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A Review: Formulation and Evaluation of Herbal Lotion

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Abstract: The formulation method aimed to optimize these botanical elements within a stable basis. Comprehensive testing was performed to assess the lotion's physical and chemical stability, including pH, viscosity, and microbiological content. Dermatological examinations comprised patch tests on individuals over a four-week period to check skin hydration, inflammation reduction, and general skin health. The results showed outstanding stability and safety, as well as significant increases in skin hydration and attractiveness, all without causing discomfort. This herbal lotion is a potential natural alternative for effective and safe skincare solutions.

Keywords: Herbal lotion, Skin care, Aloe vera, Natural ingredients, Moisturizing, Anti-inflammatory, Antioxidant, Formulation, Stability testing, Viscosity, Anti-aging, Antimicrobial

I. INTRODUCTION

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, emolliency, 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 reduces inflammation in irritated area.

Cosmetics are designed to combat acne, minimize wrinkles, and regulate oil production. 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. It intelligently 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.

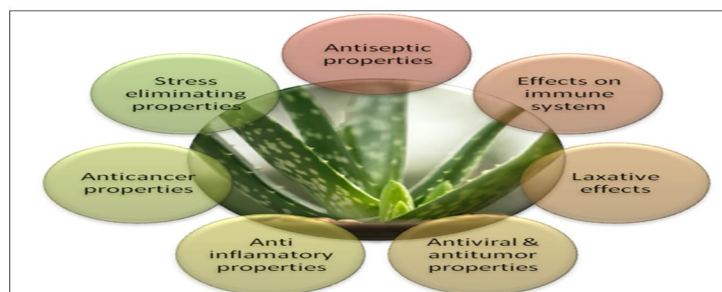


Fig .1 Properties of Alovera

II. BENEFITS OF HERBAL LOTION

- 1) Apply water to dry skin to replenish it.
- 2) Restore some hydration to your dry, rough skin.
- 3) Minimize the pain that calluses cause.
- 4) Fourth, satisfy the sensations of touch and smell.
- 5) To help you relax, take some time for yourself and engage in self-care.
- 6) In areas where it is most noticeable, lessen the roughness of your body. Enhance the radiance of your skin.

III. MATERIAL AND METHODS

List And Uses of Ingredients Used In The Formulation of Herbal Body Lotion

- 1) Aloe Vera Gel -Moisturizer
- 2) Triethanolamine -Emulsifier
- 3) Glycerine -Humectant
- 4) Distilled Water. -Diluent
- 5) Rose Water -Perfume
- 6) Steric Acid. -Emulsifier
- 7) Coconut Oil -Improve Skin TexturE
- 8) Honey -Preservative
- 9) Lemon Oil -Perfume

A. Alovera Gel

Betacarotene and vitamin C are abundant in aloe vera gel. It possesses antiaging qualities as a result. It has antiinflammatory 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, Aloe vera gel is high in minerals and antioxidants that promote healing. Additionally, it has calming and hydrating properties.



Fig .2 Alovera gel

B. Honey

Honey helps to treat acne breakouts and stop further infections because it is a natural antibacterial and antiinflammatory. Additionally, honey lessens acne's redness and swelling. It removes pollutants from the pores and prevents dust from building up in the skin's pores. By delivering sustained hydration, it lessens skin dryness. Honey helps to lessen fine lines and wrinkles by hydrating the skin's outermost layers. It is used as a wound-healing substance.



Fig.3 Honey

C. 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.4 Glycerine

D. 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.5 Rose water

E. Coconut Oil

Because of its many natural qualities and skin-benefitting qualities, coconut oil is a common ingredient in herbal treatments. It deeply hydrates the skin and helps to relieve flakiness and dryness because it is rich in fatty acids like lauric acid.

It is perfect for treating acne, rashes, and mild skin irritations because of its antibacterial and anti-inflammatory qualities. It works well as a carrier oil in herbal formulations, combining with essential oils and herbal extracts to better deliver their benefits to the skin.



Fig 6.Coconut Oil

F. Lemon oil

Lemon oil is a highly fragrant essential oil that is mostly extracted from the peel of fresh lemons and is frequently used in lotions and other skincare and cosmetic products. It is prized for both its many medicinal benefits and its crisp, zesty aroma.

Lemon oil, which is high in antioxidants like vitamin C, can help fight free radical damage and brighten the skin. It is especially helpful for oily or acne-prone skin because it also has astringent and antimicrobial properties. To prevent skin irritation, lemon oil must be used in small amounts because of its strength, usually 0.5% to 2% in leave-on treatments like lotions. Its possible phototoxicity is another crucial factor to take into account, particularly if cold-pressed lemon oil is utilized, as this can increase the skin's sensitivity to sunlight.



Fig.7 Lemon oil

IV. FORMULATION OF HERBAL LOTION

- 1) Fill the mixing bowl with the appropriate amount of aloe vera gel.
- 2) Next, incorporate other components such as distilled water, rose water, glycerin, and triethanolamine. An aqueous phase was formed.
- 3) Weigh 7 grams of stearic acid, then place it in a beaker on a hot plate set to 25 degree Celsius.
- 4) To prepare the oil phase, measure 3 milliliters of coconut oil and pour it into a beaker while swirling constantly.
- 5) After thoroughly mixing each phase, herbal body lotion was created.

A. Formulation Table

Table1-Composition of Aqueous Phase

Sr.no	Ingredients	Quantity
1.	Aloe-vera gel	15ml
2.	Triethanolamine	15ml
3.	Glycerin	1ml
4.	Distilled Water	Q. S.
5.	Rose Water	Q. S.
6.	Honey	Q. S.

Table 2- Composition of Oil Phase

Sr.no	Ingredients	Quantity
1.	Steric Acid	7gm
2.	Coconut oil	3ml

B. Evaluation of herbal body lotion

- 1) Properties of Organoleptics- To assess the herbal lotion's organoleptic qualities, visual inspection techniques are employed. This evaluation looked at color, odor, texture, and condition.
- 2) Test of Absorption- The lotion was applied to the skin and rubbed in until it was fully absorbed as part of the absorption test. 30 Test for Skin IrritationTo screen for irritant reactions such swelling, itching, and redness on the skin, a formulation was applied to the back of the hand and left on for 15 minutes.
- 3) Test of homogeneity -Touch and visual inspection were used to evaluate the homogeneity test.
- 4) Test of pH -A digital pH meter was used to measure the pH of this all-herbal lotion.

V. CONCLUSION

This Study Developed A Herbal Lotion Formulation And Assessed It Based On Physiological Characteristics Such As Ph, Spediability, 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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