

A REVIEW OF THE HERBAL COLD CREAM FORMULATION USING MUSA PARADISIACA BANANA PLANT

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ABSTRACT

Herbal cosmetics are products designed to improve and enhance human appearances. The current study set out to manufacture and evaluate herbal cold cream that contained plant extracts manufactured using the water-in-oil method in order to nourish and moisturise skin. There is more moisture in the cold cream. because they create an oily barrier that lessens water loss from the skin's outermost layer, the stratum corneum. They are an oil-in-water emulsion. The slow evaporation of the herbal extract cold cream provides a calming and cooling effect. the amount of water in the emulsion. In this Cream We use a variety of herbs, including turmeric, cantharanthus roseus, banana root, and orange peel, to keep our skin healthy and hydrated.

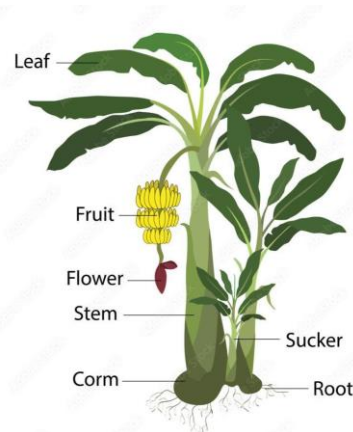
KEYWORDS: Cold cream made with herbs Water emulsion from banana roots or plants that is hydrating, calming, humectant, and moisturizing.

INTRODUCTION

Originating from the Greek verb "cosmetics," the word "cosmetic" means to add embellishment to. Since then, any material used to improve attractiveness or to promote appearance. The significance of cosmetics has increased as more people aspire to feel and appear young and beautiful. Creams can be used to cleanse the face in a variety of circumstances. Recently, anti-ageing lotions have been created that help keep skin looking younger for many years. The best degreasers are water, soap, and cleaning cream. For rough, dry, and chapped skin, cosmetic creams nourish it. Its main functions are to soften, lubricate, and remove unwanted debris from the skin. They make the skin look more elegant and less oily. It gives the skin emollience because of the oil phase. The purpose of the cold cream is to cool the body, release waste products from the pores, and replenish moisture in dry skin. It is simple to wet, wash, and rinse off. The skin is not conserved by them. It melts in natural pores at body temperature.

Banana tree

The largest herbaceous blooming plant is the banana plant, sometimes known as a tree. With an output of about 29725 thousand tonnes from an area of 803 thousand hectares, India is the world's greatest producer of banana as.



Synonym: Banana plants, Kanaha Beach, Maui

Classification of Banana plant: Banana belongs to plantae kingdom.

Kingdom: Plantae

Division: Angiosperms

Order: Zingiberales

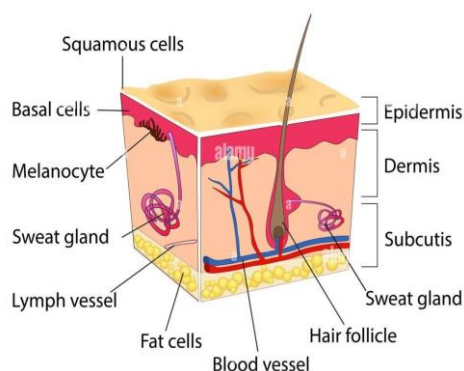
Family: Musaceae

Genus: Musa.

It is an herbaceous plant (up to 9 m long). Elongated oval deep-green (up to 365 cm in length and 61 cm in width with a robust tree like pseudo-stem crown) with a

prominent midrib, each plant produces a single inflorescence like a drooping spike and large bracts opening in succession, ovate, 15-20 cm long, concave, dark red in colour, and somewhat fleshy. There is a lot more to this humble fruit than meets the eye. This starch-rich fruit doubles as a meal many times. Banana is generally consumed as a dessert, cooked as a vegetable, or made into various confections. In addition to these uses of banana as a highly nourishing delicacy, Banana fruits as well as various other parts of banana trees find diverse uses in medicine, fibre making, religious rituals, etc.

Anatomy of skin



In terms of weight and surface area, the skin is the biggest organ in the body. Its surface area is roughly 16,000 cm². Skin makes up 8% of an adult's body weight. It is the live body's outermost layer or tissue. The skin has a defence system against the outside world. When exposed to sunshine, the skin can create a beneficial molecule called vitamin D. The human body's temperature is regulated by the skin, and serves as a sense organ as well. Different biological components, such as melanocytes, erythrocytes, keratinocytes, etc., are found in skin. Its various components, including cells and fibres, give it multi-layer structures.

Epidermis

The epidermis, the outermost layer of skin, is composed of stratified, keratinised squamous epithelium, and its thickness varies according to the location on the body. The thickest layer is seen on the bottoms of the feet and the palms of the hands. No blood is there. The deeper layers of the epidermis are nourished and oxygenated by the dermis interstitial fluid, which drains away as lymph but does not reach the epidermis' veins or nerve terminals.

Dermis

The dermis is elastic and resilient. It is made of connective tissue, and the matrix contains elastic and collagen fibres woven together. Stretch marks, also known as permanent striae, are a result of the skin's elastic fibres rupturing when it is overstretched during pregnancy and obesity. Water is held together by collagen fibres, which also give the skin its tensile strength. As

collagen fibres age, wrinkles start to appear. The primary cells in the dermis are mast cells, macrophages, and fibroblasts. Areolar tissue and various levels of adipose (fat) tissue are found under the skin's lowest layer.

Subcutaneous gland

The sebaceous gland The sebaceous gland is another important site for androgen processing and control. All of the enzymes needed to convert cholesterol into steroid precursors or adrenal hormones, such as dehydroepiandrosterone, are found in the skin. The sebaceous gland can also inactivate androgens by using an enzyme called hydroxysteroid dehydrogenase, which is present as early as 16 weeks of foetal life. The type-1 isoform of 5- α -reductase, which transforms testosterone into its most powerful form, is also produced in large quantities in the sebaceous glands, especially those on the face and scalp. The sexual gland is significantly regulated by hormones. Androgens regulate sebaceous gland function via binding to nuclear androgen receptors (AR). ARs are found in several skin components, with the androgens being found in the sebaceous gland.

Function of skin

Skin performs the following functions

Langerhans cells, which are a component of the adaptive immune system, are an anatomical barrier that protects the body from pathogens and damage between the internal and exterior environments.

Sensation: Consists of a range of nerve endings that respond to touch, pressure, vibration, and tissue injury. For more information, see the somatosensory system and haptics
Heat regulation: The skin's blood supply is far more than what it needs, allowing for fine control of energy loss by radiation, convection, and conduction. Constricted blood vessels significantly restrict cutaneous blood flow and maintain body heat, whereas dilated bloodvessels promote perfusion and heat loss.

Controlling evaporation: The skin acts as a permeable, relatively dry barrier against fluid loss. The significant fluid loss in burns is a result of the loss of semi-this function. Others can judge our emotions, physical condition, and beauty based on the appearance of our skin.

Synthesis and storage: UV rays act on particular parts of the skin to produce vitamin D and act as a storage location for water and lipids.

Advantages of cold cream

1. It keeps the skin from drying out and ageing.
2. Cold creams protect skin from harsh surroundings because they contain an adequate amount of water and oil.
3. They also maintain safe and hydrated skin.
4. Cold creams are intended to smooth the skin and remove makeup.

5. The primary purpose of medicated cold cream is as a topical pharmaceutical dose form for skin care.
6. To assist in preserving the skin's moisture balance and preventing the use of cold cream on rough skin (non-medicated).
7. As a cleaning step to get rid of
8. To give the skin an oily protective layer and emollient effect.
9. As with sunblock components, offer a chemical barrier as well.

Ideal properties herbal Cold Cream

1. Normally, it shouldn't be diluted.
2. The cold cream's pH should be between 4.6 and 6.0.
3. It should have the ideal consistency for easy application and removal from the container.
4. Following external application, the skin ought to experience a cooling effect.
5. In order to shield the skin's surface from water evaporation, it must form a thin, waxy protective coating.
6. It should have a quicker emollient effect, allowing extremely dry skin to swell and soften quickly.
7. Spreads easily on the skin and is less oily than ointment.
8. It must be chemically and physically stable for the duration of its shelf life.
9. There should be compatibility between the excipients. Sterilisation is required.

Application of cold cream

Cold creams are incredibly adaptable and can be utilised in a variety of ways, despite their primary use as face moisturisers. First of all, it's often used as a makeup remover. By gently melting away makeup and debris, the rich oils make it possible to remove them with little harm by rubbing or scrubbing. Similarly, because it smoothes the skin and makes it easier to apply makeup uniformly over the face, some people find it works well as a primer for cosmetic foundations. Kelly claims that because it eliminates makeup without the need for water, it's even a fantastic product to bring on road trips or camping excursions when you might not have access to a shower or sink. Finally, cold.

Cold Cream Benefits

The benefits of cold cream are quite simple. By design, cold cream is meant to topically moisturise the skin, so anyone looking to boost the hydration of their skin can benefit from using this product. However, those with particularly sensitive skin or dry, itchy skin will benefit the most from using it daily to improve the texture and appearance of their complexion. These effects are likely the result of the cold cream's ability to help restore the skin's effectiveness as a natural barrier to the environment, something that is lost when your skin is 100 percent dry.

CONCLUSION

In conclusion Because natural medicines are thought to

be safer and have fewer adverse effects than synthetic ones, they are more widely accepted. The need for herbal formulations is rising globally. Cold moisture dry skin and cream are designed to cool the body and clear the pores of waste. When wet, it's easy to wash and store, but it irritates the receivers. The water provides extra protection for the skin.

REFERENCES

1. N. Shah, B.M. Methal, A Handbook of Cosmetic, Vallabh Prakashan, 2006.
2. Saraf S & Kaur C. D. Phytoconstituents as photoprotective novel cosmetic formulations, *Pharmacognosy reviews*, 2010; 4(7): 1-11.
3. B.S., Kalpesh K. Mehta, Anshu Gupta Dispensing Pharmacy A Practical Manual. Pharma Med Press, 2016; 389-399.
4. N. Shah, B.M. Methal. A Handbook of Cosmetic, Vallabh Prakashan, 2006.
5. Stover RH, Simmonds NW. Bananas (3rd ed.). Harlow, England: Longman. ISBN 978-0- 582-46357-8, 1987; 5-9.
6. Anonymous. National Horticulture Board, Gurgaon Haryana, 2014.
7. <https://images.app.goo.gl/53FmVLx5WYy3YqxS9>
8. K. P. Sampath Kumar, Debjit Bhowmik, S. Duraivel et al. Traditional and Medicinal Uses of Banana. *Journal of Pharmacognosy and Phytochemistry*, 2012; 1(3).
9. Rajesh N. Medicinal benefits of Musa paradisiaca (Banana) *International Journal of Biology Research*, April, 2017; 2(2): 51-54.
10. <https://images.app.goo.gl/k8TDnKpsEe4Rckav9>
11. Saraf, S., & Kaur, C. D. Phytoconstituents as photoprotective formulations. *Pharmacognosy reviews*, novel cosmetic, 2010.
12. Myers D, *Surfactant Science and Technology*, VCH Publishers, 1992; 209-247.
13. British Pharmacopoeia Commission *British Pharmacopoeia*. London: TSO, 2021.
14. The United States pharmacopoeia The National formulary. Rockville, Md.: United States Pharmacopoeial Convention, Inc. (USP 21-NF 16).
15. S. Khadabadi, S.L. Deore, B.A. Baviskar. *Pharmacognosy and Phytochemistry. A Comprehensive Approach*, published by PharmaMed Press, 1st edition, 2014; 8(4).
16. Panda, H. *Herbal Cosmetics Hand Book*. National Institute of Industrial Re, 2000.
17. Mali, A. S., Karekar, P., & Yadav, A. V. Formulation and evaluation of multipurpose herbal cream. *International Journal of Science and Research*, *International Journal of Science and Research*, 2015; 4(11): 1495-1498.
18. R. Patel, H. U.Momin, R.L. Dhumal, K. L. Mohite, Prepara preparation and evaluation of multipurpose herbal cream, *Adv Pharm Life sci Res.*, 2017; 5(1): 27-32.
19. Himaja, N. Formulation and Evaluation of Herbal Cream from *Azadirachta indica* Ethanolic Extract.

Journals: Int J Res Drug Pharm Sci, 2017; 1(1):
23-6.

20. Mukherjee, P. K. Quality control of herbal drugs: an approach to evaluation of botanicals. Business Horizons, 2002.