



Formulation and Evaluation of Herbal Lotion

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ABSTRACT:

The Herbal preparation is research by many more researcher and from new herbs obtained new herbal formulation. The herbal lotion formulation had no adverse effect. The formulation of herbal lotion prepared from aloe vera gel and honey is useful for nourishing skin, and it also act as an anti-inflammatory, antiseptic and antioxidant agent. The prepared lotion is evaluate irritancy test, acid value and pH measurement frequently. As moisturization is present in aloe vera gel it is use to prevent dryness of skin during winter and during summer and also use to prevent acne and sunburn. The herbal lotion passes all evaluation test and has no side effect hence it is safe to use for skin.

KEYWORDS: Herbal drugs, Herbal drug extract, aloe vera, Honey, coconut milk, Herbal formulation and Evaluation.

INTRODUCTION:

Herbal formulation involves the natural ingredients which are used in cosmetic products. The features of the herbs are well-known. For example turmeric, Aloe vera etc. The origin of ayurveda in India by Rishi's also denotes the best of ayurvedic herbs. The formulation which contains the herbs are proved by ayurveda. Herbal remedies in rich the bodies with nutrients with other useful minerals. An herbal lotion that can give effective protection to skin and free from any toxicity. As they are natural and are found to be safe to use as compared to chemical based formulation. Lotions are semi-liquid form it directly applied on the body. The benefits of coconut milk, honey, and aloe vera, the richness of saffron help to nourish the skin and also prevent dryness of skin during summer and winter season and slightly brings glow on the skin. The lotion act as a cooling, soothing or for protective purpose.

Lotion Benefits:^[1]

- Re-hydrate dried skin.
- Replenish extra dry or rough spots on the skin.
- Feel and smell good.
- Help yourself relax.
- Soften the roughest parts of your body.
- Make your skin glow.






Advantages of herbal lotion:^[1]

- Easy to manufacture
- Easy to available and found in large of variety of plants
- They do not provoke allergic reactions and do not have any negative side effects.
- They are easily incorporated with skin and hair.
- Extract form of the plants decreases the bulk properties of the cosmetics and gives appropriate pharmacological effects.

COLLECTION OF MATERIAL:

The fresh Aloe vera leaves were taken from SMBT Campus of Dhamngaon, Nashik. Rose water, Coconut milk, and Almond oil were made at my home. Honey was collected from my localized area. Saffron was collected from local market of Nashik.

USES OF INGREDIENTS IN LOTION:

Sr.No	Herbal Drug	Uses
1	 <p>Alovera</p>	<p>Aloe vera gel has vitamin C and E Beta carotene in abundance. Therefore, it has anti-aging properties. It also contains antimicrobial properties and is anti-inflammatory. It also helps to eradicate skin blemishes and diminish age lines. It unclog the pores and soften the skin. Aloe vera gel has cooling properties and it is rich in antioxidants and minerals that boost the healing process. It also helps moisturizing and soothing effects^[11]</p>
2	 <p>Saffron:</p>	<p>It is derived from the flower of crocus sativus. Saffron is a scarlet color thread like pistil, which is believed to have originated primarily in Greece. Treating tanned skin means brightening the skin by treating the affected areas. Using saffron for skin whitening helps to brighten the skin and bring out the skin's natural radiance. and to treat skin diseases like acne. Wound^[7-10]</p>
3	 <p>Coconut milk:</p>	<p>Coconut milk has a high fat content which can have an excellent moisturizing effect when applied topically dry skin, and it also acts as a sealant to lock in moisture and hydrate. It's easily absorbed, smoothes skin cells, and the fats help maintain your skin's elasticity. It is ideal moisturizer for the body which makes the skin smooth and textured.^[6]</p>
4	 <p>Honey:</p>	<p>Honey is a natural antiseptic and anti-inflammatory that helps to heal breakouts of acne and prevent extra infections. Honey also reduces the redness and swelling of acne. It controls the accumulation of dust in the skin pores and absorbs the impurities from the pores. It reduces the dryness of skin by providing long-lasting hydration. Honey moisturizes the top layers of skin and helps to reduce wrinkles and fine lines. It is used as a wound-healing agent^[5]</p>
5	 <p>Almond:</p>	<p>Almond oil is an emollient that provides hydration, which can help moisturize and smooth skin. Almond oil is generally safe for sensitive skin because it is non-irritating and light weight.</p> <ul style="list-style-type: none"> • It may act as an antioxidant. • It may have anti-inflammatory action. • It may act as an immunity booster. • It may increase good cholesterol levels. • It may have antibacterial activity. • It may have anti-fungal properties.^[3,4] •

PREPARATION OF ALOVERA GEL:

- Collect the raw material.
- Wash leaf and remove base and tip of the leaf.
- Leaf is cut into section.
- Extract mucilage part of the leaves into mixing jar
- Heat it and add agar-agar powder.
- Grinding /homogenization of unpasteurized juice.
- Add vitamin E and mix it well.
- Package the produced gel and store it.

- **FORMULATION TABLE:**

Sr. No.	Name of Ingredient	Quantity (ml)		
		F1	F2	F3
1	Aloe Vera Gel	10ml	10ml	10ml
2	Coconut Milk	5ml	4ml	5ml
3	Honey	5ml	5ml	4ml
4	Saffron	3ml	4ml	5ml
5	Almond oil	2ml	1ml	2ml
6	Rose water	2ml	2ml	1ml
7	Vitamin E	2 Capsule	3 capsule	2 capsule
8	Glycerin	3ml	4ml	3ml
9	Lavender Oil	2-4 Drops	2-4 Drops	2-4 Drops

METHOD OF PREPARATION HERBAL LOTION:

1. Weigh all the ingredients as per formulation
2. Alovera gel was taken in separate clean beaker then stirred it till it gets converted into little bit creamy form.
3. Then honey and saffron extract was added and mixed it.
4. Then another beaker was taken and in that Almond oil, Lavender oil, Vitamin. Oil from capsules and Glycerin was added.
5. Then this oils solution was slowly added in the first one beaker and mixed it thoroughly.
6. After mixing all ingredients rose water and coconut milk was added as per consistency.

**Figure 6: Herbal Lotion**

EVALUATION TEST:

1. **Appearance:** The appearance of the lotion was observed by visual examination.
2. **Color:** The color of the cream was observed by visual examination.
3. **Odor:** The odor of the lotion was tested by smelling
4. **pH:** pH of prepared herbal lotion was measured by using both PH paper & digital PH meter
5. **Spreadability:** Spread ability of formulated lotion was measured by placing sample in between two slides then compressed to uniform thickness by placing a definite weight for defined time
6. **Irritancy test:** The lotion was applied to a specific area of the left- hand dorsal surface. Irritancy, erythema, oedema were checked up to 24 hrs. & reported.
7. **Removal Test:** The ease of removal of the cream applied was examined by washing the applied part with water.
8. **Stability Test:** To check the microbial growth, the formulation was placed in the center of the petri dish, and then the plates were incubated at 37°C for 72hrs.

EVALUATION TABLE:

Sr. No.	Test	Observation		
		Formulation F1	Formulation F2	Formulation F3
1.	Appearance	Lotion type	Lotion type	Lotion type
2.	Color	Greenish.	Faint Greenish.	Faint Greenish.
3.	Odor	Aromatic.	Aromatic.	Aromatic.
4.	pH	5	5.5	5
5.	Spreadability	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 5 months	No microbial growth is observed 4 months

RESULT AND DISCUSSION:

The herbal gel and body lotion was prepared and subjected to evaluation of various parameters. The herbal formulation was greenish in color. The pH was throughout the study is between 5-6 which lies in the normal pH range of the skin and the gel did not produce any irritation upon application to the skin. I was formulated three formulations of herbal shampoo F1, F2&F3, F2 is best formulation after the observation of evaluation test. The stability test was carried out for six months and results revealed that the all lotions showed better stability. The preparation was stable under normal storage conditions. These results indicated that the herbal lotion had no adverse effects on the topical area. It is showed this herbal preparation is useful in inflammation, and anti-aging.

CONCLUSION:

In this study, a formulation of herbal lotion was formed and evaluated in terms of their organoleptic properties [Appearance, Color and odor] and physiological parameters pH, Sprediability, easy of removal and irritancy test.

The present work focus on the herbal extracts Provide nutrients necessary for the healthy skin. There are numerous herbs available naturally having different uses in cosmetic preparations for skincare as antioxidants. The present study revealed that herbal cosmetic are very safe and does not produce any toxic and adverse reactions compare to marketed cosmetics products. Herbal Lotion we will avoid skin problems.

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