

# Formulation And evaluation of Herbal Lotion Incorporating Acalypha indica Linn Extract For Anti Allergic Treatment on Skin

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**Abstract-** The Ayurvedic, Siddha, Unani, and Homeopathy systems are examples of this. are mostly plant-based and represent the local heritage with world of global significance is made richer by a great number of things from a medicinal plant. The majority of the plant has proven to be the highest concentration of medicinal ingredients. Over the vast majority of contemporary pharmaceuticals are directly made from Medicinal plants have a broad pharmacological spectrum. events. As a result, medicinal plants have been playing essential function in pharmaceutical research. [1]

The Greek term is the source of the word cosmetic. "kosmtikos" means possessing the ability to arrange. expertise in adornment. The genesis of cosmetics is a as a consistent narrative throughout the course of human history they came to be. 3000 BC, when humanity lived in prehistoric times Used colors for decoration to entice the animals that He wanted to go hunting, and the guy made it through the assault by painting his face and decking out his body, he hide himself from the adversary.

Body that induces terror in an opponent for defense (regardless of whether it's a person or an animal). The origins of cosmetics were related to religion, warfare, hunting, and superstition, which was subsequently linked to medicine. The Knowledge that was ultimately separated from medicine and ultimately to pharmacy.<sup>2</sup> The herbal cosmetics are those that include a variety of plant-derived phytochemicals, which has an impact on skin functions and offers the nutrients that are essential for healthy skin or hair. The when used for their intended purpose, natural herbs and their derivatives the term "aromatic value" refers to the value of fragrance in cosmetic formulations herbal cosmetics [2]. Herbal cosmetics are typically mentioned as well. cosmetics made with natural ingredients. Herbal cosmetics are created, using a variety of cosmetic components to create the foundation in which one or more herbal components are employed to treat a variety of skin conditions. Plants are utilized extensively for a variety of purposes the creation of novel pharmaceutical goods for

cosmetics and applications in the pharmaceutical industry. herbal beauty products the commodities that make use of herbs in their raw state or as extracts form.<sup>3</sup> The earliest recorded use of cosmetics is credited to in ancient Egypt, around 4000 B.C., pharmaceuticals were in essence, they are referred to as drug products that have an impact on preventing, lessening, treating, or curing illness the body's anatomy or purpose [4]. According to the European directive (European commission). The term "cosmetic products" refers to "Any substance or preparation meant to be put in agreement with the different outside components of the human body either with the epidermis, hair system, lips, nails, etc. or with the the oral cavity's mucous membranes and teeth with the sole or primary purpose of cleaning them altering their look by adding scents, or addressing body odors and either protecting them or keeping them in good condition.[4] Raymond first used the word Cosmeceuticals. One of the founders of the U.S. Society of Cosmetics is Reed.1961 – Chemist. He really utilized the term to brief. the cosmetics that are both active and science-based. The aforementioned The word was used even more by Dr. Albert Kligman in the the compounds that have both are referred to by the year 1984. Aesthetic and therapeutic advantages. Cosmeceuticals are cosmetic-pharmaceutical hybrids designed to improve health and beauty through components that affect the skin's biological makeup and function. [3] According to the Drugs and Cosmetics Act, the cosmetics are Articles meant to be rubbed are considered acts introduced into, poured, sprinkled, or sprayed on, or or applied to the human body or any of its parts in any other way. For washing, enhancing beauty, and promoting appeal or changing its appearance. The product doesn't be subject to a drug license preview. [3], [4] Herbal Cosmetics, also known as Products, are created using a number of allowed cosmetics. the components that make up the foundation upon which one or more Herbal components are used to provide well-defined "Herbal" shall only refer to aesthetic advantages. "Cosmetics." Herbs don't offer quick remedies. They provide a method for aligning the body with the natural world. An extensive array of cosmetics

*and toiletries has been created and designed in accordance with Indian Just now, herbs.[3] There is a growing need for herbal remedies because they are kind to the skin and have no adverse effects. The fact that herbal cosmetics are solely produced by the herbs and bushes, and hence side-free of any consequences. Herbs lack organic material. have any negative impacts on the body; rather give the body the nutrition and other beneficial things it needs minerals.[3] The use of had attracted growing interest medicinal flora of underdeveloped nations. This is because herbal remedies have been proven to be safe and particularly without any negative side effects compared to manufactured pharmaceuticals. Additionally, there has been there has been little to no mention of any kind of microbial resistance to herbal use and administration medications.[5]*

## I. INTRODUCTION

Homeopathy, Ayurveda, Siddha, and Unani are all systems predominantly plant-based, and with the local history a large number of items from around the world enrich the world of a medicinal plant. The majority of the plant has turned out to be the most abundant source of therapeutic chemicals. Over modern medications come primarily from 80% of their sources. Medicinal plants possess a broad spectrum of pharmacological properties. activities. As a result, medicinal plants have been playing a key role in traditional medicine. Essential to pharmaceutical science research.

The Greek term from which the word cosmetic originated is The word "kosmtikos" signifies that one has the ability to plan, arrange, and plan expertise in ornamentation. The genesis of makeup is a continuous narrative spanning the course of human history is described as follows they evolved. 3000 BC, the prehistoric man used colors for decoration to entice the creatures that he wanted to go hunting, and the man also made it through the attack. By painting his skin and decorating his body to resemble the enemy a body for defense that makes an adversary afraid (regardless of whether they are humans or animals). Cosmetics originated in related to religion, warfare, hunting, and superstition, which was later linked to medicine. at last, knowledge was separated from medicine and to pharmacy at last.<sup>2</sup> The preparations containing herbal cosmetics are phytochemicals originating from diverse plant species, which has an impact on how the skin works and provides the nutrients that are vital for healthy skin or hair. The when used for their intended purpose, natural herbs and their derivatives. The term used to describe the aromatic worth of cosmetic preparations is cosmetics made with herbs.[2] In most cases, herbal cosmetics are also referred to. cosmetics made from natural ingredients. Herbal cosmetics are created,

the foundation is made using a variety of cosmetic components which makes use of one or more herbal components to treat a wide range of skin conditions. Plants are used extensively for the creation of novel pharmaceutical products for cosmeceuticals and applications in the pharmaceutical industry. Herbal cosmetics include herbs used in raw or extract form[3]. The earliest known application of cosmetics is ascribed to Egyptian pharmaceuticals, 4000 BC Drugs are defined as products in their essence. that have an impact on preventing, lessening, treating, or curing disease the body's form or function[4]. According to the European directive (European commission).The definition of cosmetic items is as follows "any substance or preparation intended to be placed in" contract with the different outside components of the human body (lips, nails, hair system, epidermis, etc.) or with the the gums and the mucous membranes of the mouth solely or primarily for the purpose of cleaning them altering their appearance by adding scent, or either fixing body odors or shielding them keeping them in excellent shape.[4] Raymond coined the word Cosmeceuticals. Reed, a founder of the U.S. Society of Cosmetics A chemist in 1961. He really used the word to brief. the cosmetics that are scientifically based and effective. The afore mentioned Dr. Albert Kligman continued to use the word in the the year 1984 when referring to the compounds that possess both therapeutic and aesthetic value. Cosmeceuticals are cosmetic-pharmaceutical mixtures meant to improve components that affect health and beauty the biological texture and function of the skin.[3] According to the Drugs and Cosmetics Act, the cosmetics are... Articles designed to be rubbed are referred to as acts. introduced into, poured, sprinkled, or sprayed on, or not utilized on the human body or any of its parts. of for enhancing beauty, cleansing, and promoting attractiveness or changing how it looks. The product doesn't fall within the purview of a drug license. [3], [4] Products are referred to as Herbal Cosmetics. made using a range of approved cosmetics components used to create the foundation upon which one or more To offer well-defined, herbal elements are employed. It will be known as "Herbal" if it just provides aesthetic advantages. Cosmetics". Herbs don't work right away. They provide a means of bringing the body into harmony with the environment. Numerous formulations for cosmetics and toiletries based on Indian designs and development Recently, herbs. [3]

There is a growing need for herbal remedies because they are kind to the skin and have no adverse effects. The nicest thing about herbal cosmetics is that they are because it is made entirely of herbs and shrubs, it has no side effects. The herbs' natural ingredients do not do not have any adverse effects on the human body; rather give the body the nutrients and other beneficial things it needs. minerals. [3] The usage of had grown in popularity. medicinal plants in underdeveloped

nations. This is because herbal treatments have been shown to be both safe and in particular, without any negative side effects in contrast to man-made substances. Additionally, there has been little or no evidence of any kind of microbial resistance during the administration and use of herbal drugs.[5] In India, *Acalypha indica* has been extensively used in Different ayurvedic medical system disorders. It grows everywhere as a weed. the India, China, and South Africa. It is a member of the the family Euphorbiaceae. The Indian acalypha has been used for centuries to cure a variety of conditions, such as anti allergic, Wound healing, Antivenom, and Infertility Anti-inflammatory, diuretic, and antioxidant properties Cancer and bacterial illnesses. It has Polyphenols, Flavonoids, and other plant ingredients Terpenoids, saponins, alkaloids, and tannins. Usually, many of these components are found in a single 2, 3, 4 sections of plants, such as the root, leaf, and shoot. The anti allergic efect on skin is briefly evaluated .



## PARTS OF PLANT AND USES:

### Traditional uses

#### Leaves :

- The essence of leaves mixed with salt, or a decoction of plant, is used for scabies and other skin problems.
- The leaf essence is used as an emetic and also used for eye infections.
- A leaf extract is also used as a purgative and vermifuge.

- The powder of leaves used for maggot-infested wounds.
- In India used as an expectorant to treat asthma and pneumonia.
- The leaf extract is used as a purgative.
- Infusion of the leaves of plant used to control glycaemic level in people having type-2 Diabetes.
- In India the leaves extract is used to treat Rheumatism.
- Leaf extract is used as an antidote to snake venom.

#### Root:

- Root extract is used to treat asthma, and also to clean the liver and kidneys.
- The root decoction is also used for intestinal worms and to treat stomach ache.
- The root of this plant used as purgative.
- In ayurveda the roots are used in chest pain, joint pain, and migraine and blood dysentery and lowering blood sugar.
- In ayurveda the root is useful in fever, heart diseases, retained excretions and biliousness.

#### Seed :

- The seed is used as laxative, carminative and to improves the appetite.
- Seed powder is used for treatment of amoebiasis.

#### Whole plant:

- Used for treatment of arthritis and gout.
- This herb is used to control vomiting.
- In traditional Austrian medicine, this plant is used for the treatment of various ailments such as urinary tract, kidney problems, gastrointestinal tract, cardiovascular system, haemorrhage, gout, rheumatism and skin problems.

## TAXONOMY

- Botanical Name : *Acalypha indica* L.,
- Kingdom : Plantae
- Class : Angiosperms
- Order : Malpighiales
- Family : Euphorbiaceae
- Genus : *Acalypha*
- Species : *Indica*

## MORPHOLOGY:

### Leaves:

- Length: 2.5-7.5cm Width:2-2.5cm
- Shape: Ovate or rhomboid, ending in acute tips
- Margin: Crenate-Serrate
- Base: Wedge-shaped or Cuneate
- Petioles: Slender, longer than the blade, with minute stipules.

**Flowers:**

- Unisexual: Found in numerous lax, elongated axillary spikes
- Male flowers: Smaller, scattered, terminal or axillary
- Female flowers: Larger than male, scattered arrangement.

**Fruits and Seeds:**

- Fruits: Tiny, hairy, 1.5-2mm, 3-lobed, tuberculate and pubescent
- Seed: Pale brown, minute, ovoid:
- Capsules: Small, bract-concealed and hispid

**ETHNOMEDICAL USE:**

1. ANTI-ALLERGIC
2. ANTI-MICROBIAL
3. ANTI-ULCER
4. ANALGESIC
5. ANTI-ANTHRITIC
6. ANTI-INFLAMMATION
7. ANTI-CONVULSANT
8. ANTI-ANXIETY

**MATERIALS AND METHOD:****COLLECTION OF RAW MATERIAL:**

The *Acalypha indica* were collected Nov-2024. The leaves were separated, washed in a tray and shade dried for 3-5 days. The shade dried leaves after 3 days were milled to obtain a fine powder.

**DRYING:**

The process of drying involves removing moisture or liquid from a material, usually through evaporation. Generally speaking, utilized to preserve, lighten, or in sectors like the food, pharmaceutical, agricultural, and textile industries. get the stuff ready for more processing.

There are several approaches:

1. Drying in the sun
2. Drying in the shade
3. drying in a hot air oven

The leaves of the *Acalypha indica* plant were harvested after they had dried. The leaves are dried beneath after being harvested during the procedure.

After this process, the leaves of the plant are finally dried for a week in the shade.

**PLANT LEAF POWDERING:**

After the shadow drying procedure, the leaf is collected. Turn the leaf into powder using a grinder or transfer it into the mixture. Following the crushed leaves are passed into a sieve after being crushed 120 is the number to call to obtain a fine powder.

**HOW TO PREPARE THE EXTRACT:**

The term "extraction" refers to the procedure of isolating bioactive chemicals. compounds or substances of therapeutic value using specific solvents to extract from plant or animal tissues. The purpose of this procedure is to produce concentrated forms of these compounds, along with the undesirable ingredients, were eliminated.

Leaf collecting and this procedure will take place. completely cleaned using distilled water, then dried in the shade for three to five days. The dry leaves were crushed into powder make the extraction using chloroform solution after creating the form. and with the aid of extraction, an aqueous solution according to the articles evaluated. These techniques may be,

1. Maceration
2. . Decoction
3. . Soxhlet Extraction
4. . Hot Extraction [13]
5. The powder from "*Acalypha indica*" weighs around 25 grams.
6. add correctly after packing in the Soxhlet instrument
7. 300 ml of chloroform into a clean round-bottomed flask.
8. Connect the Soxhelt instrument and run for six hours at 50–60°C.
9. "*Calendula officinai*s" powder weighs around 25 grams.
10. are placed in the Soxhlet device and add correctly
11. Put 300 ml oPhytochemical evaluation:
12. Set up the Soxhelt device and let it run for six hours at 50–60°C

**Phytochemical evaluation:****The Alkaloid Test:**

Dilute was used to treat the test extract for alkaloids hydrochloric acid and combined with the following ingredients:

- The Dragendorff reagent test is used to detect the Dragendorff reagent.
- The sample was reddish brown in color, and the filtrate was added.
- The creation of a precipitate is evidence that alkaloids are present.
- found in the test sample. [14][15][16][17]

**Flavonoid Experiment:****Test for ferric chloride:**

2–3 drops of the FeCl<sub>3</sub> solution were added. The test solution turned dark green when the additive was added.

The presence of flavonoids in the test medicine is indicated by the color. [14][15][16][17]

**Phenolics and Tannins Test:****Lead acetate test:**

A 10% lead acetate solution was used. introduced into the test sample. White formation

The presence of phenolic compounds is indicated by the precipitate. in the sample. [14][15][16][17]

**Test for glycosides:****Keller-killani test:**

2ml of the test solution were treated. The change in the FeCl<sub>3</sub> content of the CH<sub>3</sub> COOH in H<sub>2</sub>SO<sub>4</sub>. Reddish to blue indicates that the heart

The test sample contains glycoside. [14][15][16][17]

**Test for anthraquinone glycoside:**

Borntrager's Test: The test substance was boiling H<sub>2</sub>SO<sub>4</sub>. In a test tube, soak 1 ml of the solution for five minutes. Filter and Organic solvents such ether were combined with the filtrate. organic layer was separated and chloroform (or) was

used. mixed with dilute NH<sub>3</sub> solution. The presence of anthraquinone in the test drug is suggested by the pink color. [14][15][16][17]

**Test for Steroidal Glycosides/Saponins:****Libermann's-Burchard test:**

The test sample was 2 mL acetic anhydride and 2 mL were used to treat the substance.

The creation of the bluishgreen hue in concentrated H<sub>2</sub>SO<sub>4</sub> indicates the steroid is present in the sample. [14][15][16][17]

**Amino acid/protein test:****Biuret test:**

4% of the test drug sample was treated with the biuret test. 1% CuSO<sub>4</sub> solution and NaOH.

The presence of protein is indicated by the violet colour. sample [14][15][16][17]

**Test for Carbohydrates:**

Benedict's reagent test: 2 ml of Benedict's reagent was used. combined with the test sample and heated for five minutes yellow, red, and green colors indicate appearance a variety of carbohydrates are present. [14][15][16][17]

**Check for Coumarins**

With 3ml of 10% NaOH, 2 ml of the sample was mixed in. The the existence of yellow color implies the presence of coumarins. [14][15][16][17]

**Test for terpenoids:**

2 ml of chloroform was mixed with 0.5 ml of the sample. and a few drops of concentrated sulfuric acid were added. to create two, carefully put along the side of the test tube. layers. an interface with red-brown hues the presence of layers that conform to terpenoids.

**METHOD :**

Oil-in-water (O/W) emulsion-based lotion of *Acalyha indica* extracts were created.

The oil phase contained all of the soluble components (Part A), and all The water-soluble chemicals were in the

water phase. (Part B). All Part A chemicals were summed together. and heated to 800°C to ensure that all the oil-based Compounds are melted. The majority of the elements of are *Acalypha indica*, and preservatives the excipients, including officinalis, were dissolved uniformly in the water phase and maintained at the heating temperature of at 80 degrees Celsius. As soon as both phases were uniformly mixed, The oil phase was immediately added to the water once it had dissolved. to keep the phase going, use constant stirring suitable homogeneity, and the cooling process was permitted. in the designed lotion, to achieve a stable emulsion. [19] Gradually introduce the oil phase into the aqueous phase while maintaining a constant stirring temperature of 70°C. Add solvent to the last volume to bring it up to 50 ml. It was placed in an appropriate container.

OIL PHASE	AQUEOUS PHASE
Stearic acid, cetostearyl alcohol, and liquid paraffin	Glycerine, Triethanol amine, are mixed add Bentonite in water and dissolve
Heat the mixture components at 70-50 °C until it melted	Heat the mixture components at 70-50 °C until it melted

#### ASSESSMENT:

The herbal lotion's evaluation criteria:

The physicochemical characteristics of manufactured lotion formulations were studied through research. The herbal lotion mixture was tested for its qualitative factors like pH and organoleptic qualities viscosity, specific acid value, saponification value gravity, and so on. This parameter is quite difficult to determine. crucial for guaranteeing the quality, safety, and effectiveness of these formulas.

#### ORGANOLEPTIC ATTRIBUTES:

The lotion's color was determined by sight. Inspection. By smelling the lotion, the odor was evaluated. odoriferous.

#### HOMOGENEITY:

The compositions were visually inspected for homogeneity. by feel and look. [18][19][20][21][22][23][24][25] The kind, wetness, and emolliency of the substance are determined.

smear: Human skin surface was treated with lotion. to ascertain the emolliency of the assigned volunteers, wetness and the nature of the smear. On the skin, there was a thin coating of

lotion, and it was inspected visually. The slipperiness, emollient qualities, and the residue that remained on the skin after its application included: also examined. The lotion was simple to wipe off. simple washing of the human skin, to which lotion should be applied. Use tap water as you go. The following are some of the characteristics of the The use of lotion increased patient adherence. [18][19][20][21][22][23][24][25]

#### TEST FOR IRRITANCY:

The location of the area to be tested is marked on the hand surface. The That marked specified area is then coated with the formulation. and reported time down. Irritation, redness, and The edema was evaluated at the appropriate intervals during the 24 hours that followed.

#### WASHABILITY:

A portion of lotion was applied over the skin of hand and allowed to flow under the force of flowing tap water for 10 minutes. The time taken when the lotion completely removed was noted. [18][19][20][21][22][23][24][25]

#### DETERMINATION OF TYPE OF EMULSION:

To test the type of emulsion in the formulation, it was diluted with oil and water.

Water-in-Oil (W/O) Emulsion: Stays stable when mixed with oil but breaks down when mixed with water.

Oil-in-Water (O/W) Emulsion: Remains stable when mixed with water but becomes unstable when mixed with oil.

#### DETERMINATION OF PH:

The PH meter was calibrated using standard buffer solution. About 0.5 gm of lotion was weighed and dissolved in 50 ml of distilled water and its PH was measured using digital PH meter.

#### DETERMINING THE SPECIFIC GRAVITY:

Wash the Pycnometer with distilled water, then dry it in the oven for 15 minutes to get rid of the water, and then allow it to cool.

The sample was placed into the pycnometer, weighed once more, and capped (b). It was then capped and weighed using a cap and weight (a). Figure out

Subtract the weight(b-a) from the sample weight per milliliter.  
[18][19][20][21][22][23][24][25]

$$\text{specific gravity} = \frac{\text{weight of the sample}}{\text{weight of the water} * \text{water density}}$$

#### VISCOSITY DETERMINATION:

Using Oswald's Viscometer, the viscosity of the made herbal lotion was measured at room temperature.

[18][19][20][21][22][23][24][25]

The formula was used to determine the viscosity of the herbal lotion that had been made.

$$\text{Lotion viscosity } (\eta_1) = \frac{t_1 d_1}{t_2 d_2} \times 2$$

Where

Viscosity of the lotion is denoted by  $\eta_1$ , and its time flow is denoted by  $t_1$ .

Water viscosity is represented by  $\eta_2$ , and water flow time by  $t_2$ .

#### FRAGRANCE TEST:

The fragrance agent like jasmine, rose, is added for the property of fragrance or the pure smelling to the lotion. It is determined by casual smelling.

#### Finding out the chemical characteristics:

The acid value is determined as follows:

Making a 0.1 M solution:

0.56 g of KOH pellets were weighed, mixed with water, and stirred constantly. The 0.1 molar KOH solution that has been prepared

The burette was filled.

#### Sample Preparation:

The 10 ml lotion was measured, then dissolved in a mixture of 25 ml ethanol and 25 ml ether. Titrate after adding 1 ml of phenolphthalein solution.

against 0.1 molar KOH solution.

[18][19][20][21][22][23][24][25] The acid value of the prepared lotion was determined by:

with the formula.

Acid value=56.1 times

W=Weight of lotion; N=number of milliliters of 0.1 molar KOH

#### ASSESSMENT OF SAPONIFICATION VALUE:

25 ml of 0.5M alcoholic potassium was accurately weighed and placed into a 250ml iodine flask containing 2 grams of oil. The mixture was refluxed on a water bath with hydroxide for 30 minutes, then titrated with phenolphthalein indicator.

In a similar manner, the experiment was carried out against 0.5M HCL, but this time without the sample.  
[18][19][20][21][22][23][24][25] The experiment was also blank (a).

Using the formula, the prepared oil's saponification value was determined.

The saponification value is 28.05(b-a).

where

a- Equally empty b- No sample

The sample's w-weight

#### AGITATION TEST:

Under this test, we add 5-10 gm of lotion in the container and it is kept on the reciprocating shaker. This container is allowed to be shaken 60 cycles per minute through entire time duration of 24 hrs. After the time of 24 hrs ends up; the container is opened up to check for any phase separation of lotion [18][19][20][21][22][23][24][25]

#### CENTRIFUGATION TEST:

In this test, the lotion is added to the centrifuge tubes and the tubes which contain lotion are kept in the centrifugation machine to check for any phase separation of lotion. The tubes were centrifuged for 3500 rpm for the time period of 30 minutes.

[18][19][20][21][22][23][24][25]

#### RESULT AND DISCUSSION:

##### FORMULATION:

The formulation of a herbal lotion involves the use of extracts from *Acalypha indica*, with the oil-in-water (O/W) emulsion being the active ingredient. The process involves heating the oil-based compounds at 80°C, dissolving them in water phase, and adding the oil phase to the water phase. The final volume is then poured into a suitable container.

##### EVALUATION:

The formulation's physico-chemical properties were evaluated for qualitative parameters like organoleptic property, pH, acid value, saponification value, viscosity, and specific gravity to ensure quality, safety, and efficacy. Physical parameters like color, odor, homogeneity, emolliency, wetness, smear type, irritancy, and edema were determined. The lotion was tested on human skin surfaces to determine its emolliency, wetness, and smear type. The emulsion type was tested by dilution with oil and water, with the Water-in-Oil emulsion becoming unstable when mixed with lotion. Chemical parameters included acid value, saponification value, stability parameters, and acceleration tests. The formulation was tested for stability through agitation, centrifugation, and filtration. The results showed the lotion effectively reduced skin irritation risk and promoted skin health.

### PHYTOCHEMICAL SCREENING:

Alkaloids, flavonoids, tannins, steroids, and saponin glycosides were found, according to a preliminary screening of phytochemicals

### CONCLUSION AND SUMMARY:

The goal of the research was to create an herbal lotion containing *Acalypha indica* extract to regulate the anti-allergic activity on skin. The extract, known for its antioxidant, antibacterial, anti-allergic and anti-inflammatory properties. The characteristics of the lotion were pulled out and incorporated into its base. With varying ingredients, different formulas were created. Various concentrations in order to ascertain the ideal creation with effectiveness and stability in mind. The lotion samples were tested for spreadability, viscosity, pH, and other characteristics. Stability, and their in-vitro and in-vivo behavior was evaluated. Anti-allergic effects against skin discomfort and allergic reactions findings revealed that remarkable anti-allergic action, making it a promising natural substitute for skin allergic management. The composition preserved excellent desirable cosmetics, skin compatibility, and stability assets. Additional investigation is advised to investigate its economic potential and long-term consequences. As the furnace agent is added it can be used for external use for applying on the skin to treat patches and acne in the skin and it reduces the oily nature of the skin.

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