



**INTERNATIONAL JOURNAL OF
PHARMACEUTICAL SCIENCES**
[ISSN: 0975-4725; CODEN(USA): IJPS00]
Journal Homepage: <https://www.ijpsjournal.com>



Research Article

Formulation And Evaluation of Herbal Lipstick

Aditya Dange*

Balwantrao Chavan College of Pharmacy, Naigaon BZ, Maharashtra, India.

ARTICLE INFO

Published: 30 May 2025

Keywords:

Herbal lipstick, Beta vulgaris, Lycopene, Natural formulation, Cosmetic evaluation

DOI:

10.5281/zenodo.15553850

ABSTRACT

The objective of this research was to develop and assess a herbal lipstick using naturally derived ingredients as alternatives to synthetic compounds. Color and antioxidant properties were derived from beetroot (*Beta vulgaris*), strawberry (*Fragaria virginiana*), and lycopene (from *Solanum lycopersicum*). The final product underwent tests for physicochemical stability, skin compatibility, and performance, indicating potential for safe and effective commercial use.

INTRODUCTION

Lipsticks are widely used across the world to enhance lip appearance and offer protection. However, conventional products often contain artificial substances linked to allergic responses and potential health risks. This study focuses on creating a plant-based lipstick that minimizes such risks and promotes eco-conscious cosmetic development. Herbal formulations are becoming increasingly popular due to their high content of beneficial phytochemicals. These natural alternatives are usually safer, biodegradable, non-toxic, and cruelty-free, offering an attractive option for health-conscious consumers.

Objective

***Corresponding Author:** Aditya Dange

Address: Balwantrao Chavan College of Pharmacy, Naigaon BZ, Maharashtra, India.

Email ✉: dangeaditya237@gmail.com

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

To develop a lipstick using botanical ingredients and assess its safety, stability, and functional properties through standardized evaluation methods.

MATERIALS AND METHODS

Ingredients and Roles:

- Castor oil (10 ml): Emollient and blending agent
- Beeswax (11 g): Provides gloss and firmness
- Cetyl alcohol (10 ml): Co-solvent
- Paraffin oil (5 ml): Co-solvent and emollient
- Beetroot extract (25 ml): Natural pigment
- Vanilla essence (3 ml): Natural preservative



- Lycopene (25 ml): Antioxidant and colorant
- Strawberry extract (3 ml): Flavoring and antioxidant
- Rose water (5 ml): Moisturizing agent
- Perfume: Adds fragrance

Pigment Extraction Process:

Beetroot was crushed and soaked in a 1:1 mixture of ethanol and water. The mixture was heated in a water bath for 15 minutes, followed by centrifugation at 18,000 rpm. The resulting extract was filtered and concentrated by evaporating the alcohol.

Formulation Procedure:

Each ingredient was melted individually based on its melting point. The colorants were blended into the molten oil-wax mixture. The mixture was poured into lipstick molds and cooled to allow solidification.

Evaluation Parameters

- Color: Reddish hue
- pH: Approximately 6
- Skin Sensitivity: No irritation observed
- Melting Point: 59–61°C
- Breaking Point: 30 g
- Ease of Application: Smooth and comfortable
- Stability Test: Maintained texture and performance
- Solubility: Soluble in chloroform

RESULTS AND DISCUSSION

The herbal lipstick formulation fulfilled the essential quality benchmarks. The deep red coloration from beetroot and lycopene was visually appealing. The absence of skin irritation confirmed its dermatological safety. Physical parameters such as melting and breaking points

were within the ideal range, ensuring usability and shelf stability. Beetroot and lycopene added antioxidant benefits, while strawberry extract contributed to flavor and longevity. Moisturizing agents like rose water and castor oil enhanced lip care properties. The lipstick applied effortlessly and retained its consistency over short-term testing. There was no evidence of microbial contamination or spoilage.

CONCLUSION

This research successfully demonstrates that a herbal lipstick made with plant-based ingredients can deliver both cosmetic appeal and therapeutic benefits. The product proved stable, user-friendly, and free from harmful additives. Herbal lipsticks are a viable alternative to synthetic versions, offering hydration, protection, and antioxidant properties. Further work should include long-term stability tests and user trials for commercial development.

REFERENCES

1. Dalke HS, et al. Design and Characterization of Nutraceuticals Lipstick of Beetroot Powder. *Int J Pharm Pharm Sci.* 2019.
2. Anilkumar V, et al. Design, Development and Evaluation of Herbal Lipstick from Natural Color Pigment. *IJPPR.*
3. Vetal B. Formulation and evaluation of herbal lipstick. *Int J Drug Discov Herb Res.* 2011.
4. Bhagwat D, et al. Herbal Lipstick Using Lycopene. *Res J Pharm Technol.* 2017.
5. Ghongade K, et al. Cosmetic Preparations Using *Ixora coccinea*. *Asian J Res Pharm Sci.* 2021.
6. Rasheed N, et al. Formulation and evaluation of herbal lipsticks. *Res J Pharm Technol.* 2020.



HOW TO CITE: Aditya Dange*, Formulation and Evaluation of Herbal Lipstick, Int. J. of Pharm. Sci., 2025, Vol 3, Issue 5, 4936-4938.
<https://doi.org/10.5281/zenodo.15553850>

