IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

A Review on Herbal Medicated lipstick

Shubham Mahadev Hole, Nikita Rajaram Holkar, Utkarsha Gulabrao Hambir, Dr. P. H. Khade, Dr. Ashok Bhosale
Student, Student, Student, Professor, Principal
Shankarrao ursal college of pharmaceutical sciences and research center

Abstract :
Cosmetics are substances that are used to change a person's physical appearance or scent. These days, there is a growing global market demand for herbal cosmetics, which are unavoidable gifts from nature. Women can find a variety of herbal cosmetic products to meet their needs. Herbal cosmetics are safe for human health, unlike synthetic ones. Herbal products such as herbal pastes, creams, lipsticks, and shampoos have always garnered a lot of interest due to their good activity and generally lower side effects when compared to synthetic materials. Herbal cosmetics are cosmetics made with herbal ingredients that have desirable physiological effects, such as improving, calming appearance, healing, and conditioning qualities. The most popular cosmetic added to makeup to accentuate the beauty of lips is lipstick. A lipstick is a cosmetic item that gives the lips color, texture, and protection. It is made of pigment, wax material, various oils, and emollients. The natural lipstick's ingredients are all-natural and safe to use. The nutrient found in herbs that maintains healthy lips. Frequent use of synthetic lipstick colors can have major negative effects, including cancer, skin irritation, discoloration, and acne. Using herbal color extracts from various herbal sources helps lessen the negative effects. The background, types, formulation process, various color pigment extractions, natural oils, bases, flavors, physical evaluation, quality control of lipsticks in industries, molding, and lipstick flaws were all covered in this review. The natural drug used in the formulation is a curcumin which is used for antifungal therapy and Pomegranate arils extract is used as coloring agent. Preformulation studies revealed that API and excipients were found compatible for the formulation of herbal
lipstick. Preliminary trials were carried out for determination of concentration of ingredients
and drug. Two ingredients such as carnauba wax and cocoa butter was varied and remaining all ingredients was kept constant on the basis of preliminary trials. Evaluation test like
melting point, pH, breaking point, thixotropy structure, softening point, solubility, permeability study was performed, and select optimized batch on the basis of evaluation of
lipstick.The present work is aimed to formulate herbal medicated lipstick by using various natural ingredients like turmeric (Curcuma longa.) ,honey , pomegranate (Punica granatum) , bees wax , olive oil, Castor oil,lemon juice strawberry essence, coconut oil.

Keywords :

Herbal Cosmetic, Natural ingredients, Lipstick, Lip anatomy, Women, Physiology.

Introduction:

Women use lipsticks the most frequently among cosmetics to give their lips a beautiful color and appearance. Women's apparent facial characteristics can be altered with lipstick. These are typically produced as molded sticks and are made of coloring pigments that have been dissolved or scattered in a fatty base made of an appropriate mixture of oils, fats, and waxes that have been appropriately perfumed [1-3]. Lipsticks are cosmetic products that give the lips color, texture, and protection. They are made of pigments, waxes, oils, and emollients. There were only a few shades of lipstick available in the early 20th century. Throughout the 19th and 20th centuries, dark red was one of the most fashionable colors[4] . In the 1920s, dark red lipstick was fashionable. Lipstick served as a symbol of independence for flappers. Actress Clara Bow served as the inspiration for the cupid's bow lipstick look. During lunch and in public, lipstick application was acceptable at the time, but not during dinner [5]. Liquid lipstick, which dries matte but applies like a gloss, gained popularity in late 2015 and early 2016 thanks to brands like Anastasia Beverly Hills. The most common form is applied with a wand and applicator inside a tube. There are numerous variants of lipstick, including lip crayons, pencils, balms, glosses, liners, and stains. Glosses and balms are typically less opaque and more translucent lively [6-8]

Lipstick Background :

The history of cosmetics originates back to ancient civilization. In particular, the Sumerians, Syrians, Persians, Egyptians, Babylonians, and Greeks were among the people who frequently used lip color. Later, in an attempt to keep up with the times, Elizabeth I and the ladies of her court colored their lips with red mercuric sulphide for years. Red was used to color both the lips and the cheeks.

Advantages of herbal cosmetics over Synthetic cosmetics :

These days, herbal cosmetics are preferred over synthetic ones because they provide the body with nutrients that improve health, are free of artificial ingredients, and don't have any negative side effects. Natural cosmetics have several benefits over synthetic ones, including being safe to use, body-compatible, naturally occurring, reasonably priced, offering a wide range of products, having no negative effects, and not being tested on animals [9,10]

Anatomy of lips :

The lips function as a speaking, suction, and prehension organ. It is made up of the skin, superficial fascia, the muscle known as the orbital, and the surrounding muscles. (Mucous membrane and areolar tissue) the edges of the mucous membrane covering the lips is red and parched. ongoing with the skin and having multiple touch corpuscles and vascular papillae. Its mucus internal membrane is mirrored from the top and lower lip on the gums, where it forms the median line superiors and inferiors in two folds. either the areolar tissue The coronary vessels are found in the submucous layer, which encircle the buccal opening in close proximity to the free boundary of the lips. The origin of the coronary arteries is the visage.[11,12]

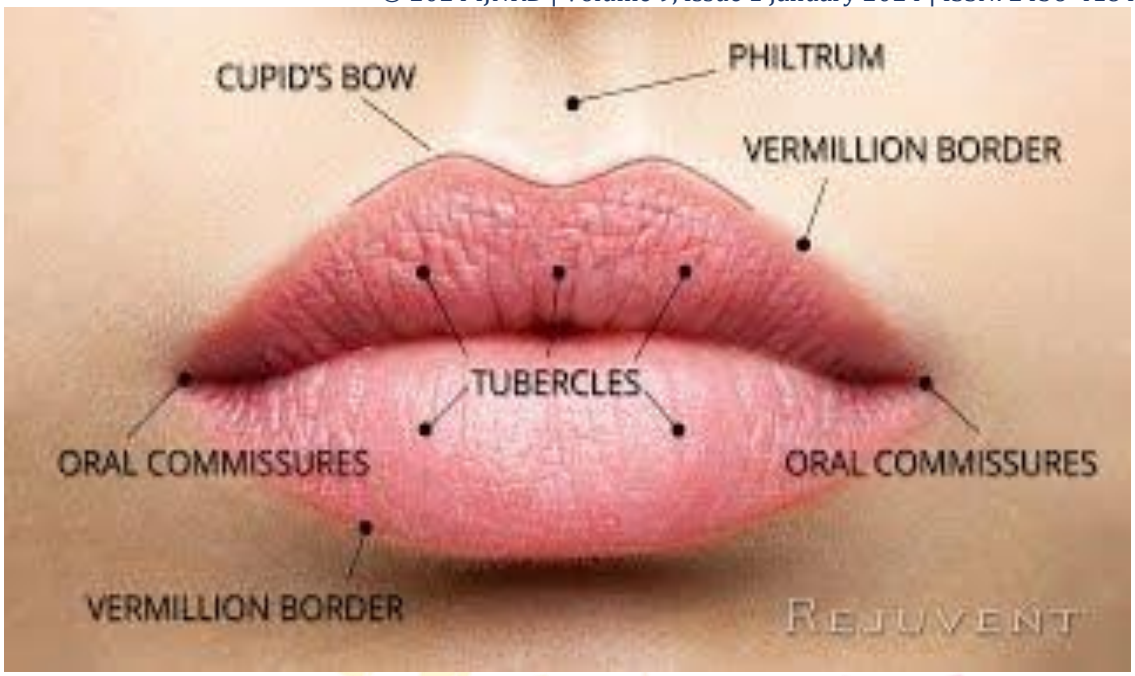


Fig.1 Anatomy of Lips

Difference between lip and regular skin structure :

The lip is more attractive than the skin at large. Regular skin typically has 15 to 16 layers in the top corneum layer, primarily for protection. Compared to the skin on the average face, the lip's top corneum layers are extremely thin, with only three to four layers total. Due to the low melanin content of lip skin, blood vessels can be seen more clearly through the skin, giving the lips their beautiful pinkish color. Because the lip skin lacks sweat glands and hair follicles, it lacks body oil and sweat to shield the lip from the elements [13].Lip skin is particularly sensitive to external stimuli because it is prone to drying out and developing tiny cracks, especially when exposed to cold, dry air [14,15].

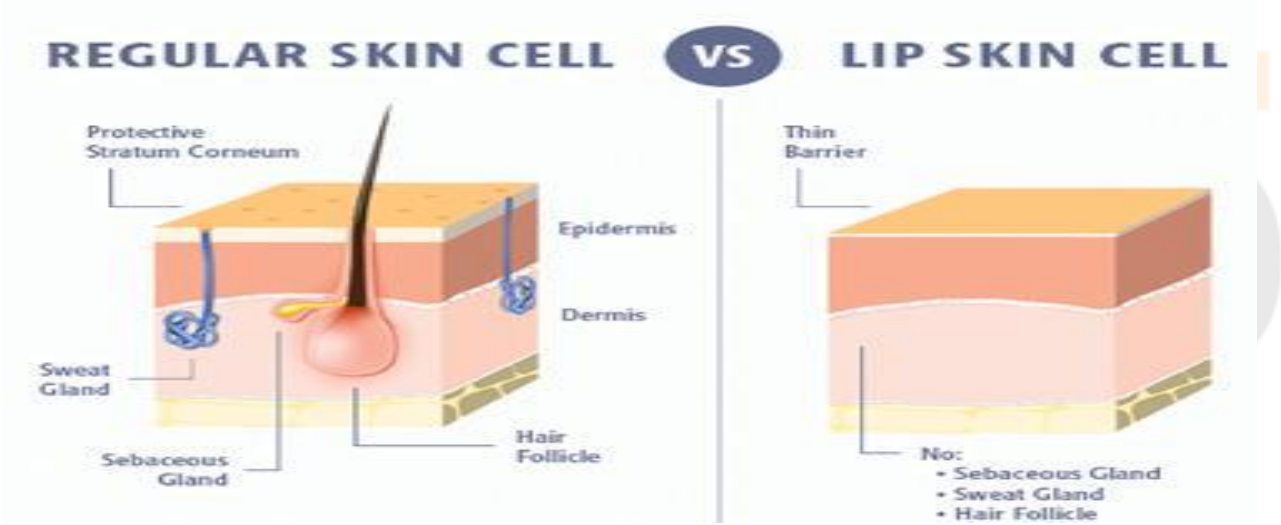


Fig. no.2 Difference between regular & lip skin

The lack of the protective stratum corneum layer suggests that lips serve poorly as barriers. Their low moisture capacity,4 makes them prone to infection, pathology, desiccation, and puts them at daily risk of chemical and mechanical trauma: toothbrushing, lip-licking, mouth rinsing, eating and UV exposure Trans-Epidermal Water Loss (TEWL) is the amount of water that passively evaporates through the skin to the external environment (not by sweat, but due to the differential water vapor pressures on either side of the skin). TEWL measurement is a good gauge of the skin barrier integrity (an increase indicates impaired barrier function and correlates to skin ageing and deterioration).5 Research indicates that lips experience significantly greater TEWL than other

skin structures, allowing many common dermatoses including cheilitis (lip inflammation) that leads to dryness, chapping, cracking, flaking, sores, bleeding[16,17].

Lip Disorders [18,19]

1. Swelling :

Lip swelling can be caused by an allergic reaction. A sensitivity to specific foods or beverages, medications, cosmetics, or airborne allergens could be the cause of the reaction. The lips usually return to normal when the cause is found and removed, but the reason behind the swelling is often still unknown. Hereditary angioedema is a condition that can result in at times of swelling. Lip swelling may be brought on by non-hereditary disorders like erythema multiforme, sunburn, cold, dry weather, or trauma

2.Cold Sores (Herpetic Gingivostomatitis) :

Cold sores are caused by the herpes simplex virus; this is a mouth and lip infection that often occurs in children. Blisters, erosions, and crusting may be seen on the lips and buccal mucosa.

3 . Discoloration :

Lip discoloration can occur as a result of a fungal infection, iron deficiency anemia, sun exposure, or an allergic reaction. The area around the lips frequently develops freckles and irregularly shaped brownish areas called melatonin macules, which can last for many years. These marks are not the reason to be concerned.

4. Sun damage :

Sun damage can cause the lips to become dry and hard, especially on the lower lip. A white, filmy appearance or red spots indicate damage that raises the risk of developing cancer again. Wearing a wide-brimmed hat to protect the face from the sun's harmful rays or applying lip balm containing sunscreen can help prevent this kind of damage. Inflammation: Cheilitis, or inflammation of the lips, can cause pain, irritation, redness, cracking, and growing in the corners of the mouth. A vitamin B12 deficiency in the diet may cause cheilitis.

Fig. no.3 Different Lip Problems

Different Types of Lipstick and Their Uses: [20]

Today's lipstick market contains number of products with many effects and characteristics.
Below are a few forms of lipsticks with basic characteristics:

1. Moisturizing Lipsticks:-

Individuals who have dry lips should use moisturizing lipsticks as it keeps lips soft and smooth. These lipsticks moisturize lips due to ingredients like vitamin E, glycerin and aloe. Other great things about using moisturizing lipsticks are wet and very shiny lips.

2. Satin and Sheer Lipsticks:

These lipsticks also moisturize and nourish lips and ensure it is shiny and glossy. Sheer and satin lipsticks have high oil ingredients and they could appear darker in the package than they are on lips. Another characteristic of lipsticks with oil components is that it must be replied many times.

3. Mate and Lipstick:

Mate lipsticks are perfects selection for women who are seeking colorful and nice shade. These lipsticks have affectation of flat and not shiny lips. Your lips will look smother and younger with matte lipstick. Plus it is advised to mix products with vitamin E and aloe with mate lipsticks.

4. Cream Lipstick:-

Women who'd small lips should use cream lipsticks. Lipstick with cream formula is not shiny, but it's smooth influence on lips. You need to use lip gloss afterward for desire look. Cream lipsticks containmore wax to be able to protect lips, but also cause aftereffect of dry lips

.

5. Pearl and Frosted Lipstick:-

Frosted lipstick makes lips sparkle and glisten. Pearl and frosted lipstick reflects light and makes very shiny effect on your own lips. Negative effects are that could cause lips feel heavy, crack and dry. It is advised to moisturize your lips before utilize this lipsticks.

6. Gloss Lipstick:-

Gloss is extremely popular lipstick for girls with thin and small lips because make lips shine andimprove the dimension of depth. Gloss may be along with traditional lipstick.

7. Long Wearing and Transfer Resistant Lipsticks:-

Women who don't have time to utilize Lipstick frequently may use long wearing lipstick. These lipsticks have formula that keep lips look perfect from 4-8 hrs. They're resilient and soon youeat something greasy or oily. Many of them contain moisturizer to balance the dryness of lips.

8.Medicated lipstick:[21,22]

Lipstick are cosmetic formulation for the modification or accentuation of lips colour & are prepared by moulding a dispersion of color in a waxy base, in the form of stick. Any preparation used in the beauty treatment by name of lipstick. When this preparation contain active ingredients, they are also known as a Medicated lipstick.

10. Lipstick Nutritive:

This type of lipstick is perfect for winter because it protects the lips against the cold.

11. Lipstick for hygiene or treatment:

It nourishes the sensitive skin on the lips, repairs cracks, wards off herpes, and imparts a gentle, natural gloss. Depending on how much you want to use, the lipsticks from Mattel come in gloss, glitter, and thick varieties. consistency.

12.Long-lasting lipstick:

They stand for 8 to 24 h. Glaze they are translucent, bright, and have
low pigmentation.

13. Waterproof lipstick: is made of a material that prevents it from evaporating and allows It to stay in touch with water. The lipsticks' level of colouring will determine,

14. Lipstick with no colour.

15. Neutral-colored lipstick.

16. Brightly coloured lipstick

Mechanism of lipstick:

A lipstick bullet nosepiece is held in place by the cup body of a lipstick swivelling mechanism, which also controls the movement of the cup.

The nosepiece was attached to a rotatably rotating spiral that had helical guiding grooves carved into its inner surface. The screw was inserted into the spiral and was detachably attached to the cup. The screw features double-helical protrusions that are formed on its exterior. When the spiral is rotated, the double-helical protrusions are received in and guided by the helical guiding grooves inside the spiral, causing the screw and the cup to move upward or downward.

The basic manufacturing process of lipstick :[23-25]

The formulation of herbal lipstick involves the basic manufacturing process like;

Pigment pre-milling:

The first step involved in the formulation of herbal lipstick is pigment pre-milling where the agglomerates in the powder are broken down to provide homogeneous smooth and even colour to the lipstick.

Melting and Mixing:

The next step involves the melting and mixing stage, since waxes are solid at room temperature they cannot be mixed with other ingredients to make this process easy as the waxes are melted. It can be usually mixed with oil and melted to the melted base, the pigment and other additives are added and mixed to form a homogeneous product.

Molding:

Molding is the actual step where the melted lipstick is poured into metal or plastic mold, the mix is poured while it is hot however it is beneficial to harden, and then it is removed from the mole with slight pressure.

Flaming:

Flaming is the last step where the lipstick is passed through the flame, it is typically held and twisted in the flame for up to a second and then removed to avoid melting and losing shape to obtain a glossy finish, and then it is placed in the containers.

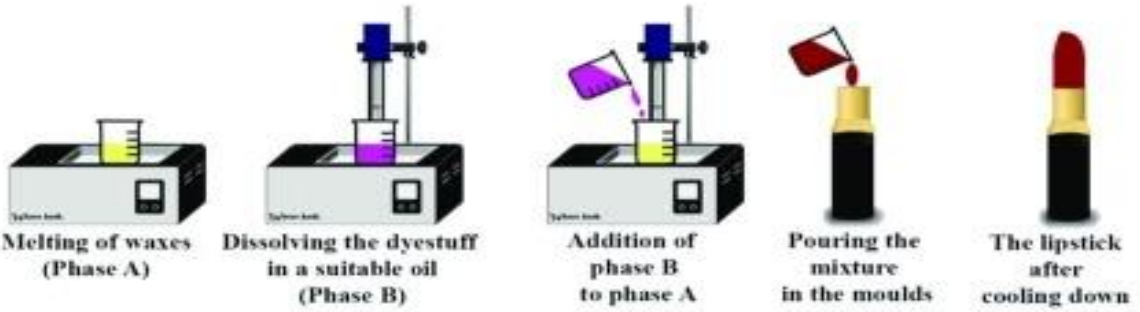


Fig.no. 4 General Method of Preparation Of Lipstick

Defects in lipsticks [26-27]

Formulation related problems:

Sweating:

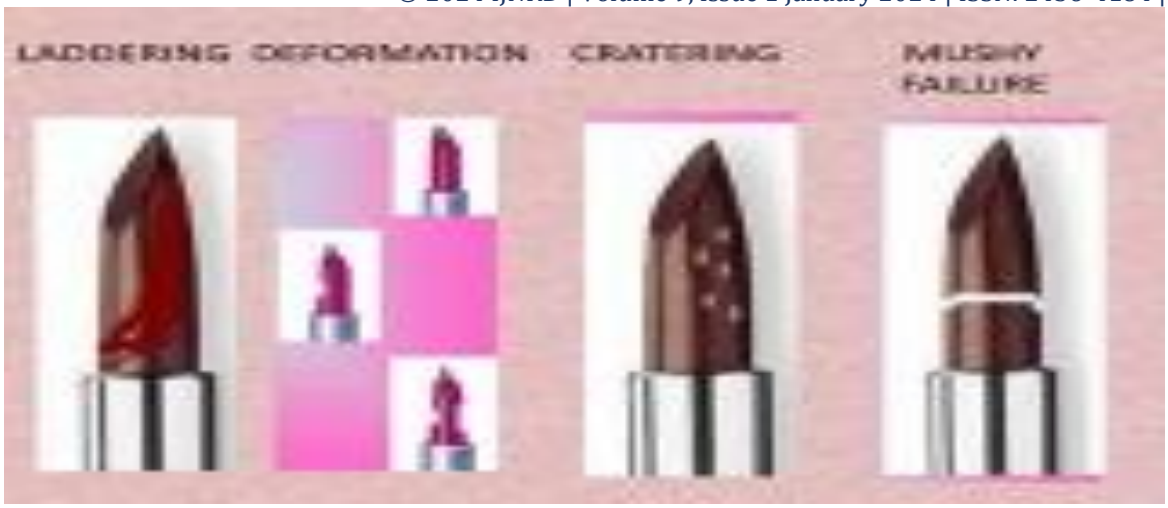
It is the most common problem of lipstick formulation due to high oil content or inferior oil binding. It may arise in any climate or temperature range.

Bleeding: .

This refers to the separation of colored liquids from the waxy base.

Streaking:

A thin line or band of a different colour or a substance appears on the finished product.



Fig, no. 5 Formulation Related Problems Of Lipstick

Moulding related problems:

Laddering:
Lipstick does not look smooth or homogeneous after congealing and setting but instead has a multi-layered appearance.

Deformation:
This is a moulding problem where the shape of the lipstick looks deformed. It is noticeable and appears on both sides of the lipstick.

Cratering:
This appears in split moulding and it shows up flaming when the stick develops dimples.

Mushy failure:
This is a problem in which the central core of the lipstick lacks structure and breaks.

Quality Control of Lipsticks : [28-31]

Quality assurance Because the product needs to meet Food and Drug Administration (FDA) standards, the procedures are strict. Due to the strict regulations placed on the manufacturing process and ingredients, lipstick is the only cosmetic that is consumed. Lipstick is combined and processed in a sterile setting to ensure contamination-free quality. Testing is done on incoming material to make sure it satisfies the specifications. For the duration of the product's life, samples from each batch that is produced are kept and kept at room temperature. Lipstick color control is essential, and one need only observe the variety of colors offered by a manufacturer to understand this. The shades of lipstick can be controlled numerically with the use of colorimetric equipment. This device can precisely match the remaining lipsticks
because it provides a numerical reading of the shade when combined. The heat and rupture tests are the two particular lipstick tests. The lipstick is put in a holder in the extended position and heated to 130 °F (540 °C) for 24 hours. This is known as the heat test. There shouldn't be any lipstick falling or bending. The lipstick is inserted into two holders in the extended position for the Rupture test. Weight is added to the lipstick's holder. Up until the lipstick ruptures, portion at 30-second intervals. Next, the pressure needed to break the lipstick is

compared to the manufacturer's specifications. Each manufacturer establishes its own Parameters because there are no industry standards for these tests.

Herbal ingredients of Lipsticks:

- Bases:

A significant class of ingredients for producers of cosmetics and personal hygiene goods is waxes. A wide range of products and industries use waxes. Although their main use is in candles, they are also widely used as thickeners or emulsifiers in the food, cosmetic, and pharmaceutical industries. In chemical terms, waxes are complex combinations of fatty acids, hydrocarbons, and esters. Compared to fats, waxes are more brittle, harder, and less greasy.

They are resistant to bacteria, oxidation, and moisture. Wax falls into four categories. The three types of waxes that are most frequently used in cosmetic products are candelilla, gemstone, and beeswax.

- Oils:

There are physical differences between oils and fats. Triglycerides, another name for fats and oils, are chemically glycerol esters made up of fatty acids and glycerol; the latter is typically solid at room temperature. The stability and characteristics of the oil are determined by the saturated or unsaturated state of the fatty acids. Coconut oil, cottonseed oil, and palm oil are oils that are high in saturated fatty acids (Lauric, Myristic, Palmitic, and Stearic acids). Canola, olive, corn, almond, safflower, castor, and avocado oils are high in unsaturated fatty acids (Oleic, arachidonic, and linoleic acid). Due to its beneficial properties, castor oil is a common ingredient in lipsticks; however, other oils or solvents are now also used. A refined grade castor oil has a pleasant color, no taste, and no smell. Castor oil works incredibly well as a plasticizer. To prevent rancidification, castor oil is supplemented with an antioxidant similar to that found in other vegetable oils like almond or olive oil. Almond oil has a faint, distinct smell and is pale yellow in color. It is made up primarily of glycerides with oleic acid, with minor amounts of linoleic, myristic, and palmitic acid. It possesses emollient qualities. [32,33]

.

- Colouring agents:

The primary purpose of colorants, also known as coloring agents, is to give cosmetic goods a unique look. Since ancient times, color has been a part of cosmetics. Sight, touch, and smell work together to impact a person's desire to purchase cosmetics. Color is therefore an essential component of cosmetic formulation[34]. The colour is imparted to the lips in two ways: by staining the skin with a solution of dyestuff which can penetrate the outer layer of the lip skin and by covering the lips with a colored layer which serves to hide any skin roughness and give smooth appearances. The first requirement is met by soluble dyes and the second one is met is insoluble dyes and pigments which make the film More or less opaque. The colours should be from the list of certified dyes under the drugs and cosmetic act [34]. The naturally occurring colours from different plant and fruit sources are given in Table 1. The colorants derived from natural sources should be non-toxic with no physiological activity. It should be a definite chemical compound because then only its colouring power will be reliable, its assay will be practicable and easier. It's tinctorial (coloring) power should be high enough so that only small quantities would be sufficient for use. Colorants should be unaffected by light, tropical temperatures, hydrolysis, and microorganisms, and therefore they must be stable on storage.

Table 1. The natural colouring agents [38,39]

Colour	**Chromo-phore Plant**	**Sources**
Purple Blue	Anthocyanin	Grapes, Blueberry, Pulm, Purple cabbage, Black Berry
Green	Chlorophyll	Avocado, kiwi, Cucumber, Spinch, Broccoli.
Yellow, Orange	Carotenoids	Papaya, pineapple, Pumkin, Carrot, Orange.
Red	Lycopene	Beetroot, Tomato, Strawberry, Water, watermelon, Pomegranate
White tan	Anthocyanin	Cauliflower, Potato,

Colorants should not be affected by oxidizing or reducing agents and pH changes and also should not interfere with the tests and assays water soluble colorants are equally desirable with oil-soluble and spirit soluble colours. The most important characteristic of colorants is compatibility with other ingredients(Table 2) and medicament. It should be free from objectionable taste and odour and must be readily available and inexpensive. Examples of natural colorants are obtained from Beetroot, saffron, Turmeric and Tomato .[35-38]

Table 2. The natural ingredients [40,41]

Bases	**Oils**	**Flavouring agents**
Cocoa butter	Coconut oil	Strawberry
Bees wax	Olive oil	Orange
Carnauba wax	Castor oil	Saffaron
Candelilla wax	Glycerine	Raspberry
Avacado butter	Arachis oil	Vanilla
Olive wax	Grape seed oil	Rose oil
Olive butter	Sesame oil	Cherry
Raspberry butter	Corn oil	Sandalwood

- Flavouring agent:

Flavours or flavouring agents are usually required to mask the four basic taste sensations flavour refers to a mixed sensation of taste, touch, smell, sight, and sound all of which involve a combination of physicochemical and physiological actions that influence the perception of substances with the expansion of technology in the flavour industry, many artificial or imitation flavour has been created. The creation of acceptable flavours is more
of an art than a science. Flavours are selected based on the taste of the drug or other ingredients that need to be incorporated (Table 3). Flavours used in a lipstick
should not contain any ingredient which may be irritating or toxic. These should have good taste and should be able to mask the fatty door of the base. Flavouring agents are an essential component to mask the door of the fatty or wax base as well as to impart an
attractive flavour [42,43]

.

Table 3. The natural masking flavours .[41]

Taste	Masking flavours
Salt	Butterscotch,maple
Bitter	Wild cherry,walnut,liquorice,chocolate mint
Sweet	Fruit,berry,vanilla
Acid	Citrus

Extraction Process of various herbal colour pigments:

1. **Extraction of colour pigment from Pomegranate fruit:**

The ripe pomegranate fruits were selected based on the red colour of the peel that indicated mature fruits and no black spots or blemishes for about a few seconds. After that, the arils of the fruit were then extracted with a maceration process in an alcoholic solvent (ethanol) in the ratio of 1:4, which means that 400 ml of ethanol was used to be macerated with 100 g of arils of fruits. The total amounts of arils were about 1000g, so the total amount of ethanol required was approximately 4 L .After 24 h extraction, the sample was then filtered with paper to obtain the red-purple filtrate. The filtration was required to filter several times to remove the residue and impurities. The red-purple filtrate that was leftover was clear liquid without sedimentation. Furthermore, the filtrates were then evaporated for approximately 5 days to remove the solvent in the dark .[44,45]

.

2. **Extraction colour pigment from Turmeric:**

The samples of dry turmeric were extracted using acetone and hexane (2:3 v/v). The oleoresin- containing solvent (yellow pigment extract) was concentrated by rotary evaporation under vacuum at 40 °C and placed in a glass bottle and stored until used. Then the water-soluble turmeric yellow pigment or the liquid colour was developed from oleoresin (50 ml concentrate) by adding 10 ml of polysorbate (Tween 80) followed by mixing in the mixer for 2 min. The oil-soluble turmeric yellow pigment in petroleum ether and hence used for crystallization. To 50 ml of concentrated oleoresin in alcohol 100 ml of petroleum ether was slowly added and vortexed and manually for 10 min and allowed to stand for 30 min. The top layer was decanted, concentrated under vacuum at 40 °C and placed in a glass bottle, and stored at 40 °C until used .[46,47]

.

Physical Evaluation of lipsticks : [48-58]

- Colour and texture:

Formulated lipsticks were checked for colour, glossy and smooth texture.

- pH:

The pH of formulated herbal lipsticks was determined using a digital meter and pH paper.

- Determination of Melting Point:

Determination of melting point is an important Parameter for lipstick formulation; as it is an indication of the limit of safe storage. The melting point offormulated lipstick was determined by the capillary tube method. Approximately 50 mg of lipstick sample was

taken and melted and filled into a glass capillary tube opened at both ends. Capillary was cooled with ice for 24 h and increased with a thermometer. The thermometer with capillary was deep in the beaker containing full of water which was placed on a heating plate with a magnetic stirrer. Heating and stirring were started slowly

at a fixed speed. The temperature at which material moves along the capillary tube was considered a melting point.

- Breaking Point:

This test was carried out to find out the value of maximum load that lipstick can withstand before it breaks. This test gives strength to lipstick. Prepared herbal lipstick was held horizontally in a socket inch away from the edge of support. The weight was gradually increased by a specific value (10 g) at a specific interval of 30 sec and the weight at which
breaks was considered as the breaking point.

- Determination of hardness:

Formulated lipstick from each formulation was selected randomly and measured using Monsanto hardness tester. The average result of each formulation was calculated
and recorded.

- Determination of Spreadability:

It was tested by repeatedly applying the lipstick onto the glass slide to observe the uniformity in the formulation of the protective layer and whether the stick fragmented,
deformed, or broke during application.

- ❖ Good: Uniform, fragments do not occur, perfect application, without deformation of lipstick.
- ❖ Intermediate: uniform, leave fragments, good application but with little deformed.
- ❖ Bad: Not uniform leaves many fragments, difficult to apply, and deformed.

- Softening Point:

Lipstick should be able to withstand a range of conditions to which it will be subjected in the
consumer's handbag. It should be resistant to varying temperature conditions and be just as easy to apply in hot and an axe in cold weather. The softening point of lipstick was determined by the Ring and Ball method.

- Ring and Ball method:

A ring or support orifice is taken and prepared herbal lipstick was inserted into it. The extra mass above and below the orifice was removed using a sharp blade leaving tablets of lipstick fitted into the ring. This was placed in the refrigerator (60 °C) for about 10 min. The ring was tied onto a stand. A beaker containing 500 ml water at room temperature is placed on a hot plate with a magnetic stirrer. A steel ball was delicately placed on the lipstick tablet. The bar with support was then inserted into the beaker till it submerged into it. Heating and slow agitation using a thermometer. The temperature at which the lipstick mass and steel balls were loosed and fell to the bottom of the beaker was noted as a softening point
of lipstick.

- Rancidity:

This test when carried out on dark-colored lipstick is likely to be vitiated because the endpoint in the determination of peroxide number may not be very sharp. In such cases, it is expected, as a good manufacturing practice manufacturer should check rancidity of lipstick raw materials, especially vegetable oil and other rancidity prone materials regularly in
lipstick base mixtures without colours, by peroxide number test.

- ❖ Reagents:

Acetic acid, chloroform, Potassium chloride solution, saturated sodium thiosulphate- approximately 0.01N

❖ Procedure:

Weigh 5.0 and 0.05 g of lipstick sample in a 250 ml conical flask and dissolve in 30 ml of acetic acid-chloroform mixtures (3:2). Heat if necessary to dissolve
the sample. Add 0.5 ml of freshly made saturated potassium iodide solution, shake and after two minutes add 30 ml distilled water and then titrate with 0.01N sodium thiosulphate solution using starch as an indicator. The peroxide number (PN) is calculated as per
the equation given below.

$$PN = ME \times A \times N \times 1000/MS \ldots.(1)$$

Where,
ME is Milli equivalents peroxide per 1000 g sample,
A is volume in ml
N is Normality of sodium Thiosulphate solution
MS is Mass of sample.

➢ Microbiological test:

The test consists of plating a known mass of the sample on two selected culture media specifically suitable for the growth of bacteria and fungi and incubating them for
a specified period to permit the development of visual colonies for counting.

❖ Apparatus:

Tubes of resistant glass provided which closely fit metal. Autoclaves of suitable size. They shall keep the uniform temperature within the chamber up to and including the sterilizing temperature of 1200 °C. They shall be equipped with an accurate thermometer, located to register the minimum temperature within the sterilizing chamber, a pressure gauge, and properly adjusted safety valve, Petri dish, colony counter. Media (Nutrient Agar Medium): Dissolve 5 g of yeast extract (or meat extract), 5 g sodium chloride, and 10 g peptone in 1000 ml of distilled water contained in a 2 lit beaker by heating on a water bath. Add 25 g of powdered agar and continue boiling until the agar is completely dissolved. Adjust the pH to 7.4 with sodium hydroxide solution using a pH meter or comparator.Filter while hot through lint cloth placed in a funnel and dispense into tubes in 20 ml quantities. Close the tubes with metal caps or cotton and sterilize in an autoclave at 121 °C and 1.05 kg/CMG pressure for 20 min. After autoclaving, store the tubes in a refrigerator.

❖ Procedure:

Weight and transfer aseptically four 0.5 g portions of the sample to four melted nutrient agar tubes, shake the tubes to mix the contents thoroughly, and pour into sterile Petri dishes. Incubate the nutrients agar tubes at 370 °C for 48 h. Determine the average number of
colonies per gram of the sample on nutrient agar tube
.

➢ Surface anomalies:

This was studied by the surface defects, such as the formation of crystals on the surface, contamination by moulds, fungi, the formation of wrinkles, exudation of liquid substances and solid fatty substances.

➢ Aging stability:

Prepared herbal lipstick was stored at refrigerator temperature (40 °C), room temperature (20 to 250 °C), and high temperature (30 to 400 °C) for 1 h. Various parameters such as bleeding, streaking, catering, and blooming were observed. .

➢ Perfume stability:

The prepared herbal lipsticks were tested for 30 days, to record fragrance.

➢ Skin irritation test:

It is carried out by applying the product on the skin for
10 min and any sign of irritation is observed.

CONCLUSION:

In the last few decades, there has been a tremendous boost in the use of cosmetics by women. However, the hazards caused by these chemicals have come into the limelight very recently. Consumers can take safe and effective advantage of herbal lipsticks after thorough clinical trials. Compared to other beauty products, natural cosmetics are safe to use. Synthetic colouring agents may cause allergic reactions and be found to be carcinogenic. The ability to desire the right cosmetics for you depends on accurate ingredient knowledge, body Prakriti assessment, personal needs, customer perception about the product, and benchmark product. Quality control for the ability and safety of herbal cosmetic products is of predominant importance. So quality control tests must be carried out for herbal cosmetics. It
is assumed to be safe for longer periods.

ACKNOWLEDGEMENT:

Author wish to thanks Shankarrao ursal college of pharmaceutical sciences and research centre, kharadi for providing the library support to complete this review study.

Reference :

1. Mehta RM. Pharmaceutics-I. Edn 2, Vallabh Prakashan, Delhi, 2015, 213-214.

2. Mithal BM, Saha RN. A Handbook of Cosmetics. Edn 1, Vallabh Prakashan, Delhi, 2007, 39-47.

3. Berg R, Kroencke A. Beauty: The New Basics. Workman Publishing Company, New York, 2001, 1-10.

4. Forman-Brunell M. Girlhood in America: An Encyclopedia. Edn 1, Vol. VII, Santa Barbara, California, 2001,
206-217.

5. Mansour D. From Abba to Zoom: A Pop Culture Encyclopedia of the Late 20th Century. Andrews McMeel Publishing, Kansas City, 2005, 322-330.

6. Monica WM, Nicholas, Gikonyo K, Glaston KM. Alfred M. Properties of a complementary food based on amaranth grain (Amaranthus cruentus) grown in Kenya. Journal of Agriculture and Food Technology 2011; 1:153-178.

7. Singhal RS, Kulkarni PR. Review: Amaranthus an underutilized resources. International Journal of Food Science and Technology. 1988; 23:125-139.

8. Pedersen B, Kalinowski LS, Eggum BO. The nutritive value of amaranth grain (Amaranthus caudalus) protein and mineral of raw and processed grain. Plant Foods Human Nutrition. 1998; 36:309-324.

9. Mitral BM, Saga RN. A Handbook of Cosmetics. 1st ed. New Delhi, India: Vallabha Prakashan; 2000.

10. Sharma AV, Sharma PV. Flavouring agents in Pharmaceutical Formulation. Anc Sci Life, 1988; 8: 38-40.

11.Basha BN, Prakasam K, Goli D. Formulation and evaluation of gel containing Fluconazole antifungal agent. Int J Drug Dev Res, 2011; 3: 4-10.

12. Balsam MS, Sagarin E. Cosmetics Science and Technology. 2nd ed. New York: Wiley Inter science Publication; 2008.

13.Allan KV, Kumar GP. Colorants the cosmetics for the Pharmaceutical dosage form. Int J Pharmacy Pharm Sci, 2011; 3: 13-21.

14. Chaudhari NP, Chaudhari NU. A review on Herbal lipstick from different natural colouring pigments. Indian J Drug, 2018; 6(3): 174-179.

15. Kadian SS, Sharma A. Stability and application of crude beetroot extract in different food products. Int J Biol Pharmacy Allied Sci, 2013; 2(3): 693-698.

16.Kobayashi H, Tagami H. Functional properties of the surface of the vermilion border of the lips are distinct from those of the facial skin. Br J Dermatol. 2004 Mar;150(3):563-7.

17.. Maruccia, M.G. Onesti, P. Parisi, E. Cigna, A. Troccola, N. Scuderi. Lip Cancer: A 10-Year Retrospective Epidemiological Study Anticancer Research Apr 2012, 32 (4) 1543-1546.

18.Chaudhari NP, Chaudhari NU. A review on Herbal lipstick from different natural colouring pigments. Indian J Drug, 2018; 6(3): 174-179.

19.Indian Standard (IS) (1990): Lipstick (PCD 19: Cosmetics).

20.Abdeldaiem MH, et al. Use of yellow pigment extracted from Turmeric (Curcuma longa) Rhizomes powder as Natural food Preservative. Am J Food Sci Tech, 2014; 2(1): 36-47.

21.Malviya N. Isolation and quantification of Lycopene from Watermelon, Tomato, and Papaya Red J Recent Sci, 2014; 3: 68-70.

22.Chattopaddhyay, P.K., Herbal Cosmetics and Ayurvedic Medicines, National Institute of Industrial Reasearch, 2005:45-50.

23.Margaret A. Selling dreams inside the beauty business. London: JM Dent & Sons Ltd; 1981.

24. Bashinski R. What the shape of your stick might say about you/ Freudian slip of the lip. New York: Daily News; 1999.

25. Nadkari AK. Indian Materica Media. 3rd ed. Vol. II. Mumbai: Popular Prakashan; 1975.

26.Korac RR, Khambholja KM. Potential of herbs in skin protection from Ultraviolet radiation. Pharmacogn Rev, 2011; 7: 164-173.

27. Shivanand P, Nilam M, Viral D. Herbs play an important role in the field of cosmetics. Int J Pharm Tech Red, 2010; 2: 632-639

28. Navarre MG, editor. The chemistry and Manufacturer of Cosmetics. 2nd ed. Vol.1. New York: Wiley- Inter science; 1974.

29. Hart RG, editor. Harry's Cosmeticology. 6th ed. London: Leonard Hil! Books; 1973. pp. 140-156

30. Nema RK, Rathore KS, Dubey BK. Text of cosmetics. 1st ed. New Delhi (India): CBS Publishers and Distributors; 2009. pp. 69-81.

31. Katiyar SK, Elmets CA. Green tea polyphenols skin protection and antioxidant (Review). Int J Oncol, 2001; 18: 1307-1313.

32.Okoh OO, Sadimenko AP, Asekeen OT, Afolayan AJ. The effects of Drying on the chemical components of Essential oils of Caledula officinalis. Afr J Biotechnol, 2008; 7: 1500-1502.

33. Athar M, Syed MN. Taxonomic perspective of plant species yielding vegetable oils used in cosmetics and skin care products. Afr J Biotechnol, 2005; 4: 36-44.

34.Itami S, Kurata S, Sonoda T, Takayasu S. Charac-terization of 5 alpha-reductase in cultured human dermal papilla cells from beard and occipital scalp hair. J Invest Dermatol, 1991; 96(1): 57-60.

35.Ozkur MK, Bozkurt MS, Balabanli B, Aricioglu A, Ilter N, et al., The effects of EGB 761 on lipid peroxide leaves and superoxide dismutase activity in sunburn. Photodermatol Photoimmunol Photomd, 2002; 18: 117-120.

36. Jain A, Dubey S, Gupta A, Kannojia P, Tomar V. Potential of herbs as cosmeceuticals. Int J Res Appl Pharmacy, 2010; 1: 71-77.

37. Dixit SN, Srivastava HS, Tripathi RD. Lawsone, The antifungal antibiotic from leaves of Lawsonia inermis and some aspects of its mode of action. Indian Phytopathol, 1980; 31: 131-133.

38. Brown RP, Gerbarg PL, Ramazanov Z. Rhodiola rosea: A phytomedical overview. HerbalGram, 2002; 56: 40-52.

39.Furmanowa M, Skopinska RE, Rogala E, Malgorzata H. Rhodiola rosea in-vitro culture: phytochemical analysis and antioxidant action. Acta Soc Bot Pol, 1998; 67: 69-73.

40.Chaudhary G, Goyal S, Poonia P. Lawsonia inermis Linnaeus: A phytopharmacological review. Int J Pharm Sci Drug Res, 2010; 2: 91-98.

41. Pandey S, Meshya N, Viral D. Herbs play an important role in the field of cosmetics. Int J PharmTech Res, 2010; 2: 632-639

42.Nayak BS, Jena PK, Dindha SC, Ellaiah P. Phytochemical investigation and in vitro evaluation of anthelmintic activity of Gmelina arborea roxb.fruit extracts. Asian J Chem, 2012; 24(8): 3445-3448.

43. Khanpara K, Renuka V, Shukla J, Harsha CR. A Detailed Investigation of shikakai (Acacia concinna) fruit. J Curr Pharm Res, 2012; 9: 6-10.

44. Tournas JA, Lin FH, Burch JA, et al., Ubiquinone, idebenone, and kinetin provide ineffective photoprotection to skin when compared to a topical antioxidant combination of Vitamins C and E with ferulic acid. J Invest Dermatol, 2006; 126: 1185-1187.

45. Nayak L, Sahu BP. A review on Herbal Medicine and Health. J Pharm Adv Res, 2018; 1(1): 1-7.

46Scartezzini P, Speroni E. Review on some plants of Indian traditional medicine with antioxidant activity. J Ethnopharmacol, 2000; 71: 23-43.

47. Cabral C, Francisco V, Cavaleiro C, Gonçalves MJ, Cruz MT, Sales F. Essential Oil of Juniperus communis alpina (Suter) Celak Needles: Chemical Composition, Antifungal Activity and Cytotoxicity. Phytother Res, 2012; 26(9): 1352-1357

48.Melvina M, Dorothy G, Frank M, Joanne E, Margaret S, Cheryl S. Herbal Therapies and Diabetes among Navajo Indians. Diabetes Care, 2005; 28(6): 1534-1535.

49. Anis E, Anis I, Ahmed S, Mustafa G, Malik A, Choudhary MI. Alpha-glucosidase inhibitory constituents from Cuscuta reflexa. Chem Pharm Bull, 2002; 50(1): 112-114.

50. Yang L, Chen Q, Wang F, Zhang G. Antiosteoporotic compounds from seeds of Cuscuta chinensis. J Ethnopharmacol, 2011; 135(2): 553-560.

51. Rehman HU, Yasin KA, Choudhary MA. Studies on the chemical constituents of Phyllanthus emblica. Nat Prod Res, 2007; 21(9): 775-781.

52. Tiwari V, Kuhad A, Chopra K. Emblica officinalis corrects functional, biochemical and molecular deficits in experimental diabetic neuropathy by targeting the oxido-nitrosative stress mediated inflammatory cascade. Phytother Res, 2011; 25(10): 1527-1536.

53. Sukanya DH, Lokesha AN, Datta G, Himabindu K. Phytochemical diversity in ashwagandha (Withania somnifera). J Med Aromat Plants, 2010; 1(2): 27-30.

54. Mishra LC, Singh BB, Dagenais S. Scientific basis for the therapeutic use of Withania somnifera (Ashwagandha): A Review. Altern Med Rev, 2000; 5(4): 33-38.

55. Ruan B, Kong LY, Takaya Y, Niwa M. Studies on the chemical constituents of Psoralea corylifolia. J Asian Nat Prod Res, 2007; 9(1): 20-25.

56. Zhao G, Li S, Qin GW, Fei J, Guo LH. Inhibitive effects of Fructus psoraleae extract on dopamine transporter and noradrenaline transporter. J Ethno Pharmacol, 2007; 112(3): 498-506.

57. Pino JA, Bayat F, Marbot R and Aguero J. Essential oil of Chamomilla recutita (Linn.) Rausch. J Essent Oil Res, 2002; 14: 407-408.

58. Panda S, et al. Preparation and evaluation of Herbal Lipstick. J Pharm Adv Res, 2018; 1(2): 117-119