

# Formulation And Evaluation of Herbal Lipstick

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**Abstract:** The formulation of herbal lipstick focuses on utilizing natural, plant-based ingredients to create a safe, sustainable, and skin-friendly cosmetic product. Herbal lipsticks are crafted from organic oils, waxes, botanical extracts, and natural pigments. Key ingredients such as beeswax provide structure, while nourishing oils like castor oil, offer hydration and protection to the delicate skin of the lips. Natural pigments derived from minerals, fruits, and herbs, such as beetroot powder provide a range of colors without the use of synthetic dyes. Herbal lipsticks are also enriched with antioxidants, vitamins (such as Vitamin E) promote skin health, soothe irritation, and prevent premature aging. The formulation process emphasizes non-toxic, hypoallergenic ingredients to reduce the risk of allergic reactions and ensure gentle application. Additionally, with an increasing consumer demand for eco-friendly products, herbal lipsticks are often designed to be biodegradable and packaged in sustainable materials. This abstract explores the formulation principles, key ingredients, and benefits of herbal lipsticks, highlighting their role in the growing trend towards natural beauty products that prioritize both effectiveness and environmental consciousness.

**KEYWORDS:** Herbal Lipstick, Beet root, Cosmetic, Formulation.

## INTRODUCTION:

The word herbal is a symbol of safety in contrast to the synthetic one which has adverse effects on human health. Herbal preparations viz., herbal tablets, herbal tonics, herbal paste, herbal shampoo, herbal sindhur, herbal contraceptives and herbal lipstick has become popular among the consumer herbal medicines represent the fastest growing segment to heal the various ailments. Possibly, herbal user desire to assume control over health care needs. Perhaps the large in personal healthcare system is unpatable to many and they turn to herbal medicine due to increase side effects of available synthetic preparations [1,2]. Cosmetics are the substances used to enhance the appearance of human body. Cosmetic include skin care creams, lotion, powders, perfume, lipsticks, fingernails and toe nail polish, eye and facial make up, coloured contact lenses, hair

color, hair sprays, gels, deodorants, baby products, bubble bath, bath salts and many more products are in great demand in both developing and developed countries [3].

### **IDEAL CHARACTERISTICS:**

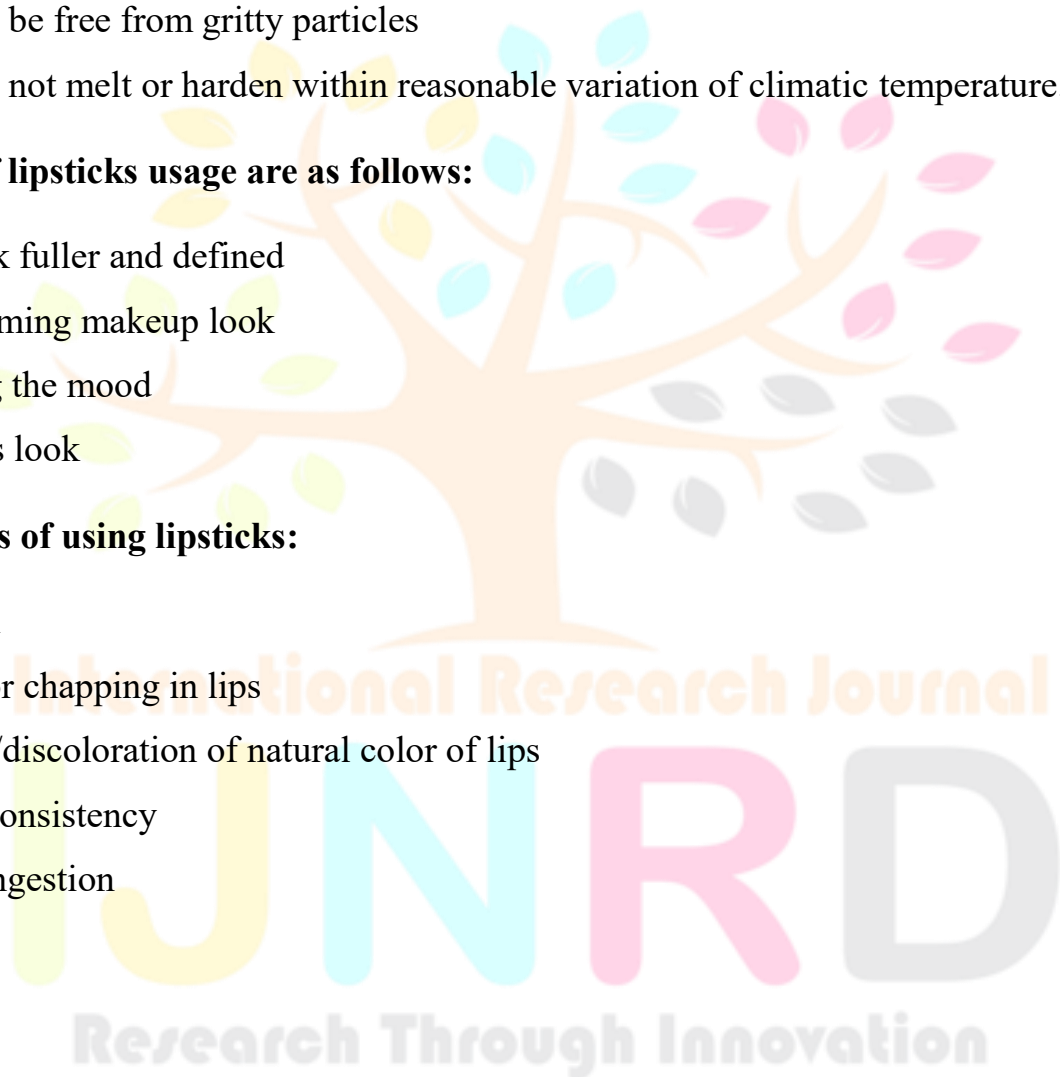
- It should give shiny and smooth appearance free from sweating
- It should be non- irritant and non toxic to the lips
- It should not dry on storage
- The container should operate easily
- It should impart uniform colour to the area of application
- It should be free from gritty particles
- It should not melt or harden within reasonable variation of climatic temperature. [4,5]

### **Advantages of lipsticks usage are as follows:**

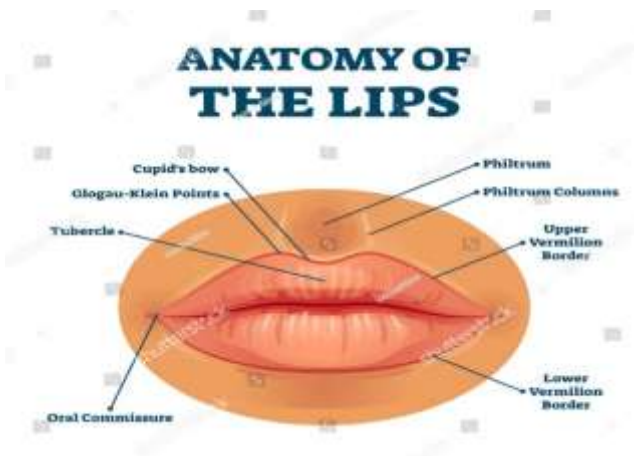
- Lips look fuller and defined
- Transforming makeup look
- Boosting the mood
- Fabulous look

### **Disadvantages of using lipsticks:**

- Irritation
- Drying or chapping in lips
- Staining/discoloration of natural color of lips
- Greasy consistency
- Toxins ingestion



## Anatomy of the lips:



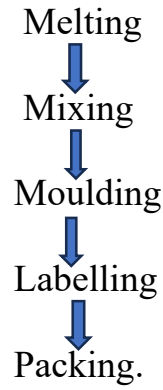
**Fig:1 Anatomy of the lip**

The upper lip covers the anterior surface of the body of the maxilla. Its upper half is of usual skin color and has a depression at its center, directly under the nasal septum, called the philtrum, which is Latin for lower nose, while its lower half is a markedly different, red-colored skin tone more similar to the color of the inside of the mouth, and the term vermilion refers to the colored portion of either the upper or lower lip. It is raised by the levator labii superioris and is connected to the lower lip by the thin lining of the lip itself, which can be seen by opening your mouth wide in front of a mirror. Thinning of the vermilion of the upper lip and flattening of the philtrum are two of the facial characteristics of fetal alcohol syndrome, a lifelong disability caused by the consumption of alcohol during pregnancy.[6]

### METHOD OF PREPARATION:

- Weighed the required quantities of all ingredients (except colour) add in 100 ml beaker.
- First, melt and mix the raw ingredients for the separately in a beaker.
- Heat the solvents, oils, waxes in separate stainless steel or ceramic containers.
- Then mix solvent and liquid with the colour pigments (Beet root).
- Mix the pigment (Beet root) mass with the hot wax.
- Then pour this into tubing moulds, cool, and separate the lipstick from the mould and fit it in the lipstick case.

**Steps involved is**



**Formula:**

Ingredients	Quantity taken	Importance of ingredients
Bees wax	2gm	Hardness
Castor oil	1ml	Blending agent
Honey	Q. S	Flavouring agent
Rose essence	3 drops	Flavouring agent
Beet root	5 ml	Colouring agent

**DRUG AND EXCIPIENT PROFILE:**

**1. Bees wax:**

**Synonyms:** Yellow wax, Cera Alba.

**Biological source:** It is obtained from the honey comb of the bees *Apis mellifera* and other species of *Apis* belonging to the family *Apidae*.



**Fig.2 Bees Wax**

**Uses:**

1. It is used in the preparation of ointment, plasters and polishes.
2. It is used in cosmetics for preparation of face creams and lipsticks [7].

**2.Castor oil:**

**Synonym:** Castor Oil, Ricinus oil

**Biological source:** It is obtained by pressing the seeds of the *Ricinus communis* plant, commonly known as the castor oil plant.

**Family:** Euphorbiaceae.

**3.Honey:**

**Synonym:** Madh, Beloved, dear.

**Biological source:** It is obtained from the nectar and secretions of plants, and excretions of plant-sucking insects.

**Family-**Apidae.



**Fig.3 Honey**

**4.Rose oil:**

**Synonym:** Attar of roses.

**Biological source:** Rose oil is derived from the petals of different rose species, with *Rosa damascena* and *Rosa centifolia* being the most common sources.

**Family:** Rosaceous.

**Uses:**

1. It is used in the preparation of soaps, body lotions, face cream etc
2. It has been used for making lipstick [8].

**5.Beet root:**

**Synonym:** Beta vulgaris rubra, Chukandar, Table beet.

**Biological source:** It consists of fresh root of Beta vulgaris.

**Family:** Amaranthaceae, Chenopodiacea.



**Fig.4 Beetroot**

**Uses:**

1. It is used as coloring agent.
2. It gives glossy appearance to lips [9].



**Fig.5 Lipstick Formulation**

## **EVALUATION OF LIPSTICK:**

It is very essential to maintain a uniform standard for herbal lipstick, keeping this view in mind the formulated lipstick was evaluated on the parameters such as melting point, breaking point, force of application, surface anomalies etc. [10,11]

### **1.Melting point:**

It is determined using capillary tube method. Take both ends open glass capillary tubes. Introduce into each of 5 capillary tubes a sufficient amount of the lipstick, about 10mm high and allow the tubes to stand for the appropriate time and at the prescribed temperature in capillary tube is taken as the melting point. Repeat the operation 3 times using other 4 capillary tubes and calculate the result.[12]

### **2.Breaking point:**

Breaking point analysis was used to assess lipstick strength. The lipstick was positioned one inch from the edge of support and held horizontally in a socket. The weight was progressively increased by a predetermined amount (10 gm) every 30 seconds, with the weight at which it broke being regarded as the breaking point.[13]

### **3. Test for the Application Force:**

force of application test is used to evaluate the force required for lipstick application on the lips. The test was carried out by placing a piece of coarse brown paper on a shadow graph balance. Then the lipstick was applied at a 45-degree angle to cover a 1 square inch area until fully covered. The resulting force of application was shown by a pressure reading.

### **4.Perfume Stability:**

After 30 days, the formulated lipstick was tested to determine its fragrance.

### **5.PH:**

pH of all formulations was near to 7 and should not cause any irritation on the lips

### **6.Aging stability:**

Store the product in 40°C for 1 hour and observing the various parameters such as application characteristics, crystallization of wax on surface and oil bleeds.[14]

### **7.Solubility test:**

Dissolve the lipstick in different solvents and observe the solubility in each solvent.

**8.Skin irritation test:**

Apply the lipstick on the skin for 10min and observe.

**Evaluation of Herbal Lipstick:**

Sr. No.	Parameter	F1
1	Colour	Pink
2	Texture	Smooth
3	PH	5.8
4	Skin irritation test	No Irritation
5	Melting point	50-55
6	Perfume stability	++
7	Force of application	Good
8	Odour	Aromatic
9	Breaking point	120gm
10	Solubility	Acetone
11	Hardness	4.2N

**Conclusion:**

The preparation of herbal lipstick using beetroot is a straightforward process that results in a natural, nourishing lip product. While the color may not be as intense or long-lasting as conventional synthetic lipsticks, the product is safe, eco-friendly, and beneficial for those who prefer a more natural approach to cosmetics. The final product will not only provide color but also offer hydration and protection, making it a great option for daily use.

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