



iJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** XII **Month of publication:** December 2023

DOI: <https://doi.org/10.22214/ijraset.2023.57258>

www.ijraset.com

Call: ☎ 08813907089

E-mail ID: ijraset@gmail.com

Review on Formulation and Evaluation of Herbal Lipstick

Miss. Diksha D. M.¹, Shaikh Shaheda Yaseen², Kadam Sandesh³, Yachwad Shailesh⁴, Bhalerao Shankar⁵, Sagave Sarita⁶, Pethkar Sagar⁷, More Sambhaji⁸

Abstract: Lipstick is a cosmetic used for color the lips. It enhance the appearance of the lips. Lipstick utilise for the purpose to enhance the appearance, look attractive and protection of lips for many types damaging UV rays etc. Herbal Lipstick is a cosmetic product containing pigments, oils, fragrance, preservatives, colors, texture and protection to the lips. It has become an almost universal constituent of ladies' handbags. Moist lips, dry lips, shiny lips, smooth lips, all are simple matters of cosmetic application Herbal lipsticks are gaining popularity because natural cosmetics are safe. In market numbers of shades of colors are available to satisfy the demand by the women's in form like liquid as well as stick on lips. Herbal lipsticks having minimum side effects. It contains natural ingredients or nutrients it is safe to use that keep lips healthy. Lipstick containing synthetic colorants which are made up of harmful chemicals and it is very harmful for our skin. Regular use of synthetic lipstick colours can have side effects on the skin, including skin pigmentation, skin irritation, acne, and cancer. The use of plant-based plant extract from the plants helps lessen side effects. This overview of lipstick covers its kind, technique of formulation, variety of colours, pigment extraction, natural oil, flavour, physical assessment, and quality control standards for lipstick used in the industry, as well as mould and flaws. Cosmetic procedures are used to enhance facial attractiveness. The demand for natural cosmetics is currently rising steadily thanks to its natural gifts. The natural products that women use today include a variety.

Keyword: herbal lipstick, beetroot, mould, formulation, evaluation, natural ingredient.

I. INTRODUCTION

An herbal lipstick is utilised to rejuvenate the lips muscles maintain the elasticity of the skin., clean adhered dirt and improve the blood circulation. The merits of herbal based cosmetics are their nontoxic nature. It moisture the lip skin. This lipstick supplies vital nourishment to the lip. Cosmeceuticals are cosmetic pharmaceuticals designed to improve the health and beauty of the skin by providing specific results ranging from anti-acne and anti-wrinkle to sun protection. Created by Dr. Albert Klingman, the concept claims that cosmeceuticals are topical substances that fall into a wide range of materials between pure cosmetics (lipstick and rouge) and pure medicine (antibiotics, corticosteroids). Cosmetic products are a combination of biologically active ingredients with medicinal or drug-like properties and cosmetic products that help beautify the skin.



Cosmetic preparations are topically applied preparations that contain active ingredients that affect the biological function of the skin. External factors such as air pollution, exposure to sunlight. lipstick used to impart an attractive color and glossy moisture appearance to the lips. These preparation do not damage the skin and are non tacky. They typically involve a color change but also increases shine and smooth out appearance of wrinkles and folds on lips. They are a solid product housed in a molded packaging.

II. IDEAL PROPERTIES OF LIPSTICK

- 1) It should give glossy and soft appearance.
- 2) It should be non-irritant and non-toxic.
- 3) It makes you look healthy and well.
- 4) The container should operate easily.
- 5) It should impart uniform pigments to the area of application.
- 6) It provide beauty to face.
- 7) It should not melt or harden within reasonable variation of environmental temperature.

A. Advantages

- 1) The ingredient in the natural lipstick is all natural and is safe to use.
- 2) They also contain natural nutrient that keep lips healthy.
- 3) They have fewer or no aspect impacts.
- 4) They are non-toxic, highly lipophilic, anti-oxidants, anti-microbial, anti-inflammatory, and are used in leucoderma of lips.
- 5) Extensive range of color to choose from.
- 6) Colorants has different original shades of color from purplish red, ruby red, beetroot purple, dark violet, pastel red, pale red, purplish red, rose red, deep magenta, dark purple, orange, deep violet.
- 7) The medicated lipstick should be protect lip from dryness and cracking.
- 8) It should be also protect from sores and swelling.
- 9) Lipstick defines your lip and brightens your smile.

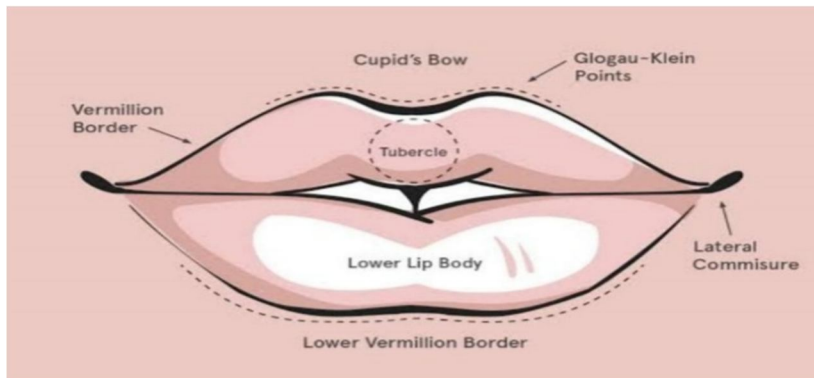
B. Disadvantages

- 1) Time consuming process for manufacturing.
- 2) Difficult to hide taste and odour.
- 3) no pharmacopoeia define proper use of herbal ingredient or procedure in preparation of herbal cosmetic
- 4) It dose become a habit.
- 5) You spend good amount on it.

III. ANATOMY OF LIPS

Lips are soft, movable body part at the mouth of humans and helps for the intake of food and speech. "Labium superius oris" and "Labium inferius oris", are the upper and lower lips respectively. The meeting point where the lips joint the surrounding skin of smooth area is the vermillion border and reddish area within the border is called the vermillion zone. Cupid's bow is the vermillion border of upper lips. The fleshy protuberance located in the center of the upper lip is a tubercle. [20] known by various terms including the procheilon (also spelled prochilon), the "tuberculum labii superioris", and the "labial tubercle".

The skin of the lip, with three to five cellular layers, is very thin compared to typical face skin, which has up to 16 layers. With light skin color, the lip skin contains fewer melanocytes (cells which produce melanin pigment, which give skin its color). Because of this, the blood vessels appear through the skin of the lips, which leads to their notable red coloring. With darker skin color this effect is less prominent, as in this case the skin of the lips contains more melanin and thus is visually darker. The skin of the lip forms the border between the exterior skin of the face, and the interior mucous membrane of the inside of the mouth.



The upper lip covers the anterior surface of the body of the maxilla. Its upper half is of usual skin color and has a depression at its center, directly under the nasal septum, called the philtrum, which is Latin for lower nose, while its lower half is a markedly different, red-colored skin tone more similar to the color of the inside of the mouth, and the term vermilion refers to the colored portion of either the upper or lower lip. It is raised by the levator labii superioris and is connected to the lower lip by the thin lining of the lip itself, which can be seen by opening your mouth wide in front of a mirror. Thinning of the vermilion of the upper lip and flattening of the philtrum are two of the facial characteristics of fetal alcohol syndrome, a lifelong disability caused by the consumption of alcohol during pregnancy

A. Method of Preparation

- 1) First, melt and mix the raw ingredients for the separately according to their melting point.
- 2) Heat the solvents, oils, waxes in separate stainless steel or ceramic containers.
- 3) Then mix solvent and liquid with the colour pigments.
- 4) Mix the pigment mass with the hot wax.
- 5) Then pour this into tubing moulds, cool, and separate the lipstick from the mould and fit it in the lipstick case.

Steps involved is:

Melting
|
Mixing
|
Moulding
|
Labelling
|
Packing.

B. Formulation Related Problems

- 1) *Sweating*: It is the most common problem of lipstick formulation due to high oil content or inferior oil binding. It may Rise in any climate or temperature range.
- 2) *Bleeding*: This refers to the separation of colored liquids from the waxy base.
- 3) *Streaking*: A thin line or band of a different colour or a substance appears on the finished product.

C. Moulding Related Problems

- 1) *Laddering*: Lipstick does not look smooth or homogenous after congealing and setting but instead has a multi-layered Appearance.
- 2) *Deformation*: This is a molding problem where the shape of the lipstick looks deformed. It is noticeable and appears on Both sides of the lipstick.
- 3) *Cratering*: This appears in split moulding and it shows up flaming when stick develops dimples.
- 4) *Mushy Failure*: This is a problem in which the central core of the lipstick lacks structure and breaks.

IV. COMPONENTS OF LIPSTICK

1) .base-

- Solid waxes (bees wax, camauba wax, candelina wax).

Function-

-Provide hardness and creaminess, lubricate lipstick after application.

2) .oil-

-Caster oil, liq paraffin.

Function-

-dispensing the pigment and give high gloss to the lipstick.

- 3) .coloring agent-
-pigment, staining dyes.
Function-
-impact color.

- 4) .perfumes-
Function-
-give aroma.

V. METHODS OF FORMULATION OF LIPSTICK

- 1) STEP 1: First melt and mix well the raw materials separately according to their melting point.
- 2) STEP 2: Heat the solvent oil, waxes, inseprate stainless steel or ceramic containers.
- 3) STEP 3: Then mix solvent and liquid with the color pigments.
- 4) STEP 4: Then puor into tubing moulds cool and separate the lipstick from the mould and fit it the lipstick case.

VI. FORMULATION TABLE

<u>Ingredients</u>	<u>Quantity taken</u>	<u>Importance of ingredients</u>
Bees wax	2gm	Hard wax
Coconut oil	3gm	Soft wax
Olive oil	2 ml	Soft wax
Caster oil	4ml	Blending agent
Beetroot powder	6-8gm	Colouring agent
Vannila	5drops	Flavouring agent
Rose powder	3 gm	Flavouring agent

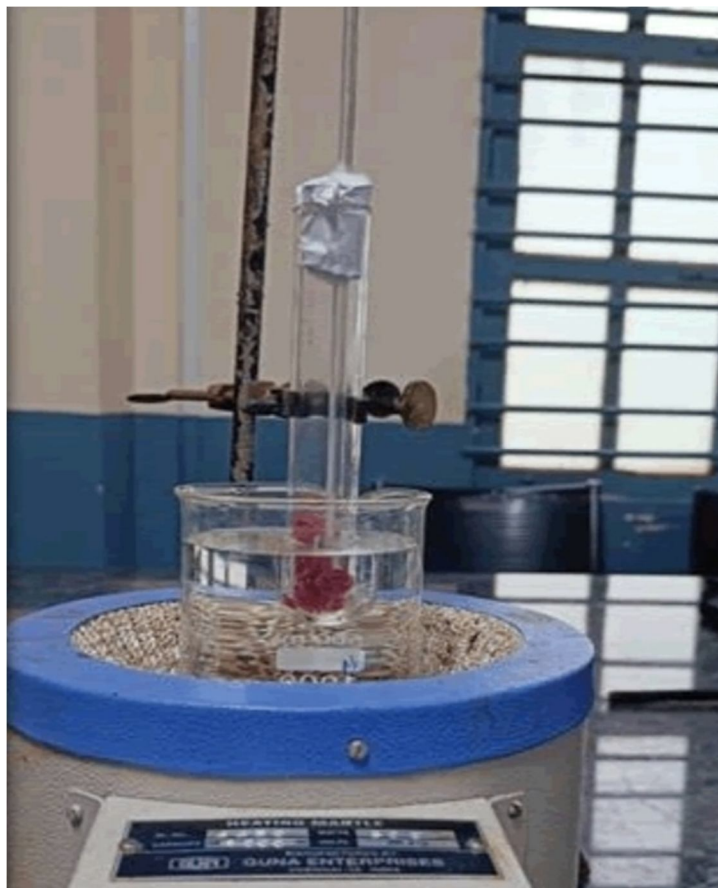
VII. DEFECTS IN TABLET MANUFACTURING:

- 1) *Sweating*: Caused due to high oil content or inferior oil binding.
- 2) *Bleeding*: Sepration of colored liquids from waxy bases.
- 3) *Blooming*: Due to higher percentage of cetyl alcohol.
- 4) *Streaming*: Expected to be caused due to titanium dioxide.
- 5) *Laddering*: Lipstick does not look smooth or homogenous.
- 6) *Deformation*: Noticeable in softer formualae.

VIII. EVALUATION TEST FOR LIPSTICK

A. Melting Point

- 1) Determination of m.p is imp as it is indication of limit of same storage.
- 2) The m.p of formulated lipstick is determine by capillary tube method.
- 3) The cappilary is filled and then kept in the cappillary app. That firstly it is observed that the product is slowly method.
- 4) The above procedure is reapeted 3 times and the m.p ratio is observed in diff. Formulation.



B. Breaking Point

- 1) Breaking point is determined to access the strength of the lipstick. - The lipstick are separately held horizontally in a soaked about half inch away from the edge of support.
- 2) Gradually increasing wt.at specific interval of 30sec loaded until the lipstick breaks.
- 3) The final wt. At which the lipstick breaks is considered as the breaking point.



C. Force of Application

- 1) It is test to determine the force to be applies for application.
- 2) Keep a piece of coarse brown paper on a shadow graph balance and apply lipstick at 45angle to cover a 1sq inch area until fully covered.
- 3) The pressure leading is an indication of force of application.

D. Surface Anomalies

This test is for determining the surface defects such as no formation crystals on surfaces no contamination by molds, fungi.

E. PH Determination Test

Using a digital metre and pH paper, the pH of herbal lipstick formulations was obtained.



F. Aging Stability

Store the product in 40°C for 1 hour and observing the various parameters such as application characteristics, crystallization of wax on surface and oil bleeds.

1) Solubility Test

Dissolve the lipstick in different solvents and observe the solubility in each solvent.

2) PH Parameters

Determine the PH of the lipstick by using PH meter.

3) Skin Irritation Test

Apply the lipstick on the skin for 10min and observe.

4) Perfume Stability

Perfume stability can also be assessed by storing lipstick in oven at 40°C and by making periodic comparison of perfume with fresh lipstick.

5) Thixotrophy Character

It is the 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 50gm load at 25°C. The depth of penetration was a measurement of the thixotropic structure of lipstick.

IX. CONCLUSION

This review provides information on overview Of herbal lipstick .It has minimal or no side effects. Herbal Lipstick is prepared by using different natural ingredients . Hence, the use of natural colour is step towards healthy cosmetics and which can be widely utilised by the women with great pleasure. Improvement in the fangle builder of applicators and metal tubes decreased the cost of cosmetics. This combined with new fangled acceptance by the general population caused wide spread use and popularity to increase.

REFERENCES

- [1] Deshmukh S, M Chavan, Sutar M, Singh S.; Preparation and evaluation of natural lipstick from bixaorenella seeds.; International Journal of Pharma and Biosciences.2013.
- [2] Azwanida N, Hui M S, Afandi A,Mohamed S, Zulhisyam A K, Ayob A,Rusli N,Rasat M S M;Colorstability evaluation of pigment extracted from hylocereuspolyrhizus, clitoratearnatae andpandanusamaryllifolius as cosmetic colorants and premarket survey on customer acceptance on natural cosmetic product. Journal of Tropical Resources and Sustainable Sciences.2015; 3:61-67.
- [3] Kumar Sumit, Swarankar Vivek, Sharma Sujata, Baldi Ashish, Herbal Cosmetics: Used for Skin and Hair December, Inventi Rapid: Cosmeceuticals,2012; 4: 1-8
- [4] Larsson SC, Naslund I, Rutegård J, Wolk A, Vitamin A, retinol, and carotenoids and the risk of gastric cancer: a prospective cohort study, Am. J. Clin. Nutr., 2007; 85(2): 497–503.
- [5] Sunil R, Shekhar T C, Ashutosh B. Formulation and evaluation of a herbal lipstick: A new approach. International Journal of Pharmaceutical Erudition, 2013; 3(1): 26-30.
- [6] Kaul S, Dwivedi S. Indigenous ayurvedik knowledge of some species in the treatment of human disease and disorders. Inter J Pharm and Life Sci 2010; 1 (1):44-49
- [7] Dwivedi S, Dwivedi A, Dwivedi SN. Folklore uses of some plants by the tribal are of Madhya Pradesh with special reference to their conservation. Ethno botanical Leaflets. 2008; 12: 74 1-743.
- [8] Afandi, A.S.R.U.L.; Lazim, A.M.; Azwanida, N.N.; Bakar, M.A.; Airianah, O.B.; Fazry, S. Antibacterial properties of crude aqueous Hylocereus polyrhizus peel extracts in lipstick formulation against gram-positive and negative bacteria. Malaysian Appl. Biol. 2017,46, 29–34
- [9] Lwin, T.; Myint, C.; Win, H.; Oo, W.; Chit, K. Formulation and evaluation of lipstick with betacyanin pigment of hylocereus polyrhizus (Red Dragon Fruit). J. Cosmet. Dermatol. Sci. Appl. 2020, 10, 212.
- [10] Ghongade, K.; Bodake, V.; Badadare, S.; Magdum, M.; Gawande, N.; Kate, S.; Waghmare, K. Formulation and Evaluation of some Cosmetic preparations using novel natural colorant from Ixora coccinea. Asian J. Res. Pharm. Sci. 2021, 11, 22–28. [CrossRef]
- [11] Mahanthesh, M.C.; Manjappa, A.S.; Shinde, M.V.; Sherikar, A.S.; Disouza, J.I.; Namrata, B.U.; Ajija, W.C. Design, development and assessment of herbal lipstick from natural pigments. Int. J. Pharm. Sci. Rev. Res. 2020, 61, 59–64.
- [12] Yusof, A.A.B.; Ajit, A.B.; Sulaiman, A.Z.; Naila, A. Production of lip balm from stingless bee honey. Maldives Natl. J. Res. 2018, 6,57–72.
- [13] Malvandi, H.; Sancholi, F. Assessments of some metals contamination in lipsticks and their associated health risks to lipstick consumers in Iran. Environ. Monit. Assess. 2018, 190, 1–8.
- [14] Fraser, A., in Mary, Queen of Scots. Weidenfeld and Nicolson, London, 1989.
- [15] Arthur. O. Tucker, The Economic Botany, by the New York Botanical Garden, Bronx, NY 10458, 40(4), 1986, p 425-433.
- [16] Results from <http://health.indiamart.com/ayurveda/ayurveda-cosmetology/herbs-in-cosmetics.html>.
- [17] Crawford, T.H ., Nagarajan, T.S., J.Soc.Cosmet.Chem., 1954, V,202.
- [18] Encyclopaedia Britannica, 14th edn, 1929.
- [19] Rao S.A., In: Sri Sarabhendra Vaidya Ratnavali. Krishnaswami Mahadick., editors. Saraswati Mahal Library: Tanjore; 1952. p.277-381.
- [20] Mishra J. Shri Kamaratnam- Nityanath virachitam (13th Century.A.D.) Kalyan, Mumbai: Lakshmi- Venkateswar press Prakashan; 1897.p.93. Chap.5:60.
- [21] Nadkarni K.M., Indian plants and drugs with their medicinal properties and uses. Norton and Co.1. Madras: 1910.p.120. 2 Sanskrit series office, Varanasi (In three Volumes) 1963:455. Chapter 20:37.5.
- [22] Bhishagaratna K.L., An English Translation of Sushruta-Samhita (176-340 A.D)- The Chokhamba
- [23] Bhishagaratna K.L., Atridev-Vagbhat-Ashtang Hridaya-Shri Vagbhat virachita (Later half of 5th Cen A.D.) Varanasi: Chaukhamba Sanskrit Series Office; 1962.p.564. Chapter 32.3
- [24] Khory R.N., The Bombay Materia Medica and Their Therapeutics. Mumbai: Ranina's Union press; 1887.p.479.p. 226. P.303.
- [25] Bhagirathaswami-Ratirahasya-Koka kavi virachita (13th cen.A.D.)-Lohia S.C.195/2. Harison Road, Calcutta: 1930.P. 236. Chapter 15:84.
- [26] Upadhyaya S.C., Ratirahasya (13th Cen.A.D.) Mumbai: D.R. Taraporevala Sons and Co. Pri. Ltd;
- [27] Anon-Maharashtra State Gazetteer. Vol.A. Mumbai: Bot Gen Miscellaneous Plants-Govt printing press; 1961.p.84. Part III
- [28] Charaka Samhita, Handbook on Ayurveda, Editor, Gabriel Van Loon, 2002-2003 Vol 1.
- [29] Prashant, L., Kole et al, Cosmetics potential of herbal Extracts, natural Product Radiance, Vol 4(4), 2005, p 315-321.
- [30] Top 7 Advantages of using Natural Cosmetics.
- [31] Akinyele BO and Odiyi AC: Comparative study of the vegetative morphology and the existing taxonomic status of Aloe vera. Journal of Plant Sciences, 2007; 2: 558-563.
- [32] Escamilla M, Ferre A, Hidalgo C, Fuentes N, Kaps R, et al., Revision of European ecolabel criteria for soaps, shampoos and hair conditioners. Joint Research Centre European Commission, 2012; 1-40.
- [33] Suzuki D: The "Dirty Dozen" ingredients investigated in the David Suzuki Foundation Survey of chemicals in cosmetics. Backgrounder, 2010; 1-15.
- [34] Occupational Exposure to Hazardous Agents.
- [35] International Agency for Research on Cancer (IARC) monographs on the evaluation of carcinogenic risks to humans, 1978; 17: 1-365.



- [36] Kadam VS, Chintale AG, Deshmukh KP and Nalwad DN: Cosmeceuticals an emerging concept: A comprehensive review. International Journal of Research in Pharmacy and Chemistry, 2013; 3: 308-316.
- [37] Winter RA: Consumers dictionary of cosmetic ingredients. Three Rivers press United states USA, Edition 7th, 2009.
- [38] Ayurvedic and Herbal Products. . Sharma A, Shanker C, Tyagi LK, Singh M and Rao CV: Herbal medicine for market potential in India: An overview. Academic Journal of Plant Sciences, 2008; 1: 26-36
- [39] US: Food and Drug Administration, "Parabens".
- [40] Joshi LS and Pawar HA: Herbal cosmetics and cosmeceuticals: An overview, Nat Prod Chem Res., 2015; 3: 170.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)