



Research Article

Formulation and Evaluation of a Herbal Lipstick : A New Approach

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Herbal word is a symbol of safety in contrast to synthetic one which has adverse effects on human health. Herbal preparations like herbal tablets, herbal tonic, herbal paste, herbal creams, herbal shampoos and herbal lipstick etc. has become more popular among the consumer herbal medicines represent the fastest growing segment to heal the various ailments. Colouring skin particularly skin of face or lips is an ancient practice going back to prehistoric period. In present days the use of such products has increased and choice of shades of color, texture and luster have been changed and become wider. This can be observed from the fact that lipsticks are marketed in hundred of shades of colours to satisfy the demand of women. The present investigation was done to formulate herbal lipstick, since lipsticks are one of the key cosmetics to be used by the women. Attempt was also made to evaluate the formulated herbal lipstick. 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.

Key Words : Herbal Cosmetics, Castor oil, Beet root juice, Bees wax, shikakai.

INTRODUCTION

Cosmetics are the substances used to enhance the appearance of human body. Cosmetics include skin care creams, lotions, powders, perfumes, lipsticks, fingernail and toe nail polish, eye and facial make up, coloured contact lenses, hair colours, hair sprays, gels, deodorants, baby products, bubble bath, bath salts and many more products are in great demand in both developing and developed countries. Herbal cosmetics have growing demand in the world market and are an invaluable gift of nature. There are a wide range of herbal cosmetic products to satisfy your beauty regime. Herbal

cosmetics are the preparations, which represents cosmetics associated with active bio-ingredients, nutraceuticals or pharmaceuticals¹.

The herbs used in cosmetic preparation have varieties of properties like antioxidant, anti-inflammatory, antiseptic and antibacterial etc. These herbal products claim to have no side effects, commonly seen with products containing synthetic agents. The literature in Ayurveda, especially Charak Samhita, stated numerous medicinal plants in Varnya kashaya. The herbs like Chandan, Haldi, Khas, Nagkeshara, Manjistha, Yastimadhu are used to obtain glowing complexion and Arusa, Amala, Bavchi,

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Guduchi, Chakmard are mentioned as Kustaharan^{1,2}.

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 “cosmeceutical” use, although the term itself is of recent origin. In most cases, these cosmetic applications are adequately supported by efficacy and safety data documented in scientific literature. Among the more popular functional natural ingredients, several antioxidants used in cosmetics are scientifically proven to offer additional benefits in supporting skin texture, appearance and tone³. While in traditional cultures, plant materials were used in crushed or dried and powdered form, their incorporation into existing cosmetic formulations presents unique challenges.

In recent time’s lipsticks have been under the scanners of many health watchers. Lipsticks are often eaten away by the user and hence it is imperative that health regulators have a microscopic look at the ingredients that go in to the lipstick.

Materials & Methods:

Castor oil, Paraffin wax, Bees wax, Beet root juice, Shikakai ripe fruit powder, lemon juice, orange essence and vanilla essence. Following method was adopted

by author during the course of present investigation^{5,6}.

Collection and authentication of herbs of plant material- the different herbs used in the formulation of herbal lipstick on the basis of literature survey were collected in the month of march 2013 from local areas of dehradun.

Formulation of Herbal Lipstick:

The herbal lipstick was formulated as per general method of normal lipstick formulation. The ingredients used in the formulation of a herbal lipstick are:

Castor oil- 16 gm, Paraffin wax- 28 gm, Bees was- 36 gm, Ripe fruit powder of shikakai- 12 gm, Beet root juice-6gm, Orange essence – 1.5 gm, lemon juice- 01gm, Vanilla essence- QS.

All the ingredients were mixed in a definite ratio by melting paraffin wax and bees wax at a low flame and then moulded in a suitable mold (Moulding method) to formulate lipsticks⁶.

Evaluation of Herbal 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^{7,8}.

Melting point - Determination of melting point is important as it is an indication of the limit of safe storage. The melting point

**Table 1: Ingredients with their prescribed quantity in the formulation of a herbal lipstick**

S.No.	Ingredient	Importance	Quantity (gram)
1.	Castor oil	Blending agent	16
2.	Paraffin wax	Glossy & hardness	28
3.	Bees wax	Glossy & hardness	36
4.	Beet root juice	Colouring agent	06
5.	Ripe fruit powder of Shikakai	Surfactant	12
6.	Lemon oil	Antioxidant	01
7.	Orange essence	Flavouring agent	1.5
8.	Vanilla essence	Preservative	q.s

of formulated lipstick was determined by capillary tube method the capillary was filled, keep in the capillary apparatus and firstly observed the product was slowly-slowly melted. After sometimes was observed the product was completely melted. The above procedure was done in 3 times and the melting point ratio was observed in different-different formulation.

Breaking point - Breaking point was done to determine the strength of lipstick⁹. The lipstick was held horizontally in a socket ½ 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.

Thixotrophy character - It is indication of thixotropic quality and was done by using penetrometer. A standard needle of specific diameter was allowed to penetrate

for 5 seconds under a 50 gm load at 25°C. The depth of penetration was a measurement of the thixotropic structure of lipstick.

Force of application- It is test for comparative measurement of the force to be applied for application. A piece of coarse brown paper can be kept on a shadow graph balance and lipstick can be 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 by the surface defects, such as no formation crystals on surfaces, no contamination by moulds, fungi etc.

Aging stability -The product was stored in 40°C at 1 hr. Various parameters such as bleeding, crystallization of on surface and ease of application were observed.



Solubility test -The formulation herbal lipstick was dissolved in various solvents to observe the solubility.

pH parameter - The pH of formulated herbal lipstick was determined using pH meter.

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

Perfume stability -the formulation herbal lipstick was tested after 30 days, to record the fragrance.

Table- 2: Evaluation of formulated herbal lipstick

S.N.	Evaluation parameter	Inference
1.	Colour	Red
2.	PH	6.5±0.3
3.	Skin irritation test	No
4.	Melting point	60-61
5.	Breaking point	31
6.	Thixotrophy character	9
7.	Force of application	Good
8.	Perfume stability	+++
9.	Surface anomalies	No defect
10.	Aging stability	Smooth
11.	Solubility test	Chloroform soluble

Results & Discussion:

In last few decades there has been tremendous boost in use of cosmetics by women. However, the hazards cause by these chemicals has come into limelight

very recently. The present work formulation and evaluation of herbal lipsticks was aimed to formulate a lipstick using herbal ingredients with a hope to minimize the side effects as produced by the available synthetic ones¹⁰.

Hence, from present investigation it was concluded that this formulated herbal lipstick has better option to women with minimal side effects though a detailed clinical trials may be done to access the formulation for better efficacy.

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