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FORMULATION AND EVALUATION OF HERBAL LOTION FROM *THEVETIA PERUVIANA* FOR SKIN DRYNESS

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ABSTRACT

Background: *Thevetia peruviana* extract was used in this work to create a herbal lotion for dry skin treatment. Rich in bioactive chemicals, the extract helps to soften and hydrate skin. With good pH, viscosity, spreadability, and stability, the lotion offers a natural substitute for synthetic moisturizers. **Aim:** Formulation and evaluation of herbal lotion from *Thevetia peruviana* for skin dryness. **Material and Methods:** The formulation of herbal body lotion was made using pili kaner extract, Aloe-vera gel, clove oil, Glycerin, Rose Water and Cetyl alcohol and beeswax acacia gum. Evaluation criteria were also carried out to assess the formulation and to guarantee that the subjected formulation is not detrimental for the human race. **Results:** The herb lotion was made with a variety of ingredients, including clove oil, glycerin, rose water, T. prruviana, aloe vera, and cetyl alcohol. The antimicrobial and hydrating qualities of Pili Kaner (*Thevetia peruviana*) and Aloe-vera shield skin from microbial deterioration and provide moisture. **Conclusion:** Herbal body lotion is ready for use in tropical climates. Aloe vera and pili kaner are combined in lotion to moisturize skin and have a synergistic effect. Globally, herbal remedies are becoming more and more popular. It's a great idea to use glycerin, coconut oil, shea butter, beeswax, clove oil, and pili kaner extract in the creation of a herbal lotion.

KEYWORDS: *Thevetia peruviana*, Aloe Vera, herbal lotion, skin dryness, phytochemicals parameters, evaluation.

INTRODUCTION

Herbal lotions are carefully formulated using a base of approved cosmetic ingredients combined with one or more herbal components to provide unique cosmetic benefits. In this study, such formulations are referred to as “herbal cosmetics.” Herbal lotions incorporate aromatic herbs and their derivatives, a practice that has gained popularity among consumers seeking natural products, thereby increasing the demand for cosmetics made with plant-based ingredients and extracts. Lotions are low-viscosity topical preparations intended for external application. They are typically applied to the skin using absorbent materials such as cotton wool or gauze saturated with the solution. These preparations serve various functions, including cooling, soothing, or protecting localized areas of the skin.[1] Herbal lotions, specifically, are liquid formulations designed to enhance skin aesthetics. They aid in sebum removal, skin cleansing, and contribute to improved blood circulation, moisturization, and astringent effects. Additionally, they offer benefits such as a sensation of freshness, skin lightening, and therapeutic properties.[2]

Most herbal lotions are applied gently to the skin. They often contain finely divided, insoluble substances reduced to colloidal form, which can soothe inflamed areas and enhance interaction with affected skin surfaces. During formulation, various additives may be incorporated to optimize the lotion's dispersion as well as its cooling, soothing, drying, or protective effects.[3]

Cosmetic formulations aim to address a wide range of skin conditions, including the reduction of wrinkles, acne, and excess sebum. Many products are specifically developed for skin protection, sun screening, anti-acne, anti-wrinkle, and anti-aging purposes. A variety of herbal ingredients are utilized in these preparations to achieve the desired effects. The present study focuses on the formulation and development of herbal lotions using medicinal herbs. It also explores the benefits and applications of these lotions in cosmetic science.

The traditional Indian system of medicine, Ayurveda, has long employed herbs and plant-based substances for the treatment of numerous ailments. In modern cosmetic formulations, lotions primarily function to protect the skin from environmental stressors while providing a soothing effect. According to the Drugs and Cosmetics Act, cosmetics are defined as substances intended to be rubbed, poured, sprinkled, or sprayed on the human body for purposes of cleansing, beautifying, enhancing attractiveness, or altering appearance.[4]

Skin is the outermost tissue of the Body and the largest organ in terms of both weight and surface area. It has an area of approximately 16, 000 cm^3 for an adult and represents about 8% of the body weight. Skin has a very complex structure that consists of many components. Cells, fibers and other components make up several different layers that give skin a multi-layered structure.[7,8,9] Skin performs a wide variety of functions resulting from chemical and physical reactions inside these components. The major function of skin is to act as a barrier to the exterior environment. It protects the body from friction and impact wounds with its flexibility and toughness. Harmful chemicals, bacteria, viruses and ultraviolet light are also prevented from entering the body by the skin. It also prevents water loss and regulates body temperature by blood flow and evaporation of sweat.[10,11,12] These functionalities are critical to our well being. The secretion of sweat and skin lipid cause the elimination of a number of harmful substances resulting from metabolic activities in the intestines and the liver. Furthermore, skin has a large amount of nerve fibers and nerve endings that enable it to act as a sensory organ. When skin is exposed to sunlight, it can produce vitamin D, an imperative chemical substance for the body.[13,14]

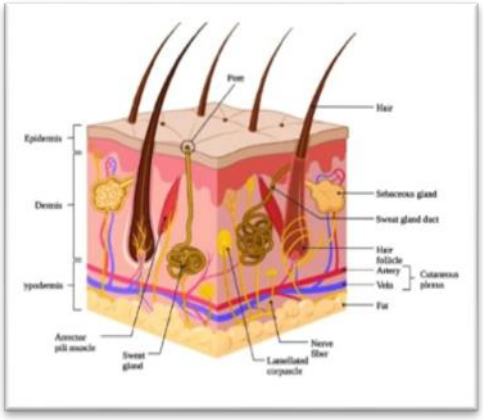

Fig. 1: Layers of skin.

The human skin is the outer covering of the body and is the largest organ of which protect integumentary system. Located on outermost layer covering a living body, skin is an organ which protects the underlying body from external environment such as shocks, temperature, ultraviolet radiation, chemicals and other threats.[15] Though nearly all human skin is covered with hair follicle, it can appear hairless. There are three main types of skin: Glabrous (in palms and soles), hairy (most of the human body) and mucocutaneous.[16]

The term dry skin describes an integument with a dry, rough or scaly appearance with the possible presence of reddening, cracking or itching. Dry and chapped skin is a very common problem both in healthy individuals and in patients with skin diseases. Dry skin conditions occur in association with ageing, in response to the environment, and in several genetically based disorders. Dry skin is a lack or shortage of moisture in the skin, causing it to appear rough and scaly. Dry skin is a co common side effect of cancer treatment. Both chemotherapy and radiation therapy can cause dry skin reactions. Dry skin can be a life-long problem that can worsen with advanced years. Treatment of dry skin is aimed at restoration of the epidermal water barrier. This is accomplished with moisturizing agents that are topically applied to the skin.[17,18,19]

Dry skin is called xerosis and itchy skin is called pruritus. This side effect may be more common for people with cancers of the blood, such as leukaemia, lymphoma, and multiple myeloma. Dry and itchy skin is also very common with chemotherapy, targeted therapy, radiation therapy, and bone marrow transplants.

Fig. 2: Conditions of Dry skin.

Dry skin is a very common skin condition characterized by a lack of the appropriate amount of water in the most superficial layer of the skin, the epidermis. While dry skin tends to affect males and females equally, older individuals are typically much more prone to dry skin the skin in elderly individuals tends to have diminished amounts of natural skin oils and lubricants. Areas such as the arms, hands, and particularly lower legs tend to be more affected by dry skin. Environmental factors, such as humidity and temperature.[18,19,20]

Thevetia peruviana, commonly known as yellow oleander in English and Peeli Kaner in Hindi, is widespread throughout the India. The plant is mostly used as an ornamental in gardens, road dividers along the sides of roads. It does not require any maintenance and can easily survive in extreme conditions.[20]

Thevetia peruviana, a member of the Apocynaceae family, is commonly referred to as the yellow oleander, has a history of traditional medicinal use in managing a range of health conditions, including amenorrhea, malaria, jaundice, hemorrhoids, constipation, headaches, and various skin disorders.[21] The plant is reported to exhibit cytotoxic properties attributed to its significant cardiac glycoside content found in both roots and seeds.[22,23]

These glycosides produce effects akin to digoxin and primarily function by inhibiting the NaK ATPase enzyme within the cardiovascular system.[24,25,26] The plant has been reported. Cytotoxic due to the presence of a high amount of cardiac glycoside, with intermediate poisoning potentially manifesting as a first-degree atrioventricular (AV) block that may progress. To AV dissociation.[26] Furthermore, the seeds are the most toxic part of the plant as it contains glycosides thevetin A, B and nerifolin, followed by the leaves and fruits.[27] Apart from that, the plant contains different secondary metabolites like alkaloids, flavonoids, steroids, terpenoids, tannins, saponins etc.[28] Due to the potential toxicity and popularity of the plant, the current research focuses on the evaluation of antimitotic activity of the methanolic extract *Thevetia peruviana* fruits.

Our planet is home for enormous medicinal plants. Mankind use of medicinal plants is not new rather dates back to thousands of years. In fact, ancient man was very dependent on green plants for his day-to-day needs of medicaments. When a plant is designated as medicinal, it is implied that the said plant is useful as a drug or therapeutic agent or an active ingredient of a medicinal preparation. Recently the demand for plant based therapeutics has increased steeply because of many loopholes in modern system of medicine such as various side effects and high cost. The therapeutic properties of medicinal plants are attributed owing to the presence of active principles such as alkaloids, flavonoids, glycosides, terpenoids, tannins, coumarins, saponins etc.[27-32]

Thevetia peruviana (pers) K Schum is a medicinal plant with wide array of pharmacological properties, but yet not received considerable scientific attention. The plant belongs to the family Apocynaceae and is commonly known as yellow oleander. The plant is native to Central and South America, especially Mexico, Brazil and West Indies but now frequently cultivated throughout the tropical including India and Srilanka as an ornamental plant.[33-39]

Fig. 3: *Thevetia peruviana* Plant.

T. peruviana bark has historically been used for amenorrhea, intermittent fever, ulcers, febrifuge, purgative, and snake bites. The leaves are used to treat jaundice, fever, intestinal worms, and to treat violent headaches and colds. The seeds are used as an abortifacient, an emetic, to treat hemorrhoids skin ailments, and to treat rheumatism.

Different parts of *Thevetia peruviana* are known to possess various medicinal properties. The plant is commonly used in domestic medicine in tropical America and in tropical Asia. *Thevetia peruviana* used traditionally in treatment of amenorrhoea, malarial fever, jaundice, **h**emorrhoids, constipation, headaches, skin disorders. The main medically active compounds found in the plant are a range of cardiac glycosides. Of these glycosides, peruvoside has been investigated most thoroughly. Large scale clinical trials with 1,600 patients showed that all forms of cardiac insufficiency can be successfully treated with perasoside. Of the other glycosides thevetin has effectively been used clinically in cases of cardiac decompensation, although it's effective dose is rather close to its toxic dose. Thevetin A is far less potent than mixture thevetin. The potency of neriifulin as a cardiac glycoside is only moderate.[26]

The latex is applied to decayed teeth to relieve toothache and is used to treat chronic sores and ulcers. The burk is a powerful antiperiodic and febrifuge. A tincture of the bark is used in the treatment of malarial fever and snakebites. Water in which the leaves and bark have been macerated is taken to cure amenorrhoea. A decoction of the leaves is taken to treat jaundice, fever and as a purgative for intestinal worms. The leaf sap is used Eye drops and nose drops to cure violent headaches. The seeds may be used as a purgative when treating rheumatism and dropsy and as an abortifaciens. The pulverized seeds are sometimes an ingredient of suppositories to alleviate hemorrhoids. The oil from the kernel is applied topically to treat skin complaints.[29,30,31,32]

MATERIAL AND METHODS

Collection and authentication of plant: Fresh plant of *Thevetia peruviana* was collected from Dehradun, Uttarakhand, India in February 2025. The plant was identified and authenticated at the Forest Research Institute (FRI), Dehradun, Uttarakhand, India, with vide reference no. **2545/Dis./2018/Syst.Bot./Rev.Gen./4-5**.

Plant material

The aerial parts of the plant *Thevetia peruviana* were collected from Dehradun, Uttarakhand, India. The plant material was washed thoroughly with running tap water to remove any dirt or debris, shade dried for several days, and then powdered using a mechanical grinder. The powdered material was passed through Sieve No. 22 and stored in an airtight container for further analysis and extraction. The extraction was carried out using various solvents to study its potential application in the formulation of herbal lotion targeting skin dryness.

Pharmacognostic Evaluation

Organoleptic / Macroscopic Evaluation[20-27]

Organoleptic evaluation was carried out based on the general characteristics such as **color, odor, taste, size, shape, and texture** of the plant material. This technique involves the qualitative assessment of the drug using the senses (sight, smell, taste, and touch) and is used as a primary step to identify the crude drug. The aerial parts of *Thevetia peruviana* were observed to be greenish-brown in color, with a characteristic odor and slightly bitter taste. The texture was coarse and fibrous in nature.

Extractive Value

Cold maceration method was used to determine the extractive value of the plant material as follows:

- **16g** of coarsely powdered, air-dried material was accurately weighed and placed in a glass-stoppered conical flask.
- It was macerated with **384 ml** of the Methanol for 12 hours, with intermittent shaking, and then allowed to stand for 24 hours.
- The mixture was filtered carefully. From the clear filtrate, **25 ml** was transferred to a tared flat-bottomed dish.
- The filtrate was evaporated to dryness in a water bath, and dried at **105°C for 6 hours**, then cooled in a desiccator for 30 minutes and weighed.
- The extractive value was calculated and recorded in terms of **% w/w of air-dried drug**.

$$\% \text{ Extractive value} = \frac{(\text{Final wt.} - \text{initial wt.}) \times 4 \times 100}{\text{Wt. of drug}}$$

Preliminary phytochemical screening of *Thevetia peruviana*[28-33]

Preliminary phytochemical screening of the methanolic extract of *Thevetia peruviana* was conducted to identify the presence of various bioactive constituents responsible for its **moisturizing, anti-inflammatory, and skin-protective effects**, which are essential in managing skin dryness.

The screening was performed using standard qualitative chemical tests described in pharmacognostical and phytochemical evaluation literature.

1. Test for Alkaloids

- **Mayer's Test:** To 1 ml of extract, a few drops of Mayer's reagent were added. Formation of a **creamy white precipitate** indicated the presence of alkaloids.
- **Dragendorff's Test:** To 1 ml of extract, Dragendorff's reagent was added. Appearance of an **orange-red precipitate** confirmed alkaloids.

2. Test for Flavonoids

- **Lead Acetate Test**: To 1 ml of extract, few drops of 10% lead acetate solution were added. Formation of a **yellow precipitate** indicated flavonoids.
- **Alkaline Reagent Test**: Extract was treated with 2 ml of NaOH solution; **intense yellow color** turned colorless on adding acid, confirming flavonoids.

3. Test for Saponins

- **Foam Test**: The extract was shaken vigorously with distilled water. **Persistent froth** that lasted for more than 10 minutes confirmed the presence of saponins.

4. Test for Tannins

- **Ferric Chloride Test**: To the extract, a few drops of 5% ferric chloride were added. A **blue-black or greenish-black coloration** indicated the presence of tannins.

5. Test for Glycosides

- **Keller-Killiani Test:** Extract was treated with glacial acetic acid, ferric chloride, and concentrated sulfuric acid. Formation of a **brown ring** at the junction confirmed cardiac glycosides.

6. Test for Terpenoids

- **Salkowski's Test:** Extract was treated with chloroform and concentrated sulfuric acid. Formation of a **reddish-brown coloration** at the interface indicated terpenoids.

7. Test for Steroids

- **Libermann-Burchard Test**: To the extract, chloroform, acetic anhydride, and concentrated sulfuric acid were added. A **green or bluish-green color** indicated the presence of steroids.

Fig. 4: Phytochemical evaluation of *Thevetia peruviana.*

Extraction from *Thevetia peruviana* leaves

The powdered drug was extracted with solvent like methanol using cold maceration method.

Cold maceration method

The cold maceration method was used to extract the chosen plant products. 384 milliliters of methanol and a small amount of water were used to extract 16 grams of powdered dried leaves of *Thevetia peruviana*. After that, the product is filtered. After mixing 384 ml of 70% methanol with a dry powder weighing 16 g, the mixture was carefully transferred into a 500 ml volumetric flask. To ensure complete dissolution, the solution was shaken constantly while standing for a full day. To guarantee the best extraction, the mixture was then left aside for a day. The liquid filtrate was then separated from any solid residue by filtering the mixture through filter paper. The extract was then dried and stored for later use after being filtered and concentrated using a rotary evaporator.[34-39]

Extraction from Aloe Vera Gel

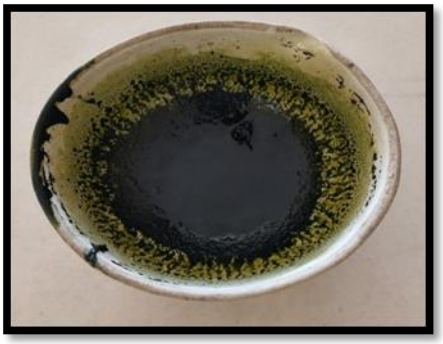

Fig. 5: Extract of *Thevetia peruviana* leaves.

Fresh leaves of *Aloe barbadensis* (commonly known as Aloe vera) were collected, washed thoroughly with distilled water to remove dirt and impurities, and then dried with a clean cloth. The thick, succulent leaves were carefully cut open using a sterile knife, and the inner **mucilaginous gel** was scooped out using a sterile spoon.

The following steps were followed for extraction:[40-44]

- **Homogenization**

The collected gel was homogenized using a blender to obtain a uniform, smooth gel-like consistency. This step ensures even distribution of active constituents.

- **Filtration**

The homogenized gel was filtered through **muslin cloth** followed by **Whatman filter paper No. 1** to remove coarse fibers and unwanted particles. The resulting filtrate was clear and viscous.

- **Preservation (if required)**

A small amount of **citric acid or ascorbic acid** (0.1%) may be added as a preservative to prevent oxidation and microbial contamination during storage.

- **Storage**

The extracted gel was stored in an **amber-colored glass container** at **4°C** until further use in formulation studies. Amber bottles protect the gel from light degradation.

Formulation and preparation of herbal lotion: [45-53]

Table 1: List and uses of ingredients used in the formulation of herbal lotion.

S.No.	Ingredients	Uses
1	Yellow oleander extract	Active ingredient
2	Aloe vera gel	Hydration
3	Cetyl alcohol	Curescency
4	Glycerine	Humectant
5	Coconut oil	Deep moisturization
6	Almond oil	Soften skin
7	Beeswax	Hydration
8	Rose water	Anti-inflammatory
9	Acacia gum	Natural thickening agent
10	Clove oil	Prevent microbial growth

Table 2: Composition of Oil Phase.

S. No.	Ingredients	Quantity
1	Coconut oil	10 ml
2	Shea butter	5 g
3	Almond oil	5 ml
4	Beeswax	2g

Table 3: Composition of Aqueous Phase.

S.No.	Ingredients	Quantity
1	Rose water	15 ml
2	Aloe vera gel	10 ml
3	Acacia gum	0.5 g
4	Glycerine	5 ml

Emulsification

Slowly add the oil phase into the water phase while continuously stirring to form an emulsion.

Cooling & Additives

Allow the lotion to cool to 40°C, and then add Pili Kaner extract, essential oils, Vitamin E, and preservative

Final Mixing & Packaging

Mix thoroughly until smooth, then transfer into sterilized lotion bottles.

Evaluation of herbal lotion[54-60]

Fig. 6: Mixing.

Fig. 7: Herbal lotion.

Evaluation research is defined as a form of disciplined and systematic inquiry that is carried out to arrive at an assessment or appraisal of an object, program, practice, activity, or system with the purpose of providing information that will be of use in decision making.[65-69]

- **Organoleptic Properties**: Visual inspection methods are used to evaluate the organoleptic properties of the herbal lotion. Color, Odour, Texture and state were examined during this assessment.
- **Absorption test**: Absorption test was done by applying the lotion onto the skin and rubbed until it gets completely absorbed
- **Skin Irritancy test**: The irritation test was done by applying a formulation on hand's back skin and leave it for 15 minutes to check irritation reaction such as swelling, itching and redness effect on the skin
- **pH Test**: The pH value of this purely herbal Lotion was determined by using pH meter.
- **Spread-ability test**: Between two slides, a lotion that weighed 500 mg was put. On the top slide, a 200g weight was put The weight was taken off, and the extra mixture was thrown away. The bottom slide was attached to the machine, and the upper slide was attached to a string that didn't bend and had a 100g load put on it. The time it took for the top slide to come off was written down
- **Smoothness:**[27] The smoothness of the lotion formulation was assessed through touch examination, wherein we rubbed the lotion between their fingers and made observations regarding its texture. We recorded whether the lotion felt smooth, clumped, homogeneous, or harsh.
- **Washability Test:** Applying a tiny bit of cream to the hand and then washing it with tap water was the washability test.[70-74]

RESULTS

The herbal lotion was made with a variety of ingredients, including glycerin, coconut oil, clove oil, aloe vera gel, Pili Kaner extract, and rose water. Aloe vera's antimicrobial and hydrating qualities shield skin from microbial deterioration and provide moisture. Glycerine has anti-aging properties. To assess the quality and effectiveness of the formulation, the herel lotion was tested using a number of parameters, including physiochemical parameters, pH, washability, irritability, smoothness, etc. The formulation's physiochemical characteristics include its semi-solid state, pleasant odour, and green colour. The formulation has a neutral pH and good washability.

1. Microscopic evaluation of *Thevetia peruviana*

I. Leaves

Shape: Lanceolate to linear-lanceolate

Size: 10–15 cm long, 1–2 cm wide

Color: Dark green on the upper surface, lighter green on the lower surface

Odor: Slightly pungent or characteristic

Texture: Smooth and leathery (coriaceous)

Arrangement: Alternate (sometimes appearing whorled due to close spacing)

II. Stem

Color: Light brown to yellowish-brown

Texture: Hard, woody; vascular bundles in a ring

Taste: Bitter and slightly acrid

III. Flower

Colour: Bright yellow

Size: 4–6 cm diameter

Structure: Funnel-shaped, 5-lobed petals, tubular corolla, stamens inside tube

Arrangement: Solitary or cymose clusters

Odour: Mildly sweet fragrance

IV. Fruit

Type: Drupe

Size: 3–5 cm

Colour: Green when unripe, yellow to orange when ripe

Shape: Ovoid or slightly flattened

Texture: Smooth, glossy outer surface, hard inner seed

Odour: Mild when fresh, pungent upon decay.

2. Phytochemical evaluation

Table 4: Qualitative analysis of phyto-constituents on the methanol.

Phytochemical	Test method	Expected compounds
Alkaloids	Draggendroff's reagent test	Presence of alkaloids like Thevetin
Flavonoids	Sodium hydroxide test	Flavonoids like quercetin, kaempferol
Tannins	Ferric chloride test	Presence of tannins
Saponins	Foam test	Saponins (glycosides)
Steroids	Salkowski test	Steroidal compounds (e.g., B-sitosterol)
Terpenoids	Liebermann-Burchard test	Terpenoids like limonene, B-carotene
Glycosides	Borntragger’s test	Cardiac glycosides
Phenols	Folin-Ciocalteu method	Phenolic compounds like tannins and flavonoids

3. Extractive value of *Thevetia peruviana*

Table 5: Extractive Value of *Thevetia peruviana.*

S. No.	Solvent used	Extractive Value
1.	Methanol Soluble	4.17%

4. Evaluation parameters of Herbal lotion

The herbal lotion was formulated using a variety of natural ingredients, including *Pili Kaner* extract, aloe vera gel, glycerine, coconut oil, rose water, and clove oil. Aloe vera provides antimicrobial and hydrating properties that help protect the skin from microbial degradation while maintaining skin moisture. Glycerine contributes anti-aging benefits and enhances skin smoothness.

The formulated lotion was evaluated based on several parameters to assess its quality and performance. These included physicochemical characteristics, pH, wash ability, skin irritancy, and smoothness. The physicochemical evaluation revealed that the lotion has a green colour, a pleasant odour, and a semi-solid consistency. The pH of the formulation was found to be neutral, indicating good skin compatibility. Additionally, the lotion demonstrated good washability and was non-irritant to the skin.

Table 6: Results of evaluation parameters of Herbal lotion.

S. No.	Test	Result
1	Colour	Yellowish green
2	Odor	Earthy & herbal smell
3	Texture	Smooth
4	State	Semi-solid
5	skin irritancy	No irritancy
6	pH	7
7	Spred-ability	Good
8	Washability	Good (easily washable)
9	Smoothness	Good
10	Absorption	Good

DISCUSSION

The present study was carried out to formulate and evaluate a **herbal lotion from *Thevetia peruviana* to treat skin dryness,** utilizing the plant's rich phytochemical profile. Skin dryness, often caused by environmental factors and lack of hydration, can be effectively managed using moisturizers derived from natural sources. Herbal formulations are gaining popularity due to their safety, affordability, and minimal side effects compared to synthetic products.

Microscopic characteristics of *Thevetia peruviana* fruit were studied to authenticate and identify the raw plant material. The fruit is a drupe, ovoid in shape, measuring about 3–5 cm, and turns yellow to orange when ripe. It has a smooth, glossy surface and a hard inner seed. The odour is mild when fresh. Microscopy helped in confirming the presence of characteristic cellular structures, supporting its proper identification and usage in formulation.

Extraction was done using methanol as the solvent due to its efficiency in extracting a wide range of bioactive compounds. Cold maceration was used to preserve heat-sensitive constituents. The extract was filtered and concentrated, yielding a semi-solid mass rich in poten**Phytochemical analysis** of the methanolic extract revealed the presence of important secondary metabolites such as alkaloids, flavonoids, tannins, saponins, steroids, terpenoids, glycosides, and phenols. These phytochemicals are known for their antioxidant, anti-inflammatory, and moisturizing properties, which can aid in skin hydration and protection from environmental damage.

Formulation of the herbal lotion was carried out by incorporating the methanolic extract into a base consisting of emulsifiers, humectants, and stabilizers. The goal was to create a smooth, non-greasy, and skin-friendly lotion that could deliver the active constituents effectively. The lotion showed good consistency therapeutic phytoconstituents suitable for topical application.

Evaluation of the lotion included physical characteristics like color, consistency, pH, spreadability, and stability. The lotion maintained a suitable pH close to that of the skin (around 6.0–6.5), had good spreadability, and showed no signs of phase separation or microbial contamination during stability studies. The moisturizing effect was subjectively assessed and showed promising results in reducing skin dryness upon application.

CONCLUSION

Herbal remedies can partially replace synthetic ones and are more effective at reducing dry skin. Herbal lotions are simple to apply and absorb quickly. Herbal products reduce negative effects because the skin naturally shields the body. Because of their special and advantageous qualities, herbal formulations are becoming more and more in demand on the global market. The creation and testing of a herbal body lotion are the main objectives of this study. In addition to

physical attributes like pH, spreadability, ease of removal, and possible skin irritation, other factors were assessed, such as appearance, color, and smell (organoleptic properties).

The creation of a herbal lotion that offers vital nutrients for healthy skin is the primary objective of this study. Numerous herbs have special qualities that make them useful in skincare, particularly as antioxidants.

Herbal cosmetics are safe and do not cause harm, according to the study. Additionally, herbal lotions help avoid skin issues. Cosmetics are being used more and more in the personal care sector. Herbal cosmetics' bioactive components improve skin health and supply vital nutrients.

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