REVIEW ON HERBAL VANISHING CREAMS

Mrs. B. Pravalika Reddy*1, Arukala Nikitha, Banoth Venkatesh, kathula Deepthi.

Assistant professor Department of Pharmaceutics, Malla Reddy Pharmacy College, Maisammaguda, Hyderabad, Telangana, India.

Abstract: Herbal vanishing creams represent a breakthrough in skincare technology, offering a balanced approach to achieving radiant and blemish-free skin. This cream is formulated using a proprietary blend of carefully selected herbal extracts, each chosen for its specific skin-enhancing properties. One of the key advantages of this herbal vanishing cream is its versatility in addressing a wide range of skin issues. The cream's lightweight and non-greasy texture allows for easy absorption, leaving the skin feeling refreshed and nourished. Furthermore, its herbal composition promotes gradual improvement, aligning with the body's natural processes and minimizing the risk of adverse reactions. As consumers increasingly seek natural alternatives in their skincare routines, the Herbal Vanishing Cream presents a promising option that bridges the gap between traditional remedies and modern scientific advancements.

Key words: Corn silk, Annatto seeds, Vanishing cream, Evaluation studies.

INTRODUCTION

The Ayurvedic system of medicine was one of the most important systems that uses herbal plant and extract of the treatment of management of various Diseases state. Vanishing creams get their name from the fact that they seemed to disappear when spread onto the skin. They are an oil-in-water emulsion consisting of stearic acid, an alkali, a polyol and water. Vanishing cream produces emollient and moisturizing effect. Ideal properties of vanishing creams are high melting point, pure whiteness, and very little odor and low iodine number, rubbed easily on the skin without roll-on effect. It reduces loss of moisture from dry skin, smoothens the skin and keeps it soft, prevents skin from roughening and chapping, used as adhesive for makeup powder.²

CORN SILK (ZEA MAYS)

The traditional herbal medicine with numerous therapeutic attributes, it remarkably gained popularity in Asian and African countries.

Corn silk is the collection of stigma from female flower of the maize plant. It is the yellowish thread-like strands called stigma are found inside the husks of corn. Corn silk refers to the fine, thread-like structures found on the ears of corn (maize) plants. While often overlooked, corn silk plays a vital role in the reproduction and growth of corn plants. It is rich in various bioactive compounds and has been used in traditional medicine for its potential health benefits.



TAXONOMICAL CLASSIFICATION:

• **Kingdom:** Plantae (Plants)

• **Phylum:** Angiosperms (Flowering plants)

• Class: Monocots (Monocotyledons)

• Order:Poales

• Family: Poaceae (Grasses)

• Genus:Zea

• **Species:**Zea mays

ACTIVE CONSTITUENTS

- Maysin: Maysin is a flavonoid unique to corn silk. It possesses antioxidant properties and has shown potential anti-inflammatory effects.
- Saponins: Corn silk contains saponins, which are phytochemicals known for their potential diuretic properties. Saponins may help increase urine production and promote kidney health.
- **Alkaloids:** Corn silk contains alkaloids such as hordenine and choline. These compounds contribute to the medicinal properties of corn silk and may have various effects on the body.
- **Phenolic Compounds:** Phenolic compounds found in corn silk, such as ferulic acid and caffeic acid, exhibit antioxidant activity. They help neutralize free radicals and reduce oxidative stress in the body.
- **Vitamins and Minerals:** Corn silk contains small amounts of vitamins and minerals, including vitamin C, vitamin K, potassium, and calcium, which contribute to its nutritional profile.
- **Amino Acids:** Corn silk contains amino acids, the building blocks of proteins, which play essential roles in various physiological processes in the body.

ANNATTO SEEDS (BIXA ORELLANA)

Annatto, scientifically known as Bixa orellana, is a tropical plant native to South and Central America. It is renowned for its vibrant red-orange seeds, which have been used for centuries as a natural dye and food

coloring agent. Besides its cultural and culinary significance, annatto possesses medicinal properties and is valued for its potential health benefits.

Description:

Appearance: Annatto is a shrub or small tree with broad, heart-shaped leaves and clusters of pink or white flowers. The plant produces distinctive spiny red-orange seed pods containing seeds covered in a red-orange pulp.

Height: Annatto plants typically grow to heights ranging from 2 to 6 meters.

Habitat: Annatto thrives in tropical and subtropical regions, favoring warm climates with well-drained soil and ample sunlight.



TAXONOMICAL CLASSIFICATION:

• **Kingdom:** Plantae (Plants)

• **Phylum:** Angiosperms (Flowering Plants)

• Class: Eudicots

• Order: Malvales

• **Family:**Bixaceae

• Genus: Bixa

• **Species:** Bixa Orellana

ACTIVE CONSTITUENTS:

- **Bixin and Norbixin:** These are the primary coloring agents present in annatto seeds. Bixin is responsible for the red-orange coloration, while norbixin is a water-soluble derivative responsible for the yellow color. These compounds are used as natural food colorants and dyes.
- Carotenoids: Annatto seeds are rich in carotenoids, which are antioxidants that can provide health benefits. Carotenoids such as β-carotene, α-carotene, and lutein contribute to the nutritional value of annatto seeds.
- **Tocotrienols and Tocopherols:** Annatto seeds contain tocotrienols and tocopherols, which are forms of vitamin E. These compounds exhibit antioxidant properties and may help protect cells from oxidative damage.
- **Polyphenols:** Annatto seeds contain polyphenolic compounds, including flavonoids and phenolic acids, which have antioxidant and anti-inflammatory properties. These compounds contribute to the potential health benefits of annatto seeds.
- **Essential Oils:** Annatto seeds contain small amounts of essential oils, which contribute to their aroma and flavor. These oils may also have antimicrobial properties.
- Fatty Acids: Annatto seeds contain fatty acids, including oleic acid, linoleic acid, and palmitic acid. These fatty acids are essential for human health and play roles in various physiological processes.

Evaluation of herbal vanishing cream

Physical Evaluation Formulated herbal creams was further Evaluated by using the following physical parameter physical parameter colour, odour, consistency, and state of the formulation. ^{3,4,5}

Colour Emollient: The colour of the cream was observed by visual examination.

Odour: The odour of cream was found to be characteristics.

State: The state was cream was examined visually. The cream was solid in state result was shows in table

Consistency: The formulation was examined by rubbing cream on hand manually. The cream having smooth consistency.

Ph: Ph of prepared herbal cream was measured by using digital ph meter. The solution of cream was prepared by using 100 ml of Distilled water and set aside 2h. Ph was determined in three times for solution and the average value was calculated.

Washability: Formulation was applied on the skin and then ease extends of washing with water was checked.

Non- irritancy test: Herbal cream formulation was evaluated for the non-irritancy test. Preparation shown no redness and irritancy. Observation of the state was done for 24 h 28 **Viscosity:** Viscosity of cream was done by using Brooke field viscometer at the temp of 25 Degree c. using spindle no, 63.at rpm.

Phase separation: The prepared cream was transferred in a suitable wide mouth container. Set aside for storage the oil phase and aqueous phase separation were visualizing after 24h.

After feel: Emolliency slipperiness and amount of residue left after the application of the fixed amount of cream was found to be good.

Method of Preparation:

Some step is carried out in the preparation follow as

Preparation of alcoholic extract of crude drugs: All above mentioned powdered crude drugs of 5gms were taken into the conical flask and then 100ml. of ethanol was added to it, then the conical flask was capped with aluminum foil. Then this mixture was placed for maceration for 5 days. ⁶

Preparation of oil phase: Stearic acid (17%), potassium hydroxide (0.5%), sodium carbonate (0.5%) was taken into one porcelain dish and this mixture was melted at 70°C.

Preparation of aqueous phase: Alcoholic extract of crude drugs mentioned in step-1 (4.5%), Glycerin (6%), Water (71%) were taken into another porcelain dish and heated this mixture at 70°C. ⁸

Addition of aqueous phase to oil phase: The aqueous phase was added to the oil phase with continuous stirring at 70°c. Now, once the transfer was completed it was allowed to come at room temperature, all the while being stirred. Perfume (0.5%) was added at last just before the finished product was transferred to suitable container. Then cream was evaluated for various physical parameters.⁹

Analysis of physical parameters¹⁰

Determination of organoleptic properties

The appearance of the cream was judged by its color, pearlscence and roughness and graded.

Determination of pH

Accurately weighed 5 g of the sample was dispersed in 45 ml. of water. The pH of the suspension was determined at 27°C using digital pH meter.

Determination of homogeneity

The formulations were tested for the homogeneity by visual appearance and by touch.

Determination of spread ability

Spread ability may be expressed by the extent of the area to which the topical application spreads when applied to the affected parts on the skin. The therapeutic efficiency of the formulation also depends upon its spreading value. Hence, it was found necessary to determine the spread ability of the formulation. For this purpose, ample (about 3gm) was applied in between two glass slides and they were pressed together to obtain a film of uniform thickness by placing 1000 gm weight for 5 minutes. Thereafter a weight (10gm) was added to the pan and the top plate was subjected to pull with the help of string attached to the hook. The time in which the upper glass slide moves over the lower plate to cover a distance of 10 cm is noted. The spread ability (S) can be calculated using the formula.

S=M*L/T

Where,

- S Spread ability m- Weight tied to upper glass slide.
- 1- Length moved on a glass slide
- t- Time taken.

The determinations were carried out in triplicate and the average of three readings was recorded.

Determination of wetness

It was determined by applying cream on skin surface of human volunteer.

Determination of type of smear

It was determined by applying the cream on the skin surface of human volunteer. After application of cream, the type of film or smear formed on the skin were checked.

Determination of emolliency

Emolliency, slipperiness and amount of residue left after the application of fixed amounts of cream was checked.

Determination of viscosity

The viscosity determinations were carried out using a Brookfield Viscometer (DV II+ Pro model) using spindle number S- 64 at a 20 rpm at a temperature of 25°C. The determinations were carried out in triplicate and the average of three readings was recorded.¹²

Determination of type of emulsion

Dilution test

In this test the emulsion is diluted either with oil or water. If the emulsion is o/w type and it is diluted with water, it will remain stable as water is the dispersion medium" but if it is diluted with oil, the emulsion will break as oil and water are not miscible with each other. Oil in water emulsion can easily be diluted with an aqueous solvent, whereas water in oil emulsion can be diluted with an oily liquid. 13

Dye solubility test

In this test an emulsion is mixed with a water soluble dye (amaranth) and observed under the microscope. If the continuous phase appears red, it means that the emulsion is o/w type as the water is in the external phase and the dye will dissolve in it to give color. If the scattered globules appear red and continuous phase colourless, then it is w/o type. Similarly, if an oil soluble dye (Scarlet red C or Sudan III) is added to an emulsion and the continuous phase appears red, then it is w/o emulsion.¹⁴

CONCLUSION

The vanishing cream of crude drugs with the best properties and having nutritional value was to be prepared by simple methods, and less equipment is required. The vanishing cream formulated using natural extracts has good consistency, spreadability, homogeneity, pH, non – greasiness.

REFERENCES

- 1. Pawar A, Gaud RS.Modern Dispensing Pharmacy. Career publication, Second edition, April 2005; 227.
- 2. Das K, Dang R, Machale MU, Ugandar RE, Lalitha BR. Evaluation for safety assessment of formulated vanishing cream containing aqueous Stevia extract for topical application. Indian Journal of Novel Drug Delivery. 2012; 4(1):43-51.
- 3. KM Ho. Proper Choice of Base of Topical Medicaments. Medical Bulletin. 2006; 11(9): 7-8.
- 4. Ravindra RP, Muslim PK.Comparison of physical characteristics of vanishing Cream base, cow ghee and shata-dhauta-ghrita as per pharmacopoeial standards. International Journal of Pharma and Bio Sciences. 2013; 4(4):14-21.
- 5. Ugandar RE and Deivi KS. Formulation and evaluation of natural palm oil based vanishing cream. International Journal of Pharmaceutical Science and Research. 2013; 4(9):3375-3380.
- 6. Ugandar R.E. & Deivi K.S, Formulation and Evaluation of Natural Palm Oil Based Vanishing Cream, International Journal of Pharmaceutical Sciences and Research, 2013; 4(9): 3375-3380.

- 7. Vishal L, Chandrakant S, Namita J, Vinod W, Amit S, Gopichand B & Vijay S, Formulation and Evaluation of Vanishing Herbal Cream of Crude Drugs, Indo American Journal of Pharmaceutical Sciences, 2018; 05(05):4121-4128.
- 8. Rimi M, Arvind N and Manish M, Formulation and Evaluation of Polyvalent Herbal Cream, International Journal of Scientific Development and Research, 2021; 6(2): 301-304.
- 9. Ugandar RE and Deivi KS. Formulation and evaluation of natural palm oil based vanishing cream. International Journal of Pharmaceutical Science and Research, 2013; 4(9): 3375-3380.
- 10. Aduri, R; S, U; K, H; S, L; and Marina. Formulation, Development and Evaluation of Multi Purpose Skin Cream. World Journal of Pharmaceutical Research, 2018; 7(9): 641651.
- 11. Rashmi S and Khushbu S, Formulation and Evaluation of Novel Herbal Anti-Ageing Formulation (Gel-Cream), World Journal of Pharmaceutical Research, 2015; 4(8): 2426-2444.
- 12. X Fatima Grace, R Joan Vijetha, S Shanmuganathan and D Chamundeeswari, Formulation and Evaluation of Polyherbal Cosmetic Cream, Advanced Journal of Pharmacy and Life Science Research, 2014; 2(3): 14-17.
- 13. More BH, Sakharwade SN, Tembhurne SV, Sakarkar DM, Evaluation of Sunscreen activity of Cream containing Leaves Extract of Butea monosperma for Topical application. International Journal of Research in Cosmetic Science.2013; 3(1):1-6.
- 14. Saraf S, Chhabra SK, Kaur CD, Saraf S. Development of photochemoprotective herbs containing cosmetic formulations for improving skin properties. Journal of cosmetic science, 2012; 6(3):119–131.

