

A REVIEW ON HERBAL COLD CREAM

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ABSTRACT

Formulations used in cosmetics are intended to enhance human beauty. Since the beginning of time, creams have been valued as essential topical preparations in cosmetic products because of how simple it is to apply and remove them from the skin. Pharmaceutical creams are used for a number of aesthetic purposes, including cleansing, beautifying, modifying look, moisturising, etc. They also protect the skin from bacterial and fungal infections and can be used to treat skin injuries including burns, cuts, and wounds. The general population and society can safely employ these semi-solid preparations. The products used to enhance and beautify human appearances are known as herbal cosmetics. The current study's objective was to design and assess herbal cold creams that contained plant extracts made utilising the water in oil method for the goal of moisturising and nourishing the skin. Brassia seed, hibiscus, ditoria ternatea and adansonia were used to make the cold cream. As the water in the emulsion slowly evaporates, the cooling and calming effects of the herbal extract with cold cream are produced. Cold creams are more moisturising because they create an oily barrier to stop the loss of water from the stratum corneum, the outermost layer of the skin. They are water-in-oil emulsion and intended for application on skin or accessible mucous membrane to provide localized and sometimes systemic effect at the site of application. *Adansonia digitata* L. one of the important plants of the world and abundant in African countries. It is rare in India. The present review article highlights the geographical distribution of this plant in India, etymology of genus and species, synonyms, botanical description, chemical constituents and medicinal uses. Fats in its saturated and unsaturated form play an important role in our daily diet. Its overconsumption in either form can be lethal to our body. For example, excess of cholesterol, saturated and trans fat can lead to chronic diseases such as cancer, heart attack, diabetes. Looking into the chemical composition of mustard oil with other edible vegetable oil, this review highlights the health benefits of Mustard oil for its medicinal utility like anticarcinogenic property which prevents cancer formation in the body, reduces body temperature, antifungal and antibacterial property to treat skin diseases, good appetizer and body toner. Further, it reduces the adhesive impulses in blood platelets which is helpful to minimize the risk of a heart failure, prevent children's asthma, allergic cold, and asthmatic eczema, protect eyes and throat irritation and strengthen our RBC by decreasing cholesterol and improving RBC membrane structure.

KEYWORDS: Hibiscus rosa scinensia, ditoria ternatea, Gorakhi imli, Brassia seed.

INTRODUCTION

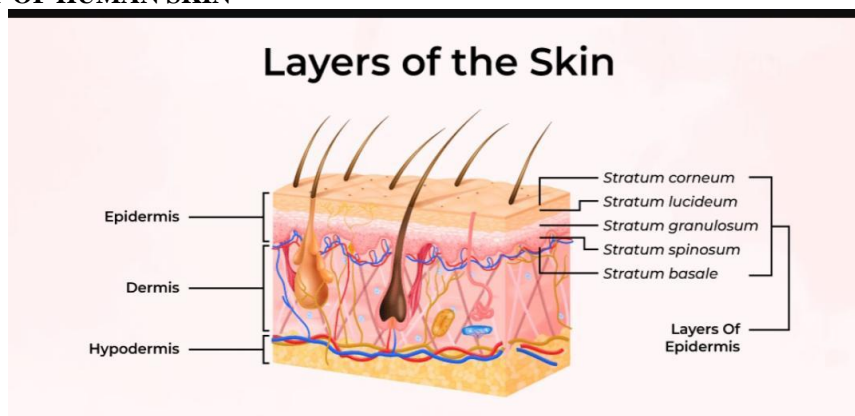
Cosmetics are the products which are generally used to beautify the skin and also to purify the skin. The cosmetics are the word derived from the Greek word – 'kosmetikos' which means to adorn. From that time the materials which are used to promote appearances or to beautify the skin are called as cosmetics. From ancient times till now people are still using polyherbal or herbal cosmetics for beautification of skin. Cold cream is the water in oil emulsion. Cold cream gives the prolonged contact time in the site of application as compared to the other semisolid dosage form or formulation. Then it gives elegance to the skin and it is not that much greasy. Due to the oil phase, it gives an emollient to the skin. The

function of the cold cream is for restoring moisture to dry skin, it allows to eliminate the waste materials from the pores and also cools the body. It is easily washed and easy to wash away. They are non-irritating when applied on the skin. The water phase provides the skin with additional protection. At body temperature, it becomes liquefiable. It enters the skin through the pores of the skin's epidermis. Galen, a Greek physician who created the cold cream formulation in the second century, is credited with developing it. He made a mixture of water, beeswax, and rose petals. These were the main moisturiser components he used to create the cold cream. Galen's cream was the common name for this skin lotion. Cold creams can be used to remove temporary

tattoo marks and then removed with a cotton ball in addition to moisturising the skin. Uses of cold creams are can be to remove temporary tattoo marks and then

removed with a cotton ball in addition to moisturising the skin. Uses of cold creams are also related to the creation of children's face paint.^[1]

2. PHYSIOLOGY OF HUMAN SKIN



- **Epidermis:** The thickness of the stratified, keratinized squamous epithelium that makes up the epidermis, the skin's outermost layer, varies depending on where on the body it is located. The palms of the hands and the bottoms of the feet have the thickest layer. There is no blood present. The dermis' interstitial fluid, which supplies oxygen and nutrients and drains away as lymph, bathes the deeper layers of the epidermis but does not reach the veins or nerve terminals of the epidermis.

- **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:** Another crucial location for processing and regulation of androgen is the sebaceous gland. The skin contains all the required enzymes for converting cholesterol to steroid precursors or adrenal hormones, such as dehydroepiandrosterone. Using an enzyme that is present as early as 16 weeks of foetal life, hydroxysteroid dehydrogenase, the sebaceous gland can also inactivate androgens. In the sebaceous glands, particularly those on the face and scalp, the type-1 isoform of 5-alpha-reductase, which is responsible for converting testosterone into its most potent form, is also abundantly generated. Hormones play a significant

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 blood vessels promote perfusion and heat loss.

Controlling evaporation: The skin acts as a semi-permeable, relatively dry barrier against fluid loss. The significant fluid loss in burns is a result of the loss of this function.

Others can judge our emotions, physical condition, and beauty based on the appearance of our skin.

Storage and synthesis: By the action of UV rays on specific areas of the skin, it serves as a storage site for lipids and water as well as a method for vitamin D (3).

Advantages of Herbal Cold Cream

- It Prevents ageing and dehydration of skin.
- As cold creams contain enough amount of water and oil, they keep skin safe from the rough environments.
- They also keep skin moisturized and safe
- Cold creams are designed to remove makeup and smooth the skin
- Medicated cold cream is mainly used as topical pharmaceutical dosage form for the treatment of skin.
- To help in the maintenance of moisture balance of skin and avoid rough skin co uses of cold cream (non-medicated).
- 7. As cleansing preparation to remove make
- To provide an emollient effect and oily protective layer on the skin

- As a carrier for drug substances such as diflucortolone valerate in medicated cream.^[2,3]

Ideal Properties of Herbal Cold Cream

- It should not normally be diluted
- The pH of the cold cream must be optimum from 4.6–6.0. Its consistency should be optimum so that it can be easily put out from the container and apply easily.
- Should give a cooling effect on the skin after external application.
- It must provide a thin waxy protective layer on the skin to protect the water evaporation from the skin surface.
- Should give a faster emollient effect, so that very dry skin can swell up and become soft within a short time
- Less greasy than ointment and Easily spread on the skin.
- It should be physically and chemically stable throughout its shelf-life.
- The excipients should be compatible with each other. It should be sterile.^[4,5]

Application of Herbal Cold Cream to skin

Despite their intended design as facial moisturizers, cold are actually very versatile and can be used in a number of different ways. First, one of its most popular uses is as a makeup remover. The thick oils are able to gently melt makeup and dirt away, allowing it to be removed with minimal damage, rubbing or scrubbing. Similarly, some find it effective as a primer for cosmetic foundations as it smooths the skin and allows makeup to be applied more evenly across the face. Since it removes makeup without water, Kelly says it even is a great product to take camping or on road trips where you may be away from your bathroom sink or shower! Lastly, cold creams can also be effective as a lip balm, body lotion, or even a shaving cream. Using a cold cream on your lips helps lock in vital moisture and provide hydration throughout the day to the sensitive skin on the lips. Likewise, applying a moisturizing cold cream to your body delivers the same intense hydration that the cream is designed to provide to your face but to your arms, legs, back, and hand.^[6,7]

Objective

- To prepare the cream by using the emulsification technique.
- To made safety, efficacy and quality of Herbal cold cream.
- They are non-irritant applied on the skin.
- To explore the many aspects of the rich traditional Indian herbal medicine.
- To give knowledge gained during the course in evaluating the usefulness of herbal formulas.
- To formulate and evaluate a herbal cold cream for shining skin by using natural herbal product.
- To make a cold cream ideal for all skin types.
- To give the useful benefits of cold cream on human use as cosmetic product.

Ingredients of formulation

- 1) **Hibiscus rosa sinensia**
- 2) **Clitoria ternatea**
- 3) **Adansonia digitata**
- 4) **Brassia seeds**

2.1 Butterfly pea flowers

Biological source: Clitoria ternatea, commonly known as butterfly pea, is a perennial herbaceous plant.

Family: Fabaceae.

Synonyms: Asian pigeonwings, bluebell vine, blue pea, butterfly pea, cordofan pea or Darwin pea.

Vernacular Name

There are around 60 global species belonging to genus Clitoria, which originated from the tropical equatorial Asia, and later was distributed widely in South and Central America, East and West Indies, Africa, Australia⁹. The vernacular name of Clitoria ternatea is also known as butterfly pea,

- Blue pea, (English),
- Aparajita (Bengali)
- Cunha (Brazilian),
- Lanhu die, Lanhuadou (Chinese),
- Aparajit (Hindi), Kajroti (India),
- Bungabiru, Tembangtelang (Indonesian)⁴⁻⁵



Class	Magnoliopsida
Sub Class	Rosidae
Order	Fabales
Family	Fabaceae
Genus	Clitoria
Species	ternatea.
Botanical name	<i>Clitoria ternatea</i> L.
Common name	Asian pigeon wings

Habitat

It is naturally found in grassland, open woodland, bush, riverine vegetation, and disturbed places.

Useful part: Flowers

Uses**Common uses**

Butterfly pea flower is a common ingredient in many herbal teas, mixed drinks, and cosmetic products. It is rich in antioxidants and may be linked to several health benefits, including increased weight loss, better blood sugar control, and improvements in hair and skin health.



It also has anti-glycation properties, which are known to slow down aging of the skin. Because of these properties, Butterfly Pea flower is anti-inflammatory and is helpful in treating skin irritation, redness, itching, and allergies.

Traditional uses

In Ayurveda, *Clitoria ternatea* possesses various pharmacological activities, including antidiabetic, nootropic, anesthetic, antimicrobial, antipyretic, analgesic, anti-inflammatory, antidepressant, anti-stress, diuretic, anticonvulsant, anxiolytic, insecticidal properties.^[9,10,14]

Botanical Name	: <i>Hibiscus rosasinensis</i> L.
Kingdom	: Plantae
Subkingdom	: Tracheobionta
Super division	: Spermatophyta
Division	: Magnoliophyta
Class	: Magnoliopsida
Subclass	: Dilleniidae
Order	: Malvales
Family	: Malvaceae
Genus	: <i>Hibiscus</i>
Species	: <i>rosasinensis</i>

Hibiscus rosa sinensis

Hibiscus rosa-sinensis, known colloquially as the Chinese hibiscus, China rose and shoe flower, is an evergreen flowering shrub native to East Asia. It is widely grown as an ornamental plant throughout the tropics and subtropics. The flowers are large, generally red in the original varieties, and firm, but generally lack any scent. Also many colors are available in a single, double or multi-shades including white, yellow, orange, red, pink, salmon, purple, etc. *Hibiscus rosa-sinensis*, is the national flower of Malaysia. The leaves are alternate, simple, ovate to lanceolate, often with a toothed or lobed margin. The flowers are large, conspicuous, trumpet-shaped, with five or more petals. The fruit is a dry five-lobed capsule, containing several seeds in each lobe, which are released when the capsule dehisces (splits open) at maturity.^[11,12]

USES

To induce abortion, ease menstrual cramps and to help in childbirth. To treat headaches. A preparation from the leaves is used to treat postpartum relapse sickness, to treat boils, sores and inflammations. Good for hairs. Hibiscus flowers are reported to Possess anti-fertility property by ancient Ayurvedic texts.

Adansonia digitat**Scientific classification**

Kingdom: Plantae
Clade: Trichophytes
Clade: Angiosperms
Clade: Eudicots

Clade: Rosids
Order: Malala's
Family: Malvaceae
Genus: Adansonia
Species: Digitata

Binomial name

Adansonia digitata.

Synonyms

Adansonia baobabs L.
Adansonia baobab Gaertn.
Adansonia integrifolia Raf.
Adansonia kilima Pettigrew, K.L.Bell, Bhagw., Grinan, Jillani, Jean Mey., Wab
Adansonia scutula Steud. Syno
Adansonia situla (Lour.) Spreng.
Adansonia somalensis Chiov.
Adansonia sphaerocarpa A.Chev.
Adansonia sulcata A.Chev.
Baobabus digitata (L.) Kuntze
Ophelus sitularius Lour.



Seed



Binomial name

Brassica rapa L.



Use

The *Adansonia digitata*, also known as the baobab tree, has many medicinal uses, including:

Anti-inflammatory: The tree's parts are used to treat inflammation.

Anti-diarrhea: The pulp and seeds are used to treat diarrhea and dysentery.

Antipyretic: The tree's parts are used to treat fevers.

Antimicrobial: The tree's parts are used to treat microbial infections.

Anti-malarial: The tree's parts are used to treat malaria.

Anti-viral: The tree's parts are used to treat viral infections.

Analgesic: The tree's parts are used to treat pain.

Immune stimulant: The tree's parts are used to stimulate the immune system.

Insect repellent: The tree's parts are used to repel insects.

Pesticide: The tree's parts are used as a pesticide.

Skin disease treatment: The seeds and oil are used to treat skin diseases, such as dandruff and muscle wounds.

Oral hydration: The pulp and seeds are used for oral hydration in the Ivory Coast and eastern Africa.

Hemoptysis treatment: A fruit decoction is used to treat hemoptysis in Tanzania. [19,20,21,22,23]

Brassica seeds

Scientific classification [Edit this classification](#)

Kingdom: Plantae
Clade: Tracheophytes
Clade: Angiosperms
Clade: Eudicots
Clade: Rosids
Order: Brassicales
Family: Brassicaceae
Genus: Brassica
Species: <i>B. rapa</i>

Oilseed subspecies (*oleifera*) of *Brassica rapa* may have been domesticated several times from the Mediterranean to India, starting as early as 2000 BC. Edible turnips were possibly first cultivated in northern Europe, and were an important food in ancient Rome. [8,9,10,11,12,13]

CONCLUSION

It is evident that the iconic baobab tree of Africa is an important nutritional and medicinal resource. Several plant parts have interesting anti-oxidant, anti-viral and anti-inflammatory properties, and based on the review, baobab has been used extensively since ancient times in traditional medicine and food application. Numerous studies on the biological activities of baobab have been conducted with promising results. However, the major trend found is that baobab fruit pulp is rich in vitamin C and the anti-oxidant capacity of the fruit pulp is greater than that of other common fruits known for high anti-oxidant activity. Baobab fruit pulp has been approved by statutory bodies for use in certain nutritional products. Seed oils have been used for topical skin application since ancient times and due to the toxic effects of synthetic oils, there is a growing trend to replace them

and revert to the use of natural oils in the cosmetic and pharmaceutical industries. Baobab seed oil is used in pharmaceutical and cosmetic industries due to its fatty acid content known to have beneficial effects when applied onto the skin. Based on the review, it can be seen that the baobab tree is promising considering the nutritional benefits of the fruit pulp in terms of its vitamins C content, while the leaves based on their mineral and vitamin A content. The seed oil's fatty acid composition and antioxidant activity is what makes it unique as functional oil. Oleic acid is probable the most abundant monounsaturated fatty acid in all the common edible oils compared with polyunsaturated fatty acids, oleic acid is more stable towards oxidation stable during shelf life or undergo oxidative decomposition during frying than those oils that contain high amounts of polyunsaturated fatty acids. The fatty acid compositions in baobab oil are linoleic and oleic acid. Due to the fatty acid composition of the oil, the oil can be classified as premium oil and can be used in replacement of the other vegetable oils.

REFERENCE

1. Susan c. Wivell, clear cold cream cosmetics composition, United States patent, 1996.
2. British pharmacopoeia commission british pharmacopoeia. london: Tso, 2011.
3. The United States pharmacopoeia the national formulary. Rockville, me: United States pharmacopoeial convention, Inc (USP21-NF16).
4. 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.
5. 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.
6. Himaja, N. Formulation and Evaluation of Herbal Cream from Azadirachta indica Ethanolic Extract. IJournals: Int J Res Drug Pharm Sci, 2017; 1(1): 23-6.
7. Mukherjee, P. K. Quality control of herbal drugs: an approach to evaluation of botanicals. Business Horizons, 2002.
8. Royal Botanic Gardens, Kew. Retrieved 22 August, 2022.
9. "Brassica rapa subsp. Oleifera". Germplasm Resources Information Network. Agricultural Research Service, United States Department of Agriculture. Retrieved 13 April, 2013.
10. "Brassica rapa subsp. Oleifera". Turnip Rape. EOL. Retrieved 13 April., 2013.
11. Clive Stace New Flora of the British Isles. Cambridge: Cambridge. ISBN 978-0-521-58935-2. Bailey's Dictionary (5th reprint ed.), 1997; 1731.
12. Doreatha Hurst. History and Antiquities of Horsham. Farncombe & Co., 1889.
13. "Brassica rapa". Bioimages. Cas.vanderbilt. edu. 2011. Archived from the original on 27 June 2010. Retrieved 10 June 2010.
14. Saptarini Nm, suryasaputra D, Nurmalia H, application of Butterfly pea (clitoria ternater linn.) extract as an indication of acid base titration.
15. Mukherjee PK, Kumar V, Kumar NS, Heinrich M. The Ayurvedic medicine Clitoria ternatea – From traditional use to scientific assessment. J Ethnopharmacol., 2008; 120(3): 291-301. Doi: 10.1016/j.jep.2008.09.009, PMID 18926895.
16. Subramanian MS, Prathyusha P. Pharmacophytochemical characterization of Clitoria ternatea Linn. Int J Pharm Tech Res., 2011; 3: 606-12.
17. Saptarini NM, Suryasaputra D, Nurmalia H. Application of Butterfly Pea (Clitoria ternatea Linn) extract as an indicator of acid-base titration. J Chem. Pharm., Res., 2015; 7: 275.
18. S. Khadabadi, S.L. Deore, B.A. Baviskar. Pharmacognosy and Phytochemistry, A Comprehensive Approach, published by PharmaMed Press, 1st edition, 2014; 8(4).
19. Panda, H. Herbal Cosmetics Hand Book. National Institute of Industrial Re., 2000.
20. 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.
21. 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.
22. Himaja, N. Formulation and Evaluation of Herbal Cream from Azadirachta indica Ethanolic Extract. IJournals: Int J Res Drug Pharm Sci, 2017; 1(1): 23-6.
23. "Adansonia digitata L. "(<https://powo.science.kew.org/taxon/558628-1>) plants of the world online Royal Botanic gardens kew. (retrieved 19 february 2022).