

# Herbal Face Cream: - An Overview

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**Abstract**—Aloe vera gel is extracted from the plant's mucilaginous tissue and contains no antraquinones, making it gentle for skin use (1).

The gel is rich in vitamins, enzymes, minerals, sugars, and essential amino acids, all contributing to skin health. Amla provides Vitamin C, antioxidants, and amino acids which slow aging, protect against free radicals, and offer antibacterial benefits. Cucumber peel is a source of fiber, magnesium, potassium, and silica, crucial for maintaining healthy skin, bones, and muscle tissues. The formulated herbal face cream thus offers a multi-functional natural solution for skin hydration, anti-aging, and protection, representing a safer alternative to chemical-based creams (1).

Herbal creams are mainly intended for beautification of skin. The main aim of the present research work is to prepare a face cream using different herbs and the prepared cream is evaluated for stability and antibacterial activity. The herbs used in the formulation (F1, F2, and F3) are flowers of Jasmine, Tulsi, leaves of Neem. The formulated cream is evaluated for the various parameters like organoleptic properties, pH, stability, consistency, skin irritation, and antibacterial properties. F1 formulation has shown good stability and antibacterial properties compared to marketed cream. Aloe vera, Jasmine, Neem, Tulsi are medicinal plant they are used as traditionally from ancient year in various herbal medicines such Ayurveda, siddha, and Homeopathic. Cosmetic and some medicinal products are made up from the Mucilaginous tissue in the centre of aloe vera leaf and called Aloe vera gel. The herbal cream is basically water in oil type of emulsion. The natural ingredients chosen for preparation of herbal cream are turmeric, Jasmine, aloe-vera, Tulsi, and neem. The choice of these ingredients is based on their individual properties.

**Index Terms**—Aloe Vera, Jasmine, Tulsi, Neem Leaves,

**Amla, Turmeric, Face Cream**

## I. INTRODUCTION

The word cosmetics was acquired from the Greek word *kiosktikis* meaning having the powder, order in decorating. Herbal cosmetics, here referred as products are formulated were permissible one or more herbal ingredients to form the Base in which defined cosmetics advantage only, it is called herbal cosmetics<sup>(1)</sup>

The herbal cosmetics due to the availability of new ingredients to the reward for developing successfully product and it maintained of Quality standards. To the cosmetics and some medical products are made-up for the mucilaginous tissue for the Centre of aloe vera leaf it called Aloe vera Gel. The Bioactive compound isolated from cucumber includes Cucurbitacin's 1 and 2 of the coumarin. Aloe Vera, allay and cucumber peel are medical plant are used as traditional from various herbal medicine such as cosmetics and some medicinal products are made-up from the mucilaginous tissue in the centre of aloe vera gel.

Aloe vera contain 75 potentially active Constitution like vitamins, minerals, sugar, enzymes, amla contain amino acid etc. Protein, mineral like magnesium, potassium and silica. The silica is an essential compound to keep your muscles, bones and healthy. It also hydrated our skin, improve, complex ion and version<sup>(2)</sup>

The herbal medicament is made from plant and their Extractive. Herbal formation to a dosage form consisting for a one or more herbs or processed herbs in specified quantities of provides definite nutritional, cosmetics and other health benefits that are

means for diagnosis and treatment of diseases and to alter the structure or physiology. As it is natural and safe it provides solution to food health. Simple herbs, such as pepper mint, osmium, ginger, turmeric, coriander, etc can be cultivated at home, Herbal cosmetics are much popularity as they are safe and natural.

Herbal Cream Benefits: -

The advantage of beauty cream is simple solution. By design, Beauty cream is supposed to topically moisturize the pores and skin, so any one trying to improve the hydration in their pores and skin can glow from the usage of this product. However, people with particular touchy pore and skin will maximum from the usage of it every day to enhance to feel and look in their complexion. These consequences are in all like the end of the beauty cream potential to assist repair the5290ffectiveness as an herbal barrier to the environment, some things this is misplaced while your pores and skin is simply too dry.<sup>(3)</sup>

Herbal Cream They are free from all the harmful synthetic chemicals which are proven to be toxic for the skin of a person. Different parts of the plant and plant extracts are used in herbal products. They also consist of natural nutrients like Vitamins and minerals that keep skin healthy, glowing and lustrous.<sup>(4)</sup>

A face moisturizer Is a lotion, or cream emulsion, ointment or balm formulated with emollients that help skin stay hydrated. Moisturizers hydrate the surface layers of the skin. Their main skin benefit is that they seal the skin, locking in moisture and nutrients, while protecting the skin from environmental irritants.<sup>(5, 6)</sup>

## II. AIM AND OBJECTIVES

Aim: Formulation and Characterization of an Herbal face Cream

Objectives: To set a formula for herbal cream by using different herbs. To evaluate formulated products by using different tests. Herbal face cream is to nourish, rejuvenate, and protect the skin.

Herbal creams can help with skin conditions like acne, eczema and dry skin.

Scope:

- Ingredient Selection: Use of herbs like aloe vera, amla, cucumber peel, neem, tulsi, jasmine, and excipients such as bee wax, rose water, borax,

liquid paraffin, and glycerin.

- Formulation Development: Scientific methods for mixing and preparing the herbal cream using precise quantities and safe techniques
- Testing and Evaluation: Assessment through organoleptic tests (appearance, color, odor), microbial tests, stability checks, and irritancy tests to ensure quality, safety, and effectiveness
- Skin Benefits: Focused on moisturizing, reducing acne, addressing skin irritation, tackling dryness, and combating signs of aging through herbal extracts.
- Safety and Efficacy: Validation of the cream's non-irritant, antimicrobial, and skin-friendly characteristics, suitable for a wide range of skin types.<sup>(1, 2)</sup>

## III. LITERATURE REVIEW

- Shah et al. (2010) reported that Aloe vera contains more than 75 active compounds including vitamins, minerals, enzymes and amino acids, which help in soothing, moisturizing and healing the skin. Saraf et al. (2010) also showed that Aloe vera has strong anti-inflammatory and photoprotective activity
- Krishnaveni et al. (2010) stated that Amla (*Emblica officinalis*) is rich in Vitamin C and natural antioxidants that protect the skin from aging and free-radical damage. Mishra et al. (2014) found that amla extracts improve skin texture and provide rejuvenating effects.
- According to Okereke et al. (2015), Cucumber (*Cucumis sativus*) is known for its cooling, soothing and hydrating properties due to its high-water content. It helps reduce swelling, irritation and sunburn. Rieger (2011) also mentioned its role in refreshing the skin.
- Neem (*Azadirachta indica*) has been described by Newall et al. (1998) as possessing antibacterial, antifungal and anti-inflammatory effects, making it useful for treating acne, pigmentation and skin infections.
- Rani & Hiremath (2010) reported that Tulsi (*Ocimum sanctum*) contains natural antimicrobial and antioxidant compounds which help in cleansing, protecting and healing the skin.

- Beeswax is highlighted by Ashawat et al. for its natural emulsifying and skin-protective properties. It forms a barrier on the skin and prevents moisture loss.
- According to Naresh et al. (2018), rose water has anti-inflammatory and antibacterial properties that help reduce redness, irritation and acne.
- Kalpesh et al. (2016) mentioned that liquid paraffin is a highly effective moisturizing and skin-softening agent used in cosmetic creams.

5. Liquid paraffin
6. Aloe vera gel
7. Glycerine
8. Jasmine
9. Tulsi
10. Neem

#### IV. PLAN OF WORK

The plan of work is having following points, Sampling Data Collection Tools of Analysis Preparation

Sampling: The Sampling includes list of ingredients used for the preparation of the herbal face cream. In that collection of raw materials, weighing, cleaning, separation was done. The sampling was done according to the procedure for the formulation and evaluation of herbal face cream. Some of the ingredient available in the local market as ready to use in format. Some of the ingredient taken from the home as well as available in the college.

Data Collection: for the formulation we need to collect data for that so the data collection was done from the various international journals, books, internet, and articles. The data collection includes the abstract, introduction, keywords, Sampling, uses, procedure for formulation, evaluation parameter etc.

Tools of Analysis: Tools of analysis includes all the evaluation parameters such as sensitivity test, ph, physical appearance, skin sensitizat, etc. for the analysis we arrange two volunteers Preparation: air dried and coarsely powdered pf Aloe Vera, neem leaves etc. were placed in Soxhlet separately, using petroleum ether and then successively with Ethanol. The extract was then concentrated to dryness under reduced pressure and controlled temperature and they were preserved in a Refrigerator.

Ingredients of formulation

All natural materials are used for the present study. The details of the plant material used for the Formulation are mentioned below.

1. Bee wax
2. Rose water
3. Distilled water
4. Borax

#### Drugs And Excipient Profile

Bee wax:

Ability to protect from irritants beeswax can also act as a layer of protection When applied to the skin. Bee wax is the substance that forms the structure of a honey Comb the bees secrete wax to build the honey combs. Protective properties the bee wax Is fact present within cosmetics and body Product



Fig: 1

#### Benefits and Uses Skin Enhancer Skin Moisturize

Natural skin healing agent Rich source of Vitamin A & E Anti-inflammatory properties  
Nourishes and fortifies skin Easy to handle & melts quickly Pain Reliever &Anti-Inflammatory

Rose water:

The rose water is flavoured water made by steeping rose petals in water. It's is the hydrosol portion the distillate of rose petals, a byproduct of the production of rose oil for use in perfume. It is the antibacterial properties use in the help of reduce acne. The anti-inflammatory property can reduce skin redness and puffiness. Rose water Maintain the skin natural PH Balance.



Fig: 2

Benefits and Uses Smooth skin irritation. Smooth sore throats. Reduces skin redness  
Helps prevent and treats infections. Contains antioxidants Enhances mood. Enhances mood.

Borax: -

Borax mixed with wax is used in lots of Beauty like cream, gel and cream. It's famously used in hand soap to assist wash off the oil or grease from the hands. Borax alkaline nature makes it a really perfect element in cleanser and toners. In borax is every so often used as an emulsifier buffering agent, or preservation for moisturizing merchandise, Cream, shampoos, gel, cream, scrubs. Borax is likewise an element mixed with glue and water to make slime a gooey cloth that many. Figure no 3 Borax Liquid paraffin: - Liquid paraffin is a hydrating and cleansing agent. Hence it is used in several cosmetics both for skin and hair products



Fig: 3

Liquid paraffin: -

Liquid paraffin is a hydrating and cleansing agent. Hence it is used in several cosmetics both for skin and hair products. Liquid paraffin: - Liquid paraffin is a hydrating and cleansing agent. Hence it is used in several cosmetics both for skin and hair products.



Fig: 4

Benefits and Uses

1. Moisturizing Agent
2. Increases Elasticity of the Skin
3. Skin Softening
4. Reduces Swelling
5. Helps Remove Dead Skin Cells
6. Healing Properties

Aloe vera gel:

Aloe vera gel from the leaves of aloe plants. People have used it for thousands of years for healing and softening the skin. Aloe has also long been a folk treatment for many maladies, including constipation and skin disorder.



Fig:5

- BOTANICAL NAME – Aloe miller
- FAMILY Asphodelus
- MORPHOLOGY all four commercial forms compared below here of their morphological character
- Are distinguished by their transparency
- Opaque mass
- Have bitter and unpleasant
- Yellowish brown to chocolate brown
- It is waxy

#### CHEMICAL CONSTITUENTS

- Anthracene glycosides
- Resins
- aloetic acid
- Barbaloin
- Aloesone

#### USES

- Soothing ice cube rub
- Shaving gel
- Eyebrow gel
- Treats sun burn

#### Jasmine:

The exotic botanical extracts of the flower enrich skin with oil that hydrates and nurtures dry skin and lends it a youthful glow. Antioxidants in Jasmine revive the dead skin and reduce the stress induced dullness. And the soft, flowers stay on the skin relax and skin.



Fig: 6

BOTANICAL NAME: - Jasminum FAMILY: - Oleaceain

MORPHOLOGY: - The main reason jasmine is so famous is its strong fragrance. People adore the flower for its strong, sweet smell.

#### Uses

- Jasmine is inhaled to improve mood, reduce stress, and reduce food cravings.
- It's mild fragrances make and natural anti deodorant.
- It's help strength the roots of the hairs.
- Effective cure for scraps, wound and cuts
- Antiseptic properties help keep skin infection at bays.

#### Glycerine:

A thick sweet colourless liquid made from fats and oils and used in medicines, beauty products and explosive substances. Glycerol is a common ingredient in pharmaceutical and is used to improve smoothness and taste of medicines.



Fig:7

BOTANICAL NAME: -Glycerol it consists of sweet water and glycerin, from fats splitting process through this sweet. Water is obtained.

- Twitchell process
- Pressure splitting batch, continuous and semi continuous
- Enzymatic splitting Purification of sweet water to obtain Glycerin
- Sweet water
- Treatment

- Concentration
- Distillation
- Glycerin

Neem: -

Neem is a natural herb that comes from the neem tree, other names for which include Azedarach indica and Indian lilac. The extract comes from the seeds of the tree and has many Different traditional uses. Neem is known for its pesticidal and insecticidal properties, but people also use it in hair and dental products. (7, 8)



Fig: 8

Family: - Mahogany

Morphology: - It is mainly evergreen but sometimes shed its leaves during the dry season. Neem has a deep taproot and is a mycorrhizal dependent species.

Uses

1. Heals Scars
2. Fights Acne
3. Treats Pigmentation
4. Oil-control
5. Moisturize
6. Exfoliation
7. Clear and Glowing Skin
8. Treats Skin Infections
9. Anti-aging
10. Treats Scalp Infection

Tulsi: -

Basil or sacred Tulsi is an excellent shrub and known as "queen of herbs." • Many Indians revere the Tulsi herb, which is considered to be exceedingly sacred. Many Indians adore these plants, which are grown in most Indian homes. • Due to its therapeutic qualities, this plant has gained popularity. • The dried roots, seeds, and leaves of Tulsi are the portions that are typically utilized. About 70% eugenol, 20% methyl eugenol, and 0.7% volatile oil components are found

in Tulsi leaves.

Biological Source: -The drug of Tulsi consists of fresh and dried leaves and roots.

- Ocimum Sanctum-holy basil
- Ocimum Basilicum-sweet basil Geographical Source:
- Annual herb found through India.



Fig: 9

Benefits of Tulsi:

- **Stress Relief:** Tulsi is an adaptogen, which means that it supports general resilience and equilibrium while also assisting the body in adapting to stress. It can aid in lowering tension, anxiety, and mental exhaustion while fostering calmness and relaxation.
- **Immune Support:** Tulsi helps control the immune system because of its immunomodulatory qualities. It might strengthen the body's defenses against illness, guard against infections, and support healthy immune system operation.
- **Respiratory Health:** Tulsi is frequently used to promote respiratory health and lessen the symptoms of respiratory ailments like sinusitis, bronchitis, asthma, and coughs and colds. Its expectorant and mucolytic qualities aid in clearing respiratory airways and releasing mucus.
- **Digestive Health:** Tulsi aids in the healing of digestive problems such as gas, bloating, indigestion, and cramping in the stomach. It eases the digestive tract, encourages gut health, and increases the synthesis of digestive enzymes.
- **Cardiovascular Health:** By lowering blood pressure, cholesterol, and preventing blood clots, Tulsi may assist preserve cardiovascular health. Additionally, it possesses cardioprotective qualities that lessen the risk of harm to the heart and blood vessels.

- Effects against Inflammation: Tulsi has anti-inflammatory qualities that help lessen inflammation and soothe the symptoms of inflammatory illnesses like rheumatism, arthritis, and inflammatory bowel disorders.

Methodology:

- Heat the aggregate in water tub for melting purpose. Remove dish from the water tub
- Take the borax and distilled water in beaker. • Heat this in water water tub for approximately 750C
- This borax introduced dropwise in porcelain dish with nonstop stirring. Add methyl paraben in porcelain dish dissolved it.
- Add neem oil and jasmine oil on this solution.
- Ads fragrance for perfume. Note – all the ingredients should be tested before and the face should be clean before applying. On skin, a patch test should be done before applying on the skin.

Table No.1 Formulation Table of Herbal face cream

Name of Ingredients	Quantity
Borax	2 mg
Rose Water	5 ml
Distilled Water	2 ml
Jasmine	10 gm
Neem	2 gm
Tulsi	1 gm
Aloe Vera	3 gm
Liquid Paraffin	5 ml
Bee Wax	5 gm

V. METHODS TO APPLY HERBAL FACE CREAM

- The herbal face cream can be applied in several ways for different purposes, as indicated by the formulation project:
- The primary use is as a facial moisturizer to hydrate and soften the skin.
- It can be used as a makeup remover; the thick oils in the cream lightly dissolve makeup and dust, which can then be wiped away gently without harsh rubbing.
- The cream can also serve as a primer before applying foundation, helping smooth the skin and allowing makeup to be applied more

evenly.

- Because it is applied without water, the cream is convenient for outdoor activities or travel where water may be scarce.
- Additionally, it functions well as a lip balm, body lotion, or even shaving cream, providing moisturizing and protective effects in each use.
- It is recommended to apply the cream on clean skin and conducting a patch test before widespread use to check for any skin reactions.

VI. PRECAUTIONS FOR APPLYING HERBAL FACE CREAM

- Always perform a patch test before applying the cream over a large skin area to check for any allergic reactions or irritation.
- Ensure the skin is clean and free of dirt or makeup before applying the cream.
- Avoid applying the cream on broken, wounded, or severely irritated skin.
- Use the cream as directed, and do not exceed recommended quantities to avoid clogging pores or potential side effects.
- If any redness, inflammation, or itching occurs after application, discontinue use immediately.
- Store the cream in a cool, dry place away from direct sunlight to preserve its efficacy.
- Keep the product out of reach of children to prevent accidental ingestion or misuse.
- Avoid contact with eyes; if the cream accidentally gets into the eyes, rinse thoroughly with water.

VII. EVALUATION PARAMETER

Organoleptic Evaluation

The Face Cream thus obtained was evaluated for its organoleptic properties like colour, odour and state. The appearance of the cream was judged by its colour and roughness and graded.

Test for microbial growth in formulated Cream

The Formulated Creams were inoculated on the plates of agar media by streak plate method and a Control was prepared by excluding the cream. The plates were placed into the incubator and are Incubated at 37°C for 24 hours. After the incubation period, plates were taken out and checked for the Microbial growth by

comparing it with the control.

#### Stability Test

In the mechanical test cream samples were inserted into centrifuge tube at a speed of 3750 RPM for half an hour or 5000 to 10000 RPM for 15 Minutes then observed whether a separation exist or not.

#### Homogeneity

Homogeneity of the prepared creams was confirmed by the visual appearance and by touch.

#### Dye Test

Under Microscopic observation the disperse globules appear red in colour and the ground is colourless cream prepared is O/W type. The dye test confirms that all formulations were O/W colourless Cream.

#### Irritancy Test: -

All formulations show no redness enema inflammation and irritation and During irritancy studies these formulations are found to be safe to use for the skin.

### VIII. CONCLUSION

Multipurpose of herbal cream are the o/w type from the emulsified. This emulsion based on the Cream was formulated using from herbal extract and was evaluated. This work for be concluded That this cream can be used as to multipurpose herbal cream and the herbal cream and the extract of herbal cream produce synthetic effect of the other. To the prepare formulated should good antimicrobial activities no evidence to the phase separation and consistently during to study hard. Natural treatment is great appropriate with inside the fewer side effects that they are more Secure with that the artificial one. Herbal information has developing called for with inside that Global market. Herbal face packs are taken into consideration as maintaining and efficiency Manner to the boost the arrival of pores and skin. Herbal face pack or mask are used to stimulate Blood circulation, rejuvenating the one muscle tissue and assist to preserve the pliability of the Pores and skin and get rid of dust from pores and skin pores. This within side the work it 'Formulated the herbal feck pack containing natural available ingredients like neem.<sup>15</sup>

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