International Journal of Science and Research Archive

eISSN: 2582-8185

Cross Ref DOI: 10.30574/ijsra

Journal homepage: https://ijsra.net/

(RESEARCH ARTICLE)

Check for updates

Development of Herbal moisturizing Body Lotion

Kalyani Uttam Binnar and Bhavana Dnyandeo Tambe *

SMBT Institute of D. Pharmacy, NandiHill, Dhamangaon, Nashik, Maharashtra India.

International Journal of Science and Research Archive, 2025, 14(02), 1416-1421

Publication history: Received on 11 January 2025; revised on 21 February 2025; accepted on 24 February 2025

Article DOI: https://doi.org/10.30574/ijsra.2025.14.2.0539

Abstract

Herbaceous plant used for its flavor, aroma, or medicinal qualities. One category of dietary supplements is herbal remedies. Herbal medicine is used by people in an effort to preserve or enhance their health. Herbal cosmetics are those that were created when consumers' desire for herbal products and their aromatic value in cosmetics preparation led to a demand for natural products and extracts. It is used as a moisturizer, antioxidant, skin-brightening, melanin-lowering, and hyperpigmentation remedy to keep skin from drying out in the winter. Thorough testing was done on the lotion's chemical and physical stability, including its pH, viscosity, and microbial load Underwent extensive testing. Morusabla leaves are used medicinally; its laxative and antioxidant properties have been investigated scientifically.

Keywords: Morus Alba Leaves Extract; Herbal Lotion; Antioxidant; Skin-Brightening

1. Introduction

The demand for natural goods and natural extracts in cosmetic preparations was sparked by customers' desire for herbal products and the usage of natural herbs and their products for their aromatic value. With the aid of an absorbent substance, such cotton wool or gauze soaked in it, they are put straight onto the skin. Lotions can be used locally for protecting, calming, or cooling effects.

The need for natural materials and natural extracts in cosmetic preparations was sparked by customers' desire for herbal products and the usage of natural herbs and their products for their aromatic value. Liquid solutions called lotions are intended for frictionless exterior application. They are applied directly to the skin using an absorbent substance, like cotton wool or gauze that has been soaked Init.The need for natural materials and natural extracts in cosmetic preparations was sparked by customers' desire for herbal products and the usage of natural herbs and their products for their aromatic value. Liquid solutions called lotions are intended for frictionless exterior application. They are applied directly to the skin using an absorbent substance, like cotton wool or gauze that has been soaked in it.

1.1. Advantage of Herbal Body lotion

- They don't cause allergic responses.
- No adverse side effects are present.
- Their constituents are more stable, pure, and effective.
- Herbal cosmetics are easy to handle and store
- Evenly distribute them over the skin's surface.
- Decrease the body's roughness.

*Corresponding author: Bhavana D.Tambe

Copyright © 2025 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution Liscense 4.0.

2. Material and method

2.1. Materials

Various materials and their role in the herbal body lotion formulations are as follow;

Table 1 Formulation Table

Sr.No.	Ingredients	Uses
1	Aloe vera gel	Moisturizes
2	Almond oil	Improves the skin elasticity
3	Glycerine	Soothes dry skin
4	Coconut milk	Reduces lines and wrinkles
5	Rose water	Balance skin pH
6	Methyl paraben	Preservative
7	Propyl paraben	Preservative
8	Vitamin E capsules	Antioxidant
9	Honey	Improve skin texture
10	Xanthum gum	Thickening agent
11	Keshar	Improve skin tone

Honey: Bees make honey, a sweet liquid, from the nectar of plants. Honey has the following advantages:[6]

- Because of its acidity, honey works well against some bacteria and fungus, accelerating tissue restoration and wound healing.
- Honey has anti-oxidant qualities.
- It might aid in preventing free radical damage to the skin
- A rapid energy boost can be obtained from honey, a natural source of carbs.

2.1.1. Vitamin E capsule

Vitamin E tablet one vitamin that is far soluble is vitamin E. Essential nutrients are vital for the production of general health and wellbeing.

- Antioxidant qualities
- Immune system assistance
- The evening skin tone
- Age-reduction
- Water

2.1.2. Coconut milk

- Coconut Milk made from coconut when applied directly to dry skin
- Coconut milk's high fat content can provide a great moisturizing effect.
- It also serves as a sealant to hydrate and look in moisture.
- It is the best moisturizer for the body since it is easily absorbed, has the smoothest skin cells, and contains fats that help keep your skin supple.
- Coconut milk is a moisturizing agent that has antibacterial and antifungal qualities.
- Coconut milk reduces inflammation and encourages wound healing.

2.1.3. Aloe vera gel

- Aloe vera gel has anti-inflammatory and antibacterial qualities as well.

- It has cooling qualities and is high in minerals and antioxidants that promote healing.
- It has calming and hydrating properties as well.
- Aloe vera's ability to chill prevents sunburn from developing and provides a cooling sensation
- This drug is applied as a moisturizer to minor skin conditions and dry, rough, scaly, itchy skin.

2.1.4. Almond oil

- Almond oil is and moisturizes and nourishes.
- Due to its light weight and lack of irritation.
- Almond oil is generally safe for sensitive skin.
- It might have antioxidant properties.
- It might have an anti-inflammatory effect.
- It might raise levels of healthy cholesterol
- It might possess antimicrobial properties.
- It might possess antifungal qualities.
- It might have an immune-boosting effect.

2.1.5. Glycerin

- Glycerin as a moisturizer.
- It relieves skin that is dry and inflamed.
- It helped with scars and acne.
- 4.It aids in wrinkle reduction.
- It has the ability to prevent aging.
- It is employed as a cleanser. The permeability of the skin is improved.

2.1.6. Rose water

- A potent component of a face treatment is rose water.
- Rose water has many anti-inflammatory properties.
- In addition to lowering itching and redness, it has a cooling effect.
- It eases inflammation of the skin.
- It moisturizes and hydrates the skin.
- 6.It enhances the suppleness and texture of the skin and helps keep the pH balance of the skin stable.

2.1.7. Methyl paraben

- Methyl paraben stops dangerous bacteria from growing and contaminating items.
- Over time, methyl paraben helps products keep their efficacy and purity.
- Methyl paraben works well against a variety of microbes.

2.1.8. Propyl paraben

- A benzoate ester called propylparaben works well against yeasts, molds, and bacteria.
- It is frequently used in conjunction with other parabens or preservatives to prolong the cosmetics' shelf life.
- At room temperature and across a broad pH range, it remains stable.

2.1.9. Kesar

- Acne can be treated with Kesar's antibacterial qualities.
- Dark spots and imperfections can be less noticeable with Kesar.
- Kesar may help firm and plump skin by promoting the creation of collagen and hyaluronic acid.
- Kesar promotes the formation of skin cells, which aids in the healing of small cuts and wounds
- Antioxidants from Kesar can help shield skin from UV rays and other environmental stresses.

2.1.10. Xanthum gum

- The water-holding capacity of xanthan gum keeps the skin moisturized.
- Products that include xanthan gum may feel silkier and smoother.
- By keeping the skin's barrier permeable, xanthan gum can help stop breakouts.

- Xanthan gum can lessen the visibility of fine lines and help fill in wrinkles.

2.1.11. Mulberry oil

- The mulberry fruit's seeds are used to make mulberry oil, a posh and nutritious oil.
- Known for being rich and emollient, this oil is meant to improve your skincare regimen.
- Its natural composition and smooth, light texture make it perfect for skin renewal and revitalization.

Table 2 Formulation Table

Ingredients	**F1**	**F2**	**F3**
Leaves extracts	10 ml	12 ml	15 ml
aloe vera gel	5 ml	10 ml	15 ml
Almond oil	2 ml	2ml	2 ml
Coconut milk	5 ml	5ml	5 ml
Methyl paraben	0.02 gm	0.02gm	0.02gm
Propyl paraben	0.02 gm	0.02gm	0.02gm
Rose water	10 ml	12 ml	15ml
Xanthum gum	2 gm	2 gm	3 gm
Honey	2 ml	2 ml	2 ml
Vitamin E pills	2 pills	2 pills	2 pills
Glycerin	5 ml	4 ml	5 ml
Kesar	4 gm	4 gm	5 gm
Mulberry Oil	2-4 drop	2-4 drop	2-4 drop

2.2. Method of Preparation Herbal Lotion

- Determine each ingredient's weight using the formulation.
- Alovera gel, almond oil, honey vitamin e was transferred to a clean, separate beaker and swirled until it became somewhat cream
- Glycerine, methyl paraben, propyl paraben, mulberry oil were then placed in another beaker. Glycerin and oil from capsules were added.
- After a thorough mixing, the oils solution was gradually added to the first beaker.
- Coconut milk and rose water were added according to consistency after all the components had been mixed.

Figure 1 Herbal Body Lotion

2.3. Evaluation test

- **Appearance:** A visual inspection of the lotion's appearance was conducted.
- **Color:** A visual inspection revealed the cream's color.
- **Odor:** The lotion's scent was evaluated by sniffing
- **P^H:** A digital PH meter and a PH paper were used to measure the produced herbal lotion's PH.
- **Spreadability:** To determine the lotion's spreadability, a sample was sandwiched between two slides and crushed to a consistent thickness using a specific weight for a predetermined amount of time.
- **Irritancy test:** A particular region of the left hand's dorsal surface was treated with the lotion. Erythema, oedema, and irritation were monitored for up to 24 hours and reported.
- **Test of Removal:** The applied area was washed with water to test how easy it was to remove the cream. .
- **Stability Test:** The formulation was put in the middle of the petri dish, and the plates were then incubated for 72 hours at 37°C to examine the all-microbial growth.

Table 3 Evaluation Table

Sr.No	Test	Observation		
		Formulation F1	**Formulation F2**	**Formulation F3**
1	Appearance	Lotion Type	Lotion Type	Lotion Type
2	Color	Greenish	FaintGreenish	Faint Greenish
3	Odor	Aromatic	Aromatic	Aromatic
4	pH	5	5.5	5
5	Spreadibility	Easily spreadable	Easily spreadable	Easily spreadable
6	Irritancy Test	Non-irritable & non allergic on the skin	Non-irritable & non allergic on the skin	Non-irritable & non allergic on the skin
7	Removal Test	Easily removed from the skin by using water	Easily removed from the skin by using water	Easily removed from the skin by using water
8	Stability Test	No microbial growth is observed After 6 months	No microbial growth is observed After5 months	No microbial growth is observed After 4 months

3. Result and Discussion

The herbal lotion was made and evaluated based on a number of factors. herbal preparation was greenish in color. The pH was within the usual range of the skin, which is between 5 to 6, during the trial, and the lotion did not cause any skin irritation when applied. In standard storage circumstances, the preparation remained stable. These findings suggested that there were no negative effects of the herbal lotion on the affected area. Research indicates that this herbal concoction has anti-aging and anti-inflammatory properties.

4. Conclusion

In this study, a herbal lotion formulation was created and assessed based on physiological factors such as pH, spriteability, ease of removal, and irritancy test, as well as organoleptic features (color, odor, and appearance).The current study focuses on herbal extracts. Give the skin the nutrition it needs to stay healthy. There are many naturally occurring herbs that can be used as antioxidants in skincare and cosmetic preparations. In comparison to commercially available cosmetics, the current study found that herbal cosmetics are extremely safe and do not cause any harmful or negative effects. By using herbal lotion, we can prevent skin issues. This study unequivocally revealed the several drawbacks of allopathic lotion, including sensitivity, high cost, and adverse effects.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

[1] ikita M. Rathi, Shital V. Sirsat, Surekha S. Tayade, Abhijit S. Khot; Akshay C. Deshmukh Formulation and Standardization of Herbal Lotion 4 April 2022,Volume 7rose alexander, reviewed: november 15, 2017

[2] Saudagar R. B. 1 and Sisodiya M. H., Review on Herbal Cosmetics, World Journal of Pharmaceutical Research, Volume 7, Issue 7, 573-591.

[3] Sajjad A, Sajjad SS. Aloe Vera: An Ancient Herb for Modern dentistry-A Literature Review. 2014:01-06

[4] Songkro, S., Sirikatitham, A., Sungkarak, S., Buaking, K., Wungsintaweekul, J., Maneenuan, D., &Oungbho,

[5] K. (2010). Characterization of Aromatherapy massage oils prepared from virgin coconut oil and some essential Oils. Journal of the American Oil Chemists' Society, 87(1), 93-107.

[6] Snowdon JA, Cliver DO. Microorganisms in honey. Int J Food Microbiol. 1996;31:1–26.

[7] https://patents.google.com/patent/JP4276088B2/en Dharmananda S. "SAFFRON, an Antidepressant Herb". http://www.itmonline.org/arts/saffron.htm.

[8] "EMORY HEALTH CARE"

[9] Zargari, A. Medicinal Plants, 1st ed.; Tehran University Publication: Tehran, Iran, 1997.

[10] Mir, H. Herbal Knowledge: Usage of Herbs in Prevention and Treatment of Diseases, with Latest Research around the World, 2nd ed.; DaftareNashreFarhangeEslami: Tehran, Iran, 2004

[11] KP Sampath Kumar, DebjitBhowmik, Biswajit, Chiranjib, Pankaj, KK Tripathi Margret Chandira.

[12] Conventional Indian herbal plants Tulsi and its medical significance: a survey. Res Rev: J extracts. World J Pharm PharmSci 2018;7:851-62.

[13] R.M. Mehta, "A book of Pharmaceutics – II", Published by vallabhprakashan 4thedition, pageno. 119.

[14] Mir, H. Herbal Knowledge: Usage of Herbs in Prevention and Treatment of Diseases, with Latest Research around the World, 2nd ed.; DaftareNashreFarhangeEslami: Tehran, Iran, 2004

[15] Almond oil [online], Accessible from: http://www.dermaxime. Com/almondoil.htm

[16] RenisheyaBlissJeba Malar T, Johnson M, Nancy Beaulah S, Laju RS, Anupriya G, Renola Bliss JebaEthal

[17] Anti-bacterial &anti-fungal action of aloe Vera gel extricate. Int J Biomed Adv Res 2012; 3:184-7