

## Formulation And Evaluation of Herbal Lotion

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### Abstract:

This study formulate and evaluate an herbal lotion incorporate aloe vera, vitamin E. Herbal lotion is an oil-in-water emulsion is a liquid preparation in which widely used in cosmetic preparation in Dermatological condition like dryness, itchiness, roughness and scaliness. Skin Hydration nourishes & protects the skin. It is used as an external application without friction. And study the Physical and Chemical properties including pH, viscosity & Microbial load. Various step are involved in the formulation of lotion. cutting of tip of the leaf & extract the base of the mucilage part. The Herbal lotion has promising therapeutic effect & no or low side effect.

**Key words:** Herbal cosmetic, Herbal lotion, Aloe vera, skin, vitamin E, viscosity.

### i. Introduction:

Herbal lotion is an ayurvedic preparation the ancient Indian system of medicine develop by rishis. Herbal lotion are used as micronutrients and bioactive compound. Herbal lotion is an ayurvedic preparation the ancient Indian system of medicine develop by rishis. Herbal lotion are used as micronutrients and bioactive compound. It is an oil-in-water emulsion preparation have been prepared by various ingredients mainly aloe vera vitamin E and other additives

It can be applied directly to the skin with the help of cotton wool (or) gauze soaked in the lotion. It can be gently applied on the skin without friction on the unbroken skin and evaluate the lotion by the various physiochemical properties like pH, viscosity, stability, spread ability and pourability to be prepared an ideal lotion for the skin

It can used as in face with a specific condition while compare to the other use on the body

### Advantages:

- ❖ No first pass metabolism
- ❖ Self-application is possible

- ❖ Easy to manufacture
- ❖ The storage and handling of herbal cosmetics is easier and for prolong period

### Disadvantages:

- ❖ It produce local action only
- ❖ Photo sensitivity
- ❖ Shake well before use the lotion
- ❖ Evidences for the effectiveness of herbal medicines is generally very limited

### Applications:

- Antiseptic
- Scabicial
- Parasiticide
- Germicide
- Anti-aging
- Anti-wrinkle
- Antiallergic

### Ingredients:

- 1) Aloe vera gel
- 2) Coconut milk
- 3) Honey
- 4) Rose water
- 5) Vitamin E
- 6) Glycerine

### 1)Aloe vera gel:



Fig no: 1

- Aloe vera gel is used to reduce pimples and also used for treatment of burn wounds.
- Aloe vera gel is derived from Arabic word while vera is Latin word which means true.
- Aloe vera is commonly used in both ayurvedic medicine and traditional Chinese medicine.
- Aloe vera plant is cultivated in north Africa.
  
- Some of the ingredients included like vitamins, minerals, polysaccharides, glycoproteins.
- The ingredients helps to prevent soothing, moisturizing and anti-inflammatory properties and also prevent productive layer of skin.
- The plant embrace natural compounds that helps to protect and heal the body.
- Aloe vera grown around all over the world more than 250 species
- The previously family is Liliaceae in current family is Alliaceae.
- Aloe vera as a helpful effect on human health and cure many diseases.
- Some of the important effects includes it like antioxidant, antibacterial, anti-inflammatory, skin healing and blood glucose regulation.

## 2) Coconut milk:



Fig no: 2

- It is a high fat content and it can be applied topically dry skin and also look in moisture and hydrate.
- It can be easily absorbed on smoothest skin cells and help to maintain skin surface.
- It is a moisturizing agent
- It also helps to helps to reduce inflammation and wound healing.

- It is an antibacterial activity and antifungal and antioxidant.

## 3) Honey:



Fig no: 3

- Honey is Also preventing bacterial infection and it can be moisturizing
- Honey is not only scrumptious but also used in natural powerhouse if skin care
- But also, it is used for centuries because of many healing properties and also used in skin infections
- It is used to reduce redness and swelling of acne.
- It is an antibacterial product which means fight against bacteria
- Honey is natural and it is primarily composed for sugar and water.

## 4) Rose water:



Fig no: 4

- Rose water helps to maintain skin ph. balance and it improves skin structure and softness
- It is used for a facial treatment
- It is anti-aging property

- It is well known being soothing and calming to the skin
- It is used for skin irritation redness
- It is used reduce inflammation like anti-inflammatory properties that reduces redness and skin irritation.

#### 5) Vitamin-E:



Fig no: 5

- Vitamin E is mostly found in many vegetables' oils and seeds, nuts, green leafy Vegetables
- It is anti-inflammatory properties and it is used to support immune system
- It is used to improve immune system and reduce inflammation
- It is used for in dry skin, wrinkles, scars and sun damage.

#### 6) Glycerine:



Fig no: 6

- Glycerine is an anti-aging property
- It is used to improve skin absorbency
- It is used to the treatment of acene and scars
- Glycerine is used for moisturizer
- Glycerine helps to reduce wrinkles
- It is used as a cleanser
- Glycerine is a high value ingredient in skin care because it helps skin moisturizing

#### Extraction of aloe vera:

- First, we are collecting the aloe vera leaves from botanical garde and then washed with distilled water
- After we have to cut the lead in outer part with the help of knife
- After we remove colourless pacemthymatous tissue into the 400 ml breaker
- And then stir to aloe vera gel with the help of stirrer mixer
- Then we First we are collecting the aloe vera leaves from botanical garden
- and have remove the various types of impurities with the help of muslin cloth
- At last cover beaker either by filter paper or with help of silver to prevent the microbial growth or effect of equipment factor

#### Reception of raw material:

##### Formulation of Aloe vera gel:

After harvesting the aloe vera leaves are preferably transported to the processing place. The leaves should be sound undamaged, mold and matured in order to keep all the active ingredients in full comentionation

##### Filtering operation:

The aloe gel once extracted from the leaf, had the greater stability than the gel left in the leaf In order to avoid the decomposition of biological activity and the filtration operation in completed in 36 hrs of harvesting the leaves

##### Grinding/ Homogenization:

The major step of the process is crushing or grinding

The aloe vera gel fillets are crushed and homogenized using commercial high speed tissue crusher at room temperature (25°C)

And then add agar into the mixture

##### Addition of vitamin E:

The un-pasteurization aloe gel juice was fortified with vitamin E to improve the stability and flavour of aloe vera gel juice

It is used for antioxidant activity

##### Pasteurization:

Treatment is an effective method to avoid the given bad flavour and the loss of biological activity of aloe vera gel

##### Flash cooling:

After pasteurization the juice is flash cooled at 5°C. This is the crucial step for pressure the biological activity of aloe vera gel

### Storage:

The two most important environmental parameters are relative humidity and temperature are affecting the product quality

### Formulation method of lotion:

- Measure the quantity of above formulation gel
- Prepare the all-other ingredients are used in the formulation
- Take a plastic mixing bowl or large glass
- Add the measured-out gel of the aloe vera into the mixing bowl
- And then add the other ingredients of the formulation like almond oil, rose water, vitamin E, glycerine, essential oil and arrow root powder with measured quantity
- Mix all the ingredient in the bowl in vigorously manner
- Herbal lotion was prepared

### ii. Conclusion:

Here herbal ingredients plays an important part in the modern life which can be used in the day-to-day life and the different ingredients plays a different activity and uses and which can be used in the humans. The ingredients short overview of Aloe vera gel Coconut milk, Honey, Rose water, Vitamin E, Glycerine.

### iii. References:

- [1]. Saudagar R. B. 1 and Sisodiya M. H., Review on Herbal Cosmetics, World Journal of Pharmaceutical Research, Volume 7, Issue 7, 573-591.
- [2]. R. M. Mehta, Pharmaceutics-II, Fourth Edition, (119-120) Vallabh Prakashan 2015.
- [3]. Harshita Verma , Dr. Dharmesh Sisodiya; Formulation and Evaluation of Herbal Lotion of Aloe Vera (AloeBarbadensis) 2020 Scholars Academic Journal of Biosciences | Published by SAS Publishers, India
- [4]. Dr. Santram Lodhi; Dr. Mohanlal Kori, Practical Book of Herbal Drug Technology, Edition 2020 S. Vikas & Company- Medical Publishers P. No. 34- 35
- [5]. Nikita M. Rathi, Shital V. Sirsat, Surekha S. Tayade, Abhijit S. Khot; Akshay C. Deshmukh Gemmulation and Standardization of Herbal Lotion 4 April 2022, Volume 7
- [6]. Rose Alexander, Reviewed: November 15, 2017
- [7]. Atlas T K. Preparation and Utilization of Natural Aloe Vera to Enhance Quality of Mango Fruit. 2018; 6(3):76-81.
- [8]. Chemise Akubude-, Egwuonwu C, Azalea O, Akubude, Olaniyan A, Ajala E, et al. Almond oil: powerhouse of nutrients Soil use patterns in Nigeria View project Biodiesel Project View project Almond oil: powerhouse of nutrients. CIGR. 2020; 22(3):190–201.
- [9]. Ahmad Z. The uses and properties of almond oil. Complement Ther Clin Pract. 2010; 16(1):10–2.
- [10]. Snowdon JA, Cliver DO. Microorganisms in honey. Int J Food Microbiol. 1996;31:1–26
- [11]. Songkro, S., Sirikatitham, A., Sungkarak, S., Buaking, K., Wungsintaweekul, J., Maneenuan, D., & Oungbho, 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.
- [12]. DharmanandaS. "SAFFRON, an Antidepressant Herb". <http://www.itmonline.org/arts/saffron.htm>. 8. "EMORY HEALTH CARE"
- [13]. Zargari, A. Medicinal Plants, 1st ed.; Tehran University Publication: Tehran, Iran, 1997.
- [14]. Mir, H. Herbal Knowledge: Usage of Herbs in Prevention and Treatment of Diseases, with Latest Research around the World, 2nd ed.; Daftare Nashre Farhange Eslami: Tehran, Iran, 2004
- [15]. Sajjad A, Sajjad SS. Aloe Vera: An Ancient Herb for Modern dentistry-A Literature Review. 2014:01-06
- [16]. Vishakha Shinde; Kundan Tiwari; Formulation and Evaluation of Lemongrass Lotion International Journal of PharmaO2Vol.2/Issue6/Nov.- Dec. 2020.