Pharmacognosy and Phytochemistry 2022; 14(2): 113-118
- [45]. Kumar, M., Gupta, A., Singh, A., Pandey, S., Siddhiqui, A.,and Kumar, N., A Brief Review On Herbal Lipstick, European Journal of Biomedical and Pharmaceutical Sciences 2021; 8(2): 90-92
- [46]. Yadav, B-P; Vani, N-S; Bharathi, J., and Babu, M-K; A Review Article On Herbal Lipstick, Formulation Evaluation Of Herbal LipstickFrom The Extraction Of Papaya, YMER 2022;21(12): 2525-2542
- [47]. Korac R-R; and Khambholja, K-M; Potential of Herbs Inskin Protection from Ultraviolet Radiation, Pharmacog Rev 2011; 7: 164-173
- [48]. Chattopadhyay, P-K, Herbal Cosmetics and Ayurvedic Medicines, National Institute of Industrial Research 2005; 1 edition: 45-50
- [49]. Vigneshwaran, L-V; Farsana, K., Khairunnisa, T., Amritha, P-P; Sebastin, V., and Ajit Babu, T-K; Approaches to Minimize the Defects in Lipstick Formulations, International Journal of Pharmaceutical and Biological Sciences Archive 2023; 11(4): 71-77
- [50]. Kaushik, I., Sharma, H., and Nirwal, A., Tarannum Fatima, Modern Herbal Lipstick Quali Assessment and Standard: A Review, International Journal of Research Publication and Reviews 2023; 4(1): 1474-1478
- [51]. Sarode, N-D., and Gaikwad, V., A Review on Herbal Lipsticks, International Journal of Research Publication and Reviews 2022; 3(7): 1269-1284
- [52]. Anilkumar, V., and Dhanaraju, M-D; A Review on Herbal Lipsticks, Journal of Pharmaceutical Advanced Research 2021; 4(4): 1179-1190
- [53]. Yadav, S., Redasani, V-K; and Baid, K-J; Formulation and Evaluations of Herbal Lipstick, World Journal of Pharmaceutical Research 2020; 9(4): 1436-1444.
- [54]. Joshi, N., Bhawde, V., Rathod, A., Punde, S., and Thakare, S., Formulation and Evaluation Herbal Lipstick, International Journal of Novel Research and Development 2022, 7(12): 2456-4184.
- [55]. Dalavi, P-S; Nanaware, R-H; Shah, R-R;and Adnaik, R-S; Formulation and Evaluation Herbal Lipstick, International Journal of Pharmacy & Pharmaceutical research; 180-184.
- [56]. Venkatachalam, H., Parameswaran, C-R; and Palaniswamy, R., Indian Journal of Natural Products and Resources 2022; 13(4): 574-578
- [57]. Patel, M., and Patel, O., Formulation and Evaluation of Herbal Lipstick Using Beta Vulguris Extract, International Ayurvedic Medical Journal. June 2021, 1176-1180
- [58]. Kruthika, S., Ram, S-S; Shaik, A-A; Shaik, S., Mallick, S-D., and Sree, R-T., Formulation and Evaluation of Natural Lipstick from Coloured Pigments of Beta vulgaris Taproot, Research and Review: Journal of Pharmacy and Pharmaceutical Scienes 2014; 3(3): 65-71
- [59]. Rana, P., Mansuri, R., and Drwan, A., Formulation and Evaluation of Herbal Lipstick Prepared from Rosa Papa meilland 2021; 42(24): 1423-1429
- [60]. Dewangan, C., Dewangan, M., Pate, D., Kishor, R., Sahu, J., Sharma, H., and Sahu, G., Formulation and Evaluation of Herbal Lip Sun Protection Lipstick 2023; 8(3): 1258-1266
- [61]. Mistry, B., and Jain P., Formulations and Evaluations of Herbal Lipsticks from Prickly Pear (Cactus Fruit) Colour Pigment, International Journal of Pharmacy & Pharmaceutical research 2023; 27(4): 93-103
- [62]. Talreja, S., Tiwari, S., Rawat, S., and Bharti, A., The Development and Evaluation of Herbal Lipstick formula Utilizing Various Extracts, Journal of

- Pharmaceutical and Biological Sciences
2023; 11(1): 43-50
- [63]. Kothari, R., Shukla, B., Gautam, D., and Bagaria, M., Formulation and Evaluation of Herbal Lipsticks from Natural Edible Coloring Matter, International Journal of Theoretical & Applied Sciences 2018; 10(1): 17-20
- [64]. Mahanthesh, M-C; Manjappa, A-S; Shinde, M-V; Sherikar, A-S, Disouza, J-I; Namrata, B-U; Kranti, K-R; and Ajija, W-C; Design, Development and Assessment of Herbal Lipstick from Natural Pigments, International Journal of Pharmaceutical Science Review and Research 2020; 61(1): 59-64
- [65]. Elumalai, A.,Eswaraiah, C-M; and Nikhitha, M.,Formulation and Evaluation of Herbal Lipsticks from Punica granatum Fruit Peel, Research Journal of Topical and Cosmetic Sciences 2012; 3(1): 20-22
- [66]. Pawane, A-P; and Khan, Z-K; Review on formulation and Evaluation of Herbal Lipstick Using Red Spinach, International Journal of Research Publication and Reviews 2023, 4(4): 312-321
- [67]. Tole, S-B; Joshi, A-A; Dake, T-S; Chavan, V-B; Chede, D-C; and Chavan, P-S; Innovations in Herbal Lipsticks by Canna indica and Royal Poinciana, International Journal of Pharmaceutical Science Review and Research 2022; 76(2): 66-70
- [68]. Sai Datri, A., Lakshmana Rao, A., Vinayaki,V-M; Zakir, M-D; Sri Snigdhanjani, M., and Pavani, N., Formulation and Evaluation of Herbal Lipstick using Hibiscus Rosa- Sinensis, Journal of Traditional Medicine and Chinese Medicine 2023; 1(2):1-3
- [69]. <https://www.marketresearchfuture.com/reports/natural-organic-lipsticks-market-3895>
- [70]. Herbal Cosmetics Market by Distribution Channel, Product, and Geography- Forecast and Analysis 2023-2027, 2023; <https://www.technavio.com/report/herbal-cosmetics-market-size-industry-analysis>
- [71]. The 10 Best Natural Lipsticks With Organic Ingredients 2024; <https://www.thegoodtrade.com/features/organic-lipstick-brands/>