



FORMULATION AND EVALUATION OF HERBAL LIPSTICK

Sanjna Sahare², Ankita², Prerana Sahu^{2*}, Harish Sharma¹, Gyanesh Kumar Sahu¹

1. Rungta Institute of Pharmaceutical Sciences & Research, Kohka, Kurud, Bhilai

2. Rungta Institute of Pharmaceutical Sciences, Kohka, Kurud, Bhilai

ABSTRACT: -

Lipstick is a cosmetic product used to apply coloration and texture to lips, with red being associated with sensuality and women's independence. Nowadays, herbal lipsticks are gaining popularity due to their safety and potential for allergic reactions. The history of lipstick dates back to ancient Sumerian and Indus Valley people using gemstones to decorate their faces, while Egyptians wore lipstick to show social status rather than gender. Chinese beeswax was used over 1,000 years ago to protect the delicate skin of the lips. In the 16th century, lip coloring gained popularity in England, with Elizabeth II's bright red lips and a stark white face becoming fashionable. In the 19th century, lipstick was colored with carmine dye, extracted from cochineal insects native to Mexico and Central America. By 1902, fashionable American women began to consider lipstick acceptable. Herbal ingredients for lipstick include beeswax, a natural substance obtained from bee hives, which contains vitamins A, B, C, and E, as well as a natural fragrance like vanillin. Beetroot extract is used as a coloring agent, providing hydrating and nourishing properties, making lips super soft and smooth, and eliminating pigmented ones. Oils like Castor Oil, Mineral Oil, Olive Oil, and Lanolin are added for smooth and moisturized lips. Good lipstick should be non-irritant, provide long-lasting moisture, have a pleasant odor and taste, be non-toxic, and not cause allergic reactions. It should also be chemically and physically stable for a long period of time. Herbal lipsticks are safe for use, contain natural nutrients, keep lips healthy, have fewer side effects, and are suitable for everyone. Prepared herbal Lipstick evaluated for different parameters like pH, Spreadability, Melting Point, and Hardness test. The result show the product has correct pH i.e. in between 5.3-5.5, the spreadability, Melting Point and Hardness also have appropriate result. This shows that the prepared formulation is stable.

Keywords: Lipstick, Herbal cosmetics, Beetroot

1. INTRODUCTION

Lipstick is a cosmetic product used to apply coloration and texture to Lips.

The color of Lipstick has aesthetic and cultural significance. Red Lipstick has historically been associated with sensuality or women's Independence.

These days, people use to prefer herbal products rather than synthetic products are safe to use. From such herbal cosmetic, herbal lipstick, are gaining popularity. Lipsticks are the common cosmetic product which is used by majority of the women. As synthetic Coloring agent which may used to formulate the lipstick may cause allergic reaction and were found to be carcinogenic in nature. So, our aim of formulate and evaluate herbal

lipstick using Beetroot extract as coloring agent. Along with different natural ingredient such as Bees wax, Paraffin wax, Castor oil, Vaniline, were used to formulate herbal lipstick.(1)

1.1 HISTORY: -

Early History-

Ancient Sumerian and Indus Vally Men and Women firstly invent and were Lipstick Bout 5,000 years ago. They use to crushed gemstones and used them to decorate their faces, mainly on lips and around the eyes. (2)

Ancient Egyptians wore lipstick to show social status rather than gender. They extracted the red dyes from focus- algin, iodine and some bromine mannite which may result in serious illness (3)

The Chinese uses beeswax to make lipstick more than 1,000 years ago to protect the delicate skin of the lips During the Tangdynasty (618-907 CE), scented oils were enticing factor. In Australi Abonginal Girls would paint their mouth red with ochre for puberty rituals. (4)

United Kingdom ans France

During 16th century in England lip colouring started to gain some popularity During the time of Elizabeth bright red lips and a stark White face becomes Fashionable. In 19th-Century, the obvious use of cosmetics was not considered acceptable in Britain for respectable women and it was associated with only marginalized groups, such as actors and prostitutes. (5)

In the 19th Century, lipstick was coloured with carmine dye. Carmine dye was extracted from cochineal, scale insects native to Mexico ans Central America which live on cactus plants. Cochineal insect Produce Carminic acid which form 17% - 24% of the weight of the dried insects can be extracted from insect body and eggs which is mixed with aluminium or calcium salts it makes caminie dye(6). By 1902 fashionable American women had come to consider lipstick acceptable, through an article to consider in the New York Times advised on the need to apply it cautiously. (7)

1.2 MECHANISM OF LIPSTICK: -

A lipstick swivelling mechanism includes a cup having a cup body for holding a lipstick bullet nosepiece for containing the cup and guiding the movement of the cup. A spiral rotatably connected the nosepiece, having helical guiding grooves formed on the inner surface thereof and a screw received within the spiral and detachably connected to the cup. The screw has doublehelical protrusions, formed on the outer surface of the screw. The double-helical protrusions are received in and guided by the helical guiding grooves inside the spiral to make the screw and the cup move upward or downward when the spiral is rotated. (8)

1.3 HERBAL INGREDIENT OF LIPSTICK-

1.3.1 BASES-

Beeswax which is used as bases for lipstick are natural substance obtained from hives of bees. If contains different vitamins including Vit.A, B, C and E. It is not a vegar ingredient as it is produced by bees.

Beeswax is widely used in cosmetic products as it is an excellent emollient and has anti-inflammatory properties. It also give glossy look and smooth texture to the product. It protect the lips and provide moisture to it. As it is a natural substance, it doesn't cause any irritation and allergic reaction. (9)

1.3.2. PERFUME: -

As a **Perfume** or **fragrance** to the product, most commonly vaniline are used which is obtained naturally from seed pods of vaniline planifolia. It is used in lipstick, body lotions and other Personal Care Products due to its sweet and pleasant aroma. (10)

1.3.3. COLORING AGENT: -

To Provide color to the formulation many natural ingredients may use such as Beetroot, Saffron etc. **Beetroot** has many benefits in lip care such as hydrating and nourishing properties, make lips super soft and smooth, getting rid from pigmented lips etc. **Beetroot** works as a natural exfoliator for the skin which removes dead cells and give soft and pink lips.(11)

1.3.4. OIL: -

To get smooth and moisturize lips, Oils are added such as Castor Oil, Mineral Oil, Olive Oil, Lanolin etc. Castor Oil which are mostly used in Lipstick Formulation extracted naturally from Castor bean. Castor oil is rich in the monounsaturated fatty acid ricinoleic acid, a known humectant. Humectants helps to retain skin moisture. Castor Oil also have anti-inflammatory, Antibacterial and laxative proper (12)

1.4 IDEAL CHARACTERISTICS OF GOOD LIPSTICK: -

- It should be non-irritant.
- It should give moisture to the lips for long time.
- It should have pleasant odour and taste.
- It should be non-toxic.
- It should not cause any allergic reaction.
- It should be chemically and physically stable for long period of time.
- It should give smooth texture and glossy lips

1.5 ADVANTAGES OF HERBAL LIPSTICK: -

- It is safe for use.
- As it contains natural nutrient, it keeps lips healthy.
- They have fewer or no side effects.
- Suitable for everyone (13)

2. MATERIALS AND METHEDODOLOGY: -

2.1 INGREDIENTS: -

S.No.	Ingredient	Formulation 1 (F1)	Formulation 2(F2)	Formulation 3(F3)	Formulation 4(F4)
1	Bees Wax	16gm	14gm	16gm	12gm
2	Paraffin Wax	10gm	12gm	8gm	14gm

3	Lanolin	6gm	5gm	3gm	6gm
4	Castor Oil	8ml	10ml	12ml	8ml
5	Vanillin	Q.S	Q.S	Q.S	Q.S
6	Beetroot Extract	3ml	3ml	3ml	4ml
7	Titanium Dioxide	3gm	2gm	4gm	2gm



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Figure:1

2.2 METHEDODOLOGY: -



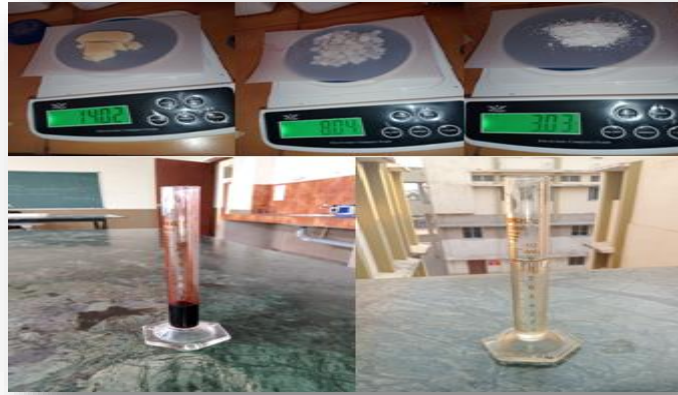


Fig: - 2 Weighing the materials



Fig:- 3 Melting



Fig: - 4 Add Beetroot juice and all dry ingredients





Fig:-5 Pour the formulation in mould



Fig:- 6 Final Product

3. EVALUATION PARAMETER: -

3.1 ORGANOLEPTIC PROPERTIES: -

Organoleptic properties are those characters that an individual experience via the senses including taste, sight, smell, and touch.

S.NO.		Formulation			
1	Organoleptic Properties	F1	F2	F3	F4
i.	Color	Light Pink	Light Pink	Light Pink	Light Pink
ii.	Odour	Sweet	Sweet	Sweet	Sweet
iii.	Shape	Cylindrical	Cylindrical	Cylindrical	Cylindrical
iv.	Taste	Sweet	Sweet	Sweet	Sweet
v.	Texture	Fine	Fine	Fine	Fine

3.2 pH: -

It is a measurement of how acidic or basic a substance is. The pH of Lipstick will may affect the colors of some of the pigment. The Natural pH of skin including lips is 5.5-5.6.



Fig:-7 pH test

S.No.	pH			
1	F1	F2	F3	F4
2	5.3	5.3	5.4	5.4

3.3 Spreadability: -

This test is used to determine the ability of lipstick consistency to spread on a surface.



Fig:-8 Spreadability test

S.No.	Spreadability			
1	F1	F2	F3	F4
2	5.5cm	5.5cm	5.5cm	5.5cm

3.4 Hardness Test: -

This test is performed to determine the hardness of Lipstick. For this Pfizer tester is use.



Fig :-9 Hardness test

S.No.	Hardness Test			
1	F1	F2	F3	F4
2	0.5	0.5	0.5	0.5

3.5 Melting Point: -

The Melting Point is the temperature at which the substance changes its state from solid to liquid. For the Standard form of Lipstick the melting point should not be lower than 60°C .



Fig :- 10 Melting Point

S.No.	Melting Point			
1	F1	F2	F3	F4
2	65°C	65°C	63°C	63°C

3.6 Stability: -

The determine the stability of Formulated product we should observe it for weeks or months. The ideal lipstick should need to be chemically and physically stable for long period of time.

3	Stability				
i	1 st Week	Stable	Stable	Stable	Stable
ii.	2 nd Week	Stable	Stable	Stable	Stable
iii.	3 rd Week	Stable	Stable	Stable	Stable
iv.	4 th Week	Stable	Stable	Stable	Stable

3. CONCLUSION: -

As lipsticks are widely used cosmetics but some of its chemical constituents may be harmful and cause damage to the lips. Therefore, nowadays people mainly refer to herbal products as this product is made from natural ingredients which doesn't cause any damage. Herbal lipstick is one of the safest cosmetics as we use herbal products for its formulation. From the above all observed evaluation parameters it is concluded that our herbal lipstick is safe for use and doesn't cause any irritation to the lips.

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