Organic Elegance: Formulation and Evaluation of Natural Lipsticks

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Abstract- Cosmetics are compounds that are used to change the way the human body smells or looks. The global market for herbal cosmetics is expanding these days, and they are unavoidable natural gifts. The artificial coloring chemicals used in cosmetics have been found by researchers to have carcinogenic qualities. Natural lipsticks are becoming more and more popular due to the safety of natural cosmetics. Lipstick is a type of cosmetic product that gives lips color, texture, and protection by combining pigments, oils, waxes, and emollients. The majority of herbal lipsticks are created using natural ingredients including pomegranates, beets, turmeric, tomatoes, and shankhpushpi flowers. This study's objective was to make and evaluate natural lipsticks using powdered Shankhpushpi flowers and lemon. The moisturizing, anti-inflammatory, and antioxidant qualities of shankhpushpi extract make it a great choice for enhancing the color and texture of lips. There are numerous naturally occurring bioactive compounds, including volatile oils, alkaloids, glycosides, flavonoids, and saponins. Herbal lipsticks are less likely to cause side effects. The herbal lipstick is safe to use and keeps lips healthy because it contains natural chemicals or nutrients. Natural lipstick has no adverse effects, which is why we use it. Furthermore, parameters including pH, melting and breaking points, and smoothness are being assessed.

Key Words: Shankhpushpi petals, Lemon, Beetroot, beeswax, herbal lipstick, evaluation

1. INTRODUCTION

Finding and defining active phytochemicals from natural sources, determining the structure and activity of the constituents, and evaluating any potential therapeutic advantages are the main objectives of the study [1-4]. Derived from the Greek words "pharmakon" (drug) and "gnosis" (knowledge), pharmacognosy is arguably the oldest modern science. It focuses on the study of crude drugs of plant and animal origin (found in tinctures, teas, poultices, powders, and other herbal formulations) and includes quality control and authentication of these drugs based on analysis of culture drugs under a microscope and under a microscope. Schmidt, an Austrian physician, coined the term "pharmacognosy" in 1811, and Seydler followed suit in 1815 with his work Analecta Pharmacognostica. But in 1811, the physician J. A. Schmidt of Vienna utilized that one to explain the study of medicinal plants and their characteristics in his Lehrbuch der materia medica. Drug identification, physicochemical characterization, cultivation, extraction, preparation, quality assurance, and biological evaluation are all part of pharmacognosy. The bioactive chemical can be extracted from a plant, animal, or plant extract, leaf, flower, or root. Skincare creams, lotions, powders, perfumes, lipsticks, nail polishes, eye and facial makeup, hair colours, deodorants, infant goods, bath oils, and many more are examples of cosmetics—substances intended to improve the appearance of the human body. Both developed and emerging nations have a strong need for these goods. Herbs have been used by people for a variety of purposes throughout history, such as food, medicine, and cosmetics. With the exception of food, where vegetarians only utilize plant-based components, the use of natural ingredients has decreased in many industries due to scientific and technological breakthroughs. Herbal remedies have recently become more popular in both medicine and cosmetics. In addition to adding moisture and

concealing flaws, lipstick improves the appearance of the lips. They have been utilized in skincare products to improve appearance and slow down the aging process, making people appear attractive and healthy. A dispersion of colouring ingredients in a blend of oils, fats, and waxes makes up a common lipstick recipe. Lipsticks can contain inorganic, synthetic, or natural dyes. However, as synthetic or inorganic dyes can result in negative side effects like red patches, inflammation, or itching, natural dyes are typically favoured. Natural dyes provide consumers with a safer option because they can be made from plants, animals, or minerals. The term "herbal" denotes safety as opposed to synthetic products, which could be harmful to human health. Consequently, consumers have become more interested in herbal treatments, such as herbal tablets, tonics, pastes, shampoos, lipsticks, and contraceptives.

Growing demand for natural alternatives in healthcare and cosmetics is reflected in the popularity of herbal remedies and cosmetics. A cosmetic product known as herbal lipstick is made with natural materials, such as plants and herbs, rather than artificial ones. It is intended to give the lips more colour, texture, and protection. In search of solutions that are both efficient and devoid of dangerous chemicals, more individuals are selecting natural beauty products over synthetic ones. This trend is demonstrated by herbal lipsticks, which are created using natural colours and plant-based components [5-6].

1.1. Different Types of Lipstick and their Uses:

a. *Moisturizing Lipstick*: Moisturizing lipsticks are recommended for people with dry lips since they maintain lips smooth and supple. These lipsticks' hydrating properties come from components like aloe, glycerine, and vitamin E. Wet and incredibly shine lips are two more wonderful benefits of using moisturizing lipsticks.

b. *Satin and sheer lipstick*: These lipsticks guarantee that lips are glossy and shiny while also moisturizing and nourishing them. Because they contain a lot of oil, sheer and satin lipsticks may seem darker in the packaging than they do on the lips. Lipsticks with all components also have the requirement to be answered several times [7].

c. *Mate Lipstick*: Mate lipsticks are the ideal choice for ladies looking for a lovely, vibrant tone. These lipsticks provide the appearance of having matte, unlustrous lips.

d. *Cream Lipstick*: Ladies with thin lips ought to apply cream lipsticks. Lipstick with a cream formula has a smooth influence on the lips but isn't glossy.

e. *Pearl and Frosted Lipstick*: Lips that have been covered in frosting gleam and shimmer. Frosted and pearl lipsticks reflect light and give your lips an extremely glossy appearance.

f. *Gloss Lipstick*: Gloss lipstick is quite popular among girls who have small, thin lips because it makes the lips look shiny and gives the appearance of greater depth. You could use gloss in addition to regular lipstick.

g. *Long Wearing and Transfer resistant Lipstick*: Long-wearing lipstick is a possibility for women who lack the time to apply lipstick often. The formula in these lipsticks keeps lips looking great for up to four and a half hours [8]

1.2. Ideal properties of herbal lipstick [9]:

The ideal requirements for the formation of a good lipstick may be as follows:

A high-quality lipstick should meet the following criteria:

1.2.1. Appearance & Texture

- Should have a bright, smooth appearance free of perspiration.
- Must be free from any chemical preservatives.
- Should not dry out when stored.
- Must not contain any grit.
- Should not melt or harden under normal climatic temperatures.

1.2.2. Application & Performance

- Should provide even, consistent coverage and impart a lasting gloss.
- Must maintain its colour intensity without shade alteration.
- Should adhere firmly to the lips without giving a greasy look.
- Needs to have good thixotropic properties, allowing smooth application with minimal

pressure.
- Should offer a smear-proof colouring effect.
- Must have the right plasticity and retain all properties throughout storage.
- Should dry easily without causing lips to crumble or feel dry.

1.2.3. Durability & Stability
- The stick should have even firmness and maintain strength at temperatures up to 55°C.
- Should not bloom or sweat when applied.

1.2.4. Safety & User Experience
- Must be safe, non-toxic, and non-irritating to the lips.
- Should be economical for both manufacturers and consumers.
- Should have a pleasant fragrance and good flavor.
- The container should be user-friendly and easy to use.

1.3. Benefits of herbal lipsticks [10]:
a) Safe to use.
b) Natural in nature.
c) Affordable and non-expensive.
d) Variety of products.
e) No side effects.
f) Not tested on animals.
g) Free from hazardous chemicals.

1.4. Problems during formulation of herbal lipsticks [5]:
a) Sweating: It is the most typical formulation issue with lipstick because of the excessive oil content or poor oil binding. Any climate or range of temperatures can cause it to.
b) Bleeding: The separation of coloured liquids from the waxy base is meant by this.
c) Streaking: The finished object has a narrow band or line that is a different hue or material. Issues Associated With molding.
d) Laddering: After congealing and setting, lipstick has a multilayered appearance rather than a smooth or uniform appearance.
e) Deformation: This is a molding issue where the lipstick appears to be distorted in shape. It stands out and is visible on both sides of the lipstick.
f) Creating: When a stick develops dimples, this material manifests as burning in split molding.
g) Mushy failure: This is a situation where the lipstick's inner core lacks support and cracks.

2. HERBS, CHEMICALS, GLASSWARE AND REAGENTS

2.1. Herbal materials: Shankapushpi flowers were collected from garden and shade dried and powdered. Beetroot is collected, peeled off and cut into small pieces which is further grinded and the extract is obtained and reduced by heating.
2.2. Excipients: Beeswax, Cetyl alcohol, Shea butter, Petroleum jelly, Badam oil, Lavender essential oil, vitamin.
2.3. Glass ware: Beakers, Funnel, Measuring cylinder, Glass rod, Spatula, Mortar and pestle, Lipstick Moulds

3. HERBAL LIPSTICK INGREDIENTS MORPHOLOGY AND ITS IMPORTANCE

3.1. Shankapushpi:
Synonym: Asian pigeonwings, bluebellvine, butterfly pea
It is a perennial herbaceous plant, with elliptic, obtuse leaves. It grows as a vine or creeper, doing well in moist, neutral soil. Its most striking feature is the color of its flowers, a vivid deep blue; solitary, with light yellow markings. They are about 4 cm long by 3 cm wide. Some varieties yield white flowers and pink.
The fruits are 5–7 cm long, flat pods with six to ten seeds in each pod. They are edible when tender.It is grown as an ornamental plant and as a revegetation species (e.g., in coal mines in Australia), requiring little care when cultivated. As a legume, its roots form a symbiotic association with soil bacteria known as rhizobia.
Butterfly pea flower tea is made from the ternatea flowers and dried lemongrass and changes color depending on what is added to the liquid, with lemon juice turning it purple [11].

Significance: Chemical compounds isolated from *C. ternatea* include various triterpenoids, flavonol glycosides, anthocyanins and steroids [12]. Cyclic peptides known as cliotides have been isolated from the heat-stable fraction of *C. ternatea* extract [13]. The blue colour of *C. ternatea* is a result of various anthocyanins, most importantly ternatins –

polyacylated derivatives of delphinidin 3,3', 5'-triglucoside (Da-T) [14-16]. It is ascribed with various qualities including memory enhancing, nootropic, analgesic, antinflammatory, antioxidant, antidepressant, anticonvulsant, tranquilizing, and sedative properties [12].

3.2. Beetroot:

Synonym: Table beet, garden beet, dinner beet

Beta vulgaris is a herbaceous biennial or, rarely, perennial plant up to 120 centimetres (47 in) in height, rarely 200 cm; cultivated forms are mostly biennial. The roots of cultivated forms are dark red, white, or yellow and moderately to strongly swollen and fleshy (subsp. *vulgaris*); they are brown, fibrous, sometimes swollen, and woody in the wild subspecies. The stems grow erect or, in the wild forms, often procumbent; they are simple or branched in the upper part [17-18] and their surface is ribbed and striate [19]. The basal leaves have a long petiole (which may be thickened and red, white, or yellow in some cultivars). The simple leaf blade is oblanceolate to heart-shaped, dark green to dark red, slightly fleshy, usually with a prominent midrib, with entire or undulate margin, 5–20 cm long on wild plants (often much larger in cultivated plants). The upper leaves are smaller, their blades are rhombic to narrowly lanceolate [17]

Significance: The red color compound betanin is a betalain in the category of betacyanins. Nitrosamine formation in beetroot juice can reliably be prevented by adding ascorbic acid [20]. It consists of various bioactive compounds such as betalains, nitrate, carotenoids, polyphenols, flavonoids, vitamins, minerals. It has various pharmacological actions such as antioxidant, anti-inflammatory, antibacterial, anticancer, neuroprotective activity. It is used as natural colorant and moisturising agent in various preparations.

3.3. Lemon:

Synonym: Nimbu, Nimmakaaya, Nimbe

The lemon (*Citrus* × *limon*) is a species of small evergreen tree in the *Citrus* genus of the flowering plant family Rutaceae. The lemon is a hybrid of the citron and the bitter orange. The yellow fruit of the lemon tree is used throughout the world, primarily for its juice. The juice of the lemon is about 5–6% citric acid, giving it a sour taste. The lemon tree produces a pointed oval yellow fruit. Botanically this is a hesperidium, a modified berry with a tough, leathery rind. The rind is divided into an outer colored layer or zest, which is aromatic with essential oils, and an inner layer of white spongy pith. Inside are multiple carpels arranged as radial segments. The seeds develop inside the carpels. The space inside each segment is a locule filled with juice vesicles [21]. Lemons need a minimum temperature of around 7 °C (45 °F), so they are not hardy year-round in temperate climates, but become hardier as they mature. Citrus require minimal pruning by trimming overcrowded branches, with the tallest branch cut back to encourage bushy growth [22].

Significance: Lemons contain many phytochemicals, including polyphenols, terpenes, and tannins [22]. Citrus essential oils are generally recognized as safe (GRAS) and a complex mixture of about 400 constituents consisting of 85 -99% volatile and 1 -15% non -volatile components. The volatile components contain a mixture of monoterpene, sesquiterpene and their oxygenated derivatives and the non -volatile compounds include hydrocarbons, flavonoids, sterols, fatty acids, coumarins, waxes, carotenoids and psoralens. Lemon has various properties such as anti-inflammatory, anti-oxidant, anti-microbial, also acts as skin brightening agent and preservative.

3.4. Beeswax:

Synonym: cera alba

Beeswax is a natural wax produced by honey bees of the genus *Apis*. The wax is formed into scales by eight wax-producing glands in the abdominal segments of worker bees, which discard it in or at the hive. The hive workers collect and use it to form cells for honey storage and larval and pupal protection within the beehive. Chemically, beeswax consists mainly of esters of fatty acids and various long-chain alcohols. Beeswax is a fragrant solid at room temperature. The colors are light yellow, medium yellow, or dark brown and white.

Significance: Beeswax is a tough wax formed from a mixture of several chemical compounds. Its main constituents are palmitate, palmitoleate, and oleate esters of long-chain (30–32 carbons) aliphatic alcohols, with the ratio of triacontanyl palmitate $CH_3(CH_2)_{29}O\text{-}CO\text{-}(CH_2)_{14}CH_3$ to cerotic acid $CH_3(CH_2)_{24}COOH$, the two principal constituents,

being 6:1. Beeswax can be classified generally into European and Oriental types. The saponification value is lower (3–5) for European beeswax, and higher (8–9) for Oriental types. The analytical characterization can be done by high-temperature gas chromatography. Beeswax is used as a natural moisturizer and rejuvenates the skin. It has anti-inflammatory property which soothes and calms the skin [23-25].

3.5. Badam oil:

Synonym: The almond (*Prunus amygdalus*, syn. *Prunus dulcis*) is a species of tree from the genus *Prunus*. Along with the peach, it is classified in the subgenus *Amygdalus*, distinguished from the other subgenera by corrugations on the shell (endocarp) surrounding the seed [26]. The almond fruit is 3.5–6 cm long. It is not a nut but a drupe. The outer covering, consisting of an outer exocarp, or skin, and mesocarp, or flesh, fleshy in other members of *Prunus* such as the plum and cherry, is instead a thick, leathery, grey-green coat (with a downy exterior), called the hull [27].

Significance: Almonds are a rich source of oil, with 50% of kernel dry mass as fat (whole almond nutrition table). In relation to total dry mass of the kernel, almond oil contains 32% monounsaturated oleic acid (an omega-9 fatty acid), 13% linoleic acid (a polyunsaturated omega-6 essential fatty acid), and 10% saturated fatty acid (mainly as palmitic acid). Linolenic acid, a polyunsaturated omega-3 fat, is not present (table). Almond oil is a rich source of vitamin E, providing 261% of the Daily Value per 100 ml. Sweet almond oil is used as a carrier oil in aromatherapy and cosmetics while bitter almond oil, containing benzaldehyde, is used as a food flavouring and in perfume [28-29]. Almond oil has anti-inflammatory property. Almond oil's vitamin E, omega-3 fatty acids, and antioxidants can keep lips soft and supple.

Its emollient properties can help heal chapped lips. Almond oil's natural nutrients can protect lips from environmental factors like UV rays and pollution. Its sclerosant properties can help lighten lips and correct pigmentation.

3.6. Lavender oil:

Lavender oil is an essential oil obtained by distillation from the flower spikes of certain species of lavender. Pure lavender essential oil is produced through steam distillation [30-31] This generates a greater amount of oil compared to other methods due to reduction of polar compound loss [32]. Harvest of lavender blooms is typically between late June and August [33].

Significance: The phytochemical composition of lavender oil varies from species to species (table), consisting primarily of monoterpenoid and sesquiterpenoid alcohols. Linalool (20-35%) and linalyl acetate (30-55%) dominate, with moderate levels of lavandulyl acetate, terpinen-4-ol and lavandulol, 1,8-cineole, camphor, limonene, and tannins. Lavender oil typically contains more than 100 compounds, although many of these are at negligible concentrations [34-35]. Lavender oil consists of therapeutic properties such as Anxiolytic, antidepressant, Anti-inflammatory, Spasmolytic, Antimicrobial, Antioxidant, Anticholinesterase, Sedative [36].

4. IMPORTANCE OF INGREDIENTS USED IN NATURAL LIPSTICK

The importance of each ingredient used in the preparation of natural lipstick are tabulated in table no.1

Table no.:1 Importance of ingredients of Natural lipstick

Name of the ingredients	Biological source	Chemical constituents	Uses
Shankhpushpi	The clitoria ternatea flowers are used for its medicinal and color changing properties. Family: Fabaceae	Alkaloids, flavonoids, glycosides, phenolic acids, terpenoids, saponins, anthocyanin, steroids, resins, volatile oils.	It has antimicrobial, antipyretic, anti-inflammatory, analgesic, diuretic, local anesthetic, antidiabetic, insecticidal properties.
Beetroot	Obtained from roots of *Beta vulgaris* . Family: Chenopodiaceae	Betalains, Citric acid, Ascorbic acid, polyphenols, Flavonoids, Carotenoids, Saponins.	It has anti-inflammatory, antioxidant, antibacterial, anticancer,

			neuroprotective activity. It is used as natural colorant and moisturising agent.
Lemon	Obtained from the fruits of *Citrus limonia* Family: Rutaceace	Contains neral and geraniol, citric acid, flavonoids, and terpenes.	It has anti- oxidant, anti-inflammatory, carminative, stimulant and used as perfuming agent, flavoring agent, preservative.
Beeswax	Obtained from the naturally occurring wax produced in the bee's hives by Apis mellifera Family: Apidae	Monoesters, Hydroxycarbons, Free fatty acids, Hydroxy monoesters, free fatty alcohols.	It has anti-inflammatory properties. Act as natural moisturizer and protective barrier.
Badam oil	Consists of dried, as well as fresh fruits of the plant *Phyllanthus emblica*. Family: Euphorbiaceae	Emblicanin A and B, punigluconin, rutin and gallic acid, flavonoids.	Improves immunity, reduces the stress, treat anaemia, improve digestion, manage weight. It has anti-aging property.
Lavender oil	obtained by distillation from the flower spikes of lavender flower	Linalool,linayl acetate, 1,8 cinaole	Using lavender oil for skin has been a traditional aromatherapy practice because of the essential oil's powerful moisturizing, antibacterial, and antiseptic properties. Lavender oil helps prevent acne breakouts, reduce skin inflammation.
Shea butter	Shea butter is produced from the nut of shea trees *Butyrospermum parkii* Family : Sapotaceae	Palmitic, stearic, oleic, linoleic, and arachidic.	It helps boost collagen production, Anti-inflammatory, Reducing irritation, Emollient, Antioxidant, Softening
Petroleum jelly	It is a mixture of hydrocarbons 7–13% of high molecular weight paraffins	30–45% smaller paraffins, and 48–60% of small paraffins.	It has lubricating and coating properties, including use on dry lips and dry skin. Below are some examples of the uses of petroleum jelly.
Vitamin E capsule		Alpha tocopherols and tocotrienols	It acts as moisturizing agent, contains anti-inflammatory properties, reduces hyperpigmentation, nourish the skin.
Cetyl alcohol	chemical reduction of ethyl palmitate.		It has emollient properties .It is used for soothing and healing dry skin. It works by preventing water loss from the outer layer of skin. It relieves dryness and leaves the skin soft and hydrated.

5. MATERIAL AND METHODS

5.1. Collection of plant materials: All the plant material were collected from different sources.

5.2. Method of preparation:

5.2.1. Extraction process:

- Shankhapushpi flower powder is taken and lemon juice is added to it. Due to its unique colour changing property it turns to purplish pink colour which plays a key role in defining the lipstick by imparting colour to it.
- Beetroot is taken which is peeled off and cut into pieces. Further grinded and the extract is obtained which is used as a dye by enhancing the colour of our preparation.

5.2.2. Melting and Mixing:

- First, the raw ingredients for the lipstick are melted and mixed—separately because of the different types of ingredients used.
- One mixture contains the solvents, a second contains the oils, and a third contains the fats and waxy materials.[32]
- These are heated in separate stainless steel or ceramic containers.
- The solvent solution and liquid oils are then mixed with the colour pigments.
- After the pigment mass is prepared, it is mixed with the hot wax.[32]

5.2.3. Moulding:

- The mixture is agitated to free it of any air bubbles. Then it is poured into tubing moulds, cooled, and separated from the moulds.
- After final touch-up and visual inspection, the lipstick is ready for packaging.
- Mixture is ground using a mill, grinding the pigment to avoid a "grainy" feel to the lipstick.
- After the pigment mass is ground and mixed, it is added to the hot wax mass until a uniform colour and consistency is obtained.
- The fluid lipstick can then be strained and molded, or it may be poured into pans and stored for future molding [37]

Fig: 1: Labelling and packing of lipstick

Table 2: Formulation of natural lipsticks

Ingredients	Quantity in grams
Shankhapushpi extract	5ml
Beetroot	2ml
Lemon	2 to 3 drops
Bees wax	6ml
Cetyl alcohol	1gm
Shea butter	1gm
Petroleum Jelly	1gm
Badam oil	2ml
Vitamin E capsule	2
Lavender oil	2 to 3 drops

6. EVALUATION OF LIPSTICKS

6.1. Melting point:

The melting point of lipstick is a crucial parameter for determining the product's storage characteristics and usability.[1] It indicates the maximum storage temperature at which the lipstick can maintain its integrity without becoming too soft or losing its shape. In the capillary tube method, a commonly used technique, approximately 50 mg of melted lipstick is inserted into a glass capillary tube open at both ends. The tube is then chilled with ice for 24 hours to solidify the lipstick. After this, the capillary tube is placed in a beaker filled with hot water, which is gradually heated with the aid of a magnetic stirrer. As the temperature increases, the lipstick begins to melt, and the point at which it starts moving through the capillary is noted as the melting point. This temperature marks the point at which the lipstick changes from solid to liquid.

For a well-formulated lipstick, the melting point should fall between 60°C to 65°C. This range ensures that the lipstick maintains its structure during application and does not become too soft in warmer environments (such as when carried in a bag or stored in a warm room).[1] Another key parameter is the droop point, which indicates the temperature at which the lipstick begins to lose its consistency and oozes oil, causing it to flatten. The melting point must always be higher than the droop point to guarantee the product's stability and usability. These parameters, the melting point and the droop point, provide essential data regarding the safe handling and storage of the lipstick, ensuring the product remains both functional and aesthetically pleasing during use and after storage.

Thus, determining the melting point is essential not only for ensuring that the lipstick performs well upon application but also for establishing safe storage conditions. These factors work together to ensure the product remains intact under varying environmental conditions and does not degrade prematurely [5].

6.2. Test for the application force:

This is a test to determine the force to be applied during application. In this method, two lipsticks are cut to obtain flat surfaces which are placed one above other. A smooth paper is placed between them which is attached to a dynamometer to determine force required to pull the paper indicates the force application [6].

6.3. Determination of surface characteristics:

The study of surface property of the product is carried out in order to check the formation crystal on the surface or the contamination by microorganism or formation of wrinkles and the exudation of liquid [6].

6.4. Ph determination test:

Using a digital meter and pH paper, the pH of herbal lipstick formulations was obtained [2].

6.5. Irritation test results:

It was found that after irritation testing of each lip color formula for 20 volunteers, all of the formula did not cause an irritation reaction. This was evidenced by the absence of symptoms of irritation caused by the onset of red skin, itching, bumps, or swelling. Hence, it could be said that the lip color made with variations in the concentration of the color, was quite safe to use [2].

6.6. Aging stability:

The product was stored in 40ºC for 1 hour. Various parameters such as bleeding, crystallization of on surface and ease of application were observed [2].

6.7. Solubility test:

The formulation herbal lipstick was dissolved in various solvents to observe the solubility.

6.8. Spreadability:

The spreadability is considered good if the application is perfect, there are no fragments, and the lipstick is uniform. If the application is good but there are some fragments and little deformation, the spreadability is considered intermediate. If the application is difficult, the lipstick is deformed, and there is an uneven distribution of fragments, the spreadability is considered bad [6].

6.9. Acceptance:

The acceptance study carried to study acceptance of the products, for this study the ten formulations of the herbal lipstick shown to the female volunteer and percentage of acceptance was calculated out of 10 marks.

Table 3: Evaluation of natural lipsticks

Parameters	Natural lipstick formulation	Marketed lipstick formulation	Standard lipstick formulation
Colour	Nude Burn	Red	-
Texture	Smooth	Smooth	Smooth
pH	6.9	6.6	6.4
Melting point	56-58°C	62-64°C	60-66°C
Softening point	67°C	62°C	50-60°C
Surface characteristics	No defect	No defect	No defect
Aging stability	Smooth	Smooth	Smooth
Perfume stability	+++	+++	+++

7. RESULT AND DISCUSSION

7.1. Formulation of Herbal Lipstick: There has been rapid boost in use of cosmetics by women. However, the problems caused by these chemicals has come into limelight very recently. The present work formulation and evaluation of herbal lipsticks was aimed to formulate a lipstick using herbal ingredients with a hope to minimize the side effects as produced by the available synthetic ones. Herbal lipstick was successfully formulated using natural edible colouring matter like cinnamon bark extract, turmeric powder, cocoa powder as a colouring agent and were used for further evaluation. The substance like Cinnamon bark, turmeric powder, cocoa powder and lemon juice are well known for their medicinal and cosmeceuticals value in the traditional Indian system of medicine. They stimulate cells to provide more elasticity and less wrinkled properties to the skin. They are used in oils and pastes to improve complexion and the general health of the skin. Most of them have significant antioxidant activity. So, it can be

considered as a natural antioxidant and it is well known that the natural antioxidants have beneficial effects on the process of skin aging, skin sun protection or skin cancer.

7.2. Evaluation of Herbal Lipstick: Results showed that all evaluation parameters of Herbal Lipstick are resemble with standard values and marketed formulation [38-39]

8. ACKNOWLEDGEMENT

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