

# **Formulation and Evaluation of Herbal Vanishing Cream**

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**Abstract:** *This paper presents the design and implementation of a mobile app-controlled gas detection and smart home integration system utilizing the Node MCU ESP8266 microcontroller, MQ6 gas sensor, DHT11 temperature and humidity sensor, relay module, and the Blynk platform. The system aims to enhance home safety by detecting gas leaks and enabling remote control of home appliances through a mobile application. The methodology involves sensor calibration, threshold setting, mobile app configuration, and relay control logic. The results demonstrate the system's effectiveness in real-time gas detection and appliance control, with user-friendly interface and reliable performance.*

*This research contributes to the advancement of IoT-based smart home solutions for safety and automation.*

**Keywords:** Real time gas detection, automatic exhaust fan control, mobile notification alerts, temperature monitoring, smart home automation

## **I. INTRODUCTION**

Now-a-days herbal extracts are used in the cosmetic preparations for augmenting beauty and attractiveness. Herbal cosmetics are classified on the basis of dosage form like- cream, powder, soaps, solutions, etc. and according to part or organ of the body to be applied for like; cosmetics for skin, hair, nail, teeth and mouth etc. Creams are semisolid emulsions intended for application to the skin or mucous membrane. A low fat moisturizer that disappears into the skin is called as a vanishing cream. It softens skin, leaving nothing behind. Vanishing cream are o/w emulsion based preparations containing aqueous phase and oil phase.

The cosmetic products are the best choice to reduce skin disorders such as skin aging, skin wrinkling, hyper pigmentation and rough skin texture etc. The usage of synthetic products becomes very harmful from long time for the youth as well as our environment. Various synthetic compounds, chemicals, dye and their derivative proved to cause various skin diseases having numerous side effects. The value of herbs in the cosmeceutical making has been extensively improved in personal care system and there is a great demand for the herbal cosmetics. Thus we are using herbal cosmetics as much as possible. The basic idea of skin care cosmetic lies deep in the Rigveda, Yajurveda, Ayurveda, Unani and Homeopathic system of medicine. These are the products in which herbs are used in crude or extract form. These herbs should have varieties of properties like antioxidant, anti-inflammatory, antiseptic, emollient, antiseborrathic, antikerolytic activity and antibacterial etc. The word herbal is a symbol of safety in contrast to the synthetic one which has adverse effects on human health.

The skin is most extensive and readily accessible part that covers most part of body skin offers convenient sight for administration of drug and the skin as a pathway of drug delivery can offer many benefits over conventional drug delivery system including maximum concentration confirms the site of action lower fluctuation in plasma drug level evidence of first pass metabolism of drug which subsequently increases the drug by ability the high patient complaints.

### **1.1. SKIN**

The skin is the body's largest and primary protective organ, covering its entire external surface and serving as a first-order physical barrier against the environment. Cream easily spread on the skin and make the texture of skin attractive.



## STRUCTURE OF SKIN

Skin is made up of following layers

- a) Epidermis
- b) Dermis
- c) Subcutaneous tissue (hypodermis)

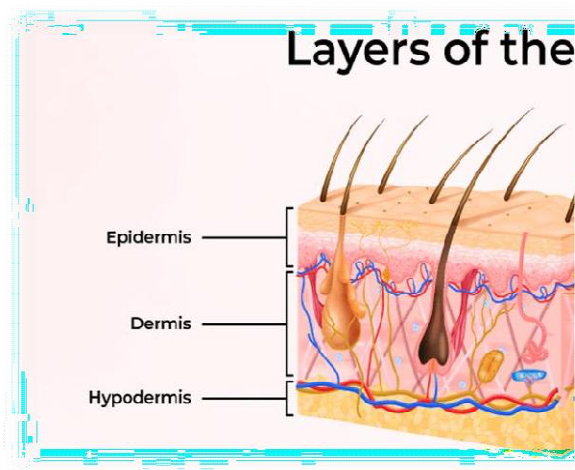


Fig. 1: Structure Of Skin

### a) Epidermis

It is the outermost layer of the skin. The epidermis is a stratified, gauged epithelium caste and it contains two types of cells, keratinocytes and dendritic cells. The main cell of the epidermis is the keratinocytes which make up 95 of the total cells present in the epidermis.

### b) Dermis

It is the middle layer of the skin.

The dermis provides plasticity, elasticity, and tensile strength to the skin.

It covers the body from mechanical injury, binds water, thermoregulation, and sensitive stimulation.

### c) Subcutaneous

The subcutaneous layer of skin, also known as the Hypodermis.

Hypodermis is layer between skin and underlying tissue in body such as muscles and bones. Hypodermis encompasses nicely of vascular, free areolar, connective tissue and adipose tissue. It serves as fat storage region.

This layer assist to modified temperature offers nutritional support and mechanical protection.

## • FUNCTIONS OF SKIN

There are following various functions of skin such as :

- ☐ Maintain the body temperature.
- ☐ Avoid loss of essential body fluids and penetration of toxic substances.
- ☐ Protection of the body from harmful effects of the sunlight and infections.
- ☐ Remove toxin from the body in the form of sweat.
- ☐ The skin stores water, fat, and metabolic products.
- ☐ The skin initiates the biochemical processes involved in Vitamin D production.



## 1.2. IDEAL CHARACTERISTICS OF VANISHING CREAM

- ☐ The cream should have a clean, white appearance.
- ☐ It should not leave a greasy or sticky residue on the skin.
- ☐ The cream should spread easily on the skin without rolling or clumping.
- ☐ It should be easily absorbed into the skin, leaving it feeling soft and smooth.
- ☐ The cream should be easily washed off with water.
- ☐ It should not dry out the skin.
- ☐ The cream should maintain its consistency at normal body temperatures.
- ☐ The cream should maintain its properties over time, including its color, texture, and spreadability.

## 1.3. ADVANTAGE AND DISADVANTAGE OF HERBAL VANISHING CREAM

### • Advantages

- ☐ IT is used as a skin moisturizer and shiny texture to the skin.
- ☐ Used as base on the skin before any other cosmetics application because it vanishes from the skin surface once applied.
- ☐ Used to blemish any pimples or scars.
- ☐ Prevents skin roughness.
- ☐ Lightweight.
- ☐ Non greasy texture allows for easy absorption.
- ☐ Leaving the skin feeling refreshed and nourished.
- ☐ Provide gentle hydration without clogging pores
- ☐ Skin brightening - Ingredients like turmeric, saffron, and licorice help lighten dark spots and enhance skin radiance.
- ☐ Cooling and soothing – Ingredients like sandalwood and aloe vera provide cooling effect and calming irritated skin.
- ☐ Suitable for daily use.
- ☐ Spot reduction and pigmentation control.
- ☐ May improve skin tone and texture over time.
- ☐ Herbal ingredients like turmeric and neem have anti-inflammatory and antibacterial properties that help reduce acne marks, dark spots and pigmentation.
- ☐ Keep skin soft.
- ☐ Balances hydration with oil absorption.

### • Disadvantages

- ☐ Skin allergies due to certain compound in the cream.
- ☐ Skin reaction like itching, irritation, redness etc may happen.

## 1.4. Traditional Beginning

The traditional beginnings of vanishing creams date back to the early 20th century when they were first introduced as a solution for providing a smooth, non-greasy finish to the skin. These creams were primarily made from a blend of water, oils (like mineral oil or lanolin), and emulsifiers that helped combine the oil and water components. The result was a formula that left the skin feeling hydrated but without the oily residue often left by traditional creams. This was particularly desirable at the time, as consumers sought products that didn't leave their skin greasy, especially in hot or humid climates.[6]

Vanishing creams were marketed not only as moisturizers but also as cosmetic products that improved skin appearance by providing a matte finish. The cream "vanished" upon application, absorbing quickly into the skin and leaving it with a fresh, smooth look. These early formulations were simple but effective for their time, though they lacked the herbal or natural ingredients that would later define modern versions.



The formulation was predominantly chemical in nature, often relying on stearic acid and glycerin as key ingredients to achieve its emollient and stabilizing properties. Over time, advancements in cosmetic science led to more sophisticated formulations, but the concept of a lightweight, easily absorbed moisturizer.

Ayurvedic and Unani systems of medicine, which have been practiced for centuries in India and the Middle East. These ancient systems emphasized the use of natural herbs, roots, and minerals to treat various skin conditions and enhance beauty.

Ayurvedic texts like the Charaka Samhita and Sushruta Samhita described herbal formulations using sandalwood, turmeric, saffron, aloe vera, manjistha, and neem to improve complexion and reduce blemishes.

Unani medicine used creams and pastes made from rose water, almond oil, camphor, and herbs to cool the skin and provide a glowing, even tone.

These early preparations were homemade creams or pastes meant to "vanish" imperfections such as spots, acne, and uneven tone—giving rise to what we now call herbal vanishing creams.

## 2. LITERATURE REVIEW

1. Pawar A and Gaud RS et al. 2005 :

The key element of vanishing cream is that it is an oil-in-water emulsion that leaves a barely visible layer on the skin after application. It contains a high percentage of water and stearic acid, which evaporates, leaving a thin, non-greasy film on the skin.

2. Das K et al 2012 :

The creams were O/W emulsion based formulations containing suitable combination of oil phase and aqueous phase along with preservatives. Both the creams were non greasy, coolant and pearl like appearance. They were subjected to various physicochemical parameters i.e. pH, viscosity, spreadability, tube extrudability and drug content studies.

3. MS .Mohini S. Pohekar et al. 2022 :

Herbal cream offers several advantages over other synthetic cream. The majority of vanishing creams prepared from synthetic origin (for e.g., acyclovir, triamcinolone, calcipotriene, triethanolamine, etc) gives extra fairness to face but has several side effects such as itching, burning sensation and many other allergic reactions. Herbal creams do not have such side effects and it gives natural fairness to skin.

4. Shivani Dattatreya Khatal and A.K .Salunkhe et al 2022:

People were obsessed looking attractive. Therefore, a variety of beauty products has been used to look attractive and youthful. In cosmetics, the usage of herbal compounds is widespread. The market for herbal cosmetics is expanding and is a gift from nature. The fact that herbal formulations are free of all dangerous synthetic ingredients that could otherwise be detrimental to the skin has always received significant attention.

5. Mr Sanket Pimpri and Mr Sanket Rathore et al. 2023 :

The reason vanishing creams got their name was because, once applied to the skin, they appeared to vanish. A preparation known as "vanishing cream" is an oil in water emulsion with an oil phase and an aqueous phase. Cream can be easily washable and water miscible, depending on the oil and water content. It can also be thick and sticky. By eliminating symptoms of aging, the poly herbal disappearing cream not only functions as a fairness expert in modern life, but it also has no negative reactions or side effects. The largest and most accessible organ covering the majority of the body is the skin. The skin provides a handy location for medication administration and using the skin as a drug delivery route has several advantages over traditional drug delivery method.

6. Shinde Prajakta and Khule Shah et al. 2020 :

The purpose of the present research work was to formulate and evaluate vanishing herbal cream. Herbal creams offer several advantages over other creams. The majority of existing creams which has prepared from drugs of synthetic



origin and give extras fairness to face, but it has several side effects such as itching or several allergic reactions. Herbal creams do not have any of these side effects. itching or several allergic reactions. Herbal creams do not have any of these side effects without side effects it gives the fairness look to skin.

7. Melak Mohammed and Md. Sohail Akhtar et al. 2020 :

Curcuma longa commonly called as turmeric belongs to the family of Zingiberaceae and it is derived from the rhizomes. It is well known that curcumin has a good anti- inflammatory properties and a protective effect on the skin. Traditionally, curcumin is incorporated in many natural herbal remedies to treat skin infections and inflammation.

8. Abdul Wadood Khan, Sabna Kotta and Shahid Hussain et al. 2013 :

Aloe vera belonging to the Lily (Liliaceae) family is a perennial succulent plant. This plant has been known as “the healing plant. Aloe vera has been used for traditional medical purposes in several cultures for millennia, it has been demonstrated that Aloe vera has growth promoting activities.

9. Sujith SN and Molly M et al. 2012 :

Skin aging is the result of continual deterioration Process because of damage of cellular DNA and protein. During the recent times, the whole world has been swept by a green wave with the realization of health hazards and toxicity associated with indiscriminate use of synthetic drugs and antibiotics, that anything in nature is safer than synthetics. More over the expense for developing a synthetic molecule is not affordable even to developed countries. There is a growing interest in natural antioxidants found in plants.

### 3. AIM AND OBJECTIVE :

#### Aim :

To formulate and evaluate a herbal vanishing cream using natural ingredients, providing skincare benefits while minimizing the use of synthetic additives.

#### Objectives :

##### 1. Enhanced Moisturization:

Provide effective hydration while ensuring a non-greasy finish, suitable for various skin types.

##### 2. Natural Ingredients:

Utilize herbal and plant-based extracts to avoid synthetic chemicals, enhancing consumer appeal for natural skincare.

##### 3. Skin Health Benefits:

Incorporate herbs with proven properties, such as anti-inflammatory, antioxidant, and antibacterial effects, to improve skin health and treat minor issues like dryness or blemishes.

##### 4. Matte Finish:

Create a formula that absorbs excess oil, providing a smooth, matte appearance, making it ideal for oily or combination skin.

##### 5. Consumer Safety and Tolerance:

Ensure the formulation is dermatologically safe, hypoallergenic, and free from harmful additives like parabens or artificial fragrances.

##### 6. Stability and Efficacy:

Develop a stable cream that maintains its effectiveness over time, resisting separation or degradation.

##### 7. Environmentally Friendly:

Promote sustainability by using eco-friendly ingredients, biodegradable packaging, and cruelty- free testing.

##### 8. Evolution of Herbal Vanishing Cream:

Ancient Practices: Inspired by traditional remedies using natural ingredients like aloe vera, neem, and turmeric for skincare.



#### 4. NEED OF STUDY :

The study of formulating and evaluating a herbal vanishing cream is essential due to several scientific, cosmetic, and market-driven reasons.

##### 1. Rising Demand for Herbal Cosmetics

**Consumer Preference:** There is a growing trend toward herbal and natural skincare products due to concerns about the side effects of synthetic chemicals.

**Market Growth:** The herbal cosmetic industry is expanding globally, with consumers seeking safer, eco-friendly alternatives.

##### 2. Safety and Efficacy

**Reduced Side Effects:** Herbal ingredients are generally considered to be safer with fewer side effects compared to synthetic compounds.

**Therapeutic Benefits:** Many herbs used in creams (like aloe vera, neem, turmeric, etc.) have medicinal properties such as antibacterial, anti-inflammatory, antioxidant, and skin- nourishing effects.

##### 3. Functional and Aesthetic Benefits

**Vanishing Property:** A vanishing cream gives a smooth, matte appearance without making the skin greasy, making it ideal for daily use.

**Herbal Enhancement:** Enriching a vanishing cream with herbal extracts adds additional benefits like moisturizing, anti-acne, and skin tone improvement.

##### 4. Need for Standardized Formulation

**Consistency and Stability:** Studying the formulation helps achieve a consistent product that is stable over time.

**Quality Control:** Evaluation ensures that the cream meets dermatological standards in terms of texture, pH, spreadability, and microbial safety.

##### 5. Scientific Validation

**Traditional Knowledge to Modern Use:** Many herbal ingredients are used traditionally, but scientific formulation and evaluation help validate their efficacy in a cosmetic base.

**Data-Driven Development:** A systematic study helps in selecting appropriate excipients, preservatives, and concentrations of herbal extracts.

#### 5. PLAN OF WORK

Plan of work based on formulation and evaluation of herbal vanishing cream.

To formulate a stable , non greasy herbal vanishing cream using natural ingredients with skin beneficial properties.

This include following steps :

- ☐ Literature review
- ☐ Procurement of drug and excipients
- ☐ Method preparation of herbal vanishing cream
- ☐ Evaluation tests
- Odour
- Ph
- Stability test
- Patch test
- Spreadability
- Appearance
- ☐ Compilation of data
- ☐ Submission and report





## 6. MATERIAL AND METHOD

### 6.1. Material :

#### • GLYCERIN

Non proprietary name - Ethylene glycol; 1,2 Ethanediol IUPAC name - Ethane-1,2-diol

Molecular formula - C<sub>2</sub>H<sub>6</sub>O<sub>2</sub> Molecular weight - 62.07 g/mol Melting point - 18.2 °C

Appearance - Clear, colorless, and odourless liquid with a syrupy consistency Application – As humectant

#### • STEARIC ACID

Non proprietary name - Stearophanic acid IUPAC name - Octadecanoic acid Molecular formula - C<sub>18</sub>H<sub>36</sub>O<sub>2</sub>

Molecular weight - 284.48 g/mol

Melting point - 69.3 °C

Appearance - White, waxy solid. It has a mild, slightly oily odor Application – As emulsifier

#### • METHYL PARABEN

Non proprietary name - Methyl parahydroxybenzoate IUPAC name - Methyl 4-hydroxybenzoate Molecular formula - C<sub>8</sub>H<sub>8</sub>O<sub>3</sub>

Molecular weight - 152.15 g/mol Melting point - 125-128°C

Appearance - White or almost white, crystalline powder and odorless Application - As an antimicrobial agent in cosmetics

In cosmetics, it is one of the most frequently used preservatives, found in a variety of products like creams, lotions, makeup, and hair care items.

#### • POTASSIUM HYDROXIDE

Non proprietary name - Caustic potash IUPAC name - Potassium hydroxide Molecular formula - KOH

Molecular weight - 56.1056g/mol Melting point - 406 °C

Appearance - white or slightly yellow, lumpy, flakey, or granular solid Application – As Ph modulator

#### • ISOPROPYL ALCOHOL

Non proprietary name - Isopropanol IUPAC name - Propan-2-ol Molecular formula - C<sub>3</sub>H<sub>8</sub>O Molecular weight - 60.1 g/mol Melting point - -89 °C

Appearance - clear, colorless liquid

Application - Act as toner and antibacterial agent Act as solvent

### 6.2. METHOD :

Here a general method for preparing herbal vanishing cream , which is a type of light , non greasy moisturizer that vanishes into skin .

The recipe combines natural herbs into emollients and emulsifiers.

Vanishing cream containing natural base was pleasant , effective , easily washable and completely safe for human use.

Steps carried out in the preparation of vanishing cream;

Step 1 : Preparation of alcoholic extract of crude drugs

All above mentioned powdered crude drugs of 5gms were taken into the conical flask and then 100ml of ethanol was added to it, then the conical flask was capped with aluminium foil. Then this mixture was placed for maceration for 5 days.

Step 2 : Preparation of oil phase

Stearic acid (17%), potassium hydroxide (0.5%), sodium carbonate (0.5%) was taken into porcelain dish and this mixture was melted at 70 .



Step 3 : Preparation of aqueous phase

Alcoholic extract of crude drugs mentioned in step-1 (4.5%), Glycerine (6%), Water (20ml) were taken into another porcelain dish and heated this mixture at 70 .

Step 4 : Addition of aqueous phase to oil phase

The aqueous phase was added to the oil phase with continuous stirring at 70 . Now, once the transfer was completed it was allowed to come at room temperature, all the while being stirred. Almond oil (0.5%) was added at last just before the finished product was transferred to suitable container. Then cream was evaluated for various physical parameters.

Table 1 : List of herbs

SR. NO.	Herbs	Quantity
1.	Sandalwood	0.5gm
2.	Aloevera	0.5gm
3.	Clove	0.3ml
4.	Indica	0.5gm
5.	Tulsi	0.5gm
6.	Turmeric	0.3gm

Table 2 : List of chemicals

SR. NO.	Chemicals	Quantity
1.	Stearic acid	4gm
2.	Glycerin	0.45gm
3.	Potassium hydroxide	0.23gm
4.	Methyl paraben	0.29gm
5.	Rose water	0.23gm
6.	Water (H <sub>2</sub> O)	20ml

### 6.3. DRUG PROFILE

#### • SANDALWOOD



Fig.1: Sandalwood

Synonyms : Chandana, Gandhasara, Malayaja, Srikanda.

Biological source : Sandalwood consists of the heartwood of the stems and roots of *Santalum album* Linn., an evergreen small tree.

Family : Santalaceae





**Morphology :** Small evergreen tree, 4-9m tall. Leaves: simple, opposite, ovate-lanceolate, entire margin, glabrous. Flowers: small, bisexual, purplish-red, in panicles, insect-pollinated. Stem: erect, woody, greyish bark, aromatic heartwood. Seed: Single, hard; epigeal germination.

**Chemical constituents :** Sandalwood's primary chemical constituents are sesquiterpene alcohols, notably alpha-santalol and beta-santalol, which make up a large portion of its essential oil. Other components include sesquiterpene hydrocarbons like alpha-santalene and beta-santalene, as well as other terpenes, aldehydes, ketones, and acids.

**Therapeutic uses :**

- **Anti-inflammatory:** Reduces skin inflammation, redness, and swelling.
- **Antiseptic:** Helps prevent and treat acne, pimples, and minor skin infections.
- **Cooling Effect:** Soothes irritated or sunburned skin.

• **CLOVE**



**Fig.2: Clove**

**Synonyms:** Clove buds, Clove flowers.

**Biological source:** Clove consists of the dried flower buds of *Eugenia caryophyllus* Thumb.

**Family:** Myrtaceae.

**Morphology:** The clove tree grows to a height of 7 to 15 metres colour: Crimson to dark brown .Odor: slightly aromatic. Taste: pungent & aromatic followed by numbness. Shape: Hypanthium is surmounted with 4 thick acute divergent surrounded by dome shaped corolla. The corolla consists of unexpanded membranous petals with several stamens and single stiff prominent style

**Chemical constituents :** Clove is the primary source of gallic acid derivatives like hidrolizable tannins, phenolic molecules like hidroxibenzoic acids, flavonoids and eugenol (C<sub>10</sub>H<sub>12</sub>O<sub>2</sub>) . Additionally, clove has phenolic acids and flavonoids . Up to 18% of essential oil found in clove flower buds is made up of β-cariofileno, eugenol acetate, and eugenol.

**Therapeutic uses :**

- **Antibacterial:** Helps fight acne-causing bacteria and prevents breakouts.
- **Antioxidant:** Protects the skin from free radical damage and premature aging.



• INDICA



Fig.3: Indica

Synonyms : Nimba , Margosa

Biological source : Neem is obtained from the dried or fresh parts (mainly leaves and seeds) of the tree *Azadirachta indica*.

Family : Meliaceae

Morphology : Medium to large evergreen tree, up to 15–20 m tall. Leaves: pinnate, alternate, with 8–19 leaflets; dark green and serrated. Stem/Bark: straight trunk with rough, fissured, dark gray bark. Flowers: small, white, fragrant; found in axillary panicles; bisexual. Fruit: smooth, ovoid drupe; green when unripe, yellow on ripening.

Chemical constituents : Limonoids: azadirachtin (major bioactive compound). Flavonoids: quercetin, kaempferol. Triterpenoids: nimbin, nimbinin, nimbidin. Others: tannins, polysaccharides.

Therapeutic uses :

- ☐ Anti-acne: Neem's antibacterial properties help treat and prevent pimples and acne.
- ☐ Antiseptic: Prevents microbial infections and promotes healthy skin.
- ☐ Soothing effect: Calms itchy or inflamed skin conditions like eczema.

• TURMERIC



Fig.4: Turmeric

Synonyms : *Curcuma domestica* valetton

Biological source : Obtain from the rhizome of *Curcuma longa* Linn.

Family: Zingiberaceae

Morphology: The perennial herbaceous plant known as turmeric may grow up to 1 m (3 ft 3 in) in height. Its rhizomes are fragrant, cylindrical, golden to orange, and heavily branching. There are two rows of alternating leaves. They are



separated into the petiole, leaf blade, and leaf sheath. Leaves blade breadth ranges from 38 to 45 centimetres (15 to 17+1/2 in), with an oblong to elliptical shape that narrows near the tip.

Chemical constituents : About 60–70% of the ingredients in turmeric powder are carbohydrates, 6–13% are water, 6–8% are protein, 5–10% are fat, 3–7% are dietary minerals, 3–7% are essential oils, 2–7% are dietary fibre, and 1% are curcuminoids. Curcumin is what gives turmeric its golden yellow colour.

Therapeutic uses :

- ☐ Anti-inflammatory
- ☐ It helps to treat skin problems
- ☐ Skin brightening

• ALOEVERA



Fig.5: Aloe vera

Synonyms : Aloe barbadensis

Biological source : Aloe is obtained from the dried juice of leaves of aloe barbadensis miller

Family : Liliaceae

Morphology : Aloe vera is a succulent perennial herb. Leaves: thick, fleshy, lance-shaped, arranged in rosettes; margins have small spines. Color: green to grey-green with occasional white spots. Roots: shallow, fibrous root system.

Chemical constituents : Polysaccharides: acemannan (main bioactive compound). Vitamins: A, C, E, B12, folic acid.

Enzymes: amylase, lipase, cellulose. anthraquinones: Aloin, emodin (laxative effect).

Therapeutic uses :

- ☐ It is used to treat skin conditions.
- ☐ It is used as an anti-bacterial agent.
- ☐ It is used for hydrating the skin

• TULSI



Fig.6: Tulsi



Synonyms : Tulasi , surasa , ocimum sanctum

Biological source : Tulsi consists of the dried or fresh leaves of Ocimum sanctum Linn.

Family : Lamiaceae.

Morphology : Erect, aromatic herb or small shrub (30–100 cm tall). Stem: quadrangular, hairy, and branched. Leaves: opposite, ovate, serrated margins, green or purplish, aromatic. Flowers: small, purplish or pink, in racemes (spikes).

Chemical constituents : Volatile oils: Eugenol, methyl eugenol, carvacrol. Flavonoids: luteolin, apigenin. Triterpenoids: ursolic acid, oleanolic acid

Therapeutic uses :

- ☐ It is used as antimicrobial agent
- ☐ It is used as antioxidant
- ☐ Oil control – helps reduce excess sebum, making skin less oily.

## 7. EVALUATION PARAMETERS

- Determination of organoleptic properties:

The appearance of the cream was judged by its color pearlescence and roughness and graded.

- Determination of homogeneity:

The formulation where tested for the homogeneity by visual appearance and by touch.

- Determination of spread ability:

Spread ability may be expressed by the extent of the area to which the topical applications spread when applied to the affected parts on the skin. The therapeutic efficacy of the formulation are also depends upon its spreading value. Hence it was found necessary to determine the spread ability of the formulation.

- Determination of wetness :

It was determined by applying cream on skin surface of human volunteer.

- Determination of patch test:

About 1 to 3 gm of material to be tested was apply to the sensitive part of the skin example skin behind ears the cosmetic to be tested was applied to an area of 1 square CM of the skin.

- Determination of appearance:

The appearance of a cream was found by observing its colour , opesity etc

- Determination of wash ability:

The removal of cream applied on skin was done by washing under tap water with minimal force to remove the cream.

- Determination of irritancy:

The cream was applied on left hand side surface of 1 sq cm and observed in equal intervals of time.

## 8. RESULT

The herbal vanishing cream was prepared by using oil in water emulsion method using mixture of alcoholic extract of crude drugs including sandalwood powder, turmeric ,aloe vera powder, indica, tulsi, and the extract where used and the cream was formulalted .

- Appearance :

The cream prepared was found to be of a whitish color and had pleasant odor.

- Homogeneity :

It was found that the cream was homogeneous and smooth and consistent in nature.

- Ruboutness :

It was found that the cream was easily spreadable and moisturizes the skin surface of human volunteer.

- Type of smear :

It was found that the cream produced non-greasy film on the skin surface.

- Emolliency :

After observation, it was found that cream not left residue on skin surface after application.

- Washability :

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The removal of cream applied on skin was done by washing under tap water with minimal force to remove the cream.

## 9. CONCLUSION

The vanishing cream of crude drugs with the best properties and having nutritional value was to be prepared by simple methods and less equipments are required.

In the current study herbal vanishing cream were formulated and evaluated for physical parameters and antibacterial activity. The natural herbs used in the preparation of herbal vanishing cream was previously reported to have anti-fungal, antimicrobial, antiinflammatory, skin-soothing activities for which it retards aging signs and pimple formation reduces wrinkles and protects from sunlight. The results indicated that the formulations passed the tests for pharmaceutical physical parameters and exhibited better antibacterial activity.

The prepared herbal vanishing cream nourish, moisturize, protect the skin against premature ageing, irradiation and acne. From above results, it is concluded that on combining the extracts of neem, tulsi, turmeric, carrot, aloe vera, lemon, papaya in a different ratio to get multipurpose effect such as anti-wrinkle, anti-ageing, and sunscreen effect on the skin. The research work suggests that the herbal vanishing cream formulations and its ingredients were studied to be consistent in quality and purity and can be easily used as a vanishing cream. The validation of the cream was done and was found in limits. From above discussion formulation F4 was safe usable for the skin. This study can be helpful for upcoming researchers to select these herbs for the formulation and evaluation.

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