

FORMULATION AND EVALUATION OF HERBAL LIPSTICKS**Navgire Ganesh^{1*}, Nashate Vaishnavi² and Survase Abhijeet³**^{1,2}Student, Vidya Niketan College of Pharmacy, Lakhewadi.³Assistant Professor, Vidya Niketan College of Pharmacy, Lakhewadi,

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ABSTRACT

Herbal cosmetics are becoming popular these days because natural cosmetics are safe to use and easy to handle by women. Artificial coloring agent can cause an allergic reaction. The objective of our study is to produce and evaluate herbal lipstick using natural edible coloring matter such as Turmeric and Indigo red as a coloring agent. Bees were used to making herbal lipsticks with various natural ingredients like wax, butter, coconut oil, olive oil, castor oil, vanilla, and rose essence and lemon juice. Herbal lipsticks prepared for different Quality control tests such as color, texture, pH, liquid point, breaking point, softening point, surface anomaly, aging and perfume stability were evaluated and compared with the marketing standard formulation. The results confirm that the different evaluation parameters of herbal lipsticks produced look similar to standard values

and marketing formulas. research have shown that a natural edible coloring agent can be a great alternative to herbal lipsticks.

KEYWORDS: Herbal lipstick, Natural coloring matter, Essence, Bee wax, Olive oil, Coconut oil.

INTRODUCTION

The word cosmetology was derived from the Greek word "kosmtikos" which means having power, arrangement and skill in decorating. The decline towards impressing others with your appearance has been reported and there are a number of wide range of herbal cosmetic products to satisfy your beauty regime, it is very safe for the skin. Human beings use herbs

for various purposes such as food, medicine and beautification with the advancement of science and technology.^[2] According to the D&C Act 1940 and the Rules 1945 cosmetics means any articles intended to be sprayed, poured, spread or sprinkled, inserted or applied to the physical body or any part for the purpose of cleaning, beautifying, promoting attractiveness or altering the appearance, it also includes any articles intended for use as an ingredient in cosmetics. Cosmetics include skin creams, lotions, powders, perfumes, lipsticks, nail and toenail polishes, eye and face make-up, permanent waves, colored contact lenses, hair dyes, hair sprays and gels, deodorants, baby products, bath oils, bubble baths, bath salts, butter and many other types of products are in high demand in both developing and developed countries.^[3] The herbal cosmetics industry is experiencing a growing graph for its market and products that are sold worldwide.^[4] Lipstick is a cosmetic that contains oils, waxes, pigments, oils, waxes, emollients that add color, texture and protection to the lips. Synthetic lipstick contains heavy metals such as nickel, copper, chromium, arsenic, and cobalt, and some of these toxic substances are absorbed by the lips and stomach during the application of these lipsticks.^[5,6] The rest is absorbed by skin pigment, where it reacts with other chemicals in the environment to cause rashes. on the lips.^[7] Herbal words are a safety symbol unlike synthetic ones which have negative effects on human health. Herbal preparations like herbal poultices, herbal tonics, herbal pastes, herbal shampoos, herbal sindhur, herbal birth control and herbal lipsticks are still popular today. There is evidence of the use of highly advanced self-beautifying ideas and a wide variety of different cosmetic products used by women and men in ancient India.

Ideal characteristics of lipsticks

1. The lipstick should basically have a good color, should be easy to apply and should have a natural look.
2. Smooth and easy to apply.
3. Non-irritating and non-toxic.
4. It should have an attractive color and luster.
5. Without grits and should not dry out.
6. It should require plasticity.
7. It should have a pleasant taste, smell and taste.
8. Do not lose its smooth and shiny appearance during storage.
9. Shelf life stable means no efflorescence and sweating during storage
10. It should not melt and harden within reasonable changes of climatic temperatures.

MATERIALS AND METHODS

Bees wax, butter, castor oil, coconut oil, olive oil, Vanilla, rose essence, Cinnamon bark powder, turmeric Powder, cocoa powder and lemon juice were Purchased from local markets

Table 1: Ingredients, their biological Source and Uses.

Sr. No.	Ingredients/ Drugs	Biological source	Uses
1.	Bees wax	It is a purified wax separated from the honeycomb of bees, <i>Apis mellifera</i> which belong to the family, <i>Apidae</i> .	Thickening Agent
2.	Coconut oil	Oil expressed from the dried solid part of endosperms of coconut, <i>cocos nucifera</i> . Belonging to family <i>palmae</i>	Hardness, smooth finish
3.	Olive oil	This oil is a fixed oil derived from <i>olea europaea</i> fruits belonging to family <i>Oleaceae</i> .	Moisturizing Agent
4.	Castor oil	Castor bean oil, castor oil seed, <i>oleum ricini</i> , <i>ricinus</i> oil, Castor oil is the fixed oil obtained by cold expression of the seeds of <i>Ricinus communis</i> Linn., belonging to family <i>Euphorbiaceae</i> .	Humectant, Skin Moisturizer
5.	Cinnamon bark	It is obtained from the inner bark of tree <i>Cinnamomum verum</i>	Coloring agent
6.	Turmeric powder	Detrived from the rhizomes or underground stems of plant <i>curcuma longa</i>	Coloring agent
7.	Lemon juice	Lemon juice obtained from ripe fruit of <i>Citrus-limonis</i> (L) belonging to family <i>Rutaceae</i> .	Antioxidant, Ric
8.	Roseessence	Rose oil (attar of rose, rose otto, attar of roses or essence of rose) is the essential oil extracted from the petals of various species of rose.	Mask unwanted odour
9.	Vanilla Essence	Vanilla is obtained from pods of the Mexican species, flat-leaved vanilla (<i>V. planifolia</i>).	Flavouring Agent

Formulation of herbal lipstick

Herbal lipstick preparation is prepared according to the cosmetic lipstick preparation method. In this recipe, white bees wax, coconut oil and olive oil are melted in a porcelain bath bowl, sorted according to their melting points. Food dyes such as cinnamon bark powder, turmeric powder, cocoa powder are mixed with castor oil and heated. The two phases are mixed at high temperatures. Add vanilla, rose essence and lemon juice at 35°C. Then pour the excess mixture into the lipstick moulds and leave the mould in an ice bath. Once it hardens, scrape off the excess with a razor blade. Lipstick is removed from the mould and flamed. Place the prepared lipstick in a cosmetic container and use it for subsequent measurements.

Composition and use of different ingredients used for the preparation of herbal lipstick

Tab. 2: Composition of herbal lipstick.

Sr. No.	Ingredient	Quantity taken	Use of Ingredient
1	Bees wax	1 gm	Hard wax (Hardness)
2	Coconut oil	1.5ml	Hard wax (Hardness)
3	Olive oil	1 ml	Soft wax (Glossy)
4	Castor oil	1 ml	Blending agent
5	Cinnamon bark	2 gm	Coloring agent
6	Turmeric powder	2gm	Coloring agent
7	Lemon juice	2 ml	Anti-oxidant
8	Rose essence	3 drops	Flavoring agent
9	Vanilla Essence	5-6 drops	Flavoring agent

Evaluation of herbal lipstick

It is very essential to maintain a uniform standard for herbal lipstick, keeping this view in mind the formulated herbal lipsticks were evaluated on the parameters such as colour texture, pH, melting point, breaking point, softening point, surface anomalies, aging stabilities, perfume stability.

Colour and Texture

Formulated lipsticks were tested for color, bright and smooth textures.

pH

The pH of the formulated herbal lipstick was determined using a digital pH meter. Determination of melting point:

Determination of melting point

Approximately 50 mg of lipstick was sampled and melted and filled in a glass capillary tube and opened at both ends. The capillary was cooled with ice for 2 hours and the thermometer solidified. The magnetic water-filled beaker had a capillary thermometer deep that was placed on a heating plate containing a magnetic stirrer. Heating and stirring were gradually started to accelerate. The temperature at which the material moves through the capillary tube is considered to be the melting point.

Breaking point

The finished herbal lipstick was placed horizontally in the socket away from the edge of support. Weight was lifted at a specific value (10 g) at a specific interval of 30 seconds and the weight calculated as the breaking point.

Surface anomalies

Determination of surface anomalies was studied about the surface defect, such as any crystal formation on lipstick surface, any contamination by moulds, fungi.

Aging stability

Prepared herbal lipstick in refrigerator temperature (4°C), room temperature ($20\text{--}25^{\circ}\text{C}$) and high temperature ($30\text{--}40^{\circ}\text{C}$) for 1 h. Various parameters such as bleeding, streaking, catering and blooming were observed.

Solubility

The formulation herbal lipstick was dissolved in various solvent like acetone, water, methanol, chloroform.

Perfume stability

Herbal lipsticks made ready to record aroma were tested after 30 days.

Prepared herbal lipsticks were compared with standard marketed formulation for all evaluation parameters mentioned above.

RESULTS AND DISCUSSION

Evaluation of herbal lipstick the results showed that all the evaluation of herbal lipstick is the same as the standard product and marketing formula.

Table No. 3: Evaluation of herbal lipstick.

Sr. no	Parameter	Herbal lipstick formulation	Marketed formulation	Standard value
1	Color	Wine Red	Wine Red	-
2	Texture	Smooth	Smooth	Smooth
3	pH	6.3	6.6	6.4
4	Melting point	$60^{\circ}\text{C}\text{--}64^{\circ}\text{C}$	$62\text{--}64^{\circ}\text{C}$	60.66°C
5	Breaking point	250 gm 140 gm	250 gm 140 gm	-
6	Surface anomalies	No defects	No defects	No defects
7	Aging stability	Smooth	Smooth	smooth
8	Perfume stability	Positive	Positive	Positive
9	Softening point	60°C	62°C	$50^{\circ}\text{C}\text{--}60^{\circ}\text{C}$

CONCLUSION

Studies have concluded that herbal lipstick can be successfully produced if Bees wax, butter, castor oil, coconut oil, olive oil, Vanilla, rose essence, Cinnamon bark powder, turmeric

Powder, cocoa powder and lemon juice are good substitute for artificial coloring agents. Various side effects occur in artificial agent that can minimize using natural agents. Which is safe and effective use of this herbal lipstick.

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