



INNOVATIVE FORMULATION OF LIQUID LIPSTICK USING HERBAL PIGMENTS

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Abstract : As most of women today prefer natural solutions over chemical-based ones for their personal care, herbal products are growing in popularity. As they don't include artificial chemicals and typically have less negative effects than traditional cosmetics. This research studies about the formulation of liquid lipstick using natural pigments. Liquid lipstick not only nourish the lips but also enhance lips by adding color on it and decorating them making them attractive. Globally, there is an increasing demand for herbal cosmetics. As herbal products gain popularity in daily routines, more people are using them. Many people are preferring natural cures over conventional ones as a result of the increased emphasis on leading towards herbal cosmetics. This formulation is of water based liquid lipstick consisting gums, humectants, emollients, alcohol, preservatives and natural pigments such as coffee extract and cocoa powder, hibiscus flower petal powder.

(Keywords: Herbal Products, Traditional Cosmetics, Liquid Lipstick, Natural Pigments)

I. INTRODUCTION

LIPSTICK IS COSMETIC PREPARATION USED TO COLOR THE LIP AND PROTECT LIPS FROM EXTERNAL ENVIRONMENT. COLORING LIPS IN AN ANCIENT PRACTICE DATE BACK TO PREHISTORIC PERIOD. NOW-A-DAYS THE USE OF HERBAL PRODUCT HAS INCREASED AND CHOICE OF SHADES OF COLORS, TEXTURES, LUSTER, 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 LATEST DEMAND OF THE WOMEN. THE DYES THAT CONTRIBUTE TO THE COLOR OF THE LIPSTICK ARE VERY HARMFUL TO HUMANS ON CONSUMPTION. COAL TARS ARE THE BASIC INGREDIENTS FROM WHICH SYNTHETIC DYES ARE FORMED CAN CAUSE ALLERGY, NAUSEA, DERMATITIS, AND DRYING OF THE LIPS. IN A MORE SEVERE FORM THEY CAN BE CARCINOGENIC AND EVEN FATAL. UNLIKE CONVENTIONAL LIPSTICKS THAT MAY CONTAIN SYNTHETIC CHEMICALS, HERBAL FORMULAS ARE MADE WITH PLANT-BASED INGREDIENTS THAT ARE GENTLE ON THE LIPS, MAKING THEM IDEAL FOR PEOPLE HAVING INTEREST FOR HERBAL COSMETICS. THE NATURAL FORMULATION ENSURES A SMOOTH, NON-STICKY TEXTURE THAT FEELS LIGHT ON THE LIPS, ALLOWING YOU TO WEAR IT ALL DAY WITHOUT DISCOMFORT. OFTEN MADE WITH SUSTAINABLY SOURCED INGREDIENTS, HERBAL LIQUID LIPSTICKS ARE USUALLY CRUELTY-FREE, TOXIN-FREE, AND ENVIRONMENTALLY FRIENDLY, MAKING THEM A GUILT-FREE BEAUTY OPTION.

II. THIS STUDY FOCUSES ON TRENDY LIQUID LIPSTICK FORMULATION PREPARED BY USING NATURAL PIGMENTS AND NON TOXIC INGREDIENTS THAT ARE NOT HARMFUL, PROTECTS THE SKIN AS WELL AS ADDS COLOR ON OUR LIPS

NATURAL PIGMENTS

1. COFFEE EXTRACT



Figure .1Coffee Powder

(Source : Picture clicked in Chemistry lab at Sandip University)

- 1) Natural nude and earthy shade : coffee extract gives lipstick an warm and earthy shade that gives lips an rich natural appearance without use of artificial dyes and toxic pigments
- 2) Lipcare with antioxidants benefits : coffee is rich in antioxidants and keeps lips nourished as well as healthy while giving them protection from external damage
- 3) Organic Exfoliation for Silky Lips: Coffee powder's fine texture acts as a gentle exfoliator, gradually removing dry skin to reveal softer, smoother lips.
- 4) A Delightful Coffee Scent : This is a bonus if you enjoy the aroma of coffee! Applying lipstick can become a more pleasurable, sensual experience and there is no need to add other additives to enhance the fragrance of formulation

2. COCOA POWDER



Figure .2 Cocoa Powder

(Source : photo clicked in chemistry lab Sandip University)

Using cocoa powder in liquid lipstick comes with some great perks:

- 1) Beautiful Natural Tint : Gives the lipstick a warm, chocolatey hue that looks rich and flattering.
- 2) Lip-Nourishing Antioxidants: Helps protect lips from damage while keeping them soft and healthy.
- 3) Hydrating and Comforting : Naturally helps prevent dryness, so your lips stay smooth and moisturized.
- 4) Silky-Smooth Application : Enhances the texture of the lipstick, making it glide on effortlessly.
- 5) Delicious Cocoa Scent : Adds a subtle chocolate aroma for a little extra indulgence while you wear it.

3. HIBISCUS FLOWER PETALS POWDER



Figure.3 Hibiscus Flower Petals Powder (Source : Google)

1) Totally Natural & Safe

It's plant-based and chemical-free, so it's gentle on the skin and perfect for people who prefer clean, green beauty.

2) Rich, Rosy Tint

Gives a beautiful pink to deep burgundy hue—great for lip tints, blushes, and even eyeshadows, depending on how concentrated it is.

3) Skin-Loving Antioxidants

Hibiscus is packed with antioxidants like anthocyanins that can help protect and nourish the skin while adding color.

4) No Synthetic Dyes or Irritants

Unlike artificial pigments, it's less likely to cause allergic reactions or irritation.

FORMULATION 1 : COCOA POWDER AND COFFEE EXTRACT SHADE TABLE 1 :-

INGREDIENTS	PERCENTAGE
DISTILLED WATER	5-10%
GLYCERINE	0-2%
HPMC	1-2%
SORBITOL	0.1-0.5%
POLYVINY PYRROLIDONE	0.5-1%
TRITANOLAMINE	0.1-0.5%
POLYETHYLENE GLYCOL	0.5-1%
ISOPROPYL MYRISTATE	1-2%
POLYSORBATE 20	0.2-0.5%
ISOPROPYL ALCOHOL	2- 3%
CARBOPOL	0.5-0.20%
COFFEE EXTRACT	1-4%
COCOA POWDER	1-2%
PRESERVATIVE	q.s

FORMULATION 2 : HIBISCUS FLOWER PETAL POWDER

SHADE TABLE 2 :-

INGREDIENTS	PERCENTAGE
DISTILLED WATER	5-10%
GLYCERINE	0-2%
HPMC	1-2%
SORBITOL	0.1-0.5%
POLYVINY PYRROLIDONE	0.5-1%
TRIETANOLAMINE	0.1-0.5%
POLYETHYLENE GLYCOL	0.5-1%
ISOPROPYL MYRISTATE	1-2%
POLYSORBATE 20	0.2-0.5%
ISOPROPYL ALCOHOL	2- 3%
CARBOPOL	0.5-0.20%
HIBISCUS FLOWER PETAL POWDER	1-4%
PRESERVATIVE	q.s
CITRIC ACID	0.1-1%

PROCEDURE

- 1) Carbopol and HPMC was left to swell with water for 1 hr .
- 2) Then distilled water was weighed and added into a beaker and putted over hot plate until its temperature reaches 60 degree and sorbitol , glycerine was added to it .
- 3) Then HPMC , PVP and TEA was added with continuous mixing with the help of mechanical stirrer (A) .
- 4) In another beaker isopropyl myristate , polysorbate 20, and TEA was added and mixed properly (B).
- 5) Then mixture B was added into mixture A with continuous stirring and carbopol was also being incorporated with this final base mixture .
- 6) In another beaker mixture of isopropyl alcohol , pigments and preservative was prepared . and this mixture was added at final stage .
- 7) 7) As two pigment lipstick was prepared
 - A) 3 g cocoa powder was added with 3 ml coffee extract (obtained by adding 2 g coffee powder in 18 ml water in glass tube and kept in water bath until dark extract was obtained) , In lipstick after the final base was formulated .
 - B) In second Shade hibiscus flower petals dried powder was added at end after the base was formulated.
- 8) Both pigments were added and formulation was allowed to stir properly to blend the pigment properly into the formulation.
- 9) Then prepared liquid lipstick was transferred into a proper container of lipstick .



Figure 4: Final Product



Figure 5 .Lipstick Shades



Figure.6 Cocoa Powder & Coffee Extract



Figure.7 Hibiscus Petal Powder

CONCLUSION

Herbal lipstick was prepared and formulated by using this formulation , with the help of natural pigments that are Coffee extract and cocoa powder and hibiscus flower petal powder. All these ingredients mentioned above work together to create stable , pigmented , and moisturizing liquid lipstick that is Nontoxic ,non harmful and chemical free and can protect our lips as well as keep our lips healthy. This sustainable green formulation has meet basic ideal properties of liquid lipstick & is an safer option for lipstick in comparison

REFERENCES

- 1)Pratikshavishnu kale."FORMULATION AND DEVELOPMENT OF HERBAL PRODUCTS CONTAINING HIBISCUS ROSA-SINENSIS". IJCRT. Volume 10, Issue 7 July 2022,page no 86-113.
- 2) Formulation and Evaluation of Lip Balm Incorporating Various Herbal Entities June 2024 IJRTI | Volume 9, Issue 6 | ISSN: 2456-3315
- 3) RiyaPati,et al."Formulation and Evaluation of Lip balm Prepared Using Various Herbal Entities".May 2023, IJIRT, Volume 9 Issue 12, page no775-779.
- 4) Pooja M, Sumeet D. Formulation and Evaluation of Lipstick Containing Herbal Ingredients. Asian Journal of Medical and Pharmaceutical Researches. 2012; 2(3):58-60.
- 5) Swati Deshmukh, Manisha Chavan, Manisha Sutar Sonia Singh, Preparation and evaluation of medicated lipstick from Bixaorellana seeds International Journal of pharma and bio sciences. 2013; 4 (3):139-144
- 6)Mamatha Tirunagari,Nagadivya Nerella et.al "Formulation and evaluation of medicated lipstick using natural coloring agent A&V Publication
- 7) Formulation and Evaluation of Medicated Lipstick for the Treatment of Chapped Lips Using Beta Vulgaris as Natural Colouring Agent” Volume 8, Issue 4 July-Aug 2023, pp: 1424-1434 www.ijprajournal.com ISSN: 2249-7781
- 8)https://www.researchgate.net/publication/356161880_Formulation_and_Evaluation_of_Herbal_Lipstick_from_Natural_Edible_Coloring_Matter
- 9) Deshmukh S, Chavan M, Sutar M, Singh S. (2013).Preparation and Evaluation of Natural Lipsticks from BixaOrellana Seeds. International Journal of Pharma and BioN. (2014). Isolation and Quantification of Sciences. 2013; 4(3): 139-144.
- 10) Sainath M. (2016). Formulation and Evaluation of Herbal Lipstic. International Journal of Advanced Research in Medical & Pharmaceutical Sciences (IJARMPS). 2016; 1(1): 14-19.
- 11) Avinash M D, Hari A M, Pradeep N S. Herbal lipstick formulation: A new approach.International Journal of Research in Ayurveda & Pharmacy, 2011; 2(6): 1795-97.
- 12) Diah Indah Kumala Sari, Fransisca Dita Mayangsari, Elasari Dwi Pratiwi | Optimization of the Mixing of Hibiscus Flower (Hibiscus rose sinensis) Extract as a Lip Balm Color with Variations in Concentration

