



FORMULATION AND CHARACTERIZATION OF HERBAL FACE CREAM

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Abstract: Aloe vera and Neem are restorative plant they are utilized as generally from old year in different natural prescriptions Chaturvedi, siddha, and Homeopathic. Beauty care products what's more, a few restorative items are made up from the adhesive tissue in the focal point of aloe vera leaf what's more, called Aloe vera gel. Aloe vera gel contains anthraquinone. Which are Liable for the solid purgative effects of aloes. In any case, complete leaf concentrate might contain Anthraquinone. Aloe vera contains 75 possibly dynamic constituents lefetamines, Chemicals, Minerals, Sugars, Saponis, Amino acids. Neem contains Amino corrosive like glutamic corrosive, proline, And Aspartic acids and so forth. Protein, Minerals. Neemare wealthy in fiber what's more, contain minerals like magnesium, potassium, what's more, silica.

Keyword: Aloe vera, Neem, face cream,, Herbal cream, Evaluation, homogeneity.

I. INTRODUCTION

The demand for herbal cosmetics has been fueled by the accessibility of unique factors, the financial incentives for creating profitable products, and the maintenance of high standards. Cosmetics are items that are applied to the body. Face creams have a softening and disinfecting effect and are used cosmetically. One of the most significant systems of medicine that employs herbal plant and extracts for the management of various diseases condition was the herbal system⁽¹⁾. Aloe vera is a cactus-like plant that grows quickly in hot, arid conditions and is farmed in enormous quantities. Aloe vera is a member of the 300 species-strong Liliaceae family. The mucilaginous tissue found in the heart of aloe vera leaves, also known as aloe vera gel, is used to make cosmetics and some pharmaceutical goods. There is no anthraquinone in aloe vera gel. They are in charge of the potent laxative effects of aloes. But anthraquinone could be present in whole leaf extract ^[2]. 75 potentially active substances, including vitamins, enzymes, minerals, sugars, saponins, and amino acids, are found in aloe vera^[3]. Amla; Embolic Officinalis, its synonym.

Herbal face cream

The term "herbal face cream" refers to products that contain more herbal substances and are solely intended to provide cosmetic benefits. The demand for herbal treatments is rising quickly as a result of these products' lack of adverse effects. Herbal cosmetics are unique in that they are manufactured entirely from herbs and bushes herbal remedies that have been extracted have no negative impact on human skin. Today, people utilize cosmetics to enhance their appearance. They prepare and use cosmetics to enhance their appearance. compositions, either natural or synthetic, for a variety of skin conditions, such as skin protection, sunscreen, anti-acne, and anti- wrinkle.

II. LITERATURE REVIEW

1. Volume 12, article number 40, (2022): The global market for cosmetics is projected to reach \$800 billion by 2023, with China taking the lead with an expected \$450 billion market by 2050. Social media and the internet are great influencers in driving the company's focus on natural goods, reduced use of chemicals, and health benefits. The paper analyzes the usage of natural products in skin care, its efficacy as topical treatments, active ingredients, fragrances, moisturizers, UV protection, and wrinkle reducers.

2. Journal of Herbal Medicine Volume 12, (June 2018): Aloe is a plant that resembles a cactus and is cultivated in subtropical regions worldwide. It has been historically utilized for healing skin ailments and injuries. Oral supplements can be used to address various conditions such as burns, lichen planus, diabetes, inflammatory bowel disease, and weight loss. However, in 2002, the FDA mandated the removal of aloe from laxatives available without a prescription.

III. METHODOLOGY

1. Plant materials:

The proposed investigation of Aloe vera. Neem were collected from the plant present at medicinal garden campus of the Kalinga university, Faculty of pharmacy situated in the Village Kotni, Near Mantralaya area of Naya Raipur city in Chhattisgarh state of India.

2. Preparation of Extract:

Air dried and coarsely powdered of Aloe vera and Neem. Were put in Soxhlet independently, utilizing petrol ether and afterward progressively with Ethanol. The concentrate was then focused to dryness under decreased pressure and controlled Temperature, and they were safeguarded in a Cooler.

3. Phytochemical screening

By comparing the samples to the standards of ephedrine and pseudoephedrine, the alkaloids in several Ephedra species samples were determined using a quick and easy HPLC approach. Ephedrine (E) and a substance called pseudo (PE) in Ephedra raw herbs may be identified using a reliable technology called HPLC. The calibration curve for ephedrine and pseudoephedrine ranges from 0.03125 to 5 micrograms per ml. With varying retention times, the calibration curve for the plant extract was created with a regression coefficient of 0.9998.

Phytochemical Qualitative Analysis

1. Test for tannins

The 0.5 g of aqueous extract was combined with 10 ml of bromine water. The possible existence of tannins was shown by the decolorization of water containing bromine.



Fig: Test for tannins

2. Test for saponins

A test tube containing a solution of crude extract of plants and 5.0 ml of distilled water was forcefully stirred. A few drops of olive oil were forcefully stirred into the foaming, and the look of the foam indicated the existence of saponins.



Fig: Test for saponins

3. Test for terpenoids

5 ml of the aqueous plant extract were combined with 2.0 ml of chloroform, which followed by being evaporated on a water route, and heated with 3 ml of concentrated H₂SO₄. As terpenoids that took shape, a grey color emerged.



Fig: Test for terpenoids

4. Test for flavonoids

Test Shinoda. After a few minutes, the mixture of aqueous crude plant extract that included pieces Combining concentrated HCL and magnesium ribbon, which turned pink, indicated the presence of flavonoids. A bright yellow hue developed when 2 ml of a combination of 2.0% NaOH and an aqueous plant crude extract were combined; this color turned colorless when we added 2 drops of a diluted acid to the mixture. This outcome revealed the presence of flavonoids.



Fig: Test for flavonoids

5. Test for steroids

1. Two milliliters of chloroform, five milliliters of aqueous plant crude extract, and a concentrated
2. solution of H₂SO₄. The presence of steroids was determined by the red color that emerged from the bottom chloroform layer.



Fig: Test for steroids

Cream Formulation:

75°C should be used to heat the liquid paraffin and beeswax in a borosilicate glass beaker. (Oil phase).

In other beaker, dissolve borax and propyl paraben in distilled water by maintaining temperature 75°C with water bath. Stir the solution with glass rod until all solid particles gets dissolved (Aqueous Phase).

The heated aqueous phase is then slowly added while stirring in the heated oily phase.

Add Aloe vera gel, and Neem extract as soon as the two phases have been thoroughly blended. Keep mixing with a glass rod until the mixture takes the shape of a creamy cream.

Rose oil should be added as a fragrance once the cream has formed.

Then, place this cream on a slab and mix it geometrically to create a smooth texture and ensure that all the components are thoroughly combined. If necessary, add a few drops of distilled water.

SN	INGREDIENTS	QUNTITY
1	Aloe vera	1.5gm
2	Bee wax	3.2 gm
3	Yellow soft paraffin	4.5 gm
4	Methyl paraben	0.3 gm
5	Glycerin	0.5 ml
6	Propylene Glycol	0.5 ml
7	Zinc oxide	0.7 gm
8	Sodium benzoate	0.1 gm
9	Neem	1.5 ml
10	Liquid paraffin	4.5 ml

Table 1: Plant extracts and chemicals composition

RESULT

The current examination was the plan what's more, assessment of herbal cream. The assessment boundaries were going under results, similar to the actual assessment of herbal cream, PH of the cream, Spread ability, Launderability, non-irritancy test, consistency and stage partition of the polyherbal torment remembering cream was displayed in table2. The herbal cream formulation is free of type, as demonstrated by an emulsion dilution test and a dye test. The pH meter determined that the herbal cream had a pH of 6. The cream's consistency, homogeneity, and Spread ability are all satisfactory. The formulation is safe in terms of irritation and allergy sensitization, according to the results of the irritancy test for sensitivity testing. The herbal cream that was created is mostly for cosmetic purposes.

CONCLUSION

The cream had a multipurpose impact by using aloe vera and citrus peel, and all natural constituents employed shown several noteworthy activities. Based on the findings, we can conclude that all formulations are skin-safe and stable at room temperature. In light of this, the formulation is superior to that of the herbal cream. Plan of cream was finished by section strategy and further assessed by different assessment boundaries like actual properties, PH, Spread ability, Launderability, non-irritancy test, consistency and stage division of cream and gives great outcomes. The produced herbal cream has the best qualities and offers nutritional benefits while using less chemicals to protect the skin from a variety of skin problems.

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