

A Review on herbal moisturizing cream

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ABSTRACT

Plant cosmetics are preparations that primarily serve to protect and care for the appearance. Semi-Permanent Complexion Improvement is a moisturizer. Compared to synthetic creams, herbal creams offer different advantages. Most of the currently available creams provide a smoother facial appearance and consist of drugs of synthetic origin, but also have several undesirable side effects, including irritation and allergic reactions. herbal creams that nourish the skin without them do not have these side effects. The purpose of this study was to develop and evaluate a herbal moisturizer containing aloe Vera gel, glycerin, rose water, and vitamin E capsules.¹ Moisturizers are semi-solid preparations that reduce the risk of skin problems and fight wrinkles. The main aim of the research was to prepare moisturizers from various herbs and evaluate the effectiveness of the prepared moisturizer. The herbs used in the dried preparations are Bael leaf powder, amla powder, neem powder and turmeric. Formulated moisturizers are classified into categories based on irritation, cleansing effectiveness, pH, viscosity, phase separation, spreadability and compatibility testing.²

KEYWORDS: Moisturizing cream, , Aloe Vera, Amla

I. INTRODUCTION

The word "cosmetics" comes from the Greek word "kosmesticos," which means "to decorate." Since then, all substances that are used to beautify or improve appearance have been referred to as cosmetics. The word "cosmetics" actually comes from its use in ancient Rome. They were usually made by slave women called "cosmetae," from which the word "cosmetics" comes. Cosmetics are used to improve appearance. The importance of cosmetics has increased as many people want to stay young and attractive. Cosmetics are now easily available in the form of

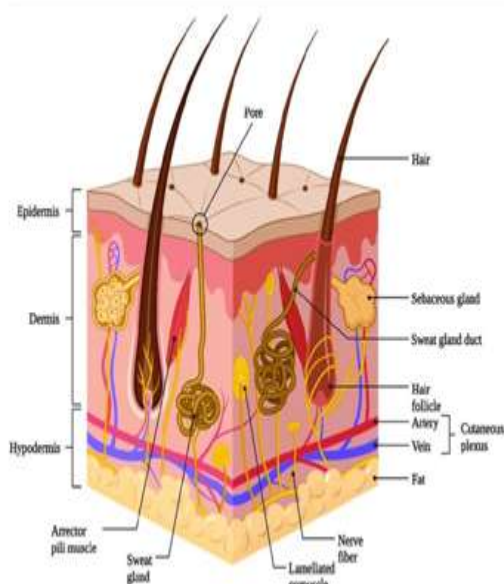
creams, lipsticks, perfumes, eye shadows, nail polishes, hair sprays, etc. Other cosmetic products such as face powder make the skin shine after applying a base cream. Cosmetic products such as creams, gels and cologne are used daily by women and men. In many cases, creams act as facial cleansers. Anti-aging creams have recently become available that will keep your skin looking younger for many years. The best cleaning products are cleansing cream, soap and water. Cosmetic creams care for hard, dry and cracked skin. Firstly, it lubricates the skin, softens it and removes unwanted dirt. Violation of the skin's protective barrier leads to various types of skin problems.

The most common condition is loss of water content, which causes dryness of the skin in the form of roughness, flaking, cracking, redness and an unpleasant feeling of tightness, sometimes accompanied by itching and tingling. Treatment with a moisturizer aims to maintain the integrity and well-being of the skin and ensure a healthy appearance. Many moisturizers are available under natural, safe, organic and herbal brands and the basic moisturizing, occlusive and softening properties are the same across all moisturizers. creams are semi-solid emulsions for use on the skin or mucous membranes. Depending on the water-to-fat ratio, the cream may be miscible with water and easy to remove or thick and sticky. This is the most commonly recommended topical medication. Since it is less greasy, dirty and sticky, most patients prefer it. Plant extracts are now often used in cosmetic products to improve their attractiveness and appearance. Prior to the development of the allopathic medical system, traditional medical systems over the centuries regulated the use of moisturizers and were commonly used for normal and dry skin. moisturizers are used to treat the signs and symptoms of dry skin, leaving it soft and smooth. Plant cosmetics are cosmetic products made from plant substances with cosmetic properties. Recently, the use of herbal substances in

cosmetics has increased, mainly due to their gentle effects and non-toxic nature.³

Human skin

The skin is the outer covering of the body. It is the largest organ of the integumentary system. The skin consists of numerous layers of ectodermal tissue and protects the underlying muscles, bones, ligaments and internal organs. Human skin is similar to that of most other mammals, except that it is not protected by skin. Although almost all of human skin is covered with hair follicles, it appears hairless. There are two general skin types: hairy skin and uneven skin. The adjective “kutan” literally means “skin”. The skin plays a key role in protecting the body from pathogens and excessive water loss. Its other functions include insulation, temperature regulation, feeling, vitamin D synthesis and vitamin B folate protection. Severely damaged skin attempts to heal by forming scars.¹⁵



Moisturizing cream

A facial moisturizer is a creamy lotion or emulsion, ointment, or balm that contains emollients that help the skin retain moisture. Moisturizing substances provide moisture to the superficial layers of the skin. Their main benefit for the skin is that they seal it, lock in moisture and nutrients and protect it from environmental irritants. moisturizers are used to treat certain skin conditions such as psoriasis, ichthyosis vulgaris, dry skin, and itching associated with atopic dermatitis. Most often they form the basis or

support for topical medications such as Whitfield ointment. They are often combined with humectants such as salicylic acid and urea.

Objectives

1. To evaluate safety, efficacy and quality of Herbal cold cream.
2. They are non-irritant when applied on the skin.
3. To explore the many aspects of the rich traditional Indian herbal medicine.
4. To apply knowledge gained during the course in evaluating the usefulness of herbal formulas.
5. To formulate and evaluate a cosmetic herbal cold cream for glowing skin by using natural herbal ingredients.
6. To synthesize a cold cream ideal for all skin types.
7. To find the useful benefits of cold cream on human use as cosmetic product.⁴

Advantages

- Moisturizing can reduce the visibility of other skin imperfections.
- Moisture helps keep skin young.
- Hydration fights wrinkles.
- Protect from environmental damage.
- Improve skin texture.

Disadvantages

- Can cause skin breakout.
- May lead to skin allergies.
- Can make skin oily.
- Might not suit all skin types.

Uses of moisturizer

- Moisturizers are used to treat certain skin conditions such as psoriasis, ichthyosis vulgaris, dry skin, and itching associated with atopic dermatitis. Most commonly this involves base or topical medications such as Whitfield ointment. They are often combined with humectants such as salicylic acid and urea.
- Moisturizers are also commonly used in sunscreens, antiperspirants, skin cleansers, shaving creams, aftershaves and hair dermatitis.
- Moisturizers are used in disposable pads to prevent dry skin and pad dermatitis.⁵

IDEAL PROPERTIES OF HERBAL

1. Cause toxic effects when used.
2. It must have an optimal grain size.
3. They must have a mitigating effect.

4. Thicker than a conditioner, holds its shape, for example 50/50 oil-water emulsion.

5. They must be evenly distributed on the surface of the skin.

6.Requires the use of preservatives to extend shelf life.

7. They must be compatible with the pH of the skin.¹³

Types of skin cream

They are divided into two types:

Oil-in-Water (O/W) : creams which are composed of small droplets of oil dispersed in a continuous phase, and an emulsion in which the oil is dispersed as droplets throughout the aqueous phase is termed an oil-in-water (O/W) emulsion.

Water-in-Oil (W/O): creams which are composed of small droplets of water dispersed in a continuous oily phase. When water is the dispersed phase and an oil the dispersion medium, the emulsion is of the water-in-oil (W/O) type.³

Preparation of Herbal Moisturizer

The preparation can be prepared by adding two different phases of shown below.

Phase 1: Oily Phase

Melt the indicated amount of beeswax in a jar using the indirect heating method (in a water bath) at a temperature of 65-70°C.As soon as the beeswax has melted, take the required amount of liquid paraffin into a separate glass, then beeswax and liquid paraffin , heat everything in a water bath at a constant temperature to 65-70°C.

Phase 2: Aqueous phase

Dissolve borax in water under heat. Weight approx. 6.Add 20 ml of water to 5 grams of orange powder to dissolve the and heat in a water bath. The same procedure is carried out for the powder when the two solutions reach a temperature of 70°; Remove it from the water bath, let it cool to room temperature and then filter it.

Phase 3:Final formulation

Firstly the oil phase ingredients such as beeswax and liquid paraffin are poured into a mortar and pestle, then gradually add the water phase ingredient , borax, stirring constantly until a creamy consistency and everything. The process takes approximately 5 minutes. The required amount of coconut oil is then added and rubbed continuously in one direction. Then add the prepared aqueous phase ingredients such as orange

peel extract, drumstick extract and aloe extract to the mixture at intervals and then grind again until they combine with the oil phase and obtain a creamy consistency. Add methylparaben as a preservative. Compared to other creams, this cream can be made heavier by adding more wax.

Herbal plants used in skin care

Common Name: Aloe vera

Botanical Name: Aloe barbadensis miller

Family: Asphodelaceae

Chemical constituents: The Aloe vera gel is made up of water, amino acids, vitamins, lipids, sterols, tannins and enzymes and also contains phenol, saponins, anthraquinone components, which have antiviral, antibacterial, and antifungal properties.

Uses

- It has antioxidant and antimicrobial properties.
- It accelerates wound healing.
- It may improve skin and prevent wrinkles.



Common Name: Rose

Botanical Name: Rosarubiginosa

Family: Rosaceae

Chemical constituents: citronellol (34–55%), geraniol, (around 14%) and nerol (around 7%). Other main constituents are paraffin (around 16%), polyethyl alcohol (around 2.8%), farnesol (around 1.2%), rose oxide (a terpenoid ether, around 0.5%), eugenol (also around 1.2%)

Uses: Treat skin disease, Anti-inflammatory, cleansing.



Common Name: Neem, Margosa
Botanical Name: Azadirachta Indica
Family: Meliaceae
Chemical Constituents: Tetranortriterpenoids, azadirachtin, diterpenes
Uses: It cures wounds, leprosy, skin diseases like acne, ulcers, hair problems.



Common Name: Papaya, Papaw
Botanical Name: Caricacpapaya
Family: Caricaceae
Chemical Constituents: Enzymes-Papain and chymopapains. Alkaloids-scorpine and pseudocarpine
Uses: fruit pulp make skin soft and removes blemishes. It can be used for treating wrinkles, sunspots, age spots, acne problems.



Common Name: Turmeric
Botanical Name: Curcuma longa
Family: zingiberaceae
Chemical Constituents: Curcuminoids, phenolic diaryl heptanoids.
Uses: Rhizome powder possesses anti-inflammatory and antioxidant properties. It is used in treatment of skin and hair problems.



Common Name: Mint
Botanical Name: Mentha arvensis
Family: Labiatae
Chemical Constituents: Menthol, menthone. α & β -pinene, α -thujene, l-limonene, β -phellandrene.
Uses: Acts against pigmentation and skin diseases and has as moisturizing, cooling, antiperspirant, anti-aging properties.⁶



Extraction Process

Preparation of turmeric extract: Take 1 g turmeric powder in 10 ml distilled water and shaken in 250 ml volumetric flask heated in water bath at 80°C to 100°C for 5 to 10 minutes. Then filtered it and it and turmeric extract is obtained.

Preparation of aloe-vera extract: Collect mature and fresh aloe-vera leaf from plant and washed it with distilled water. Dried it is hot air oven. Leaf dissected longitudinally by sterile knife. The semi-solid aloe-vera is collected. Remove fibers and impurities from it. Aloe-vera extract is obtained.

Preparation of Ripe Papaya Extract: To prepare Papaya Oil add one tablespoon of each ripe but firm organic Papaya into finely chopped pieces in a bowl. Add 2 tablespoons unrefined oil, take bowl and place over a pot of boiling water. The upper oil pan must not come into contact with the water in the lower pan and the flame must be kept at the lowest possible level while preparing the oil. Continue cooking in this way for 30 minutes using the double cup . Kettle method that helps preserve, adding water every 10 minutes. After 30 minutes remove the upper tank and filter the oil. Now you can get Papaya oil.¹⁴

General ingredients used in skin cream

The raw materials used in the production of skin creams include:

- **Water:** It is the most important and commonly used raw material in any cream preparation. These are the cheapest and most readily available. In skin creams, water acts as a solvent to dissolve the other ingredients in the creams. Water free from toxins, impurities, microorganisms, etc. It is used to make

creams. Water can also form emulsions, this depends on the amount of water used in the formulation and these are sometimes called oil-in-water emulsions and sometimes water-in-oil emulsions, depending on the amount of oil phase and water phase used.

- **Oils, fats and waxes:** Oils, fats and waxes as well as their derivatives make up the majority of creams. Waxes act as an emulsifier, fats as a thickener and oil as a perfume, preservative etc. according to its function. There are two types of oil: mineral oil and glyceride oil.
- **Mineral oil:** Mineral oil consists of hydrocarbons that are obtained from petroleum. Mineral oil is a clear, odorless and highly refined oil commonly used in cosmetics. Mineral oil rarely causes allergic reactions and cannot harden or clog skin pores. It is light and economical, helps reduce the body's water loss and keeps the body hydrated. Many mineral oils are used in cream formulations.
- **Waxes:** Used to make creams, including beeswax, carnauba wax, ceresin, spermaceti, etc. waxes are used in cosmetics because they prevent the emulsion from separating the oily and liquid components. These waxes also increase the thickness of the lipid. peel off and adhere to the surface of the skin.
- **Moisturizer:** A moisturizer or emollient is a cosmetic preparation used to protect, moisturize and moisturize the skin. These functions are generally ensured by the sebum production of healthy skin. The word "soften" comes from the Latin verb mollire, "to soften". In the human body, water constantly evaporates from the deeper layers of the skin due to a phenomenon called transepidermal water loss. By regulating water content, human skin naturally maintains a dry, easily peelable surface that acts as a barrier against pathogens, dirt and damage while protecting against dehydration.
- **Perfumes:** Perfume is a substance that imparts a scent or odor, including a sweet and pleasant smell. Examples of natural perfumes used in creams are:
 - White Blossoms:
 - Rosy Dreams

- Orange Blossom³

Experimental work

Preparation of Extract:

The fresh leaves of the plant were taken washed with water and grounded into a paste for further extraction .

Extraction with water

- 300 g of fresh leaves of A. were taken prepared as above.
- The leaves were extracted with water for 12 hours at room temperature.
- Extraction was carried out by maceration.
- The supernatant was filtered after 12 hours.
- The extract was labeled as Active A (liquid form).

Formulation of moisturizing cream Base

- A simple water-based oil has been added so that it does not affect the evaluation of the moisturizing properties of Active.
- The cream base was prepared according to the given procedure.
- All ingredients of phase A (oily phase) and phase B (aqueous phase) were collected in separate jars.
- They were allowed to melt completely by heating them to a temperature of 70-80°C.
- The oil phase was then added to the aqueous phase with constant stirring until a cream was formed.
- The cream was ground to the desired consistency and appearance.

Formulation of cream

Heat the liquid paraffin and beeswax in a borosilicate glass beaker to 75 °C and maintain this heating temperature at °C (oily phase). In another beaker, dissolve borax and methylparaben in distilled water and heat this beaker to 75°C to dissolve borax and methylparaben to obtain a clear solution. Slowly add this aqueous phase to the heated oil phase . Add a measured amount of broad bean extract, turmeric extract, amla extract and neem extract and mix vigorously until you get a creamy mixture. Add a few drops of rose oil for fragrance.

Evaluation parameters for moisturizing cream

1) Physical assessment: It is mainly used to test the color, smell, consistency and stability of the cream.

2) Irritation: It is used to check the quality of materials and chemicals and determine whether they are harmful to the skin/mucous membranes or not. First we need to mark the area on the left hand of (dorsal surface). We then apply the cream preparation to this area and note the time . We then let the preparation work for a few minutes and check the irritating effect .

3) Washability: You can also use this test to check the quality of the cream. To do this we must first add a small amount of cream that we have applied to the hand. Next we need to wash the with tap water.

4) pH Test: This is basically the acidity of a substance. The normal pH value of (cream) is between 4 and 7. This test was measured with a digital pH meter or pH paper.

5) Phase Separation: This test is normally checked within 24 hours or 30 hours. To do this we must put the cream in a closed container at a temperature of (30-80°C).Store this product away from light.

6) Viscosity: This test is essentially used to test or predict how the materials used in the cream will perform in the real world. It is mainly used to check efficiency.

7) Smoothness: This test is mainly used to check the texture of the cream whether it is greasy or greasy. According to the results, all formulas were non-greasy.

8) Flowability: Flowability is expressed as the time in seconds that two blades require to flow the creatine placed between the blades under a certain load. Less time spent separating two blades improves lubrication. Two sets of standard size slides were prepared. A slide of a suitable size was then removed and a cream preparation was placed on this slide. Another preparation was then placed on sample . A weight or load was then placed on the top blade so that the cream was pressed evenly into a thin layer between the two blades.

II. CONCLUSION

Natural remedies are more acceptable as they are safer and have fewer side effects than synthetic remedies. Herbal preparations are enjoying growing demand on the global market. herbal moisturizers are considered an effective and long-lasting way to improve the appearance of the skin. Herbal moisturizers are used to prevent skin irritations and blemishes. To avoid skin problems caused by environmental damage, it is important to moisturize the skin regularly. Long-term use of

chemicals damages the skin. Moisture is the key to skin repair.³

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