

FORMULATION AND EVALUATIONS OF HERBAL LIPSTICK**Drx. Sneha Yadav*, Dr. V. K. Redasani and K. J. Baid**

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ABSTRACT

They because it has become part of our society and fashion, cosmetics are extremely in demand since historical times till the day. Lipsticks are most commonly used to enhance lip appeal, and they also aid greatly in preserving health and happiness. For this intention and objective, an attempt was made to frame herbal lipsticks using colored natural, and the lipsticks were tested on their sensory examination, such as spreading, stiffness, shine and gloss, in order to achieve a good product. Such lipstick preparations contain natural ingredients such as carnauba wax, white bees wax oil of peppermint, oil of castor, oil of almond. Because of various adverse effects of the available synthetic preparation, the present work was designed to formulate a herbal lipstick with minimal to no side effects that will be used extensively by our society's women with great compensation and satisfaction.

KEYWORDS: Red Barrie, Blue Barrie, Herbal Lipstick, Cosmetics.

1. INTRODUCTION

Cosmetics include skin care creams, lotions, powders, eye and facial make-up, permanent waves, colored contact lenses, hair colors, hair sprays, and gels, deodorants, infant products, bath oils, bubble baths, bath salts, butters, and many other types of cosmetics in both developing and developed countries.^[1,2]

The world herbal is a symbol of safety in contrast to the synthetic one which has adverse effects on human health. Herbal preparations via ; herbal tablets , herbal tonics, herbal paste, herbal shampoo, herbal tonic, herbal paste, herbal sindhur, herbal contraceptives and herbal lipstick has become popular among the consumer herbal medicine represent the fastest

growing segment to heal the various ailment possibly, the herbal users desire to assume control over health.^[3,4]

The use of the drug has increased in the present days and a lot of improvements occur in the choice of stain texture colors, lipstick luster.^[5] It can be learned from the evidence that lipstick is being sold in hundreds of shades of colors to satisfy women's demand.^[6] Now it's time to stick to the use of herbal products and embrace a more natural way of life in the whole world for days.^[6]

Ideal characteristics of good lipstick

- It should be non- irritant.
- It should have required plasticity.
- It should nontoxic.
- That should be physically and chemically stable.
- It is not expected to dry up on board.
- It should be heavily particulate free.
- After application it can retain lip color for longer periods.
- This should offer sweating-free shiny and smooth appearance.
- It should look, smell and feel good.

It should not fuse or harden within acceptable climatic temperature variation.^[7]

2. Noxious lipstick issues

while lipstick has a colorful background and a specific market, it also suffers from some dangerous disadvantage. Recent research has found that the lipstick contains traces of lead and other heavy metals such as antimony, arsenic, cadmium that cause serious health problems and can be carcinogenic or even fatal in extreme form as it is based on human ingestion.^[9] Such lip care products cause some allergic reactions, the most severe being allergic touch cheilitis of the vermilion margin of the lip often spreading to the adjacent perioral area that may be acute or chronic.^[10]

2.1 Lead traces

A recent federal study showed that 400 shades of common lipstick contained trace amounts of lead which intensified a continuing dispute between regulators and consumer activists about how much lead is safe in cosmetics.^[11] According to tests by the Food and Drug Administration, five lipsticks manufactured by L'Oreal and Maybelline, operated by L'Oreal

USA, rated among the top 10 most contaminated of cosmetics.^[10] Two Cover Girl and two NARS lipsticks have landed in the top 10, much as Stargazer did one. In October 2007, a study by the US consumer group Campaign for Healthy Cosmetics found that 60 per cent of the lipsticks tested contained trace amounts of lead, particularly in red lipsticks. Lead rates ranged from 0.03 parts to 0.65 parts per million. One third of lead-containing lipsticks reached the mark of 0.1ppm limit set by the U.S food and drug administration for lead in candy.^[12]

2.2 Description of fruit

Red barrie: (*Rubus idaeus*)^[12,13,14]

Botanical name	Red raspberry, <i>Rubus Idaeus</i>
Taxonomy	The raspberry, bramble fruit of genus <i>rubus</i> belong to family <i>Rosaceae</i> .
Geographical area	The wild beery gathering remains a popular activity Europe and north American
Chemical constituent	Anthocyanin, flavonoids, stilbenoids, phenolic acid, tannin and lignans Ellagic acid, cyanidins, pelargonidins Folate, omega 3 fatty acid.
Medicinal uses	Antioxidant and anti- inflammatory. Obesity and Blood sugar benefits. Anti-cancer

• Blue Barrie: (*Rubus ulmifolius*)^[15,16]

Taxonomy	The blueberry fruit of genus belong to <i>vaccinium</i> and <i>cyanococcus</i> belong to family <i>Ericaceae</i> . n subfamily <i>vaccinoideae</i> genus <i>vaccinium</i>
Geographical area	<ul style="list-style-type: none"> North America and Europe region Atlantic Canada Northeastern united states
Chemical constituent	<ul style="list-style-type: none"> Anthocyanins, anthocyanidine (phenolic aglycone) Chlorogenic acid, flavonoids, alphalinolenic acid and vitamins.
Medicinal uses	<ul style="list-style-type: none"> Maintaining healthy bones Skin health Lowering blood pressure Managing diabetes

3. MATERIAL AND METHOD

3.1 Material

Sr.no	Material	Manufactured by
1	Red Raspberry (Red Barriers)	Magsa Moulde, Food Market
2	<i>Rubus Ulmifolius</i> (Blue Berry)	Magsa Moulde, Food Market
3	Bees Wax	Vedant Lab
4	Carnuba wax	Vedant Lab

5	Lanolin	Vedant Lab
6	Mentha Piperita (Peppermint Oil)	Dhanvantari Ayurveda
7	Prunus amygdalus Oil (Almond Oil)	Dhanvantari ayurved
8	Orange Essence	Dhanvantari ayurved
9	Vanilla Essence	Dhanvantari ayurved

3. 2 Method

Herbal lipstick formulation requires the basic manufacturing process such as,^[17]

- **Pigment premilling**

The first step involved in the formulation of herbal lipstick is pigment premilling where the agglomerates in the powder are broken down to give the lipstick a homogeneous smoothness and even colour.

- **Melting and mixing**

The next step involved is the melting and mixing stage, since waxes are solid at room temperature and can not be combined with other ingredients to make the waxes melted simple to make this process. Typically it can be combined with oil, and the pigment and other additives are added and blended to form a homogeneous substance to the melted foundation.

- **Molding**

Molding is the actual phase in which the molten lipstick is poured into metal or plastic mold, the mixture is poured when it is hot so it is helpful to harden and then removed with a slight pressure from the mole.

- **Flaming**

Flaming is the last stage in which the lipstick passes through the flame, is usually held and twisted in the flame for up to a second and then removed to prevent melting and losing shape to achieve a shiny finish and then put in the bottle. Different formulations are made from Test 1 to Test 5 to find the superior lipstick with colorant and oil as variable parameter.

Basic ingredient required

Sr. no.	Ingredients	% (w/w)
1	Bees wax	10
2	Caruba wax	10
3	Lanolin	15
4	Mentha Piperita (Peppermint Oil)	65
5	Prunus amygdalus Oil (Almond Oil)	65
6	Orange Essence	Adequate
7	Vanila Essence	Adequate

A cosmetic lip care should have the following criteria from a customer perspective:
attractive color Homogeneous color when applied

- Attractive colour
- Homogeneous colour when applied
- Pleasant smell and taste
- Easy to apply
- No staining or bleeding into fine line surrounding the lips
- Long lasting effect

3.3. Evaluations test

The quality control parameter used in efficient are

- Melting point
- PH
- Surface anomalies
- Solubility test
- Skin irritation test
- Color
- Microbiological test

1. Melting point

Apparatus: Flat Bottom Tube, Thermometer

Procedure: Place the lipstick in a flat bottom tube with protruded salve. Fix the thermometer through a cork, so that the thermometer bulb just touches the salve of the lipstick. Place this arrangement into a 1-liter beaker filled with water over the upper tip of the lipstick salve to a point one centimetre above. Place this arrangement into a 1-liter beaker filled with water over the upper tip of the lipstick salve to a point one centimetre above. Warm the water gradually while stirring so that temperature increases at a rate of no more than 2 ° C per minute. As the temperature increases to about 45 ° C, increase the temperature to 1 ° C per minute. Keep the lipstick salve continuously. Report when the temperature is in when the salve begins to bend and lose form.^[18]

2. PH test

The pH of herbal lipstick formulated was determined using pH paper^[19]

3. Surface anomalies

This is being examined to identify any surface defects, such as surface crystal formation, mold contamination, fungi etc.^[20]

4. Solubility test

The formulated herbal lipstick was dissolved to assess the solubility in various solvents.^[21]

5. Skin irritation test

The drug is spread over the skin for 10 min.^[22]

4. RESULT AND OBSERVATION

There has been enormous increase in women's use of cosmetics over the last few decades. The hazards caused by these chemicals, however, have recently come to the forefront. The goal of the present research formulating and evaluating herbal lipsticks was to formulate a lipstick using herbal ingredients with the hope of minimizing the side effects caused by the synthetic ones available. Therefore, from the present investigation it has been concluded that this formulated herbal lipstick has a better choice for women with limited side effects although a thorough clinical trial can be performed for better efficacy to access the formulation.

- **Melting point**

The melting point of the formulated herbal lipsticks was evaluated and the result indicates that formulation 6 has highest melting point compared to other formulations.

- **PH**

The pH of the formulated herbal lipstick was evaluated as quality control test and as a result it was found that four formulations have PH range of 6.

- **Microbiological test**

Any product will be in jeopardy by the growth of micro-organism hence it is essential to determine the number of microorganism that has grown on the product through microbiological test. This quality control test has been done on all six formulations and it has been found that formulation 6 is less susceptible to the growth of microorganism.

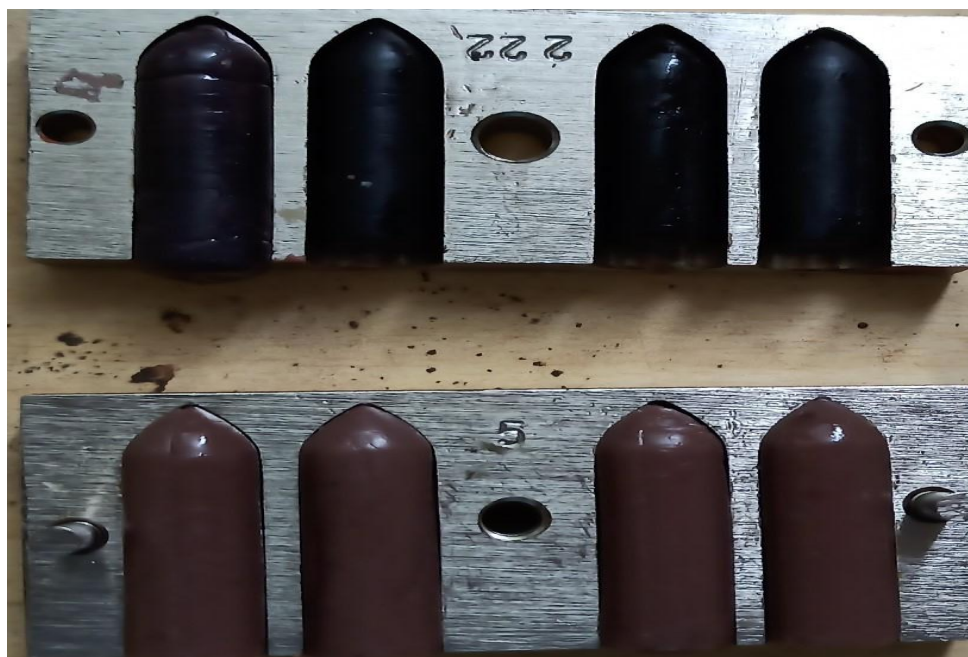


Figure 1: Formulation of herbal Lipstick.



Figure 2: Formulation herbal lipstick in container.

1. Red barrie: *Rubus idaeus*

Table no. 1: *Rubus idaeus* parameter

+ = Good, **++** = Best, **+++** =Excellent

Parameter	Trial 1	Trial 2	Trial 3	Trial 4
Colour	White	Pale Pink	Deep Red	Pinkish Red
Surface of Anomalies	No Defects	No Defects	No Defects	No Defects
Aging Stability	Rough	Smooth	Smooth	Smooth
Perfume Stability	+	++	++	+++
Solubility Test	CHCl ₃	CHCl ₃	CHCl ₃	CHCl ₃
Skin Irritation Test	No	No	No	No

2. Blue barrie: *Rubus ulmifolius*

Table no 2: *Rubus ulmifolius* parameter.

+ = Good, ++ = Best, +++ =Excellent

Parameter	Trial 1	Trial 2	Trial 3	Trial 4
Colour	White	Pale purple	Deep Purple	Reddish Purple
Surface of Anomalies	No Defects	No Defects	No Defects	No Defects
Aging Stability	Rough	Smooth	Smooth	Smooth
Perfume Stability	++	++	+++	+++
Solubility Test	CHCl ₃	CHCl ₃	CHCl ₃	CHCl ₃
Skin Irritation Test	No	No	No	No

5. CONCLUSION

Study concluded that herbal lipstick can be successfully formulated using different natural ingredients such as white bees wax, butter, peppermint oil, almond oil, Vanilla & rose essence, blue berry extract, red berry extract powder, will be better option for synthetic colouring agents which may arise different side effects. Consumers can take safe and effective advantage of this herbal lipstick after thorough clinical trials.

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