



Formulation and Characterization of Herbal Lipstick Containing Beet Root Extract

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ABSTRACT:

The safety and reliability of natural products have generated the need to produce herbal-based products. The utilization of natural beauty care products has become progressively famous among present-day in women. Herbal lipstick is a cosmetic product containing pigments, waxes, oils, fragrances, preservatives, antioxidants and colors. Herbal lip beautifying products are made-up of natural plant extracts that rejuvenate and revitalize lip skin with new freshness. The objective of the present study involved the formulation and evaluation of herbal lipsticks using color matter from natural sources such as carrot and beetroot. Different natural ingredients such as beeswax, castor oil, white beeswax, vitamin E, coconut oil, Castrol oil, olive oil, orange juice and beetroot (extract) were used to formulate herbal lipstick. Prepared herbal lipstick was evaluated for different evaluation tests such as color, texture, pH, melting point, breaking point, perfume stability. Softening point, force of application and irritancy test.

Key Words: Herbal, lipstick, Beet Root

INTRODUCTION:

Cosmetics word is derived from the Greek word "Kosmtikos" which means the power, organization and skill in beautifying. The word cosmetics is defined as 'substances of diverse origin, scientifically compounded and used to cleanse, alleviate skin troubles, cover up imperfections, beautify, and is used in this paper in a wider sense to include oral hygiene as well. Cosmetics have become an integral part of every woman's life. Herbal cosmetics are products which are formulated using various permissible cosmetic ingredients in which one or more herbal ingredients are used to provide distinct cosmetic benefits. They are also called as herbal cosmetics. Common cosmetics include Shampoo, Lipstick, Cream, and Mascara, Eye shadow, and Foundation and skin cleanser

BENEFITS OF HERBAL LIPSTICKS:

1. Safe to use.
2. Natural in nature.
3. Affordable and non-expensive.
4. Variety of products.
5. No side effects.
6. Not tested on animals.
7. Free from hazardous chemicals.²

BEET ROOT

Beetroot is the taproot portion of a beet plant, usually known in Canada and the USA as beets while the vegetable is referred to as beetroot in British English, and also known as the table beet, garden beet, red beet, dinner beet or golden beet. It is one of several cultivated varieties of *Beta vulgaris* grown for their edible taproots and leaves (called beet greens) they have been classified as *Beta vulgaris* sub, species *vulgaris* Conditiva Group. Beetroot (*Beta vulgaris*) is a plant in the Chenopodiaceae family that is now included in the Amaranthaceae family. It is best known for its many cultivated varieties, the best known of which is the root vegetable known as beets or garden beets. Beet (*Beta vulgaris*) is the main source of natural red dye, known as "beet red". The color of red/purple beets is due to a variety of betalain pigments and is used industrially as a red food coloring and can be used as a coloring agent in lipstick.⁶

BENEFITS OF BEET ROOT EXTRACT

1. Beetroot can reduce high blood pressure.
2. Beetroot can help people with heart failure and heart disease.
3. Beetroot can help you exercise for longer.
4. Beetroot can help fight against cancer cells.
5. Beetroot can help symptoms of long-term conditions.
6. Beetroot helps you keep your weight in-check

PREPARATION OF BEETROOT COLOUR PIGMENT

Peeled the beetroot and reduced it into uniform sized fine slices. Spread it over a butter paper, cover with a fine mesh and allow it to shade dry for a day. If there is any moisture left dry it in an oven. Take the dried beetroot and grind it into a fine powder. Pass the powdered material through a fine sieve. Check for any grainy particles. Sieve it again if required. Then weigh required quantity of beet root extract. Then with alcohol.¹⁰

PREPARATION OF HERBAL LIPSTICK

1. Weigh all herbal ingredients in porcelain dish individually. Then porcelain dish placed on water bath when ingredients are melted continuously beeswax is mixed with Castrol oil.
2. Then Beet root extract and orange juice as well as lemon juice are also added as are coloring agent and preservative
3. White soft paraffin is added as are moisturizing to lip
4. Then added the vitamin E as are the antioxidant and smoothening agent.
5. Flavoring agent is peppermint oil is added which have good smell.

6. Transfer it in mold and Place in the freezer.
7. Scrap the top layer by sharp knife and remove stick.
8. Pass the lipstick through the flame in quick fashion it gives gloss to the surface layer of the lipstick.
9. Performing various evaluation test of prepared lipstick, Place the lipstick in lipstick container and store.⁸

FORMULATION TABLE

Sl. No	Ingredients	F1	F2	F3	F4
1	Castor oil	2ml	4ml	4ml	4ml
2	Bees wax	2g	4g	6g	4g
3	Beet root extract	2g	3g	4g	5g
4	Coconut oil	1ml	1ml	1ml	1ml
5	Olive oil	1ml	1ml	1ml	1ml
6	Vitamin E	1ml	1ml	1ml	1ml
7	Lemon juice	1ml	1ml	1ml	1ml

Table no-1

EVALUATION OF HERBAL LIPSTICK

The prepared herbal lipstick were evaluated with the following parameters

1. Organoleptic properties

The prepared herbal lipsticks were evaluated for organoleptic properties such as colour odour and texture.⁷

2. Melting point

This test is done to know about the limit of safe storage. Determination of melting point was done by taking a melted lipstick sample and filled it into a glass capillary tube. The capillary tube is then subjected to cooling in ice for about 2 hrs and is then tied to a thermometer. This assembly was then dipped into a beaker containing water which was subjected to continuous stirring. A temperature at which the material starts moving along the capillary tube is considered as melting point.

3. Determination of pH

The pH of the formulated lipstick was analyzed by using PH meter.

4. Breaking point

This test is performed to determine the strength of the lipstick. The lipstick is placed in a horizontal position in a socket away from the edge of the support. The lipstick was then subjected to number of weights hanging from the support. This weight was gradually increased at time interval of 15secs and the weights at which the lipstick breaks is considered as the breaking point.³

5. Force of application

This test is performed to get a comparative measurement of the force to be applied in this test, a piece of coarse brown paper is kept on a shadow graph balance and the lipstick is applied at 45° angle to cover 1 sq. inch area till it is fully covered. The pressure reading gives an indication of force of application.

6. Skin irritation

The herbal lipsticks of all the formulations (F1- F4) were evaluated for skin irritation test by applying the product on the skin for about 15mins.

7. Perfume stability

These studies were conducted on all the four (F1- F4) formulations of herbal lipstick to record the fragrance.

8. Solubility test: The formulated herbal lipstick was dissolved in various solvents to observe the solubility.

9. **Aging stability:** The products were stored in 40°C for 1 hrs. Various parameters such as bleeding, crystallization on surface and ease of application were observed.⁹

RESULT AND DISCUSSION

Evaluation Parameters	F1	F2	F3	F4
Colour	Reddish colour	Reddish colour	Reddish colour	Reddish colour
Odour	Aromatic	Aromatic	Aromatic	Aromatic
Texture	Smooth	Smooth	Smooth	Smooth
Melting point	54 – 55 °C	53 – 54 °C	61 – 62 °C	62 – 63 °C
Determination of PH	6.4 ± 0.3	6.9 ± 0.2	6.7 ± 0.1	6.5 ± 0.3
Breaking point	23	24	28	30
Force of application	Easy	Good	Easy	Good
Skin irritation	No irritation	No irritation	No irritation	No irritation
Perfume stability	Good	Good	Good	Good
Solubility test	Soluble in chloroform	soluble in chloroform	soluble in chloroform	Soluble in chloroform

Table no-3

DISCUSSION

In the present work, containing herbal ingredients was prepared successfully according to the given formulations. The following are the conclusions drawn Lipstick containing herbal ingredients was successfully formulated by using four different formulations (F1 – F4) among all the four formulations, F4 formulations exhibited good results. F4 formulation lipstick containing herbal ingredients was found to be in compliance with all the evaluations tests. Likewise even all the other formulations also exhibited satisfactory results, but when compared with all the formulations F4 formulation exhibited good results regarding all the aspect.

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