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FROMULATION OF TINTED LIPGLOSS FROM DRAGOAN FRUIT PEEEL POWDER AND SHAT DHAUTA GHRITA

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ABSTRACT

The use of natural dyes and perfumes has greatly increased during the last few decades. The majority of ingredients in cosmetics have recently been switched to those derived from natural sources in an effort to reduce the severe harm caused to the human body by synthetic compounds. This guarantees optimal effectiveness and minimal adverse effects. In order to increase the quality and variety of lipsticks and lip glosses, medicinal properties (such as the anti-oxidant capabilities of neem /Aloevera, the anti-wrinkle properties of Amla, and the anti-inflammatory properties of Turmeric) can also be added. The objective of this study is to create tinted lip gloss with subdued colours in addition to the moisturising effect provided from natural sources, namely Shat dhauta ghrita and Dragon fruit peel powder a formulation like this satisfies the practical need of a large population of women to have colour, smell, and moisturising properties all in one. The formulated product underwent evaluation, which is reported here. It provided glossy tint. The equation led to a both a lovely natural light pink colour and a pleasant smell are present.

KEYWORDS: Lip gloss, Shat dhauta ghrita, dragaon fruit.

INTRODUCTION

Lip gloss is a cosmetic used primarily to give lips a glossy luster, and sometimes to add a subtle color. It is distributed as a fluid or a soft solid (not to be confused with lip balm, which generally has medical or soothing purposes, or lipstick, which generally is a solid, cream-like substance that gives off a more pigmented color.) The product is available in ranges of opacity from translucent to solid and can have variously frosted, glittery, glossy, and metallic finishes.[1]

Cosmetic plays a significant role in today's life style. Moreover current trend is going green in almost all industries including cosmetics to adopt more natural way of life. The preferable choices are natural food, herbal medicines and natural curing practices for healthy life and also there is much demand for the organic vegetable products. The usage of herbal cosmetics has been increased to many folds in personal care system.[1],[2]

Natural products have been used for folk medicine purposes throughout the world for thousands of years. Many of them have pharmacological properties such as antimicrobial, anti-inflammatory and cytostatic effects. They have been recognized as useful for human medicine. Herbal extracts are cultivated all over the world and is prime name in horticulture sector. Cosmetics made up of herbal extracts for skin care and haircare are very popular for their reliability. Herbal cosmetic products include various formulations. The word herbal indicates safety as compared to synthetic products which are having various adverse effects on human health. Coloring lips is the ancient practice to enhance the beauty of lips and to give glamour touch to the face make up. For this the choice for shades of color, textures, lusters have been changed and became wider. This can be observed from the lip jelly, lip balm, lipstick marketed in hundred of sheds of colors to satisfy the demand. This work was intended for extensive study of natural lip balm. This was based on the comprehensive literature search of natural lip balm, significance of natural excipients along formulation and evaluation of lip balm. These products are evaluated for organoleptic properties like color, odor, spread ability, pH, melting point, skin irritation and product consistency. The color of a product also provides an indication of product quality and freshness. Natural colors are however, less toxic compared to synthetic colors.[3]

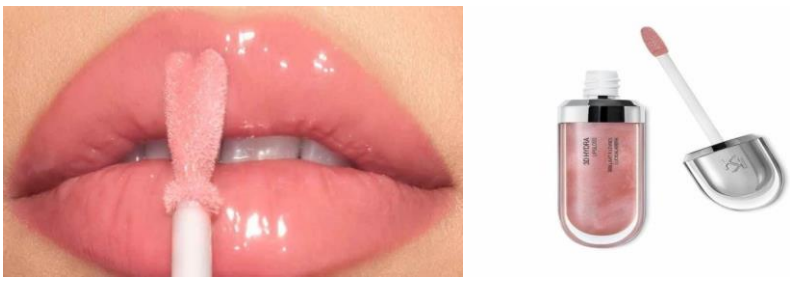

Fig. 1: Lip Gloss.

Application of Lip gloss

Lip gloss are formulations applied onto the lips to prevent drying and protect against adverse environmental factors. Numerous lip balms of chemical origin are currently available in the

market from companies like The body shop, Nivea, Himalaya, Blistex, etc. The cosmetic literature reports limited data on this type of formulation, although references related to lipstick apply because it is a cosmetic form similar to lip gloss. This similarity extends to include organoleptic and stability requirements such as resistance to temperature variations, pleasant taste, innocuousness, smoothness during application, adherence and easy intentional removal.[4]

Introduction for Shat dhauta ghrita

The word 'Ghee' is evolved from old Sanskrit word 'ghr' (means bright or to make bright), usually prepared from cow, buffalo or mixed milk.[5] Because of unique ability to reach within the deepest tissues, ghee is considered as an ideal base for preparation of Ayurvedic formulations to target the specific body organs. The 'Ghrita', also known as medicated ghee is the Ayurvedic medicinal preparation in which ghee is processed with some herbal decoctions and fresh paste of herbs, selected as per the formula mentioned in the Ayurvedic texts or Ayurvedic formulary of India.[6] Cow ghee (because of regenerative properties and promoting ability of growth of healthy cells) is generally prescribed for topical application for the treatment of wounds caused by heat or fire, painful ulcers, insect, bites herpes and leprosy.[7]

Fig. 3: Shata Krita Ghrita.

Drug profile

Colour : Whitish

Odour : Odourless

Taste : Teastless

Pharmacological activity

It is easily digestible since it has around 8% fewer saturated fatty acids than other foods. These are the most widely used edible fats and are absent from all other edible oils and fats. It contains vitamins, including as vitamins A and E, which are anti-oxidants and beneficial for lowering blood pressure ketone bodies, which protect the body from oxidative damage. Vitamin A prevents blindness by maintaining the integrity of the body's epithelial tissue, maintaining the moisture of the eyeball's outer coating. Essential fatty acids aid in the healthy development of the human body. Ghrita has a melting point of 350C, which is lower than the body's typical temperatures. a substance's digestibility index or The highest rate of absorption of all oils and fats is 96%. Due to their ease of digestion and absorption, active substances together with Ghrita. Ghrita's lipophilic activity aids delivery to a destination since cell membranes contain lipid , within cells, organ and fine distribution. Ghrita's lipophilic activity makes it easier for the formulation to enter cells and distribute drugs to them. It also contain beta carotene and vitamine E so acts as antioxidant.[8]

Excipient

Olive oil

Rich in beneficial monounsaturated fats is olive oil. Olives, the olive tree's fruit, are used to make olive oil, a natural oil. 11% of the oil is polyunsaturated, such as omega-6 and omega-3 fatty acids, while 14% of the oil is saturated fat. But oleic acid, which accounts for 73% of the oil's total composition, is the fatty acid that dominates olive oil. According to studies, oleic acid lessens inflammation and may even have positive effects on cancer-related genes.[8]

Antioxidants Are Found in High Amounts in Olive Oil Olive oil extra virgin is reasonably nutrient-dense. It also has minor levels of the vitamins E and K in addition to its advantageous fatty acids. However, olive oil also contains a lot of potent antioxidants. These biologically active antioxidants may lower your chance of developing chronic illnesses (6Trusted Source, 7Trusted Source). Additionally, they assist prevent oxidation of your blood cholesterol and battle inflammation, two advantages that may reduce your risk of developing heart disease. Trusted Sources.[9]

Olive Oil Possesses Potent Anti-Inflammatory Effects Cancer, heart disease, metabolic syndrome, type 2 diabetes, Alzheimer's, arthritis, and even obesity are thought to be largely influenced by chronic inflammation. One of the primary factors contributing to extra-virgin olive oil's health advantages may be its ability to reduce inflammation.[10]

Fig. 4: Olive Oil.

Dragon fruit peel powder

In addition to its well-known use in foods with nutritional and ornamental benefits, dragon fruit (Hylocereus polyrhizus), also known as pitaya, is gaining popularity as a health promotion product. The fruit pulp in the Hylocereus genus comes in a range of colours, including white, red, and purple, as well as red and yellow peel. Because of its colour and health advantages, the Hylocereus sp. Fruit used to produce the red hue is in high demand on the market. The micronutrient enrichment of dragon fruit, which is controlled by phenolics with antioxidant and antiproliferative properties in addition to its appealing colour, has recently attracted a lot of attention. The juice is added to ice-cream colouring applications, while the pulp is frequently consumed in fresh fruit. It has antidiabetic, anti-inflammatory, and cardiovascular disease-suppressing characteristics, as well as the ability to prevent cancer. Therefore, dragon fruit juice is commercially produced as a functional beverage to meet consumer demand for a natural supplement supporting excellent health. The fruit is accounted for as a food product with high economic value because it Is viewed as a functional food.[11]

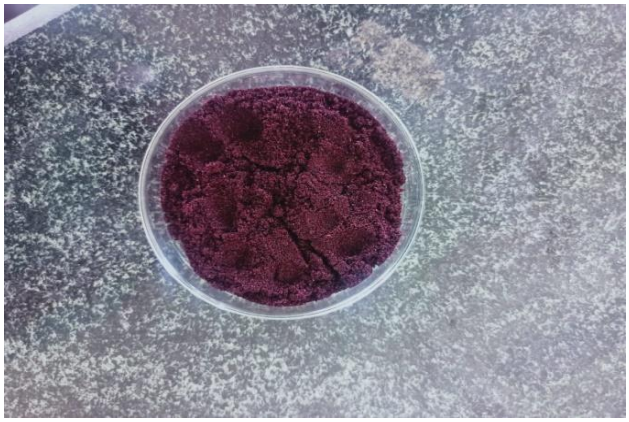

Fig. 5: Dragoan Fruit Peel Powder.

White paraffin wax

There are some potential medicinal applications for paraffin wax. Some spas and salons use it to soften the skin or as a painkiller for tight muscles and joints. The moisturising or skin-softening qualities of paraffin wax and its application in heat therapy are its two key advantages.[12]

Clear Paraffin Pharmaceuticals, cosmetics, and personal care goods are all made with wax. It is employed in the production of base creams, pastes, ointments, and creams for the skin. In addition, this type of wax is employed in the production of cosmetic goods for the lips, lipsticks, eyeliners, mascara sticks, ornamental sticks, and other beauty products, as well as styling treatments for hair, particularly in the traditional hair care industry.[13]

Fig. 6: White Paraffine Wax.

Vitamin E

A vitamin that dissolves in fat is vitamin E. It can be found in a wide variety of foods, including cereals, vegetable oils, meat, chicken, eggs, and fruits. An essential vitamin, vitamin E is needed for the healthy operation of numerous organs in the body. As an antioxidant, it is also. Natural vitamin E found in food is known as RRR-alpha-tocopherol, while synthetic vitamin E found in supplements is known as all-rac-alpha-tocopherol.[14]

Vitamin E is used to treat vitamin E insufficiency, which is uncommon but can happen in patients with specific hereditary abnormalities and in premature children who were born very low in weight. There are numerous more ailments for which vitamin E is utilised, however many of these other uses lack solid scientific backing.[15]

Fig. 7: Vitamin E Capsule.

Lanoline

Natural byproducts from the processing of animal wool, usually that of domestic sheep, include lanolin. In its raw form, lanolin is a viscous, greasy, yellow material that is secreted by the sebaceous glands of sheep. Anhydrous lanolin is the end product of purifying this raw material to remove any contaminants. Similar to wax, anhydrous lanolin has a wide range of uses across numerous industries. In addition, it shares structural similarities with the lipids found in human skin cells, which explains why it is a common element in skin care products. Similar to wax, anhydrous lanolin has a wide range of uses across numerous industries. In addition, it shares structural similarities with the lipids found in human skin cells, which explains why it is a common element in skin care products. What are the precise applications and advantages of anhydrous lanolin then? Here are some things to be aware of about the usage of anhydrous lanolin in cosmetics. As a Skin Moisturiser, Anhydrous Lanolin Anhydrous lanolin is most frequently used as a moisturiser to treat or prevent dry, rough, scaly, or itchy skin. Additionally, it can be used to treat mild skin irritants like diaper rash.[16]

Fig. 8: Lanolin.

Metyl paraben and propyl paraben

Food, cosmetics, and pharmaceutical products all employ parabens as preservatives, and their widespread use has caused an environmental buildup of parabens.[17]

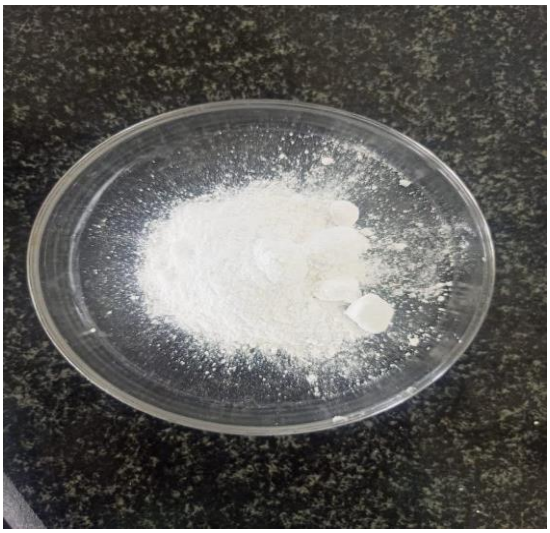

Fig. 9: Methyl Paraben.

Coconut oil

Western medicine has recently become more interested in the coconut, commonly known as Cocos Nucifera, a tree known for its numerous nutritional and therapeutic benefits. The tender coconut water and kernel, for example, are thought to offer therapeutic properties, such as antibacterial, antiviral, antifungal, antioxidant, low glycemic index, hepatoprotective, and immune system boosting effects.[17]

The dried meat of the coconut, a fruit of the coconut palm (Cocos nucifera), is the source of coconut oil, an edible oil. At 23 °C (74 °F), coconut oil melts into a yellowish-white solid or semiliquid. In contrast to the majority of other oils derived from plants or fish, coconut oil contains up to 90% saturated fat and only a small amount of unsaturated fatty acids. There is no cholesterol in it.[18,19]

MATERIALS AND METHODS

Materials

Table 1: Materials.

Sr.no	Materials	Brand name
1	Olive oil	Figaro olive oil
2	coconutoil	Parachute coconut oil
3	White paraffine	Unicorn petroleum industries

4	Anhydrous lanoline	Legends creek form
5	Shat dhauta ghrita	Gowardhan ghee
6	Dragon fruit powder	Local vendor
7	Vitamin E	Guangzhou Meishubao Biotechnology Co., Ltd
8	Methyl paraben	Nice chemicals pvt ltd
9	Propyl paraben	Nice chemicals pvt ltd

List of equipments

Table 2: equipments.

Sr.no.	Equipment
1	Measuring cylinder
2	Beaker
3	Mortar pestle
4	Conical flask
5	Funnel
6	Water bath
7	Stirrer
8	Magnetic stirrer
9	Weighing balance

METHODS

Preparation of dragon fruit peel powder

The laboratory of the pharmaceutical department, Matoshri institute of pharmacy, received the fresh and whole dragon fruits from the local market. Fruits were scrubbed clean under running water and dried with a cloth. The peels were now taken from the fruits, sliced into small pieces, and dried in a shade for 6-7days. For further use and analysis, dried peels were ground into a powder, and these samples were then aerobically packaged in sterilised airtight plastic containers.

Preparation of Shat Dhauta Ghrita

Making 'Shata-Dhauta' ghee is the first step in making shata krita ghrita. The 'Shata-Dhauta' ghee was made utilising a rumoured, long-forgotten method stated in Ayurvedic literature. In a nutshell, a laboratory agitator (REMI) was used to stir a required amount of cow ghee (2.5 kg) and distilled water (1.5 L) for 5-8 minutes in a copper vessel that had previously been cleaned. After that, the vessel's contents were allowed to settle before being carefully decanted to prevent ghee loss. For the purpose of creating "Shata-Dhauta" ghee, which was then stored in a tightly covered container, a fresh slot of the same amount (1.5 L) of distilled water was added to previously cleaned cow ghee.

Fig 11: shat dhauta ghrita.

Preparation of lip gloss

The formulation of tinted lip gloss using the colorant from natural source was prepared White paraffine and shat dhauta ghrita were precisely weighed out and placed to a flask. Coconut oil liquid was added in drops. Olive oil l were added. The combination was barely heated in a water bath to stop from coagulating. Anhydrous lanoline add to absorb moisture. A mixture of alcohol, aroma, and colour was added in a particular ratio. Later the mixture was transferred to a petri dish.[24]

Fig. 13: formulation of lip gloss.

Formula

Table 3: Formula of Lip Gloss.

Sr.No.	Ingredients	F1 gm	F2 gm	F3 gm	F4 gm	F5 gm	F6 gm
1	Olive oil	1	-	0.5	1	1	0.5
2	Coconut oil	-	1	0.5	1	1	0.5
3	White parffine	3	3	3	2	2	3
4	Anhydrous lanoline	0.5	0.5	0.5	0.5	1	1
5	Shat dhauta ghrita	3	3	3	3	2	2
6	Dragoan fruit powder	1	1	1	1	1	1
7	Vitamin E	0.5	0.5	0.5	0.5	1	1
8	Methyl paraben	0.8	0.8	0.8	0.8	0.8	0.8
9	Propyl paraben	0.2	0.2	0.2	0.2	0.2	0.2

EVALUATION PARAMETER

Organoleptic Properties

The prepared lip product was evaluated for organoleptic properties such as colour, odour and texture.

Determination of pH

The pH of the formulated lip product was analyzed by using pH paper.

Solubility test

Solubility test of the prepared formulations were carried out in water, ethanol and acetone.

4. Spreadability Test

The assessment of spreadability consisted of making use of the products (at room temperature) time and again onto a glass slide to visually examine the uniformity in the formation of the layer.

5. Skin irritation

The tinted lip gloss formulation A and B were evaluated for skin irritation test by applying the product on the skin for about 15 mins.

6. Perfume Stability

These studies were conducted on the formulations for 15 days to record the fragrance.

RESULT AND DISCUSSION

The created product was assessed, and it was discovered that its composition and formulation were perfect, yielding positive outcomes. The intention to reduce the adverse effects was successful, with the exception of beeswax and synthetic colours. The findings of the formulation evaluation of lip colourant are shown in the table below.

Table 4: Evaluation Parameter.

Lip gloss formulation	Evaluation parameter	Observation
F1	Visual Appearance Phase separation Homogeneity Spreadability Skin irritation	Magenta pink Nil Good Good No
F2	Visual appearance Phase separation	Magenta pink Nil

	Homogeneity Spreadability Skin irritation	Good Good No
F3	Visual appearance Phase separation Homogeneity Spreadability Skin irritation	Magenta pink Nil Good Good No
F4	Visual Appearance Phase separation Homogeneity Spreadability Skin irritation	Magenta pink Nil Good Good No
F5	Visual appearance Phase separation Homogeneity Spreadability Skin irritation	Magenta pink Nil Good Good No
F6	Visual appearance Phase separation Homogeneity Spreadability Skin irritation	Magenta pink Nil Good Good No

The physical characteristics of different lip gloss formulations following exposure to different storage temperature.

Table 5: Evalution Parameter In Different Storage Temperature.

Storage temperature	Evaluation parameter	Observation of six different lip gloss
25oC	Visual appearance Phase separation Homogeneity Spreadability Skin irritation	Magenta pink Nil Good Good No
12oC	Visual appearance Phase separation Homogeneity Spreadability Skin irritation	Light pink Nil Good Good No

SUMMARY AND CONCLUSION

These composition used to create the coloured lip gloss took on a glossy and smooth quality. It produces a very glossy product that spreads evenly when applied to skin. Additionally, it provided fair stability in terms of the formulation and colour tint. The preparation of completely safe and free of the negative effects of beeswax and synthetic dyes was made possible by the formulation. as beeswax's potentially harmful side effects and carcinogenic

effects, which can result in breast and uterine cancer, will be If this formulation is commercialised, avoid using it. Additionally, it is well known that the dragon fruit has heart-strengthening properties. Even if a small amount of lip gloss is unintentionally consumed, there will be no harm.

But it gives health benifits too both a lovely light pink natural tint and a pleasant aroma were produced by the mixture. it works wonderfully as a lip tint in this recipe.

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