

Preparation and Evaluation of herbal lipstick

Rujuta Eshwar Khedkar, Pradnya Shahu Manohar, Ankita Anod Adhav

Submitted: 05-01-2023

Accepted: 13-01-2023

ABSTRACT-

Now a day there is a many more harmful cosmetic products are available in market. For overcome this problem these present research gives information about the herbal lipstick.it includes the evolutionary properties, advantages& characteristics of herbal lipstick. We formulate here herbal lipstick having minimal side effects or no side effects, this preparation using herbal ingredients.

The demand of herbal cosmetics is increasing steeply as they are skin friendly with no side effects. Normally herbal cosmetics are also referred to as natural cosmetics. Herbal cosmetics are formulated by preparing a natural base first in which one or more natural ingredients are incorporated properly. Herbal cosmetics are the most recent trend in the field of beauty and fashion. These beauty products supply proper nutrients, enhance health and ensure user satisfaction compared to the synthetic cosmetics. Human skin acts as protective barrier, through which natural ingredients penetrate.

There is a wide range of herbal cosmetic products to satisfy the need of women. In contrast to synthetic ones, herbal cosmetics are safe for human health. Herbal formulations like herbal lipsticks, herbal creams, herbal shampoos and herbal paste have always attracted considerable attention because of their good activity and comparatively lesser side-effects with synthetic materials. Herbal lipstick are defined as the beauty products which possess desirable physiological activity such as enhancing, soothing appearance, healing, conditioning properties because of herbal ingredients. Lipstick is the most widely used cosmetic added in the make-up to enhance the beauty of lips. Lipstick is a cosmetic product containing pigment, wax material, different oils, and emollients that apply colour, texture, and protection to the lips. The ingredients in the natural lipstick are all-natural and are safe to use.

Keyword- Natural, Herbal, Colour, Ingredients, Lipstick, Formulation, side effect, safe

I. INTRODUCTION-

The very first origins of lipstick date back to the Sumerian region of Ur in 5,000 BC. Over the centuries lipstick has been embraced and shunned by different cultures with swings for and against the product changing throughout history. Ancient Egyptians loved lip paints and according to Pallingston were masters at mixing colour and precise application. In Roman days the real lip colours were reserved for prostitutes, while the barbarians used the blue hues of face and lip paint for men charging into battle. Lipstick was associated with Satan during the medieval days and it was not until Elizabeth Tudor that lipstick once again became an accepted and popular grooming aid.[20]

According to D&C act 1940 and rules 1945, cosmetics means any article intended to be sprayed, poured, rubbed, or sprinkled on or introduced into, or applied to the human body or its any part for ablution, glamorize, promoting enchantment, or reshape the appearance Lipstick gets their colours from the diffusion of pigments and lake dyes however now not limited to Bromo acid, D&C Red No: 21, Calcium Lake which includes D&C Red 7 and 34, and Orange No 17 12. The very first origins of lipstick data back to the Sumerian demesne of Ur in 5,000 BC. Over the centuries lipstick has been embraced and shunned by different cultures with swings for and against the product changing throughout history [1]

Lipstick are the substances to enhance or protect the beauty of the human body dates back to Vedic and puranic period. Earlier human race of tribal era used animal parts, vegetable leaves, flowers, colour stones, shells, etc.to adorn their bodies. As per FD&C Act cosmetics are defined as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness, or altering the appearance. Lipstick is the preparations, which represents lipstick associated with active bio-ingredients, pharmaceuticals. Nutraceuticals [2].

The herbs used in lipstick preparation have varieties of properties like antioxidant, anti-

inflammatory, antiseptic and antibacterial etc. These herbal lipstick claim to have no side effects, commonly seen with products containing synthetic agents. The literature in Ayurveda, especially Charak Samhita, stated numerous medicinal plants in Varnyakashaya. The herbs like Chandan, Haldi, Khas, Nagkshara, Manjistha, Yastimadhu are used to obtain glowing complexion and Arusa, Amala, Bavchi [4].

Cosmetic products, especially lipsticks as they are applied to the lips of a sensitive nature, need to pass an irritation test. This should apply to carrots as well because although numerous studies found that carrots are safe, a safety test is still required to ensure the possibility of an allergic response that can appear on the skin, including the lips [5], [6], [7], [8], [9], [10].

Lipstick is cosmetic products containing pigments, waxes, oils, and emollient that applies colour, texture, and protection to the lips. Throughout the early 20th century, lipstick came in a limited number of shades. Dark red was one of the most popular shades throughout the 19th and 20th century. Dark red lipstick was popular in the 1920s. Flappers wore lipstick to symbolize their independence. Lipstick was worn around the lips to form a cupid bow, inspired by actress Clara Bow. At the time, it was acceptable to apply lipstick in public and during lunch, but never at dinner in late 2015 and 2016, liquid lipstick which applies like a gloss but dries matte, became popularized with brands such as Anastasia Beverly Hills. Its most common form comes in a tube applied with an applicator and wand. Lipstick also has many variations including lip balms, glosses, crayons, pencils, liners, and stains. Balms and glosses tend to be more translucent and not as dark or vibrant [11], [12], [13], [14], [15], [16], [17], [18].

The word herbal is a symbol of safety in contrast to the synthetic one which has adverse effects on human health. Herbal lipstick has become popular among the consumer. Herbal medicines represent the fastest growing segment to heal the various ailments. Possibly, herbal users desire to assume control over health care needs. Perhaps the large in-personal healthcare system is unpalatable to many and they turn to herbal medicine due to increase side effects of available synthetic preparations. Herbal cosmetics have growing demand in the world market and are an invaluable gift of nature. There are a wide range of herbal lipstick products to satisfy your beauty regime, adding herbal lipstick is very safe for lips. Human beings have been using herbs for different purposes

like food, medicine, beautifying with advancement of science & technology use of natural things including plants has been reduced except for food, vegetarians take plants and plants only [19].

Colouring lips in an ancient practice dates back to prehistoric times. In present days the use of products has increased and choice of shades of colors, textures, lustre, have been changed and become wider. This can be observed from the facts that lipstick is marketed in hundreds of shades of colors to satisfy the demand for the women. In recent times lipsticks have been under the scanners of many health watchers. Lipsticks are often eaten away by the user and hence it is imperative that health regulators have a microscopic look at the ingredients that go into the lipstick. The dyes that contrast to the colour of the lipstick are dangerous to humans on consumption. In a mild form, the coal tars that are the basic ingredients from which synthetic dyes are formed can cause allergy, nausea, dermatitis, and drying of the lips [21], [22].

Herbs in lipstick refer to the leafy green or flowering parts that are grown either as a food or because they have some use in treating diseases. These have a variety of uses including culinary, medicinal & in some cases spiritual. After many researches it was concluded that herbs show more efficiency, more productivity than any other artificial & synthetic products. The word herbal is a symbol of safety in contrast to the synthetic one which has adverse effects on human health. Lead and other traces of metals are also found in lipstick. It is impossible to know whether these metals are in the lipstick by looking at the ingredient list because they are not an intentional ingredient added, but rather, an unintentional contaminant. These trace metals are naturally occurring and accidentally get taken up with other chemicals that are used in lipstick production [23].

Anatomy of Lips-

The lips are pliable, mobile muscular folds that encircle the opening of the oral cavity. They contain the orbicularis oris and superior and inferior labial vessels and nerves. The lips are covered externally by skin and internally by mucous membrane. A sagittal cut through the lip can reveal the layers of soft tissue that form this relatively simple anatomical structure. That is, from superficial to deep skin, superficial fat compartment, orbicularis oris muscle, deep fat compartment and mucosa. The lips are used for grasping food, sucking squids, clearing food from

the oral vestibule, forming speech, osculation, and controlling the size of the oral aperture [24], [25], [26], [27], [28].

Difference between Lip and regular skin structure: The lip is more attractive than the regular skin. Commonly the top corneum layer of regular skin has 15 to 16 layers mainly for protection purposes. The top corneum layers of the lip contain about only 3 to 4 layers and very thin compared to the typical face skin. The lip skin contains very few melanin cells because of this, the blood vessels more clearly appear through the skin of the lips that give a lovely pinkish colour of the lips. The lip skin has no hair follicle and no sweat glands therefore it does not have the sweat and body oil in protecting the lip from the outside environment [29], [30].

The lips serve as an organ of prehension, suction, and speech. It is composed of the skin, superficial fascia, orbicular is a muscle and the muscles inserted around it (Areolar tissue and mucous membrane) the margins of the lips are capped with dry, red mucous membrane, continuous with the skin and containing numerous vascular papillae and touch corpuscles. The mucous membrane internally is reflected from the upper and lower lip upon the gums, and in the median line forms two folds of superiors and inferiors. The areolar tissue or submucous layer contains the coronary vessels which completely encircle the buccal orifice near the free margin of the lips. The coronary arteries arise from the facial. The superior coronary is larger than the inferior and anastomoses with its fellow of the opposite aide and gives off a small artery to the septum arterial septic nasi. Compression of this artery will sometimes control nasal haemorrhage. The nerve supplying the lower lip is derived from the mental foramen and sends large twinges to the mucous membrane, the integument, and the fascia of the lip and chin. Some of the lymphatic vessels of the lips pass to a gland just above the body of the hyoid bone, while others pass to the submaxillary glands. The labial glands are in the submucosal layer of the lips around the orifice of the mouth. They secrete a mucous fluid. Mucous retention cysts develop when the ducts of these glands become occluded [1],

Function of the Upper Lip-

Although the parsimony purpose also is Sphincteric function, the upper lips is key role is coverage of dendritic and facial animation [31].

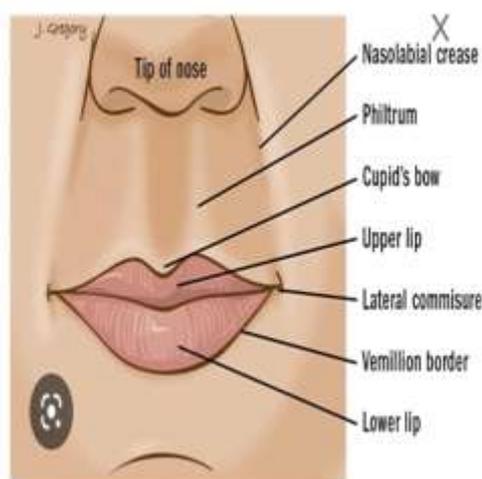


Fig. Information about upper lip

Type of Lipstick-

❖ Matte Lipstick -

1. The most common type of lipsticks is matte. As the name suggests, it is completely matte and shine-free.
2. This lipstick comes in various colours and shades and is available in stick and liquid lipstick forms.
3. Matte lipsticks give a very bold look even though they don't shine.
4. Many of the matte-style lipsticks are available with moisturizers in them as well.
5. These may have a bit of a glossier look than a true matte will have [32].

Due to its low oil content, matte lipstick has a high staying power. As a long-wearing lip colour, you can apply matte lipstick once, and it will last throughout the day, smudge-free. The signature shine-free look of matte lipsticks can make your lips feel dry, so opt for a matte lipstick that contains moisturizing ingredients like vitamin E and aloe to keep your lips hydrated.[33]

❖ Creamy Lipstick –

1. Creamy lipsticks can also be called vintage lipsticks, as they have been in trend for a long time.
2. It gets pretty tricky to keep our lips moisturised on hot or cold days while applying lipstick.
3. Cream lipstick is not shiny, but it will look very nice and smooth as a covering on the lips.
4. Cream lipsticks don't do all that much from a moisturization standpoint, but they can protect the lips.
5. The cream lipstick is a wax type formula.

6. The wax will work as a barrier on your lips to protect them from the elements [32].

As a hydrating and nourishing lipstick, cream lip products are ideal if you have naturally dry lips. Formulated with a higher concentration of wax, cream lipsticks create a protective coating that lasts throughout the day. The finish of a creamy lipstick is between a glossy and matte look, giving the lips a slight shine [33].

❖ Lip Tint or Stain-

1. Lip tints or stains are very famous and in trend lipstick type.
2. They are a great way of adding a flush of freshness without overdoing or wearing heavy lipstick.
3. They usually have a watery or creamy formula and glide easily on our lips.
4. They have a long-wearing formula due to their staining power.
5. Satin lipstick is great for moisture and a high gloss look.
6. One of the essential things to remember about satin lipstick is that it has a high oil content.
7. Sometimes high oil lipsticks need to be applied more often than other types of lipstick.
8. The satin lipstick can be worn during the day, but because of the shine, it makes an excellent choice for a special occasion [32]

Also known as lip tints, lip stains are liquid lipsticks that create a long-lasting colour stain on the lips. While lip tints are similar to the consistency of lip gloss, they dry into a sheer stain [33].

❖ Liquid Lipstick-

1. Another most trending and widely used lipstick type is liquid lipstick.
2. They do have a liquid formula that dries quickly once applied on lips.
3. They are packed in a tube and have a doe-foot applicator for perfect application.
4. Sometimes when you are looking for a modern look, you will want a matte finish lipstick.
5. The matte is exactly like the name sounds, not shiny or glossy at all.
6. You will have a very flat look with a matte lipstick, but they come in a variety of colors [32].

Due to its low oil content, matte lipstick has a high staying power. As a long-wearing lip colour, you can apply matte lipstick once, and it will last throughout the day, smudge-free. The signature shine-free look of matte lipsticks can

make your lips feel dry, so opt for a matte lipstick that contains moisturizing ingredients like vitamin E and aloe to keep your lips hydrated [33].

❖ Lip Crayon-

1. Well, the most trending type of lipstick that's quite famous among netizens is lip crayon.
2. This type of lipstick has a great formula as it can be both matte and creamy at the same time.
3. It hydrates our lips with its moisturising formula.
4. It offers a very smooth and precise application.
5. It can last up to 6-7 hours without drying out our lips.
6. Crayon lipsticks are a combination of lipstick and lip balm.
7. Very similar to a tinted lip balm, this product will last longer and provide brighter colour.
8. The tinted lip balms tend to be relatively subtle in colour.
9. The crayon lipsticks come in many different colors and textures [32]

They are simple to apply, and you really won't need other lip products as this works for both colour, style, and moisturization [33].

❖ Sheer Lipstick-

1. A sheer lipstick is a good choice if your lips are dry for some reason.
2. The sheer can moisturize your lips but also provide a lot of gloss and shine.
3. This is going to be a lipstick that stands out, but you will have to be careful about the colour you purchase.
4. For some reason, the sheer lipsticks always look darker in the package than they do when you put them on [32].

Since sheer lipsticks contain a higher concentration of oils than matte or cream lipsticks, they are more hydrating and moisturizing for the lips. However, the oils in sheer lipsticks can result in feathering or cause the colour to smear off throughout the day, so you may have to touch up sheer lipstick more often [33].

❖ Glossy Lipstick-

1. A gloss lipstick is going to stand out a bit more than a cream lipstick.
2. When you add shine to your lips, you will make them look bigger than they are.
3. For women who have very small lips, gloss lipstick can be a great fit.
4. Some people will use cream lipstick and then put a gloss lipstick on top [32].

Known for their lustrous glow that mimics lip glosses, glossy lipsticks create a smooth and shiny effect on the lips. Gloss lipsticks come in a range of colors, from neutral tones to vibrant and bright hues [33].

❖ **Pearl Lipstick-**

1. A pearl lipstick is designed to reflect light.
2. Where the lipstick stain focuses on colour, the pearl lipstick will be more about shine and light.
3. Many of the pearl lipsticks will also sparkle.
4. This can be an excellent look for a dinner party or formal event [32], [33].

❖ **Moisturizing lipstick-**

1. Using a lipstick that has the moisturizing capability is not only practical, but it can be helpful as well.
2. Many moisturizing lipsticks are going to have additional ingredients to keep your lips healthy.
3. Some of these lipsticks will contain aloe or vitamin E.
4. Your lips will stay protected and maintain a soft feel as well.
5. Most of the moisturizing lipsticks are going to look a bit glossy [32], [33].

❖ **Long Wearing Lipstick-**

1. Everyone knows that stopping to reapply lipstick can be a real pain. If you don't want to have to reapply your makeup during your day or your night out, then long-wearing lipstick could be a great choice to consider [32], [33].

❖ **Frosted Lipstick-**

1. If you want your lips to sparkle and shine, the frosted lipstick is going to be the best choice for you.
2. A frosted lipstick is something that will not only shine, but it will probably have sparkles in place as well.
3. This type of lipstick is going to be much better for a night out on the town as opposed to a lipstick you would wear during the day for work.
4. Since this is intended to be so sparkly and shiny, you may need to reapply quite often [32], [33].

❖ **Transfer Resistant Lipstick-**

1. Not only is there sometimes an issue with getting the lipstick off of your clothes, but you also know that your lips don't look as good as they once did.
2. With a transfer-resistant lipstick, you will not have to worry nearly as much about this.
3. Transfer resistant lipsticks tend to stay in place for a long time, and you will save time having to reapply several times throughout your day [32], [33].

❖ **Lip Primer Lipstick-**

1. A lip primer works precisely the way a facial primer or even a paint primer would work.
2. The primer prepares the lips for the lipstick you are about to apply.
3. When you put on a lip primer, you will then have to apply lipstick or lip gloss.
4. When you apply lipstick in this way, it should last longer, and your colour should be perfect [32], [33].

❖ **Lip Gloss Lipstick-**

1. Lip gloss is a bit different than glossy lipsticks.
2. With a lip gloss, you will usually need to apply more often if you want to keep your lips shiny and moisturized all day.
3. Lip gloss is offered in many different colors, just like lipstick.
4. You can put lip gloss directly on bare lips, and it does a great job of keeping your lips from drying out.
5. The product itself is quite a bit lighter than most lipsticks, and that is why it won't hold up on the lips quite as long [32], [33].

❖ **Lip Tint Lipstick-**

1. Lip tint is very similar to a lip stain, and it is a method preferred by people who do not want to be stuck reapplying and spending time on their lipstick.
2. The lip tint goes on easy, it is available in a wide range of colors, and you can get your lips looking great without much effort at all.
3. Since lip tint is usually a thinner, less bold product, it also does not do the most fabulous job of moisturizing your lips for the long term [32], [33].

Definition Of Lipstick and Characteristics

Definition of lipstick-

Lipstick may be basically defined as dispersion of the colouring matter in a base consisting of a suitable blend of oils, fats and waxes with suitable perfumes and flavours moulded in the form of sticks to impart attractive gloss and colour, when applied on lips.

Lipsticks provide moist appearance to the lips accentuating them and disguising their defects.

Ideal Characteristics of Good Lipsticks-

The ideal requirements for the formation of a good lipstick may be as follows:

1. It should efficiently cover lips with colour and impart a gloss which would last long.
2. It should be able to maintain the intensity of colour without any alteration in the degree of its shade.
3. It should be able to adhere firmly to the lips and should not provide any greasy appearance.
4. It should possess good thixotropic property so as to deposit the colour with minimum pressure.
5. It should show a smear proof colouring effect.
6. It should possess required plasticity and be able to maintain all the properties throughout the storage period.
7. It should not be gritty.
8. It should be easily dried.
9. It should be nontoxic & non-irritant to the lips.
10. It should impart uniform color to the area of application.
11. It should impart uniform colour to the area of application.
12. It should make lips soft.
13. It should have stability towards environmental conditions.
14. It should be completely free from grittiness
15. The container should operate easily [34], [35].



Advantage-

1. Provides Hydration

When you wear lipstick, you are able to step out of your comfort zone and bring your outfit, and your personality to the forefront. If you're into makeup, lipstick is one thing you can't miss, as it gives your personality a touch of glamour, style, and grace.

Even though some lipsticks contain ingredients that can absorb moisture from your lips, most of them do their utmost to make sure that your lips stay hydrated and they are created in such a manner that the natural state of your lips remains intact. There are many lipsticks available today that include moisturizing agents, such as vitamin E or aloe vera [36].

2. Defines your lips-

You can define your lips and draw attention to their true shape with lipstick. It can even enhance the shape. Using lipstick to conceal and overline the lips can also make them appear thicker or thinner.

The Lakmé Absolute Precision Lip Paint gives you perfectly defined lips every time you apply it. This lip paint lets you paint your lips like an expert. Its unique pack comes with an expert brush for superior definition and a lip pot with intense matte colour. But what makes it so amazing is the ease with which you can get perfectly defined lips, every time [36].

3. Completes your look-

When you apply lipstick to your lips, you also make them look fuller and adds the finishing touch to your look. Make a statement with your lips by either looking sophisticated in your next meeting or glamorous for your next date night [36].

4. Gives you confidence

Lipstick gives women a feeling of power and confidence. Put on some lipstick in a colour that you love and you'll feel way more confident. For all the lovely ladies and gentlemen out there, why not!? It's time to put your favourite lipstick shade to work, and say goodbye to your low self-esteem.

It has a one-stroke intense matte colour payoff that lasts all day long so you can feel confident. Those are the benefits of matte lipstick which make them so popular amongst all [36].

5. Acts as sunscreen

You will find that many lipsticks come with sun protection in order to keep your lips protected against harmful UV rays. Your lips, since they do not contain melanin, are more Susceptible to UV damage, but thankfully, lipsticks that contain SPF can help you avoid embarrassment.

There is no denying that lipsticks are important makeup products. You'll immediately feel better when you wear them to meetings, dinner parties, dates, and family events! It's great to put lipstick on and make yourself feel fashionable and confident [36].

ADVANTAGES OF HERBAL LIPSTICK OVER SYNTHETIC LIPSTICKS

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 no aspect impacts.
4. They are non-toxic, highly lipophilic, anti-oxidants, anti-microbial, anti-inflammatory, and are used in leukoderma of lips.
5. Extensive range of colour to choose form.

6. Colorants has different originals shades of colour 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.
8. By adding organic and inorganic acids and bases colour may be changed to different shades [37].



Disadvantage-

Lipstick can cause allergies and rashes around the lips and on the surrounding skin. There are also harmful effects on the lips, such as dryness, chapping, and blocked. pores. There are some harmful ingredients in lipstick that have been associated with cancer, as well as minute concentrations of heavy metals. Harmful Effects of Lipsticks. There are many health risks associated with lipstick. If the preservatives used in lipstick surpass the acceptable level, then it causes harm to the person such as:[38].

1. Toxin Ingestion

Toxicity is caused when manganese, cadmium, chromium, and aluminium accumulate in the body. Women ingest them while eating, accidentally. While buying lipstick, you should ensure that it is a quality product which is free of such ingredients [38].

2. Skin Allergies

A chemical called bismuth oxychloride is used to preserve lipsticks. The carcinogenic property of this ingredient is extremely harmful and can cause allergies [38].

3. Cancer

The preservatives used in lipsticks can cause major damage such as skin irritation, wheezing, coughing, and irritation of the eyes. One should be cautious as some lipstick brands can cause cancer [38].

4. Disrupted Endocrine System

All lipsticks contain petrochemicals which are a source of major health. Endocrine disruption can hinder growth, intelligence, reproduction, and development. It should not be forgotten that petrochemicals are a by-product of natural gas and crude oil [38].

5. Affected Nervous System

A common component of most of the lipsticks is lead. It is also known to cause hormonal imbalance and brain damage. The neurotoxin present in them causes degeneration of the nervous system [38].

6. Renal Failure

The heavy metals present in lipsticks can cause organ damage and dangerous diseases. Very high content of cadmium causes renal failure. Stomach tumours are caused by frequent application of lipstick [38].

Method Of Preparation of Lipstick-

Herbal lipstick formulation requires the basic manufacturing process such as

✓ Pigment prebiling-

The first step involved in the formulation of herbal lipstick is pigment prebiling where the agglomerates in the powder are broken down to give the lipstick a homogeneous smoothness and even colour [67], [68].

✓ Melting and mixing-

The next step involved is the melting and mixing stage, since waxes are solid at room temperature and cannot 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 [67], [68].

✓ Moulding-

Moulding is the actual phase in which the molten lipstick is poured into metal or plastic mould, the mixture is poured when it is hot so it is

helpful to harden and then removed with a slight pressure from the mole [67], [68].

✓ 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 [67], [68].

✓ Labelling -

After the lipstick is retracted and the tube is capped, the lipstick is ready for labelling. Labels identify the batch and are applied as part of the automated operation. While there is a great deal of emphasis on quality and appearance of the finished lipstick product, less emphasis is placed on the appearance of lip balms. Lip balms are always produced in an automated process (except for experimental or test batches). The heated liquid is poured into the tube in the retracted process position; the tube is then capped by machine a far less laborious [67], [68].

✓ Packaging-

The final step in the manufacturing process is the packaging of the lipstick tube. There are a variety of packaging options available, ranging from bulk packs to individual packs, and including packaging as a component in a makeup kit or special promotional offering. Lip balms are packaged in bulk, generally with minimum protection to prevent shipping damage. Packaging for lipsticks varies, depending on what will happen at the point of sale in the retail outlet. Packaging may or may not be highly automated, and the package used depends on the end use of the product rather than on the manufacturing process [67], [68].

Ingredients Use in Lipstick-

1. Aloe Vera

Common Name: Barbadosalea

Family: Xanthorrhoea

Aloe binds moisture to your skin, making them feel less dry. The main use of Aloe Vera in lipstick is for lips that are dry, cracked and itchy. Aloe vera is known as holy grail ingredient in the skin care industry. It has antioxidant property. It reduces wrinkles. It has anti-inflammatory property.



2. Pomegranate

Common Name: Punica granatum

Family: Punicaceae Antioxidant properties of pomegranate results in protection of the skin, also seed have properties to generate the skin & rehydrate the skin. Pomegranate fruits, fruit juice, its seeds, and peels are known to have higher contents of bioactive compounds, phenolic acids, flavonoids, and hydrolysable tannins. The peels of pomegranate fruits are the major by-products produced during processing of pomegranate enriched in antioxidants and broad-spectrum antimicrobial agents. Anthocyanins are water-soluble pigments primarily responsible for the attractive red- purple colour of pomegranate juice. It contains chief constituents such as punicalagin, punicalin, gallagic and ellagic acids It also contains alkaloids like isopelletierine. Punica granatum dye and many other common natural dyes. are reported as potent antimicrobial agents owing to the presence of a large number of tannins.



3. Beta vulgaris

Common name: Beet

Family: Brassica

Beetroot tends your lips. Moisture and nourishes lips. It has bleaching property. Chemistry of pigment. The colors of red/purple beetroot is due to a variety of Betalain

pigments, unlike most other red plants, such as red cabbage, which contain anthocyanin pigments. The composition of different beta lain pigments can vary. resulting in strains of beetroot which are yellow or other colors in addition to the familiar deep red Some of the betalains in beets are betanin, isobetanin. probetanin, and neobetanin (the red to violet ones are known collectively as betacyanin. Other pigments contained in beet are indicaxathin and vulgaxanthins (yellow to orange pigments known as betaxanthins) ... Indicaxanthin has been shown as a powerful protective antioxidant for thalassemia and prevents the breakdown of alpha-tocopherol (Vitamin E).



4. Solanum Lycopersicon

Common name: Tomato

Family: Solanaceae

Tomato has the highest antioxidant activity of all the carotenoids, due to this property it is used as an anti- ageing in skin care products⁸ Tomato contains alpha and beta carotenoid that helps skin against damaging free radical, carotenoids also prevent the degradation of collagen, elastin and fibrillin.



5. Citrullus lanatus

Common name: watermelon

Family: Cucurbitaceae



Its soothing formula will make your lips soft and velvety, with a delicious aroma of watermelon Dermatologically tested.

6. *Mangifera indica*

Common name: mango

Family:anacardiaceae

Mango Swirl is a bright orange shade. Mangoes are rich in beta-carotene and vitamin A that deep condition dry and chapped lips.



7. *Ananas comosus*

Common name: pineapple

Family; bromeliaceae

Pineapple is a natural exfoliator that helps to remove dead skin from skin. Chapped lips are usually dry and they start bleeding at times.



8. Turmeric

Family: Zingiberaceae

Scientific classification Kingdom: Plantae

Turmeric is commonly known as Indian saffron. Biological source-It consists of dried, as well as fresh rhizomes of the plant *Curcuma longa* Linn.



9. *Carica papaya*

Common name: papaya

Family:caricaceae

Papaya is a topical plant species discovered to contain high amounts of natural antioxidants that can usually be found in their leaves, fruits and seeds.



10. *Fragria*

Common name: strawberry

Family: rose Strawberry

Lips is a gorgeous light red lipstick. It doesn't have any sparkle, but does have a subtle shine. It's a versatile, sophisticated, and chic lip colors.



Ingredients & Its Functions

Sr.No.	Ingredients	Functions	Reference
01	Ripe fruit powder of <i>Shikakai</i>	Surfactants	41, 42, 43, 40
02	Lemon Oil	Antioxidants, Preservative, Flavouring agent	41,42, 43, 44, 46,40
03	Orange essence	Flavouring agent	40, 41, 42
04	Mango Butter from <i>Mangifera indica</i>	Lipstick Base	40, 41, 46
05	Beetroot juice	Colouring agent	40, 46
06	<i>Theobroma cocoa</i>	Colouring agent	40, 47, 48
07	Lycopene from <i>Solanum Lycopersicon L</i> (tomato)	Colouring agent	40, 51
08	<i>Punica granatum</i> From pomegranate	Colouring agent	40, 49, 50
09	<i>Amaranthus Cruentus L.</i>	Colouring agent	40, 52
10	Jati leaves (<i>tectona gradings L. F.</i>)	Colouring agent	40,43
11	Ginger Powder	Antimicrobial agent	40, 53
12	Turmeric Powder	Antimicrobial agent	40, 54
13	<i>Hylocereuspolyrhizus</i>	Antimicrobial agent and Colouring agent	40, 55
14	Vanilla essence	Preservative	40, 41, 43, 56, 54
15	Olive oil	Blending agent and Lipstick base	40, 46 47
16	Castor Oil	Blending agent, emollient, Oleaginous vehicle, solvent	40, 44, 41, 42, 47, 58, 59
17	Meadowfoam seed oil	Blending agent	40, 60, 61
18	Beeswax	Glossy, hardness, emollient	40, 62
19	Candelilla Wax	Lipstick base and moisturizer	40, 41, 43, 46, 47, 51, 53
20	Carnauba Wax	Lipstick base and moisturizer	40, 56, 64
21	Alkenones Wax	Lipstick base and moisturizer	40, 65, 66
22	Coconut Oil	Lipstick base and moisturizer	40, 62
23	Pitaya (<i>Hylocereuspolyrhizus</i>) Seed Oil	Lipstick base and moisturizer	40, 56, 65, 67
24	Mangosteen rind (<i>Garcinia mangostana L</i>)	Antioxidant	40, 65

Natural colouring Agent-

The colouring agent is derived from the coloured pigments of Beta vulgaris taproots. The beetroot, also known in as the tablet beet, garden beet, refers to any of the cultivated varieties of beet (Beta vulgaris) grown for third edible taproots.

Beetroot is an excellent source of folate and a good source of manganese and contains red coloured compound betaines which may function to reduce the naturally occurring amino acid cysteine as harmful to blood vessels.

COLORS	CHROMOPHORE	PLANT SOURCES
Purple-Blue	Anthocyanin	Grapes, blueberry, plum, purple cabbage, black berry
Green	Chlorophyll	Avocado, cucumber, spinach, broccoli, lettuce, kiwi
White-tan	Anthoxanthins	Cauliflower, Potato, Ginger, onions, orange
Yellow-orange	Carotenoids	Papaya, pineapple, pumpkin, carrot, orange
Red	Lycopene	Beet root, tomato, strawberry, watermelon, pomegranates

The original betaine, N, N, N-trimethyl glycine, was named after its discovery in sugar beet (Beta vulgaris) in the 19th century. It is a small N-trimethylated amino acid. Existing in zwitterionic form at neutral pH. This substance is now often called glycine betaine to distinguish it from other betaines. Natural colouring agents are extracted from natural sources such as animals, plants, insects, algae etc. Mainly natural colorants are extracted from, different plant sources such as fruits, roots, seeds and leaves etc.

Evaluation Parameters of Lipstick-

1. Melting point –

Determination of melting point is important as it is an indication of the limit of safe storage. The melting points.

The melting point of pomegranate colors pigment was measured using capillary method, the capillary was filled and kept in the capillary apparatus and firstly observed the point at which product was started melted.

After sometimes observed product was completely melted. Take both ends open glass capillary tubes. Introduce into each of 5 capillary tubes a sufficient amount of the lipstick, about 10mm high and allow the tubes to stand for the appropriate time and at the prescribed temperature in capillary tube is taken as the melting point. Repeat the operation 3 times using other 4 capillary tubes and calculate the result [69], [70], [71], [76], [77].

2. Breaking point-

Breaking point was done to determine the strength of lipstick". The lipstick was held horizontally in a socket 1/2 inch away from the edge of support.

This test was carried out to find out the value of maximum load that lipstick can withstand before it breaks. This test gives strength to lipstick Prepared herbal lipstick was held horizontally in a socket inch away from the edge of support. The weight was gradually increased by a specific value (10 g) at a specific interval of 30 sec and the weight at which breaks was considered as the breaking point.

The study indicated that the higher the breaking point test numbers, the better texture [69], [70], [71], [72], [73].

3. Thixotropy character –

It is indication of thixotropic quality and was done by using penetrometer. This test was giving an indication of thixotropic quality and is done by using penetrometer. A standard needle of specific diameter is allowed to penetrate for 5 seconds under a 50gm load at 25°C. The lipstick was kept at 25°C prior to the experiment.

Depth of penetration was a measurement of thixotropic structure. Penetration below 10 mm was inductive of soft and thixotropic structure. A product of high droop point with soft, thixotropic structure will assure good application characteristics.

The depth of penetration was a measurement of the thixotropic structure of lipstick. The thixotropy of lipstick ranged from 9 to

10. Based on the reviewed data, there is no single study that mentioned a comparison of the thixotropic results to the reference guidelines. This could suggest that no guidelines for this test have been developed [69], [70], [79].

4. Force of application-

It is test for comparative measurement of the force to be applied for application. A piece of coarse brown paper can be kept on a shadow graph balance and lipstick can be applied at 45° angle to cover a 1 sq. inch area until fully covered.

The pressure reading is an indication of force of application. It is test for determine the force to be applied for application. Keep a piece of coarse brown paper on a shadow graph balance and apply lipstick at 45° angle to cover a 1 sq. Inch area until fully covered [69], [70], [80].

5. Surface anomalies-

This was studied by the surface defects, such as the formation of crystals on the surface, contamination by moulds, fungi, the formation of wrinkles, exudation of liquid substances and solid fatty substances [69], [70], [81].

6. Aging stability –

The product was stored in 40°C at 1 hr. Various parameters such as bleeding, crystallization of on surface and case of application were observed [69], [70], [71], [74].

7. Solubility test-

Solubility of Pomegranate colors pigment was determined in distilled water, acetone, methanol, and ethanol is solve the lipstick in different solvents and observe the solubility in each solvent.

Lipstick containing castor oil is soluble in alcohol [69], [70], [83].

8. pH parameter-

The pH of formulated herbal lipstick was determined using pH meter. 1 g of lipstick was dissolved in 100 ml of distilled water and measured for its pH [69], [70], [84].

9. Skin irritation test-

Skin irritation test It is carried out by applying product on the skin for 10 min [85],[86].

10. Perfume irritation test-

The formulation herbal lipstick was tested after 30 days, to record the fragrance [75]. [70], [69], [71].

11. Softening Point -

The lipstick sample was inserted in to an aluminium ring. Extra muss above and below the orifice was removed using a sharp blade to get a lipstick tablet in to the ring. This was placed in a refrigerator (6°C) for 10 min. After removing it from the refrigerator, the ring was fastened onto a stand. This assembly was dipped in to a beaker full of water. This was heated with a continuous stirring. Temperature was monitored using a thermometer. Softening point was the temperature at which the lipstick mass was loosened and fall to bottom of the beaker [69], [70], [71], [78].

12. Permeability Study-

Cellophane membrane was soaked in and allowed to evaporate ethanol buffer (7.4pH) for 24 hr. 50 mg of lipstick mass was applied on the membrane and it was placed on the diffusion cell. Buffer (6.4pH) was used as receptor media. This was magnetically stirred (600rpm). The experimental temperature was maintained at 32°C by circulation thermostatic water inside the cell jacket [69], [70], [71].

13. Penetrometer test-

Penetration on several point on the surface of the lipstick I was determined & the average of all Such determination reported in micrometre. The penetrometer Needle was adjusted so that it just site on Surface of the Moulded lipstick rod [69], [70], [71].

14. Microbial testing-

Contamination from raw materials, moulds, storage kettles or lipstick container can lead to microbial growth. The test consists of plating a known mass of the sample on two selected culture media specifically suitable for the growth of bacteria fungi incubating them for a specified period to permit the development of visual colonies for counting. The limit is, not more than 100 µo/gm [69], [70], [71].

15. Rancidity:

This test when carried out on dark-coloured lipstick is likely to be vitiated because the endpoint in the determination of peroxide number may not be very sharp. In such cases, it is expected, as a good manufacturing practice manufacturer should check rancidity of lipstick raw materials, especially vegetable oil and other rancidity prone materials regularly in lipstick base mixtures without colours, by peroxide number test [69], [70], [71].

16. Spreadability test –

A Spreadability test is used to determine the ability of lipstick consistency to spread [69], [70], [71], [82].

Defects In Lipsticks-

1. Formulation related problems-[1]

- a. Sweating: It is the most common problem of lipstick formulation due to high oil content or inferior oil binding. It may arise in any climate or temperature range.
- b. Bleeding: This refers to the separation of coloured liquids from the waxy base.
- c. Streaking: A thin line or band of a different colour or a substance appears on the finished product.

2. Moulding related problems-[1]

- a. Laddering: Lipstick does not look smooth or homogeneous after congealing and setting but instead has a multi-layered appearance.
- b. Deformation: This is a moulding problem where the shape of the lipstick looks deformed. It is noticeable and appears on both sides of the lipstick.
- c. Cratering: This appears in split moulding and it shows up flaring when the stick develops dimples.
- d. Mushy failure: This is a problem in which the central core of the lipstick lacks structure and breaks.

Marketed preparation of lipstick

Sr.no	marketed preparation	Features
1	Biotique natural makeup diva pout lipstick	1.This Diva Pout should be a wonderful organic treat for your lips 1. formula is matte creamy that applies smoothly and gives you a non-drying and uncrackable finish.
2	DISGUISE COSMETICS 100% Vegan Matte Lipsticks	1.Keeps lips soft, nourished and moist; Leaves a smooth, satin-matte finish. 2.Extremely comfortable and long lasting. 3.They come with vibrant color payoffs like mauvy browns, hot pinks, and beautiful corals.
3	Lotus Herbals Pure Colors Lip Color	1. lipstick does not any parabens, petro-chemicals, phthalates, sulfates, synthetic fragrances, and synthetic dyes. 2. Glides on smoothly and stays put the whole day long without making your lips dry
4	Soultree Ayurvedic Lipsticks	1.Soultree Ayurvedic Lipsticks are made with pure natural pigments that enhances the beauty of your natural lips. 2.Available in 24 shades that would cater to a lot of skin tones
5	Organistick Organic Lipstick	1.Organistick lipstick is one of its kind comprising of all natural and organic components that make it long-

		lasting. 2.Available in 36 different shades.
6	Ruby's Organic Lipstick	1.Ruby's Organics Lipstick carries all the benefits of a lip balm but wears and stays like a lipstick. 2.Available in 8 different shades
7	Lotus makeup ecostay long lasting lip colour	1.Lip colour is a preservative free; Your lips are ready for a healthier shine all day long. 2.Texture is: Cream; Duration: Long lasting; SPF: SPF 20 gives UV protection.
8	Lba halal care pure lips moisturizing lipstick	1.Lba is proud to present India's first range of halal certified & vegan lipsticks. 2.Available in 15+ shades.

II. CONCLUSION-

An herbal lipstick is used to rejuvenate the lips muscles maintain the elasticity of the skin, remove adhered dirt particles and improve the blood circulation. The benefits of Herbal based cosmetics are their nontoxic nature.

It nourishes the lip skin. This lipstick supplies vital nourishment to the lip. It helps in the elimination of wrinkles, cracking, dryness and folds on lips. Lipstick exfoliates little and provides a soothing, calming and cooling effect on the lip. They restore the natural shine of lip in the optimum time period. Frequent Uses of natural lip improve lip texture and Attractive colors. Pollution and harsh climates badly affect the lip and these effects can be countered by the regular usage of Herbal lipstick. They help to retain the elasticity of lip cells, thereby controlling premature aging of the lips.

Wrinkles, Fine lines, can be effectively controlled by using natural lips. In this work, we found excellent properties of the herbal lipstick and further studies are needed to be performed to ascertain more useful benefits of herbal lipstick as cosmetics. Natural remedies are accepted nowadays with open hands as they are safer with fewer side effects than the chemical-based products. Herbal formulations are required in large amounts to fulfil the needs of the growing world market. It is an effective attempt to formulate the herbal lipstick containing different natural nutrients.

REFERENCE-

- [1]. V. Anil kumar, M.D. Dhanaraju. Journal of pharmaceutical advanced research 2018
- [2]. Madeleine Ogilvie, Mariama Majella Ryan research journal of social science and management.
- [3]. .TejasriAnandaro Gore et al formulations and evaluation of herbal lipstick containing antifungal agent Indo American journal of pharmaceutical research 2018.
- [4]. .Rautela Sunil, formulation and evaluation of herbal lipstick : A New Approach International Journal of pharmaceutical Erudition, May 2013, 3(1),26-30
- [5]. Adliani N, Nazliniwati, Purba D. Formulasilipstikmenggunakanzatwarnadar iekstrakbungakecombrang (Etlingera elatior (Jack) R. M. Sm.). J Pharm Pharmacol2012;1:87-94.
- [6]. Spiewak R. Patch testing for contact allergy and allergic contact dermatitis. Open Allergy J 2008;1:42-51.
- [7]. Nigam. Adverse reactions to cosmetics and methods of testing. Indian J Dermatol VenereolLeprol2009;75:10-9.
- [8]. Vasudevan M, Parle M. Pharmacological evidence for the potential of daucus carota in the management of cognitive dysfunctions. Biol Pharm Bull 2006;29:1154-61.
- [9]. Loretz LJ, Api AM, Barraji LM, Burdick J, Dressler WE, Gettings SD, et al. Exposure data for cosmetic products: lipstick, body

- lotion, and face cream. 2005;43:279-91.
- [10]. Farida hayati, formulation and evaluation of herbal lipsticks from carrot (daucus carota l), IJPPS 2016.
- [11]. Pallavi S. Karanje, Rohit R. Bhosale, Formulations and evaluation of herbal lipstick containing amartanthus cruentus linn volumr 7, isuse 1 march 2017.
- [12]. Korac RR, Khambholja KM. Potential of herbs in skin protection from ultraviolet radiation. Pharmacogn Rev 2011;5:164-73.
- [13]. Adliani N, Nazliniwati, Purba D. Formulas lipstick menggunakan zat warnadar ekstrak bungakecombrang (Etingera elatior (Jack) R. M. Sm.). J Pharm Pharmacol 2012;1:87-94.
- [14]. Andriani S, Soeryati S, Gozali D. Pemanfaatan zat warnawortel (Daucus carota linn) dalam pembuatan pewarna bibir bentuk batangan (lipstick). Jurnal Penelitian Farmasi 2009;6:18-25.
- [15]. Ikawati R. Optimasi kondisi ekstrak srikarotenoid wortel (Daucus carota l) menggunakan response surface methodology. Jurnal Teknologi Pertanian 2005;1:14-22.
- [16]. Spiewak R. Patch testing for contact allergy and allergic contact dermatitis. Open Allergy J 2008;1:42-51.
- [17]. Nigam. Adverse reactions to cosmetics and methods of testing. Indian J Dermatol Venereol Leprol 2009;75:10-9.
- [18]. Vasudevan M, Parle M. Pharmacological evidence for the potential of daucus carota in the management of cognitive dysfunctions. Biol Pharm Bull 2006;29:1154-61.
- [19]. Pooja Mishra and Sumeet Dwivedi, Asian journal of medicines and pharmaceutical research, 2012.
- [20]. Madeleine Ogilvie, mariamajellaryan, research journal of social science and management, 16 oct 2011, volume 1
- [21]. Renuka R. deshpande, holepundlik, formulation and evaluation of herbal lipstick, may 2022, volume 6, issue 12.
- [22]. Meherdeepati et al /IJRAP 2011, 2(6) Page no 1975-1997.
- [23]. S. Benettw, Benetts, Cosmetic formulation 2. Ed. chemical publishing company (NV). 1983.
- [24]. Dr Foutsizoglou, Anatomy of the ageing lip, pila news DECEMBER/JANUARY 2017 VOL 4 NO 2 | www.planews.com
- [25]. Alexis L. Boson, MD; Stefanos Boukavalas, MD; Joshua P. Hays, MD; Josh A. Hammel, MD; Eric L., Cole, MD; Richard F. Wagner Jr, MD Upper Lip Anatomy, Mechanics of Local Flaps, and Considerations for Reconstruction October 2021.
- [26]. Pepper JP, Baker SR. Local flaps: cheek and lip reconstruction. JAMA melanoma 2014;8:103-1028. Younger RA Facial Plast Surg. 2013;15:374-382.
- [27]. Rogers CR, Weinberg SM, Smith TD, et al. Anatomical basis for apparent subepithelial cleft lip: a histological and ultrasonographic survey of the orbicularis oris muscle. Cleft Palate Craniofac J. 2008;45:518-524.
- [28]. Yin N, Wu D, Wang Y, et al. Complete philtrum reconstruction on the partial-thickness cross-lip flap by nasolabial muscle tension line group reconstruction in the same stage of flap transfer. JAMA Facial Plast Surg. 2017;19:496-501.
- [29]. Azib N, et al. Anatomy and Lip Enhancement. Paris, France; E2e Medical Publishing/Master Collection 4; 2011.
- [30]. Standring S. Gray's Anatomy: The Anatomical Basis of Clinical Practice. 41st Edition. Elsevier; 2016.
- [31]. Moore KL, Dalley AF. Clinically Oriented Anatomy. 4th Edition. Lippincott Williams & Wilkins; 1999.
- [32]. Aayushi Mehra A Complete Guide About Lipstick And Its Types Written by Master Class
- [33]. Types of Lipstick: A Guide to 7 Types of Lipstick Last updated: Apr 7, 2022.
- [34]. Chapter: Textbook of Cosmetic Formulation: Lipsticks pharmacy180.com
- [35]. Manoj Mankala preparation and evaluation of Lipsticks Jul. 09, 2018.
- [36]. Kinnari Ashar, Oct 10, 2022 BENEFITS OF LIPSTICK be beautiful.in/all-things-makeup/life
- [37]. Uzma s *t, Shayesta k', Abdul sameeh 2, Juveriya M³, SM Shahidulla International Journal of Creative Research Thoughts

- (IJCRT) www.ijcrt.org Volume 10, Issue 5 May 2022.
- [38]. Vaishnavi Nagaraj, Side Effects of Lipsticks May 7, 2019.
- [39]. Saeid Mezaail Mawazi¹., Nurul Aqilah Binti Azreen Redzal¹, Noordin Othman 2.3 and Sultan Othman Alolayan Lipsticks History, Formulations, and Production: A Narrative Review 18 Feb 2022.
- [40]. Sunil, R. Rautela, T., Ashutosh, B. Formulation and evaluation of a herbal lipstick: A new approach. *Int. J. Pharm, Eruit* 2013, 3, 26-30.
- [41]. Tirunagari, M.; Nerella, N.; Koneru, A.; Baig, A.N.; Begum, A. Formulation and evaluation of medicated lipstick using natural coloring agent. *Res. J. Top. Cosmet. Sci.* 2020, 11, 20-23. [CrossRef]
- [42]. Mishra, P. Dwivedi, S. Formulation and evaluation of lipstick containing herbal ingredients. *Asian J. Med. Pharm. Res.* 2012, 2, 58-60.
- [43]. Ghongade, K; Bodake, V., Badadare, S.; Magdum, M.; Gawande, N. Kate, S.; Waghmare, K. Formulation and Evaluation of some Cosmetic preparations using novel natural colorant from *Ixone coccinea*. *Asian J. Res. Pharm. Sci.* 2021, 11, 22-28.
- [44]. Bhagwat, D.; Patil, N.D., Patel, G.S; Killedar, S.G.; More, H.N. Formulation and Evaluation of Herbal Lipstick using Lycopene Extracted from *Solanum lycopersicum L.* *Res. J. Pharm Technol.* 2017, 10, 1060. [CrossRef]
- [45]. Sunil, R. Rautela, T., Ashutosh, B. Formulation and evaluation of a herbal lipstick: A new approach. *Int. J. Pharm, Eruit* 2013, 3, 26-30.
- [46]. Chaudhari, N.P. Chaudhari, H.A., Chaudhari, N.U. Premchandani, L.A. Dhankani, A.R., Pawar, S.P. Formulation and evaluation of herbal lipstick from *Beta vulgaris* taproot. *Indian J. Drugs* 2019, 7, 14-19.
- [47]. Mishra, P. Dwivedi, S. Formulation and evaluation of lipstick containing herbal ingredients. *Asian J. Med. Pharm. Res.* 2012, 2, 58-60.
- [48]. Acimović, M.; Čabarkapa, I., Cvetković, M.; Stanković Jeremić, J.; Kiproovski, B.; Gvozdenar, S.; Puvača, N. *Cymbopogon citratus* (DC.) stapf: Chemical composition, antimicrobial and antioxidant activities, use in medicinal and cosmetic purpose. *J. Agron. Technol. Eng. Manag.* 2019, 2, 344-360.
- [49]. Sunil, R. Rautela, T., Ashutosh, B. Formulation and evaluation of a herbal lipstick: A new approach. *Int. J. Pharm, Eruit* 2013, 3, 26-30.
- [50]. Jain, V., Rai, S.S.; Paskanti, Y. Formulation and evaluation of herbal lipstick and hand lotion from mango butter. *World J. Pharm. Sci.* 2021, 9, 144-147. [CrossRef]
- [51]. Pratiwi, D.; Nurmaliza, N.; Bakhtiar, T. The use of natural color turmeric (*Curcuma domestica* val) and chocolate seeds (*Theobroma cacao* L.) in lipstick formulation. *Glob. Conf. Ser. Sci. Technol.* 2021, 5, 6-12. [CrossRef]
- [52]. Setyawaty, R., Pratama, M.R. The usage of jati leaves extract (*Tectona grandis* L.E.) as color of lipstick. *Maj. Obat Tradis.* 2018, 23, 16-22. [CrossRef]
- [53]. Jain, S.D.; Padiyar, M.; Birla, D.; Mukherjee, J.; Sharma, V. Formulation and characterization of herbal lipstick using colored pigment of *Punica granatum*. *Pharma Tutor* 2018, 6, 8-10. [CrossRef]
- [54]. Panda, S. Dalapati, N., Kar, P.K. Preparation and evaluation of Herbal Lipstick. *Environment* 2018, 5, 6.
- [55]. Munawirch, S.Z.; Nabila, A.N., Chabib, L. Development of water in olive oil (W/O) Nanoemulsions as lipstick base formulation. *Int. J. Pharm. Med. Biol. Sci.* 2017, 6, 37-42. [CrossRef]
- [56]. Munawiroh, S.Z.; Nabila, A.N.; Chabib, L. Development of water in olive oil (W/O) Nanoemulsions as lipstick base formulation. *Int. J. Pharm. Med. Biol. Sci.* 2017, 6, 37-42. [CrossRef]
- [57]. Raymond, C.R., I'aul, J.S.; Sian, C.O. Handbook of pharmaceutical excipients. *Am. Pharm. Assoc. Washingt. DC* 2006, 6, 130-133.
- [58]. Howard, G.M. Lipsticks. In *Perfumes, Cosmetics and Soaps*; Springer. Berlin/Heidelberg, Germany, 1974; pp. 196-221.
- [59]. Maru, A.D.; Lahoti, S.R. Formulation and evaluation of lipstick containing sunflower wax. *Int. J. Pharm. Res.* 2018, 10, 126-130.
- [60]. Naughton, F.C. Castor oil. *Kirk-Othmer Encycl. Chem. Technol.* 2011, 1, 1-20

- [61]. McIntosh, K. Smith, A., Young, L.K., Leitch, MA, Tiwari, A.K., Reddy, C.M., O'Neil, G.W; Liberatore, M.W.; Chandler, M.;Baki, G. Alkenones as a Promising Green Alternative for Waxes in Cosmetics and Personal Care Products *Cosmetics* 2018, 5, 34 [CrossRef]
- [62]. Afandi, A.S.R.U.L.; Lazim, A.M.; Azwanida, N.N.; Bakar, M.A.; Airianah, O.B.; Fazry, S. Antibacterial properties of crude aqueous *Hylocereuspolyrhizus* peel extracts in lipstick formulation against gram-positive and negative bacteria. *Malaysian Appi. Biol.* 2017.
- [63]. Bogdanov, S. Beeswax: Uses and trade. In *Bersaux Book; Bee Product Science: Bern, Switzerland, 2009; pp. 1-16.*
- [64]. Bono, A.; Mun, H.C.; Rajin, M. Effect of various for In Studies in Surface Science and Catalysis; Elsevier Am 16 of 20
- [65]. Kamairudin, N.; Gant, S.S.A.; Masoumi, H.R.F.; Hashim, P. Optimization of natural lipstick formulation based on pitaya (*Hylocereuspolyrhizus*) seed oil using D-optimal experimental design. *Molecules* 2014, 19, 16672-16683.
- [66]. 57. Illian, D.N. Utilization of virgin coconut oil (VOD) for base and purple sweet potatoes (*Ipomea batatas L.*) extract for naturalcoloring in lipstick formulation. *Ranging Jeumpa J. Pharm. Sci.* 2020, 1, 1-6.
- [67]. Drx. Sneha Yadav, Dr. V. K. Redasani and K. J. Baid, *WORLD JOURNAL OF PHARMACEUTICAL Research Article* 25 March 2020.
- [68]. Korac RR. Khambholja KM. Potential of herbs inskin protection from Ultraviolet radiation. *Pharmacogn Rev*, 2011: 7: 164-173. 28. Shivanand P. Nilam M, Viral D. Herbs play an important role in the field of cosmetics. *Int J Pharm Tech Red*, 2010: 2: 632-639.
- [69]. Rautela Sunil, Tailor Chandra Shekhar, Badola Ashutosh, Formulation and Evaluation of a Herbal Lipstick: A New Approach May 2013.
- [70]. Sharma P.P. *Cosmetics formulation and Quality Control.* 3rd ed. Vandana Publication. 2005:35-54.
- [71]. Jain S.K. & Sharma N.K. *A Text Book of Pharmaceutics.* Vallabh Prakashan.2005:127-72.
- [72]. Mittal B.M. and Saha R.N. *Handbookof Cosmetics* 1st ed. A Vallabh Prakashan.2003:132-56.
- [73]. Mishra P, Dwivedi S. Formulation and evaluation of lipstick containing herbal ingredient. *Asian Journal of Medical and pharmaceutical Researches.* 2012; 2(3):58-60.
- [74]. Avinash MD, Hari AM, Pradeep N S. Herbal lipstick formulation. A new approach. *International Journal of Research in Ayurveda & Pharmacy.* 2011; 2(6):1795-97.
- [75]. Swati D. Manisha S, Sonia S, Pavankumar K M, Dhiraj P, Ganesh N. Formulation and evaluation ofnatural lipstick prepared from bixaorellana seeds and beta vulgaris root extract and the comparative studyInternational Journal of Pharmacy and Pharmaceutical sciences.2013;5(4):68-70.
- [76]. Sunil, R.; Rautela, T.; Ashutosh, B. Formulation and evaluation of a herbal lipstick: A new approach, *lut. J. Pharm. Frul* 2013, 3, 26-30.
- [77]. Mishra, P.; Dwivedi, S. Formulation and evaluation of lipstick containing herbal ingredients. *Asian J. Meil Pharm. Res.* 2012, 2, 58-60.
- [78]. Chee, S.YK.; Sarini, H. Effect of cocoa wax derived from free fatty acids of cocoa butter deodorizer distillate towards physical properties of lipstick. *Timing Frey, Cocoe Pod Borer Attack Dar. Pod Deo, der Nat. F. Cond*, 2018,10,107.
- [79]. Dwivedi, S.; Dwivedi, S.N.: Patel, PC. Formulation evaluation and antimicrobial activity of herbal lipstick, *Recent Ade: Prospatent Medi. Plants* 2009, 4, 39-43
- [80]. Sharma, P.P. *Cosmetics: Formulation, Manufacturing, Quality Control: Vandana Publications: Lucknow, India, 2018. 86: Sainath, M.; Kumar, K.S.; Babu, K.A. Formulation and evaluation of herbal lipstic Int. J. Ad Res. Med. Pharm. Sci.* 2016, 1, 14-19.
- [81]. Liu, G.; Yang, N.; Guo, L., Guo, S. Chen, Z. A one-stage approach for surface anomaly detection with background suppression strategies, *Sensors* 2020, 30, 1829. [CrossRef] 123, Dash, G.K., Anas, N.A.A.M., Majeed, S. Formulation and evaluation of lipsticks containing natural

- ingredients. INDO Am. J.Pharm. Sci. 2017, 4, 3264-3267
- [82]. Susmiatun, S.; Kusuma, A.M. Budiman, A.; Hapsari, I The physical properties and stability of purple yam (*Ipomoea batatas* (L.) Lam) lipstick. *Plurianu* 2018, 8, 290. [CrossRef]
- [83]. 131. Mubofu, E.B. Castor oil as a potential renewable resource for the production of functional materials. *Sustain. Chem. Process*, 2016,
- [84]. Kulkarni, V. Shaw, C. Chapter 11 Miscellaneous Plogical, Chemical, and Microbiological Test Methods; Elsevier. Kent, UK, 2016. [CrossRef]
- [85]. Sreedhar, D. Manjula, N., Pise, S.PA.. Ligade, V. Ban of cosmetic testing on animals: A brief overview. *Int. J. Cher. Res. Rev.* 2020,12, 113.
- [86]. 143. Han, J., Lee, G.-Y.; Bar, G.; Kang, M.-J., Lim, K.-M. Chemskin reference chemical database for the development of anin vitro skin irritation test. *Toxics* 2021, 9, 314. [CrossRef].