

A REVIEW OF HERBAL LIPSTICK FROM DIFFERENT NATURAL COLOURING PIGMENTS

Abstract

This review provides an overview of herbal lipstick formulations utilizing different natural colouring pigments. The increasing demand for natural and eco-friendly cosmetics has led to the exploration of various plant-based pigments for lipstick formulation. Natural colorants not only provide vibrant hues but also offer potential health benefits due to their bioactive compounds. The review focuses on the selection and utilization of different natural colouring pigments in herbal lipstick formulations. Common sources of natural pigments include plants, fruits, flowers, and minerals. These sources offer a wide range of colors, from earthy tones to vibrant shades, providing a diverse palette for lipstick formulation. The extraction methods employed for obtaining natural pigments vary depending on the source material. Techniques such as solvent extraction, maceration, and steam distillation are commonly used. Optimizing extraction parameters, such as solvent type, extraction time, and temperature, is essential to obtain high-quality pigments. Formulating herbal lipsticks involves blending the extracted pigments with a base formulation consisting of natural waxes, oils, and butter. The choice of base ingredients impacts the texture, moisturization, and longevity of the lipstick. Additionally, natural additives like botanical extracts, vitamins, and essential oils can be incorporated to enhance the functional properties of the product. The evaluation of herbal lipsticks includes various aspects such as colour stability, texture, sensory attributes, and potential health benefits. Stability testing involves assessing colour changes, texture alterations, and overall product integrity over time. Sensory evaluations, including

Authors

R. Jothi Lakshmi

Associate Professor

Bharath Institute of Higher Education and Research

Chennai, India.

jothimohanraaj@gmail.com

M. Monica

B. Pharm IV Semester

Bharath Institute of Higher Education and Research

Chennai, India.

P. Pooja

B. Pharm IV Semester

Bharath Institute of Higher Education and Research

Chennai, India.

G. Asma Begum

B. Pharm IV Semester

Bharath Institute of Higher Education and Research, Chennai, India.

D. Anushya

B. Pharm IV Semester

Bharath Institute of Higher Education and Research

Chennai, India.

Dr. R. Srinivasan

Dean & Professor

Bharath Institute of Higher Education and Research

Chennai, India.

consumer panels and expert assessments, determine factors like a colour payoff, texture feel, scent, and overall user experience. The utilization of different natural colouring pigments offers not only a safer and eco-friendly alternative to synthetic colorants but also the potential health benefits associated with bioactive compounds. Plant-based pigments are often rich in antioxidants, vitamins, and minerals, which may provide nourishment and protection to the lips. Further research is warranted to explore the potential synergistic effects of combining different natural colouring pigments, optimize formulation techniques, and assess the long-term stability and safety of herbal lipsticks. The development of herbal lipsticks from diverse natural pigments showcases the potential of nature-inspired cosmetics and offers consumers a sustainable and health-conscious option for lip colour products.

Keywords: Herbal Lipstick, Natural Colouring Pigments.

I. INTRODUCTION

Herbal cosmetics have gained immense popularity in recent years due to the increasing consumer demand for natural, safe, and sustainable beauty products. These cosmetics are formulated using plant-based ingredients, such as herbs, botanical extracts, essential oils, and natural pigments, to provide a holistic approach to skincare and beauty. One of the key products in the realm of herbal cosmetics is herbal lipstick. Traditional lipsticks often contain synthetic colorants, preservatives, and other potentially harmful chemicals. In contrast, herbal lipsticks utilize natural colouring pigments derived from plant sources, offering a safer and more eco-friendly alternative. Herbal lipsticks are formulated to enhance the natural beauty of the lips while providing nourishment and care. The use of plant-based ingredients not only imparts vibrant and attractive colors but also offers potential therapeutic properties. These lipsticks often contain botanical extracts, oils, and butter that provide hydration, protection, and antioxidant benefits to the delicate skin of the lips. The appeal of herbal lipsticks extends beyond their natural ingredients. Many consumers are increasingly conscious of the environmental impact of conventional cosmetics. By opting for herbal lipsticks, individuals can reduce their carbon footprint and contribute to sustainable practices, as these products are often produced using environmentally friendly methods and packaging. Moreover, herbal lipsticks cater to those with sensitive skin or allergies, as they are free from common allergens and irritants found in synthetic formulations. These lipsticks are generally formulated without harsh chemicals, parabens, sulphates, and artificial fragrances, making them suitable for individuals with skin sensitivities. The market for herbal lipsticks continues to expand, with a growing number of brands offering a diverse range of shades and formulations to cater to different preferences and skin tones. As the demand for natural and organic cosmetics increases, the development and innovation of herbal lipsticks are expected to flourish. In this context, this review aims to explore the formulation and evaluation of herbal lipsticks, with a particular focus on the utilization of natural coloring pigments. By harnessing the power of plants and embracing nature's bounty, herbal lipsticks provide a compelling option for those seeking beauty products that align with their values of sustainability, safety, and overall well-being.

II. THE IDEAL CHARACTERISTICS OF LIPSTICK CAN VARY BASED ON INDIVIDUAL PREFERENCES AND NEEDS

However, there are several key attributes that are generally desired in high-quality lipstick:

- 1. Pigmentation:** A good lipstick should have rich and vibrant pigmentation, providing intense color payoff with just one or two swipes. The color should be true to what is seen in the product packaging or swatches.
- 2. Texture and Application:** The texture of lipstick plays a crucial role in its ease of application. It should glide smoothly and evenly onto the lips without tugging or dragging. Ideally, it should have a creamy and lightweight consistency, allowing for effortless and precise application.
- 3. Longevity:** Long-lasting wear is a desirable characteristic in lipstick. It should be able to withstand normal daily activities, such as eating and drinking, without significant fading or smudging. A lipstick with good longevity minimizes the need for frequent touch-ups.

4. **Comfort and Hydration:** Lips can often become dry or chapped, especially with prolonged lipstick wear. An ideal lipstick should provide a comfortable and moisturizing experience, keeping the lips hydrated and preventing them from feeling dry or tight.
5. **Transfer Resistance:** A lipstick that minimizes transfer onto cups, utensils, or other surfaces is often preferred. While some transfer is inevitable, a lipstick with good transfer resistance helps maintain the color on the lips and reduces the need for frequent reapplication.
6. **Smudge and Feathering Resistance:** Lipstick should ideally stay in place without smudging or feathering outside the lip line. This helps maintain a crisp and well-defined lip shape throughout the day.
7. **Versatility:** A versatile lipstick is one that can be easily layered, blended, or mixed with other shades to create various looks. This allows for customization and flexibility in achieving different lip color variations and effects.
8. **Packaging and Presentation:** While not directly affecting the performance of the lipstick, attractive and functional packaging is often appreciated. A well-designed lipstick tube or container that is sturdy, easy to open, and allows for precise application can enhance the overall user experience.

Ultimately, the ideal characteristics of lipstick can vary depending on personal preferences, occasions, and desired effects. Some individuals may prioritize long wear, while others may focus on comfort or specific color ranges. Finding a lipstick that aligns with individual needs and preferences is key to achieving a satisfying and enjoyable lipstick experience.

Lipstick has been a popular cosmetic product for centuries, and it offers several advantages that make it a staple in many people's makeup routines. Here are some of the key advantages of wearing lipstick:

- **Enhances Appearance:** Lipstick can instantly enhance the appearance of the face. By adding color and definition to the lips, it brings attention to one of the most noticeable features of the face and can make the overall look more polished and put-together.
- **Boosts Confidence:** Wearing lipstick can boost a person's confidence and self-esteem. It can make individuals feel more attractive, empowered, and ready to take on the world.
- **Variety of Colors and Finishes:** Lipsticks come in a wide range of colors and finishes, from subtle nudes and pinks to bold reds and purples. This variety allows people to express their personality and style through their lipstick choice.
- **Complements Different Skin Tones:** Lipstick is versatile and can complement various skin tones. With the right shade selection, it can enhance a person's natural beauty and flatter their complexion.

- **Defines Lips:** Lipstick helps define the shape of the lips, making them appear fuller and more prominent. This is particularly beneficial for those with thin or uneven lips.
- **Long-Lasting:** Many lipsticks are formulated to be long-lasting, which means they stay on the lips for an extended period without smudging or fading. This is especially useful for busy individuals who may not have time for frequent touch-ups.
- **Hydration and Nourishment:** Some lipsticks contain moisturizing ingredients like oils and butter, which help keep the lips hydrated and nourished. This prevents dryness and chapping, especially in harsh weather conditions.
- **Protects Lips:** Lipsticks with SPF (sun protection factor) can provide a degree of protection against the harmful effects of the sun's UV rays on the delicate skin of the lips.
- **Easy Application:** Lipstick is typically easy to apply and can be carried in a small, portable container. It requires minimal effort to achieve a noticeable and impactful makeup look.
- **Versatility:** Lipstick can be used for more than just coloring the lips. Some people use lipstick as a cream blush or eye shadow, allowing for creative makeup experimentation.

III. CHARACTERISTICS OF GOOD LIPSTICKS



Figure 1: Organic or Natural Lipsticks

The following are the ideal conditions for excellent lipstick;

1. It should provide a long-lasting shine to the lips.
2. It must be able to keep the colour's intensity.
3. It should have thixotropic characteristics
4. It should not be irritating or poisonous
5. Throughout the storage term, it should retain the requisite plasticity.
6. It must not be gritty.
7. It must be both chemically as well as physically stable

IV. PREPARATION OF LIPSTICK

1. Principle: The use of a cosmetic substance to improve the look of the lips is central to the lipstick principle. Lipstick is a cosmetic item that goes on to the lips to enhance color, definition, and texture, making them more visually pleasing.

2. Requirements

- Heat-safe glass bowl and saucepan or double boiler
- Stirring stick or spoon
- Dropper or pipette

3. Ingredients

- (1 tablespoon) beeswax or carnauba wax
- (1 spoonful) Shea or cocoa butter
- (1 tablespoon) Carrier oil (e.g., coconut oil or sweet almond oil)
- (as needed) colouring powder or beauty glitter (colour of your choosing)
- (a few drops) aromatic oils (optional for aroma)
- lipstick tubes or tiny containers that are no longer in use

4. Procedure

- Maintain a clean and sanitary work environment. Before using containers and equipment, sterilize them.
- Melt the beeswax (or carnauba wax) and shea butter (or cocoa butter) in a double boiler or a heat-safe glass dish set over a pot of boiling water. Gently stir until totally melted.
- Once the wax and butter have melted, stir in the container of oil of your choice. Continue to whisk until everything is fully blended.
- Gradually add the colouring powder or cosmetic mica to the mixture, mixing well after each addition, until the desired hue is achieved. To get the desired colour intensity, modify the amount of pigment.
- If you want to give your lipstick a nice scent, add a few drops of essential oil to the formula. Stir to properly disperse the scent.
- Fill unused lipstick tubes or tiny containers with the liquefied lipstick mixture using the pipette or dropper. Fill each tube/container all the way to the top.
- Allow the lipstick tubes/containers to harden at room temperature. You can also put them in a fridge to chill faster.
- Label the lipsticks with the color name (if wanted) and the date of preparation after they have completely hardened. Keep cool and dry, away from direct sunlight.

V. BENEFITS OF NATURAL LIPSTICKS

Natural lipsticks, also known as naturally derived or clean lipsticks, are made with natural and plant-based materials, eliminating the toxic chemicals present in traditional lipsticks. The following are some of the advantages of wearing natural lipsticks:

1. Free from Harmful Chemicals: Natural lipsticks are free of harmful chemicals such as phthalates, parabens, lead, and artificial colours, which are typically found in

conventional lipsticks. Natural lipsticks are regarded safer for both the consumer and the environment because they do not include these toxic ingredients.

2. **Gentle on the Lips:** Organic lipsticks with natural components are typically softer on the sensitive skin of the lips. They may assist to lessen the risk of discomfort, dryness, or allergic responses that certain people may experience when using traditional lip balms.
3. **Nourishing and Moisturizing:** Many natural lipsticks contain components such as plant oils (e.g., jojoba oil, coconut oil), shea butter, and vitamin E, which nourish and moisturize the lips. This will keep your lips soft, smooth, and supple.
4. **Environmentally Friendly:** Natural lipsticks are commonly packaged in eco-friendly packaging, and their manufacturing procedures have a minimal environmental effect. Furthermore, several natural lipstick companies prioritize sustainability and ethical ingredient sourcing.
5. **Natural Pigments:** The colours of natural lipsticks are derived from natural pigments taken from sources such as minerals, fruits, vegetables, and flowers. This allows for a wide spectrum of colours without the use of synthetic dyes.

Common Natural Colouring Agents

Natural Colouring Agent	Source	Colour
Beetroot Powder	Beetroot (Red Beet) extraction	Pink or red
Powdered Alkanet Root	Originated from Alkanet Roots	Purplish-Red
Extract of Annatto	Obtainable from Annatto Seeds	Orange or yellow
Titanium Dioxide (TiO ₂)	Mineral Found in Nature	White(used to brighten colours)
Powdered Turmeric	Turmeric Rhizomes Extracted	Orange or yellow

VI. EXTRACTION OF NATURAL COLOURING AGENTS

1. From Beetroot Powder



Figure 2: Beetroot Powder

- **Ingredients**
 - Water
 - Fresh beetroots
 - Use cheesecloth or fine mesh sieve

- **Procedure**
 - Remove any dirt and debris from the beetroots by washing and peeling them.
 - Cut the beetroot into tiny cubes.
 - Put the diced beets in a saucepan with enough water to cover.
 - Bring the water to a boil, then lower to a low heat and simmer the beets for 15-20 minutes, or until soft and the colour has released.
 - Eliminate the saucepan from the heat and set aside to cool.
 - To separate the beetroot colour from the pulp, strain the liquid using a cheesecloth or fine mesh strainer.
 - Take the strained liquid, which now includes the beetroot colour, and set it aside.
 - This liquid may be used immediately as an organic lipstick colorant or reduced further by heating on a low flame to concentrate the colour.

2. From Powdered Turmeric



Figure 3: Turmeric Powder

- **Ingredients**
 - Powdered turmeric
 - Carrier oil (such as coconut or almond oil)

- **Procedure**
 - To make a smooth paste, combine a tiny amount of powdered turmeric with your preferred carrier oil.
 - To acquire the required color intensity, adjust the quantity of turmeric powder.
 - The combination is now complete and ready to use as an organic lipstick colorant.

3. From Powdered Alkanet Root



Figure 4: Alkanet Powder

- **Ingredients**
 - Powdered alkanet root
 - Carrier oil (for example, olive oil or jojoba oil)
- **Procedure**
 - To make a smooth combination, combine alkanet powder from roots and a carrier oil.
 - Allow the mixture to remain for a few days so the colour can absorb into the oil.
 - Remove any solid particles from the oil, leaving only the alkanet root-infused oil.
 - This infused oil may be used to colour homemade lipstick naturally.

VII. ANALYSIS OF LIPSTICK

Lipstick evaluation is evaluating many areas of the product in order to evaluate its overall superiority, efficacy, and safety. Here are some important considerations to consider while selecting lipstick:

1. **Colour and Pigmentation:** Examine the lipstick's colour payoff and pigmentation. On the lips, look for uniform and vivid colour dispersion. Consider the available colours and if they fit the intended look.
2. **Texture and Application:** Examine the lipstick's texture. It ought to be smooth and simple to apply, but not too dry or oily. The lipstick should slide on smoothly and evenly to cover the lips.
3. **Longevity and Wear:** Consider the lipstick's staying power. A decent lipstick should last for a prolonged amount of time without fading or smearing. Determine whether the lipstick has to be reapplied frequently during the day.
4. **Comfort and Feel:** Take into account how the color of your lipstick feels on your lips. It should be easy to put on and not trigger any irritation or pain. Examine whether it moisturizes or dries the lips.

5. **Finish:** Look at the lipstick's finish, which might be dull, satin, glossy, or sparkly. Check to see if the finish matches your particular tastes and the desired aesthetic.
6. **Package:** Examine the lipstick's package. It should be strong, useful, and visually appealing. The container should keep the lipstick from dried out and make application simple.
7. **Ingredients and Safety:** Check the ingredients list to check that no dangerous compounds, such as parabens, phthalates, or heavy metals, are present. Look for substances that are natural and clean, and that are safe to use on the lips.
8. **Smell and Taste:** Consider the aroma and taste of the lipstick. A nice lipstick should have a pleasant aroma or be fragrance-free. If mistakenly consumed, it should not have a disagreeable flavor.
9. **Price and Value:** Consider the lipstick's price in proportion to its superior performance, quality, and ingredients. Think about if the lipstick is a worthwhile buy.
10. **Brand Reputation:** Investigate the company's track record and feedback from consumers to acquire insight into overall product satisfaction and the brand's dedication to quality.

VIII. DEFECTS IN THE FORMULATION OF LIPSTICK

Defects in lipstick formulation can cause a variety of problems with the product's performance, aesthetics, and safety. Here are some examples of typical flaws in lipstick formulations:

1. **Uneven Colour or Patchiness:** When pigments or other elements in the product's composition are not effectively combined or disseminated, uneven colour dispersion on the lips might develop. This might result in patchiness and inconsistency in application.
2. **Feathering and Bleeding:** Feathering and bleeding occur when lipstick goes beyond the lip boundary, resulting in a sloppy and undefined appearance. This problem might occur owing to a shortage of emollients or insufficient lipstick adherence to the lips.
3. **Dry and Chalky Texture:** Lipsticks with a dry and chalky feel can be difficult to wear and may highlight lip wrinkles and fissures. This flaw might be caused by a lack of moisturizing substances or an overabundance of powdered components.
4. **Grittiness:** Grittiness in lipstick can arise when pigments or other solid materials are not properly milled, resulting in an uneven and unpleasant texture on the lips.
5. **Poor Longevity:** Lipsticks that fade or wear off rapidly are regarded to have a low lifespan. This may be due to the lack of long-wearing ingredients or inadequate adherence to the lips.

- 6. Unpleasant Taste or scent:** Lipsticks that have an unpleasant flavour or scent might turn customers off. This flaw can be produced by the existence of particular chemicals or incorrect scent management.

IX. CONCLUSION

Finally, the natural composition of lipstick has various advantages, making it an appealing choice for many customers. Natural lipsticks eliminate toxic chemicals commonly found in traditional cosmetics by employing based on plants and clean ingredients, making them softer on the lips and less prone to cause inflammation or allergies. Furthermore, natural lipsticks frequently contain nutritious and moisturizing components such as plant oils and butters, which provide moisture and softness to the lips.

Overall, natural lipstick formulation corresponds to the rising desire for safer and more ecologically aware cosmetic products. It allows customers to improve their lips with natural and sustainable components while avoiding the hazards linked with synthetic chemicals. Natural lipsticks, when correctly developed and made, may provide a pleasant and delightful cosmetic experience, resulting in healthier, more attractive lips for people who choose to adopt this eco-friendly and conscientious approach to cosmetics.

REFERENCES

- [1] Acharya Deepak, Shrivastava Anshu; Indigenous Herbal Medicine, Trib4(3): 139-44.all Medicine, Tribal Formulation and Traditional Herbal Practices; Avishkar Publisher Distributor, Jaipur, India; 2008:421.
- [2] Deshmukh S, M Chavan, Sutar M, Singh S.; Preparation and evaluation of natural lipstick from bixaorenella seeds.; International Journal of Pharma and Biosciences.2013.
- [3] Rajesh Kumar Nema, Kamal Singh Rathore, BAL Krishna Dubey;Text of cosmetics. 1stEd. New Delhi (India): CBS Publishers & Distributors; 2009.p.69-81.
- [4] Avinash M D, Hari A M, Pradeep N S. Herbal lipstick formulation. A new apporoach. International Journal of Research in Ayurveda & Pharmacy.2011; 2(6):1795-97.
- [5] Kadian S S, Sharma A.; Stability and application of crude beetroot extracts in different food products. International Journal of Biology, Pharmacy and AlliedSciences.2013;2(3):693-698.
- [6] Kadu M, Dr Vishwasrao S, Dr Singh S; Review on natural lip balm International Journal of Research in cosmetic Science.; 2015;5(1):1-7.
- [7] Chattopadhyay PK. (2005). Herbal Cosmetics and Ayurvedic Medicines, National institute of Industrial Research. 2005; 1st ed.: pp. 45-50.
- [8] Gediya SK, Mistry RB, Patel UK, Blessy M, Jain HN. (2011). Herbal plants: used as cosmetics. J Nat Prod Plant Resour. 2011; 1: 24-32.
- [9] 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.
- [10] Kurthika S V, Ram S S, Ahmed S A, Sadiq S, Mallick S D, Sree T R.; Formulation and evaluation of natural lipstick from colored pigments of beta vulgaris taproot. Research reviews: Journal of Pharmacy and Pharmaceutical Scirnces.2014;3(3):65-71.
- [11] Dr Kasture, Gokhale S B, Parakh S R, Hasan S A. Textbook of practical pharmaceutics.16th ed.Pune (India):NiraliPrakashan, 2008; 33-35
- [12] Mishra P, Dwivedi S. Formulation and evaluation of lipstick containing herbal ingredient. Asian Journal of Medical and pharmaceutical Researches.2012; 2 (3):58-60.
- [13] 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.
- [14] 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.

A REVIEW OF HERBAL LIPSTICK FROM DIFFERENT NATURAL COLOURING PIGMENTS

- [15] Swati D, Manisha S, Sonia S, Pavankumar K M, Dhiraj P, Ganesh N. Formulation and evaluation of natural lipstick prepared from bixaorellana seeds and beta vulgaris root extract and the comparative study International Journal of Pharmacy and Pharmaceutical sciences.2013;5(4):68- 70.
- [16] Suganya K, Preethi PS, Suganya M, Usha Raja Nanthini A. (2016). Natural Pigments in Cosmetics - Past to Present. International Journal of Pharmaceutical Sciences and Business Management, 4(6): 7-14.