

A Novel Preparation and Evaluation of Herbal Lotion by Using Coconut Milk

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Abstract—The herbal cosmetics are those when natural herbs and their products used for their aromatic value in cosmetic preparation among consumers for herbal products triggered the demand for natural products and natural extracts in cosmetics preparations. Herbal preparation is research by many more researchers and from new herbs obtained new herbal formulation. Herbal lotions have gained popularity in recent years due to their perceived natural and safe properties compared to synthetic skincare products. This abstract explores the formulation, benefits, and efficacy of herbal lotions in skincare routines. It discusses the key ingredients commonly found in herbal lotions, such as aloe vera, coconut milk and honey, known for their soothing and nourishing properties. Furthermore, it examines the potential benefits of herbal lotions, including hydration, inflammation reduction, and antioxidant protection.

Index Terms—herbal cosmetics; soothing; nourishing properties; potential benefits

I. INTRODUCTION

Herbal formulation involves the natural ingredients which are used in cosmetic products. The features of the herbs are well-known. For example, turmeric, Aloe vera etc. The origin of ayurveda in India by Rishi's also denotes the best of ayurvedic herbs. The formulation which contains the herbs are proved by ayurveda. Herbal remedies in rich the bodies with nutrients with other useful minerals. An herbal lotion that can give effective protection to skin and free from any toxicity. As they are natural and are found to be safe to use as compared to chemical-based formulation. Lotions are semi-liquid form it directly applied on the body. The benefits of coconut milk, honey, glycerin, rose water, almond oil and aloe vera help to nourish the skin and prevent dryness of skin during summer and winter season and slightly brings glow on the skin. The lotion act as a cooling, soothing or for protective purpose. Herbal lotions, sometimes known

as "herbal cosmetics," are made with recognized cosmetic components to provide specific cosmetic benefits. Herbal lotions use natural herbs and extracts for their aromatic properties in cosmetic preparations, increasing demand for natural products. Lotions are liquid formulations that are designed to be applied externally without friction. They are applied directly to the skin with absorbent materials such as cotton wool or gauze. Lotion has local cooling, soothing, and protective benefits. For washing the skin and get rid of greasy secretions, lotions are employed. Along with other health advantages, it enhances blood circulation, emollience, astringency, skin freshness, and bleaching. The application of herbal creams is often frictionless. It is necessary to separate the insoluble materials finely. Colloidal particles work better on damaged surfaces and reduce inflammation in irritated area. Cosmetics are designed to combat acne, minimize wrinkles, and regulate oil production. Many substances are used to make skin protection, sunscreen, antiaging, antiacne, and antiwrinkle products. The advantages and properties of the herbal plants used to make herbal lotions for cosmetics are investigated in this study. ae intelligence and applies it to advance wellbeing and health. Ayurvedic based herbal cosmetics offer a thorough approach to skincare by treating both superficial and deep skin problems. Herbal extract-based lotions offer targeted solutions for skin issues like aging, dryness, irritation, and environmental damage. There are innumerable types of cosmetics that can be used as a vehicle for artistic expression. Makeup allows people to create their desired image and highlight their unique identities, whether through subtle enhancements or major transformations. The emergence of herbal cosmetics adds a new dimension to this creative pursuit by offering a range of organic components that nourish and improve skin. Herbal lotions encourage consumers to take time for selfcare and relaxation by transforming skincare

regimens into a sensory experience with their delicious blends of herbs and botanicals.



INGREDIENTS USED IN HERBAL LOTION PREPARATION

ADVANTAGES OF COCONUT MILK:

Coconut milk lotion offers several advantages for the skin, including:

KEY BENEFITS

Deep Moisturization: Coconut milk lotion deeply hydrates the skin, leaving it soft, smooth, and supple.

NOURISHMENT

Rich in vitamins and minerals, it provides essential nutrients to the skin, promoting healthy skin cell growth.

SOOTHING AND CALMING

The anti-inflammatory properties of coconut milk can help soothe irritated or inflamed skin, making it suitable for sensitive skin types.

ANTI-AGING

Antioxidants in coconut milk may help reduce signs of aging, such as fine lines and wrinkles, by protecting the skin from oxidative stress.

SKIN REPAIR

Coconut milk's natural fatty acids and vitamins can aid in repairing damaged skin, promoting a smoother and more even complexion.

NON-GREASY

Despite its richness, coconut milk lotion is often lightweight and absorbs quickly, leaving no greasy residue.

NATURAL AND GENTLE

Made from natural ingredients, it is often free from harsh chemicals, making it a good option for those with sensitive skin or allergies.

VERSATILE

Can be used on various parts of the body, including hands, feet, elbows, and knees, to keep skin hydrated and nourished.

ADDITIONAL BENEFITS:

1. **Improves Skin Elasticity:** Regular use may help improve skin elasticity and firmness.
2. **Enhances Skin Glow:** Provides a natural glow and radiance to the skin.
3. **Suitable for Dry Skin:** Ideal for dry, flaky, or rough skin, as it provides intense hydration.
4. **Coconut milk lotion is a natural, nourishing option for maintaining healthy, hydrated skin.**

II. MATERIALS AND METHODS

2.1. MATERIALS

Coconut Milk, Aloe vera, Honey, Almond oil, Glycerine, Rose water.

2.2. METHODS

Collection, Extraction, Straining

2.3. MATERIALS AND IT USES:

A. COCONUT MILK

The coconut tree is known as the "tree of life" due to its variety of uses and nutritional content. Coconut trees do not require extensive attention during their growth or lifespan; therefore, it is called lazy man's crop. Indonesia, India, and the Philippines are currently among the largest producers of coconuts worldwide.

The scientific name of coconut is *Cocos nucifera*. Coconut milk is a white liquid extracted from the grated flesh of mature coconuts and is known for its distinctive nutty flavour coconut milk benefits. It is commonly used in a variety of dishes, including fish, poultry, meat, and vegetable preparations, as well as in baked goods. This is particularly true in many Asian and Pacific countries where coconuts are naturally abundant and form an integral part of the local cuisine.



FIG. COCONUT MILK

SYNONYM: *Cocos nucifera*

BIOLOGICAL SOURCE

The biological source of coconut milk is the fruit of the coconut palm (*Cocos nucifera* L.)

USES

- 1.It contains anti-bacterial, anti-fungal properties and Moisturizing properties.
- 2.It's easily absorbed, smoothest skin cells, and the fats help maintain your skin's elasticity.
- 3.It is ideal moisturizer for the body which makes the skin smooth and textured.
- 4.Coconut milk is moisturizing agent.
- 5.It promotes wound healing and reduces inflammation.
- 6.It contains antibacterial and antifungal properties.

B. ALOE VERA

Betacarotene and vitamin C are abundant in aloe vera gel. It possesses antiaging qualities as a result. It has anti-inflammatory and antibacterial qualities as well. It also lessens wrinkles and removes skin imperfections. It softens the skin and unclogs the pores. In addition to its cooling qualities, all over gel is high in minerals and antioxidants that promote healing. Additionally, it has calming and hydrating properties.



FIG. ALOE VERA

SYNONYM: *Aloe barbadensis miller*.

BIOLOGICAL SOURCE

It is the dried latex from the leaves of various species of the Aloe genus, most commonly *Aloe barbadensis* Miller.

FAMILY: Liliaceae

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- Coconut milk is moisturizing agent.
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C.ALMOND OIL

Almond oil is an excellent base for herbal lotions due to its, moisturizing, and antioxidant properties. To prepare a simple herbal lotion, you can combine almond oil with other ingredients coconut milk, aloe vera, stir them together until a creamy, stable lotion forms



FIG. ALMOND OIL

SYNONYM: *Prunus dulcis*

BIOLOGICAL SOURCE

The seed kernel of the almond tree, which is scientifically known as *Prunus dulcis* or *Prunus amygdalus*,

FAMILY: Rosaceae

USES

- Provides hydration. It helps to achieve soften texture to the skin.
- Almond oil is an emollient that provides hydration,

which can help moisturize and smooth skin.

- Almond oil is generally safe for sensitive skin because it is non-irritating and light weight.
- It may act as an antioxidant.
- It may have anti-inflammatory action.
- It may increase good cholesterol levels.
- It may have antibacterial activity

D. GLYCERINE

A skin care product called herbal lotion with glycerine blends the moisturizing properties of glycerine with the organic advantages of herbal extracts. Typically, plant-based components with calming, antimicrobial, and restorative qualities like chamomile, neem, Tulsi, or aloe vera are used to make this lotion. As a natural humectant, glycerine aids in drawing and holding onto moisture, leaving the skin feeling moisturized, smooth, and silky.

Together, the herbal ingredients nourish the skin, lessen inflammation, and shield it from environmental aggressors. This herbal glycerine lotion is perfect for all skin types, but it works particularly well for dry and sensitive skin because it deeply hydrates without irritating or clogging pores. It is soft yet effective because it frequently contains no harmful ingredients.



FIG. GLYCERINE

SYNONYM: Propane-1,2,3-triol

USES:

1. Anti-ageing properties and versatile compound
2. Glycerine uses as moisturizer.
3. It soothes dry and irritated skin.
4. It treated acne and scars.

E. ROSE WATER

Rose petals are steeped or distilled in water to create rose water, a naturally occurring, fragrant beverage. Because of its calming, moisturizing, and anti-inflammatory qualities, it has been a part of skincare and cosmetic regimens for ages. Rose water's gentle astringent properties help to tighten and tone pores, while its abundance of antioxidants protects and revitalizes the skin. All skin types, especially sensitive skin, can benefit from its soothing nature. Rose water is used in body lotion formulations as a natural moisturizing ingredient that raises the skin's moisture content and adds a delicate, flowery scent without the use of artificial fragrances. It helps to maintain a healthy, glowing complexion and is perfect for dry or irritated skin due to its relaxing effects.



FIG. ROSE WATER

SYNONYM: Rosa Damascena

BIOLOGICAL SOURCE

Rose water is the petals and sepals of various rose species, with the most common being *Rosa damascena* (Damask rose).

FAMILY: Rosaceae

USES

- a. It helps to provide cooling effect and prevent itching.
- b. Rose water can clam your skin.
- c. It has anti-aging property.
- d. Rose water makes great facial mist.

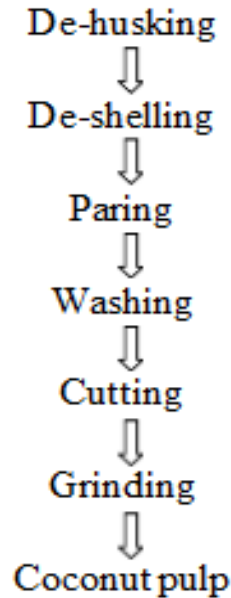
III. METHODS

1. COLLECTION

Collect all the ingredients.

2.EXTRACTION

Extraction of coconut milk form raw coconut.



STRAINING



Straining coconut milk from the pulp, blend shredded coconut with hot water, then pour the mixture through a fine-mesh strainer lined with a nut milk bag or several

layers of cheese cloth. Squeeze the bag firmly to extract as much liquid as possible, leaving the solids behind.

TABLE:1



S.No	Name of the Ingredients	Quantity
1	Coconut Milk	15 ml
2	Aloe Vera	10 ml
3	Honey	5 ml
4	Almond Oil	5 ml
5	Rose Water	2 ml
C	Glycerine	3 ml

3.1. PROCEDURE

- Collection of all ingredients.
- Take raw coconut and de-husk coconut.
- De-shelling it and paring the coconut.
- Now wash the coconut grind it in the grinder.
- Now extract the coconut milk from the coconut pulp.
- To strain coconut milk from the pulp, blend shredded coconut, then mixture is poured through a fine mesh.
- Now take another beaker and add 5ml almond oil and 3 ml of glycerin to it and stir well.
- Add 2 ml of Rose water stir it well
- Finally add 10 ml of coconut milk to the mixture.
- Stir well until coconut milk lotion is ready.



IV. EVALUATION PARAMETERS

S.No	Test	Result
1	Physical Appearance	 <p>Physical appearance was evaluated by observation on the texture, colour and smell</p>
2	Irritancy test	 <p>Mark the area (2 cm²) on the left-hand dorsal surface. Then the cream was applied to that area, and the time was noted. Then it is checked for irritancy, erythema, and edema any for an interval up to 24 h and reported</p>
3	Spreadability	<p>Sample was applied between two glass slides and was compressed to uniform thickness by placing 100gm weight for 5 minutes. Weight was added to the pan. The time required to separate the two slides, i.e., the time in which the upper glass slide moved over the lower slide was taken as measure of spreadability</p>

V. CONCLUSION:

This Study Developed an Herbal Lotion Formulation and Assessed It Based on Physiological Characteristics such as pH, Spreadability, Ease of Removal, And Irritancy Test, As Well As Organoleptic Features (Color, Odor, And Appearance). The Current Study Focuses on Herbal Extracts. There Are Many Naturally Occurring Herbs that Can Be Used as Antioxidants in Skincare and Cosmetic Preparations. According to the Current Study, Herbal Cosmetics Are Far Safer Than Commercially Available Cosmetics and Do Not Cause Any Harmful Side Effects. By Using Herbal Lotion, We Can Prevent Skin Issues.

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