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Research Article

Formulation And Evaluations Of Beet Root Herbal Lipstick

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ABSTRACT

Safety and reliability of natural products created the need to produce plant-based products. They because it has become part of our society and fashion, cosmetics they are extremely in demand from historical times to the present day. Lipsticks are they are most often used to increase the attractiveness of the lips and also help a lot maintaining health and happiness. The main goal of this project is to create and test a natural lipstick using color pigments from the Beta vulgaris root while minimizing negative effects of synthetic preparations. Beet root extract is prepared using a microwave extraction technique. The prepared lipstick is evaluated for solubility, pH, melting point, break point, etc. Stability studies have shown that beta vulgaris extract lipstick was stable throughout the study.

INTRODUCTION

The word cosmetics is derived from the Greek word “Kosmtikos” which means strength, Organization and skill in beautification.[1] Herbs used in cosmetic preparation they have different properties like antioxidant, anti-inflammatory, antiseptic and antibacterial etc. These herbal products claim to have no side effects, commonly seen in products containing. synthetic agents. Literature in Ayurveda, especially the Charak Samhita, introduced numerous medicinal plants in Varnya kashaya. Herbs like Chandan, Haldi, Khas, Nagkleshara, Manjistha, Yastimadhu are used to get September skin and Arusa, Amala,

Bavchi, Guduchi, Chakmard are mentioned as Kustaharan.[2][3] They is also called herbal cosmetics. Herbal cosmetics they are the latest trend in beauty and fashion. The herbal cosmetics industry is booming chart for your market and the products that are sold Worldwide. There are a plethora of brands out there today cosmetic market. Nevertheless, the market is still growing and there is room for new products to deliver quality products on a natural basis that satisfy consumer requirements. Plant products are increasing popularity because nowadays most women prefer natural products over chemicals for their personal care enhance their beauty because

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these products supply the body with nutrients and improve health and provide satisfaction because they do not contain synthetic chemicals and have relatively fewer side effects compared to synthetic cosmetics. Lipstick is a cosmetic product it is used to color the lips and protect the lips from external influences. Environment. Lip coloring in ancient practice date back to prehistoric times. Now-a-days use the plant product has increased and the selection of shades colors, textures, shine changed and became wider. This can be seen from the fact that the lipstick is sold in hundreds of colors to satisfy the latest women's demand. Dyes that contribute to lipstick colors are very harmful to humans consumption. Coal tars are the basic components of which synthetic dyes are produced can cause allergies, nausea, dermatitis and dry lips. In more severe forms can be carcinogenic and even fatal.[4][5] Due to the side effects of synthetic colors, it leads to an increase in the use of natural colors in the composition of lipstick. Natural colors are extracted from natural sources such as plants, insects, algae.[6][7] Synthetic lipstick usually uses synthetic dyes to add color to the lipstick, which is dangerous for it people. Mercury, lead, chromium are examples of synthetic dyes that can have harmful effects on human body .[8] Formulations of nutraceutical cosmetics can be used to treat skin problems by achieving an aesthetic sense. Lipsticks are cosmetic products for adjusting or enhancing the color of the lips and are prepared by pressing a dispersion of colors in a wax base, in the form of a stick/crayon. The consumption of lipsticks in the area of makeup preparation exceeds that of any other another product. Rather than their usage decreasing, they are getting bigger popularity. No replacement has been found to replace them. Lipsticks provide a suitable means of either refreshing the make-up by dyeing or lip protection against the effects of cold, dry weather, UV radiation and wind. Lip problems caused by infection or pollution are dry lips,

chapped, chapped, chapped lips, ulcers and lesions on the lips, sunburn and wind-burnt lips. Suitable drug candidates for nutraceutical lipsticks act locally for lips, soothing, anti-irritant, skin and anti-inflammatory agents. Lipsticks were used to color the lips, but lipsticks can be used to color as well as treat lip infections. Beet root powder was selected as the drug of choice for its anti-irritant, moisturizing properties, soothing and non-toxic natural agent acquisition and use in the treatment of skin ulcers, wounds, skin eruptions, cracks. The aim and objective of this study was to formulate a nutraceutical lipsticks with cow ghee and honey as natural excipients they replaced conventional synthetic lipstick vehicle. Castor oil has been substituted cow ghee and formulations have been subjected to various evaluations. Honey helps promote tissue regeneration and aids in healing. The antibacterial activity of honey is largely due to the presence of hydrogen peroxide. Cow ghee has a great historical background for skin care and nourishes and is highly effective on all types of skin rashes. It also works as a moisturizer.[9][10][11]

B. Characteristics of Herbal Lipstick

1. long lasting effect
2. Stable physically and chemically
3. Shiny and smooth appearance
4. Make lipstick soft.
5. It is smooth and easy to apply.
6. It is non-irritant and non-toxic.
7. It's have required plasticity, different odour, color, texture and packaging etc.
8. It is stable in shelf-life time and it is free from bloom and sweating during storage of lipstick.
9. It should be free from contamination.
10. It should be free from gritty particles.
11. It went not melt or harden within a reasonable variation of climatic temperature.[1.5]

History of Lipstick

Later, in 1984, Albert Kligman used the word "cosmeceuticals" referring to the compounds that



have both cosmetic and medicinal properties.[12] Men began using colors as decoration around 3000 BC to attract the animals they wanted to hunt. In general, the concept and construction of “cosmeceuticals” was first articulated by Raymond Reed (1961), founder of the US Society of Cosmetic Chemists.[13] Lipstick was first introduced in France in 1869 as a cosmetics product made from animal fat and beeswax.[14] A wide selection of color shades is available and textures. This can be observed from the fact that lipsticks are sold in hundreds shades of color to meet growing demand.[13] The first synthetic color (mauvine) was developed by Sir William Henry Perkin way back in 1856. The beginning of the 19th century was remarked for the bulk of production and of synthetic colors from the petroleum derived products like aniline, therefore they were called ‘coal-tar’ colors because the starting materials were obtained from coal of the 19th century was remarked for the bulk of production and recovery of synthetic colors from the petroleum derived products like aniline, therefore they were called ‘coal-tar’ colors because the starting materials were obtained from coal.[15]

MATERIALS AND METHODS

Selection of herbs

The various herbs used in the formulation of herbal lipstick were selected on the basis of literature survey.

Castor oil, Paraffin, Beeswax, Beet root juice, ripe Shikakai fruit powder, lemon juice, orange essence and vanilla essence. The following method was adopted by author during the course of present investigation. [16][17]

BEETROOT



Synonym:

Beta vulgaris rubra, Chukanda

Biological source:

It consists of fresh root of Beta vulgaris.

Family:

Amaranthaceae

Chemical constituents:

It consist of multiple biologically active phytochemicals including betalains, flavonoids, polyphenols, saponins and inorganic nitrate, it is a rich source of diverse minerals such as potassium, sodium, phosphorous, calcium, magnesium, copper, iron, zinc.

Uses: -

It is used as colouring agent. It is used as a binder. It gives glossy appearance to lips. It also provides emollient action on lips. It also prevents cracking of lips.

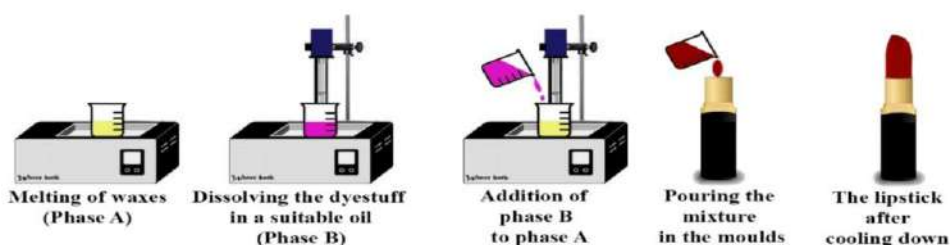
Preparation of beetroot extract

1. Fresh beetroot is thoroughly washed, peeled and Crushed.
2. Crushed beetroot grind without using water.
3. Filter the extract using muslin cloth.
4. Then carried out microwave assisted extraction using Ethanol. [18]



1. First, melt and mix the raw ingredients for the separately according To their melting point.
2. Heat the solvents, oils, waxes in separate stainless steel or ceramic Containers.
3. Then mix solvent and liquid with the colour pigments.
4. Mix the pigment mass with the hot wax.
5. Then pour this into tubing moulds, cool, and separate the lipstick
6. From the mould and fit it in the lipstick case. [18]

METHOD OF PREPARATION



MATERIALS USED

Sr. No	Common name	Role
1	Beet root	Coloring agent For Nourishment
2	Vitamin E	Preservative Hydrating agent
3	Castor oil	Moisturizer
4	Coconut oil	Hydrating agent Moisturizing agent Rejuvenate
5	Rose oil	Fragrance Perfuming agent
6	Beeswax	Lubricating agent

		Waterproofing agent Thickening agent
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FORMULATION:-

Sr. NO	INGREDIENTS	QUANTITY
1	Beeswax	10g
2	Castor oil	3ml
3	Coconut oil	3ml
4	Beet root	3gm
5	Vitamin E	Q.S
6	Rose water	Q.S

EVALUATION OF LIPSTICK

1. Melting point
2. Breaking point
3. Force of Application
4. Skin irritation test:
5. Perfume stability:
6. PH parameters
7. Solubility test

1. Melting Point

The determination of melting point is done in order to determine the storage characteristics of the product. The inciting point of lipstick base should be between 60 to 65°C in order to avoid the sensation of friction or dryness during application. Melting point of herbal lipstick is determined by capillary tube method. The capillary is filled with lipstick and attached to the thermometer. At temperature at which lipstick is melted is recorded as Melting point.[19]

2. Breaking Point

Weight at which breaks and value (10gm) at a certain interval of 30 seconds The breaking point test is used to gauge a lipstick's tensile strength. Put lipstick in a socket inch from the support's edge, horizontally. The breaking point is thought to occur when the weight is increased by a certain amount.[20]

3. pH Parameter



Using a pH metre, ascertain the lipstick's pH. [21]

4. Skin Irritation test

It involves putting a substance on the skin for 10 minutes.[22]

5. Perfume Stability

The stability of perfume can also be evaluated by periodically comparing it to brand-new lipstick while keeping lipsticks in an oven set at 40 degrees Celsius.[23]

6. Force of application:

It is a test for measuring the force that will be applied in comparison. Lipstick was applied at a 45-degree angle to cover a 1-inch square area on a piece of coarse brown paper that was kept on a shadowgraph balance until it was completely covered. The pressure reading serves as a gauge for application force.[24]

Uses of Lipstick

- Improves the appearance of lips
- Protection from bacterial infections
- Provides color and texture to lips
- It hydrates the lips. [27]

IDENTIFICATION TEST FOR BEET ROOT:

To the extract ,add few drops of diethyl ether will give Violet colour that turns to yellow.

COMPOSITION [28]

The basic raw material required for formulation of lipstick can be classified as:

1. Wax mixture such as solid waxy base and soft waxes.
2. Oil mixture and softening agent.
3. Preservative, fragrances, surfactant, antioxidant

ADVANTAGES OF HERBAL LIPSTICK:

1. The ingredient in the natural lipstick is all natural and is safe to use.
2. They also contain natural nutrient that keep lips healthy
3. They have fewer or on aspect impacts.
4. They are non-toxic, highly lipophilic, anti-oxidants, anti-microbial, anti-inflammatory, And are used in leucoderma of lips.
5. Extensive range of color to choose form.
6. Colorants has different originals shades of color from purplish red, ruby red, beetroot Purple, dark violet, pastel red, pale red, purplish red, rose red, deep magenta, dark purple, Orange, deep violet.
7. Different combination and shades can be obtained from these colors.[29]

CONCLUSION:-

This review concludes that the use of natural colorants in lipstick formulation having no or minimum side Effect. Thus, we can move towards the use of natural colorants to prepare lipstick. Hence the use of natural Color is step to-wards healthy cosmetics and which can be widely utilized by the women with great Pleasure .In the past few decades, there has been a huge increase in

the use of cosmetics by women. The presented work of formulation and evaluation of herbal lipsticks was carried out for the formulation Lipstick using herbal ingredients with the hope of minimizing the side effects it causes Available synthetic. Studies have concluded that herbal lipstick can be successful Formulated using a variety of natural ingredients such as beeswax, castor oil, coconut oil, Olive oil, beetroot powder and vitamin E and rose oil. Beetroot extract and carrot juice are It is used as a dye.

RESULT

Many natural ingredients were used formulation of herbal lipsticks that contain dyes an agent that was extracted from the herb Beta vulgaris and these lipsticks were rated on various parameters. The results of the evaluation tests are presented in following table.

Sr. No.	Evaluation Parameter	Result
1	Colour	Red
2	Texture	Smooth
3	Oduor	Aromatic
4	pH	6.2
5	Skin irritation	No
6	Melting Point	85°C
7	Breaking point	130g
8	Solubility Test	Soluble in chlorofrom

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