



Formulation and Evaluation of Herbal Anti Aging Moringa Cream

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ABSTRACT:

Therapy with herbal drugs is an old traditional medicine. Plants have been used over the years for the treatment of numerous health problems including infectious and non infectious skin disorders. The antimicrobial effects of some plants were attributed to the number of phytochemical constituents like flavonoids, triterpenes and tannins. The majority of herbs used for cosmetic purposes in india are ayurvedic ones that can be found near by. By using cream, nano emulsions and different ratios of moringa oleifera leaves. research was done on the anti-aging properties of moringa oleifera. They preventing uv radiation and increasing skin moisture. It has been claimed that moringa leaves are high in antioxidants and phenolics, such as vitamins C, B, and A. Results on hydration and enhancing skin health showed that the moringa moisturising cream has promising qualities that might be used in skincare products to hydrate and rejuvenate the skin.

Key words- moringa, oleiofera, herbal drugs, leaves, plants, vitamins, leaves.

INTRODUCTION:

The process of creating and analysing a skincare product using moringa as a primary ingredient is known as the formulation and evaluation of herbal moringa moisturising cream. Choosing the right ingredients, figuring out how much of each, and streamlining the production process are all part of the formulation process. The process of evaluating a cream usually entails testing it using techniques including rheological analysis, stability studies, sensory evaluation, and skin patch tests to determine its moisturising efficacy, stability, texture, aroma, and skin compatibility. Moringa is a promising ingredient for these kinds of formulations because of its moisturising and antioxidant qualities.

Moringa which are native to the sub-Himalayan tracts of India, Pakistan, Bangladesh, Afghanistan, and India I,

Moringa oleifera L. Is the most widely farmed; also native to many regions of Africa, Southeast Asia, and South America. The popularity of moringa as a miracle tree has been described in numerous studies that have been published in the past ten years. The plant is widely recognised for its nutritional value and its antioxidant, anticancer, and anti-inflammatory

Creams are externally applied medication forms. Usually, they are viscous liquids or semi-solid emulsions. Creams can be either water-in-oil or oil-in-water (o/w).It is frequently referred to as the "drumstick tree" and is extensively utilised in herbal and culinary preparations. Leaves are said to have purgative qualities

Benefits of Moringa Moisturizing cream

- 1) Moringa can help to balance out these traits and give you a radiant, healthy appearance.
- 2) Improve overall complexion.
- 3) Used as a moisturizer and spot remover.
- 4) Moringa contains vitamin C, vitamin E and potassium.
- 5) Nourishes and moisturises your skin.
- 6) Gives a glowing and rosy skin.
- 7) Boosts hydration and region

Maceration Extraction Process:

Firstly take 100 gm moringa leaves cleaned and washed as well as dried 72 hours in sunlight and got 20-25 grams moringa powder. The powder was extracted with 250 ml distilled water by maceration for 96 hours at room temperature, filtered and solution mixed into cream and stored it in room temperature

**(Moringa extract by Maceration Process)****Preparation of cream:**

Cream was prepared using fusion method.

1. By taking cream base Beeswax 3.2 gm and add liquid paraffin as a softening agent 4gm in a beaker. Heat water bath and Mix well melted.
2. In another beaker take distilled water 3.3 ml add emulsifying agent borax 0.16 gm. Mix well in water bath.
3. Add methyl paraben in Beeswax solution.
4. Both oil and aqueous phase were mixed at 70 °c in the mortar and mix continuously until a homogeneous product was formed.
5. 3 ml Moringa extract and chandan powder 0.02 gm was added to it with continuous trituration.
6. Reaction mixture was homogenised by mixer into a cream form.

About 0.02 ml of perfume almond oil were added at the end.

INGREDIENTS

Sr. No	Ingredients	Uses	Quantity	Role of ingredients
1)	Bees wax	Anti inflammatory agent	3.2gm	Softening agent
2)	Liquid Paraffin	Treatment of dry skin	4.9ml	Softening agent
3)	Borax	Rodent repellent	0.16gm	Emulsifying agent
4)	Methyl paraben	Increase shelf life and avoid fungal growth	0.02gm	Preservative
5)	Distilled Water	Solvent	3.3ml	Aq. phase
6)	Chandan Powder	Antiseptic	0.02gm	Antiseptic
7)	Moringa extract	Anti anginal,anti inflammatory	3ml	Anti anginal
8)	Almond oil	Smooth and Hydrate skin	0.02ml	Perfume

DRUG INFORMATION:- 1)MORINGA

Common Name- Drumstick tree

Botanical name -Moringa oleifera

Family-Moringaceae

Synonyms -Horse radish tree, Drumstick, Miracle tree, Tree of life, Ben oil tree.

Habitat - Moringa, also known as the drumstick tree, is native to parts of Africa and Asia. It thrives in tropical and subtropical climates, where it can grow in a variety of soil types, including sandy, loamy, and even poor soils.

Moringa trees require lots of sunlight and moderate rainfall for optimal growth.

2)SANDALWOOD

Common Name-Sandalwood

Botanical Name-Santalum album linn.,

Family-Santalaceae

Synonyms -Sandalwood tree, true sandalwood, santalum album.

Habitat-Chandan, also known as sandalwood, is native to the Indian subcontinent, including parts of India, Nepal, Bangladesh, Sri Lanka, and Pakistan. It thrives in tropical climates and is often found in dry, deciduous forests.

3)ALMOND

Common Name:ALmond

Botanical Name-Prunus amygdalus Batsch

Family-Rosaceae

Synonyms-Amygdalus communis,sweet almond,prunus dulcis

Habitat-Almonds are native to southwestern Asia and are produced mostly in Mediterranean climates between 28° and 48° N and 20° to 40° S.They require well drained soil and plenty of sunlight to grow successfully.

Evaluation of creams

The prepared moringa cream was observed visually and homogeneity, grittiness, viscosity, spread ability, pH, and its stability studies were recorded

1) Viscosity -The herbal cream's viscosity was measured using a Brookfield viscometer, with the angular velocity increasing from 0.5 to 20 rpm.

2) Test for microbial growth in formulated cream-The cream was tested for microbial growth using streak plate method on agar media plates, then incubated at 37°C for 24 hours before comparison with the control.

3) Homogeneity and Appearance: After the cream was set in the container, it was evaluated for homogeneity visually and physically. The appearance was determined by looking at the pearlescence, roughness, and colour.

4) Grittiness: A compound microscope was used to inspect the formulation for particles.

5) Determination of pH- pH measurement involved calibrating the pH metre using a standard buffer solution, then taking 0.5g of the prepared herbal cream and thoroughly mixing it with 50 ml of distilled water. The pH metre was then used to measure the cream's pH at room temperature.

6) Spreadability: The time it takes for two glass slides to separate from cream is measured in seconds; the shorter the duration, the better the spreadability.

RESULT AND DISCUSSION

Sr no	Parameter	Result
1.	colour	Pistachio Green
2.	Odour	Pleasant
3.	Clarity	Opaque
4.	pH	7.2
5.	Irritancy	No irritancy
6.	Anti aging	Support slowing down the signs of of aging



(Prepared Herbal moringa shampoo)

CONCLUSION

1. 1) Research and development for the formulation of Herbal Anti-aging cream was to support slowing down the signs of aging.
2. The cream does not cause any skin irritation and hazardous or hypersensitive reactions.
3. Discovered to be abundant in phenolic compounds with strong antioxidant capabilities.

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