

Research Article



Formulation and Evaluation of Herbal Lip Rouge.

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ABSTRACT

Cosmetics are the substances used to beautify, enhance, and give the attractive appearance to the human body. The ingredients of the synthetic source have so much adverse effect whereas; Herbal word is a symbol of safety. Herbal preparations like herbal tonic, paste, creams, shampoos, tablets and lipstick has become popular among the consumer. Herbal medicines are the fastest to heal the various ailments. Lipstick is most widely used to enhance the beauty and texture of lips and add glamour to touchup the makeup. With this agenda, an attempt was made to formulate natural lipsticks by using coloring pigments of *Beta vulgaris* (Beet) and *Curcuma longa* (turmeric) and the lipsticks were evaluated for their organolaptic properties such as surface anomalies, aging stability, spreading, perfume stability, hardness, shine and gloss and found to be a satisfactory product to give attractive beauty. Due to various adverse effects of available synthetic preparation the present work was conceived by us to formulate an herbal lipstick having minimal side effects.

Keywords: *Beta vulgaris* pigment, *Curcuma longa*, turmeric, Herbal lipsticks, formulation, cosmetics, Lip rouge.

INTRODUCTION

Now a day's Herbal cosmetics have growing demand in the world market. It is an invaluable gift of nature. There are a wide range of herbal cosmetic products to satisfy your beauty regime. The world is returning towards the herbal products. The use of herbal products is getting common now a day's the people are seeking to adopt more herbal remedies to improve their life style and adopt more natural way of life. People prefer natural food, herbal medicines and natural curing practices for healthy life; there is much demand for the vegetable products cultivated through biological/organic farming without using harmful synthetic fertilizers and pesticides. The usage of herbal cosmetics has been increased to many folds in personal care regime system and there is a great demand for the herbal cosmetics products. Natural products have been used for traditional medicine purposes throughout the world for many thousands of years ago from now¹. Many of them have pharmacological properties, such as antiviral, anti psychotic, anti malarial, antimicrobial, anti-inflammatory and cytostatic effects. They have been recognized as useful for human medicine. The literature in Ayurveda especially CharakSamhita stated numerous medicinal plants in Varnyakashaya. The herbs like Chandan, Haldi, Khas, Nagkeshara, Manjistha, Yastimadhu are used to obtain glowing complexion and Arusa, Amala, Bavchi, Guduchi, Chakmard are mentioned as Kustaharan. Possibly, herbal user desire to assume control over health care needs. Botanical extracts that support the health, texture and integrity of skin and hair are widely used in commercial cosmetic formulations. Plant materials, from which these extracts are prepared, have a long history of traditional use. Coloring lips in an

ancient practice date back to prehistoric period. In present days the use of product has increased and choice of shades of colors, textures, luster, have been changed and become wider. This can observed from the facts that lipstick is marketed in hundred of sheds of colors to satisfy the demand of the women². Lipsticks are often eaten away by the user so it was necessary to have a health regulation over the ingredients of the formulation. The dyes that contribute to the color of the lipstick are dangerous to humans on consumption like various synthetic dyes are carcinogenic. In a mild form, the coal tars that is the primary ingredients from which synthetic dyes are formed can cause allergy, nausea, dermatitis, and drying of the lips. In a more severe form it can be carcinogenic and even fatal. Due to various adverse effects of available synthetic preparation the present work was conceived by us to formulate an herbal lipstick having minimal side effects which will extensively used by the women of our communities with great surety and satisfaction. 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 most well known of which is the root vegetable known as the beetroot or garden beet. Beetroot (*Beta vulgaris*) is the main source of natural red dye, known as "beetroot red". Betanine is the main component of the red colorant extracted from *Beta vulgaris*. The roots are most commonly 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^{3, 4}. Turmeric is used in Ayurvedic and Siddha practices, turmeric has been used as an attempted treatment for a variety of internal disorders, such as indigestion, throat infections,



common colds, or liver ailments, as well as topically, to cleanse wounds or treat skin sores. Biological source of Turmeric consists of the dried rhizomes of *Curcuma longa* L. Family Zinziberaceae. Turmeric or its principal constituent, curcumin, has been studied in numerous clinical trials for various human diseases and conditions, but the conclusions have either been uncertain or negative^{5,6}. The preparation of this lipstick with the natural ingredients for minimizing the various adverse effects of available synthetic preparation, the present work was conceived by us to formulate a herbal lipsticks having minimal or no side effects which will extensively used by the women of our communities with great surety and satisfaction.

MATERIALS AND METHODS

Collection of plant material

The herbs used in formulation of herbal Lip rouge the *Curcuma longa* was collected from medicinal garden of R.C.Patel institute of pharmaceutical education and research, Shirpur and *Beta vulgaris* were procured from the local vegetable market of shirpur.

Methodology

The herbal lip rouge lipsticks were formulated as per method described. The lip rouge prepared from vulgarus and *Curcuma longa* were denoted by NF1 and NF2. The ingredients used in the formulation of both lipsticks are shown in table 1 and 2 respectively. Also see the figure 1 and 2.

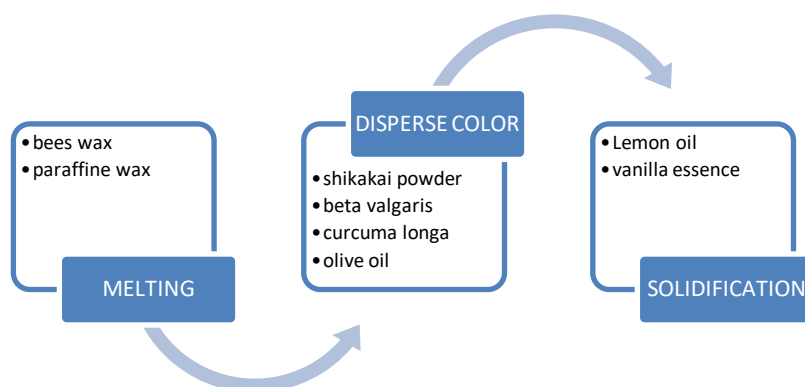


Figure1: Herbal lip rouge formulation procedure layout

1. Mixing and melting



2. Moulding and solidification



3. Cooling and remove product



Figure 2: step in preparation of Herbal lip rouge

Formulation table for *Beta vulgaris***Table 1:** Preparation of herbal lip rouge from *Beta vulgaris*.

Ingredients	Formulation1 Qty	Formulation2 Qty	Formulation 3 Qty
Olive oil	13	13	13
Paraffin wax	29	28	27
Bees wax	34	34	34
Shikakai powder	13	12	11
<i>Beta vulgaris</i>	0.9	0.6	0.3
Lemon oil	1	1	1
Vanilla essence	q.s	q.s	q.s

Formulation table for *Curcuma longa***Table 2:** Preparation of herbal lip rouge from *Curcuma longa*.

Ingredients	Formulation1 Qty	Formulation2 Qty	Formulation3 Qty
Olive oil	13	13	13
Paraffin wax	29	28	27
Bees wax	34	34	34
Shikakai powder	13	12	11
Turmeric	0.4	0.6	0.8
Lemon oil	1	1	1
Vanilla essence	q.s	q.s	q.s

Evaluation of Herbal Lip Rouge^{7,8}

It is very essential to maintain a uniform standard for herbal lip rouge, keeping this view in mind the formulated herbal lip rouge was evaluated on the parameters such as melting point, breaking point force of application, surface anomalies etc. Both the herbal lip rouge shown the result in the specific limits for the respective evaluation parameter and were found nearly.

Melting point

Determination of melting point is important as it is an indication of the limit of safe storage. The melting point of formulated herbal lip rouge was determined by capillary tube method, the capillary was filled and kept in the capillary apparatus and firstly observed the product was slowly-slowly melted. After sometimes observed product was completely melted. The above procedure was done in 3 times and the melting point ratio was observed in all formulation.

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.

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 reading is an indication of force of application.

Surface anomalies

This was studied for the surface defects, such as no formation crystals on surfaces, no contamination by moulds, fungi etc.

Aging stability

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

pH parameter

The pHs of formulated herbal lipsticks were determined using pH meter.

Skin irritation test

It is carried out by applying product on the skin for 10 min.

Perfume stability

The formulated herbal lipsticks were tested after 30 days, to record fragrance.



Evaluation table for *Beta vulgaris*(NF1)**Table 3:** Evaluation of herbal lip rouge from *Beta vulgaris*

Evaluation parameters	Inference		
	Formulation 1	Formulation 2	Formulation 3
colour	Maroon red	Light red	Maroon Red
ph	6.9	7	6.8
Skin irritation	no	no	no
Melting point	50	52	47
Breaking point	31	26	30
Force of application	good	good	good
Perfume stability	+++	++	+
Surface anomalies	No	yes	no
Aging stability	smooth	Slightly rough	smooth

Evaluation table for *Curcuma longa* (NF2)**Table 4:** Evaluation of herbal lip rouge from *Curcuma longa*.

Evaluation parameters	Inference		
	Formulation 1	Formulation 2	Formulation 3
colour	Light yellow	yellow	Orangish yellow
pH	6.8	7.4	7
Skin irritation	No	No	No
Melting point	50	48	45
Breaking point	28	30	31
Force of application	Good	Good	Good
Perfume stability	+	+++	++
Surface anomalies	Yes	No	No
Aging stability	Smooth	Smooth	Slightly rough

RESULTS

Herbal ingredients were used for formulating herbal lip rouge that contain colouring agent which is a natural colorant obtained from herb *Beta vulgaris* and *Curcuma longa*. herbal lip rouge have been investigated for different evaluation parameters. After evaluation it was found that herbal lip rouge, *Beta vulgaris* NF1 and from *Curcuma longa* NF2 were found to be safe and effective in desired properties. 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 *Beta vulgaris* and turmeric as coloring agent. The present study proves that both *Beta vulgaris* and *Curcuma longa* are the best formulations. 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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