

Formulation and evaluation of herbal lipstick

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Abstract

Coloring skin particularly skin of face and lips is an ancient practice going back to prehistoric period. In present days the use of such product 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 hundreds of shades of colors 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 lipsticks.

Keywords: Cosmetics, Herbs, Herbal lipstick, Formulation, Evaluation

Introduction

Cosmetics are substances used to enhance the appearance of the human body. Cosmetics include skin-care creams, lotions, powders, perfumes, lipsticks, fingernail and toe nail polish, eye and facial makeup, permanent waves, colored contact lenses, hair colors, hair sprays and gels, deodorants, baby products, bath oils, bubble baths, bath salts, butters and many other types of products are in great demand in both developing and developed countries¹

The word herbal is a symbol of safety in contrast to the synthetic one which has adverse effects on human health. Herbal preparations viz., herbal tablets, herbal tonics, herbal paste, herbal shampoo, herbal sindur, herbal contraceptives and herbal lipstick has become popular among the consumer herbal medicines represent the fastest growing segment to heal the various ailments. Possibly, herbal user desire to assume control over health care needs. Perhaps the large in personal healthcare system is unpalatable to many and they turn to herbal medicine due to increase side effects of available synthetic preparations.^{2,3}

Herbal cosmetics have growing demand in the world market and are an invaluable gift of nature. There are a wide range of herbal cosmetics products to satisfy your beauty regime, adding herbal in cosmetic is very safe for skin. Human being have been using herbs for different purpose like food, medicine, beautifying with advancement of science & technology use of natural things including plant has been reduced except for food, vegetarian takes plant & plant only. However there is resurgence of use of herbs both as drug and cosmetics.⁴

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, lustures, have been changed and become wider. This can be observed from the facts that lipstick is marketed in hundred of shades of colors to satisfy the demand for the women.⁴ 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 used by the women of our communities with great surety and satisfaction.

Material and Methods

Following methods were adopted by the authors during the course of present investigation.

Selection of herbs

The various herbs used in the formulation of herbal lipsticks were selected on the basis of literature survey.⁵⁻⁶

Collection and authentication of herbs of plant material

The different herbs used in formulation of herbal lipstick were collected in the months of August 2010 from the local village farmers of Ujjain district and authenticated by Dr. S. N. Dwivedi, Prof. and Head, Department of Botany, Janata PG College, APS, University, Rewa, M.P.-India and a voucher specimen HR/05/61-68 were deposited in our department.

Formulation of herbal lipstick

The herbal lipstick was formulated as per method described^{7,8}. The ingredients used in the formulation of herbal lipstick are

- Til oil
- Paraffin wax
- Beeswax
- Ripe fruit powder of shikakai
- Turmeric powder
- Strawberry essence
- Lemon juice
- Vanilla essence

All the ingredients are taken in definite ratio and 5 formulations [F1 to F5] were prepared.

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 was evaluated on the parameters such as melting point, breaking point, thixotropy character, force of application, surface anomalies etc.^{9,10}

Melting point: Determination of melting point is important as it is an indication of the limit of safe storage. The melting point of formulated lipstick was determined by capillary tube method the capillary was filled, kept 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 is done to determine the strength of lipstick. The lipstick is held horizontally in a socket ½ inch away from the edge of support. The weight is gradually increased by a specific value (10 gm) at specific interval of 30 second and weight at which breaks is considered as the breaking point.

Thixotropy character: It is indication of thixotropic quality and is done by using penetrometer. A standard needle of specific diameter is allowed to penetrate for 5 seconds under a 50 gm load at 25°C. The depth of penetration is 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 is 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 hrs. 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.

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Fig. 1 Different batches of formulated herbal lipsticks (F1 to F5)



Fig. 2 Formulated herbal lipsticks (F3)

Results and 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 ones. The prepared formulation (Table 1) was evaluated (Table 2) and it was found that the HL, F-3 (Fig. 2) was best among the five formulations. Hence, from present investigation it was concluded that this formulated herbal lipsticks has better option to women with minimal side effects though a detailed clinical trials may be done to access the formulation for better efficacy.

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

Ingredients	Importance	Quantity (gm)				
		F1	F2	F3	F4	F5
Til oil	Blending properties	54	50	51	52	53
Paraffin wax	Glossy & hardness	15	16	13	13	14
Bees wax	Glossy & hardness	12	13	14	12	11
Ripe fruit of shikakai	Surfactant	6.5	7.5	8.5	9.5	8.0
Turmeric powder	Coloring agent	10	11	12	11	10
Strawberry essence	Flavoring agent	1.5	1.5	1.0	0.2	2.5
Lemon juice	Anti-oxidant	0.1	0.1	0.5	0.5	0.5
Vanilla essence	Preservative	q.s	q.s	q.s	q.s	q.s

Table 2: Evaluation of formulated herbal lipsticks (F1 to F5)

Evaluation parameter	Inference				
	F1	F2	F3	F4	F5
Color	Brownish yellow	Brownish yellow	Brownish yellow	Brownish yellow	Brownish yellow
pH	6.5±0.3	6.7±0.2	6.9±0.1	6.8±0.1	6.7±0.2
Skin irritation test	No	No	No	No	No
Melting point	60-61	61-63	59-62	60-61	63-63
Breaking point	31	30	30	31	32
Thixotropy character	9	10.2	10.5	9.8	9
Force of application	Good	Good	Easy	Easy	Poor
Perfume stability	+++	++	+	+++	++
Surface anomalies	No defect	No defect	No defect	No defect	No defect
Aging stability	Smooth	Smooth	smooth	smooth	smooth
Solubility test	Chloroform	chloroform	chloroform	chloroform	chloroform

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