

# Formulation And Evaluation of Herbal Lipstic

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## ABSTRACT:

Cosmetic have become one among the daily wants of all teams in society. Every year, users are introduced to numerous new cosmetic product of the most recent trend. Cosmetics are unimagined in demand since historical time until day. Lipstick formulations are most generally accustomed to enhance the wonder of lips and add glamour to the touch to the makeup. With this aim and objectives, a trial was created to formulate natural lipsticks by exploitation of coloring pigments of *Bixa orellana* linn seeds and *Beta vulgaris* linn root and therefore the lipsticks are evaluated for their organoleptic properties like spreading, hardness, shine and gloss and located to be a satisfactory product to present engaging beauty. This eco-friendly, herbal, natural skin care product is made up of natural plant extracts that guarantee to rejuvenate and revitalize skin with new freshness. The practice of applying colour to cheeks and lips is very old. In ancient time, natural materials used to be applied. The preparation of this lipstick with the natural ingredients like Bixa seeds, Beet root, Olive oil, ready organic product powder of shikakai. On account of various antagonistic impacts of open manufactured lipsticks, the present work was arranged by U.S.A. to define a flavoring lipsticks having minimal or no side effects which can be widely utilized by the women of our groups with pleasant surety and fulfillment. The present study demonstrates that both *Bixa orellana* and *Beta vulgaris* are shading specialists and *Bixa orellana* containing lipstick was best among both normal lipsticks.

**Key words:** Herbal beauty care products, Lipsticks, Eco-accommodating.

## I. INTRODUCTION

The word home grown is an image of security as opposed to the engineered one which effectively affects human wellbeing. Home grown arrangements viz., natural tablets, home grown tonics, home grown glue, home grown cleanser, home grown sindhur, home grown contraceptives and home grown lipstick has ended up famous among the purchaser. Home grown pharmaceuticals speak to the quickest developing section to recuperate the different illnesses. This can be seen from the realities that lipstick is advertised in several shades of hues to fulfill the interest for the ladies. Lipsticks are frequently consumed by the client and subsequently it is basic that wellbeing controllers have an infinitesimal take a gander at the fixings that go into the lipstick. The colors that add to the shade of the lipstick are unsafe to people on utilization. In a gentle structure, the coal tars that are the essential fixings from which manufactured colors are shaped can bring about sensitivity, sickness, dermatitis, and drying of the lips. In a more serious structure they can be cancer-causing and even fatal. Due to different unfriendly impacts by manufactured arrangements of lipsticks the present work was created to figure natural lipstick by utilizing different centralizations of *Bixa orellana* and *Beta vulgaris*. Lipsticks were assessed for their organoleptic properties, for example, liquefying point, limit; spreading, hardness, skin disturbance, sparkle and gleam are observed to be an agreeable item to give appealing magnificence. In the present study meant to figure and assessment of home grown lipstick an endeavor was made to plan regular lipsticks by utilizing shading colors of *Bixa orellana* linn seeds and *Beta vulgaris* linn root and the lipsticks were assessed for their organoleptic properties.

Current assessments recommend that, in numerous creating nations, a vast extent of the populace depends vigorously on conventional specialists and therapeutic plants to meet essential medicinal services needs. Albeit present day medication might be accessible in these nations, home grown drugs (phytomedicines) have frequently kept up fame for verifiable and social reasons. The preparation of this lipstick with the natural ingredients like Bixa seeds, Beet root, Olive oil, ripe fruit powder of shikakai. Due to various adverse effects of available synthetic preparation, the present work was conceived by us to formulate a herbal lipstick having minimal or no side effects which will extensively be used by the women of our communities with great surety and satisfaction. Cosmetics are incredible in demand since historical time till day. Lipstick formulations are most widely used to enhance the beauty of lips and add glamor to touch to the makeup.

## II.PLANT PROFILE

### A. Taxonomical Classification of Bixaorellana:

Table no-1

Kingdom	Plantae
Sub kingdom	Viridiplantae
Infrakingdom	Streptophyta
Superdivision	Embryophyta
Division	Tracheophyta
Subdivision	Spermatophytina
Class	Magnoliopsida
Superorder	Rosanae
Order	Malvales
Family	Bixaceae
Genus	Bixa
Species	orellana



Fig.1 BixaOrellanafruits



Fig .2 BixaOrellana seeds

**Plant Description:** Among the naturally occurring colourants, an important one is annatto. It is a carotenoid based dye, extracted from the outer coatings of the seeds of BixaorellanaL. BixaorellanaLinn. Family (Bixaceae) is an ever green shrub native to Argentina, Brazil, Chile, Colombia and exotic to India, USA and Thailand. Bixaorellanalinn appears like a small bush like tree. It grows to about 5 or 6 meters high and has a peculiar reddish sap. The leaves are alternate, oval to heart shaped and 10-30 cm long. The flowers are large, pinkish in colour and produced in terminal clusters. The fruits are initially green but turn reddish – brown. They are fully covered by soft spines and when they dry, open into two compartments exposing the seeds.

**Chemical Constituents:** Various phytochemical investigations have revealed the presence of several carotenoid derivatives including bixin and norbixin, some terpenoids, tocotrienols, arenes and flavonoids (including luteolin and apigenin) in Bixaorellanaseeds.The reddish orange colour dye of the annatto is mainly comes from the resinous outer covering of the seeds of the plant and is composed of the carotenoid pigments bixin, norbixinand their esters.

#### Uses & Benefits ofBixaorellana:

- ✓ Annato seeds are used as purgative, antipruritic and for buccal tumours.
- ✓ These are also used as cordial, astringent, febrifuge and a good remedy for gonorrhoea.
- ✓ The seed extracts have been reported to exhibit chemo preventive and antioxidant activity.Bixin has also been found to have anticlastogenic activity.
- ✓ The roots bark and seeds of B.orellanaare antiperiodic, antipyretic; the pulp surrounding the seed is a mosquito repellent and is useful to treat dysentery.
- ✓ The decoction of the root is used for liver diseases. The whole plant is bitter, purgative, cures leprosy, biliousness, kidney disorders and vomiting.

### B. Taxonomical Classification of Beta vulgaris:

**Plant Description:**The beet (Beta vulgaris) is a plant in the Chenopodiaceae family which is now included in Amaranthaceae family.It is best known in its numerous cultivated varieties, the best known of which is the root vegetable called the beetroot or garden beet. Beetroot (Beta vulgaris) is that the main supply of natural red dye, called “beetroot red”. Betanine is that the main part of the red colorant extracted fromcommon beet.The roots ar most typically deep red-purple in color, however are available a largekind of alternative shades, as well as golden yellow and red-and-white stripy. the colour of red/purple beetroot is owing to a range of deep red-purple

in color, but come in a wide variety of other shades, including golden yellow and red-and-white striped. The color of red/purple beetroot is due to a variety of betalain pigments, unlike most other red plants

Table no-2

Kingdom	Plantae
Sub kingdom	Viridiplantae
Infrakingdom	Streptophyta
Superdivision	Embryophyta
Division	Tracheophyta
Subdivision	Spermatophytina
Class	Magnoliopsida
Superorder	Caryophyllanae
Order	Caryophyllales
Family	Amaranthaceae
Genus	Beta
Species	vulgaris



Fig.3 Beta vulgarisroot



Fig.4 Beta vulgarisplant

#### Chemical Constituents:

- ✓ Betacyanins include the reddish to violet betalain pigments. Among the betacyanins present in plants include betanin, isobetanin, probetanin, and neobetanin.
- ✓ Betaxanthins are those betalain pigments which appear yellow to orange. Among the betaxanthins present in plants include vulgaxanthin, miraxanthin, portulaxanthin, and indicaxanthin.

#### Uses & Benefits of Beta vulgaris:

- ✓ Despite traditional Formulation and analysis of herbal use of beetroot for anticancer, carminative, agent, and styptic properties, clinical trials are lacking to substantiate these claims.
- ✓ ✓ knowledge counsel a task associated inhibitor, as a natural supply of nitrites, and a possible use in vessel conditions, though proof is restricted. In the food trade, beetroot is employed for its color.

### III. PROPOSED WORK

The main aim and objective of present study is herbal lipstick and their comparative study by two selective plants viz... Bixaorellana and Beta vulgaris.

#### A. Material & Methods

##### Collection of plant material:

The herbs used in formulation of flavoured lipstick (Bixaorellana Linn) collected from medicinal garden of Chilkur Balaji College of pharmacy (Hyderabad) and the plant seeds were used for preparation of herbal lipstick. And (Beta vulgaris) were procured from the local vegetable market.

##### B. Extraction of Bixaorellana Linn

The shade dried coarsely powdered seeds of Bixaorellana (100 gms) were extracted with ethanol (60-80°C) for 18 hrs. (1:2 ratio). After completion of extraction, the defatted extract was filtered while hot through Whatman filter paper (No.10) to remove any impurities if present. The extract was concentrated by vacuum distillation to reduce the volume to 1/10; the concentrated extract was transferred to 100 ml beaker and the remaining solvent was evaporated on a water bath. Dark reddish coloured extract was obtained. The concentrated extract was then kept in desiccators to remove the excessive moisture. The dried extract was packed in air tight glass container for further studies.



**Extraction of Beta vulgaris:** Coloring agent betanine can be obtained from beetroot by milling followed by pressing, filtration and evaporation of the resulted juice.

**Formulation Of Natural Lipstick:**

The Natural lipsticks were formulated as per method described. The lipstick prepared from Bixaorellana Linn and Beta vulgaris Linn were denoted by BOL and BVL respectively. The ingredients used in the formulation of both lipsticks are shown below.

**Preparation of Natural Lipsticks with their prescribed ingredients and quantity:**

Table no-3

S.NO	Ingredients Quantity (gm)	BOL	BVL	Importance
1	Olive oil	16	12	Blending agent
2	Paraffin wax	28	29	Glossy and hardness
3	Bees wax	36	37	Glossy and hardness
4	Bixaorellana extract	1.0		Coloring agent
5	Beta vulgaris extract		1.0	Coloring agent
6	Ripe fruit powder of Shikakai	12	13	Surfactant
7	Strawberry essence	1.5	1.5	Flavoring agent
8	Lemon juice	1.0	1.0	Anti-oxidant



Fig .5 Bixa Orellana lipstick



Fig.6 Beta vulgaris lipstick

#### IV.EVALUATION OF NATURAL LIPSTICK

**A.Melting Point:** Used glass capillary tubes open at both ends, about 80 mm long, having an external diameter of 1.4 mm to 1.5 mm and an internal diameter of 1.0 mm to 1.2mm. Introduce into each of 5 capillary tubes a sufficient amount of the substance, previously treated as described, to form in each tube a column about 10 mm high and allow the tubes to stand for the appropriate time and at the prescribed temperature. Unless otherwise prescribed, substances with a waxy consistency are carefully and completely melted on a water-bath before introduction into the capillary tubes. Allow the tubes to stand at 2-8 °C for 2 h. Attach one of the tubes to a thermometer graduated in 0.5 °C so that the substance is close to the bulb of the thermometer. Introduce the thermometer with the attached tube into a beaker so that the distance between the bottom of the beaker and the lower part of the bulb of the thermometer is 1 cm. Fill the beaker with water to a depth of 5 cm. Increase the temperature of the water gradually at a rate of 1 °C/min. The temperature at which the substance begins to rise in the capillary tube is regarded as the melting point. Repeat the operation with the other 4 capillary tubes and calculate the result as the mean of the 5 readings.

**B.Breaking Point:** Breaking point was done to determine the strength of lipstick. The lipstick was held horizontally in a socket inch away from the edge of support. The weight was gradually increased by a specific value (10 gm) at specific interval of 30 second and weight at which breaks was considered as the breaking point.

**C.Force of Application:**It is test for comparative measurement of the force to be applied for application. A piece of coarse brown paper kept on a shadow graph balance and lipstick was applied at 45° angle to cover a 1 sq. Inch area until fully covered. The pressure leading is an indication of force of application.

**D. Surface anomalies:**This was studied for the surface defects, such as no formation crystals on surfaces, no

contamination by moulds, fungi etc.

**E. Aging stability:** The products were stored in 40°C for 1 hrs. Various parameters such as bleeding, crystallization.

**F. Solubility test:** The formulated herbal lipsticks were dissolved in various solvents to observe the solubility and reported.

**G. pH parameter:** The pH of formulated herbal lipsticks were determined using pH meter.

**H. Skin irritation test:** It is carried out by applying the product on the skin for 10 min.

**I. Perfume stability:** The formulated herbal lipsticks were tested fragrance.

## V. RESULT AND DISCUSSION

Table no-4

EVALUATION PARAMETERS	INFERENCES	
	BOL	BVL
Colour	Yellowish red	Red colour
pH	6.9±0.1	6.5±0.1
Skin irritation	NO	NO
Melting point	59	60
Breaking point	30	25
Force of application	Good	Good
Perfume stability	++	+
Surface anomalies	NO	Yes
Ageing stability	Smooth	Smooth
Solubility	Ethanol	Chloroform

Different natural ingredients were used for formulating natural lipsticks that contain colouring agent which is a natural colorant obtained from herb Bixaorellana and Beta vulgaris and the effect of different natural ingredients on different evaluation parameters in the formulation have been investigated. The prepared lipsticks (table 3) were evaluated (table 4) and it was found that herbal natural lipstick, BOL was best among all three lipsticks formulations. Hence from present investigation it was concluded that this formulated herbal lipstick having minimal and no side effects and thus showing maximum local effect on lips.

## CONCLUSION

This research provides guideline on the use of herbal ingredients on the preparation of lipsticks having minimal or no side effects. The natural ingredients like Olive oil, ripe fruit powder of Shikakai were used in the preparation of natural lipsticks along with Bixaorellana and Beta vulgaris as coloring agent. The present study proves that both Bixaorellana and Beta vulgaris are colouring agents and Bixaorellana containing lipstick was best among both natural lipsticks. The prepared lipsticks were show excellent properties like shining, spreading and smoothness of lips. The research finding also provides a guideline on effects of ingredients towards the physical properties and consumer acceptance of the lipstick formulations.

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