



PREPARATION AND ASSESSMENT OF HERBAL COLD CREAM

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RESEARCH ARTICLE

Abstract

The purpose cosmetics is to improve and boost the attractiveness of an individual persons. In this work, we developed and evaluated. powdered marigold rose cold cream is neem oil based. Pharmaceuticals creams are used for many different cosmetics purposes, such as washing, hydrating, highlighting, and appearance changing. This liquid preparation can be safely used by the over-all population and the social order at large. Herbal cosmetic is products that play with and progress appearance of people. In this study, the objective has to produce and assess herb cold cream by means of plant extracts product.

Keyword. Neem oil, Herbal cold cream, Skin

Introduction

The cosmetic are those products which are generally used for the same purposes- to enhance the skin & also to clean the skin. Cosmetic are term that comes after the Greek word – ‘kosmestiko’ which incomes to decorate something. Since then, any of the remedies used to enhance looks or the skin glow are known as cosmetic. Since ancient times people apply tinctures of plants or other natural components to expand the health of their skin and for beautification.

History

The use of cosmetics goes back in many centuries (1000) the Egyptians and Sumerians among the first to make use of them. In the medieval Europe, the use of a cosmetics was not less common. The face was whitewashed and the cheeks were pinked; however, the attitude on cosmetics altered in the different time periods – cosmetics, at many times, were openly condemned. Despite of the alterations in social opinion regarding cosmetics, at times such preferences were obtained by the same group of people through the use of makeup products.

Classification of cosmetics

A. Based on generally used body parts

- Hair cosmetic
- Eye make up
- Nail cosmetic
- Skin cosmetics
- Lip decorators

B. Based on physical forms.

- **Powders:** Face powders, talcum powders, tooth powders
- **Sticks:** Lipstick, deodorant stick
- **Oils:** Hair oil
- **Jellies:** Hand jelly
- **Paste:** Toothpaste, deodorant paste

C. Based on several products currently in the market

- Antioxidant
- Growth factor
- Peptides
- Polysaccharide
- Pigment lightening agent

D. Based on personal care products

- **Skin care prod Skin care product.** Moisturizer, product for special skin concerns, sunscreens.
- **Hair repair product:** Shampoo, conditioners, styling products, permanent waving and straightening products
- **Oral & dental care products:** Toothpaste, mouthwash, and dental floss

COSMECEUTICALS

The word "cosmeceutical" was coined in the 20th century for cosmetics that prescribed to treat skin conditions such as acne. Today, the word multifunctional is used to categories products that are both skin care products and which are said to provide more skin benefits than regular cosmetics. New types of topical cosmetic pharmaceutical hybrids, "cosmeceuticals", have been created to help improve skin health and appearance. The word itself catches the eye, merging the words medications and cosmetics, to attract the consumers' attention. FDA does not consider cosmeceuticals to a medication, a cosmetic or a mixture of both, so the term "cosmeceuticals" is also meaningless.

SKIN

Skin is the major organ in the body & its main function are to shield organisms from germs, regulate the body temperatures & to allow trace (tactile) sensation.

ANATOMY OF SKIN

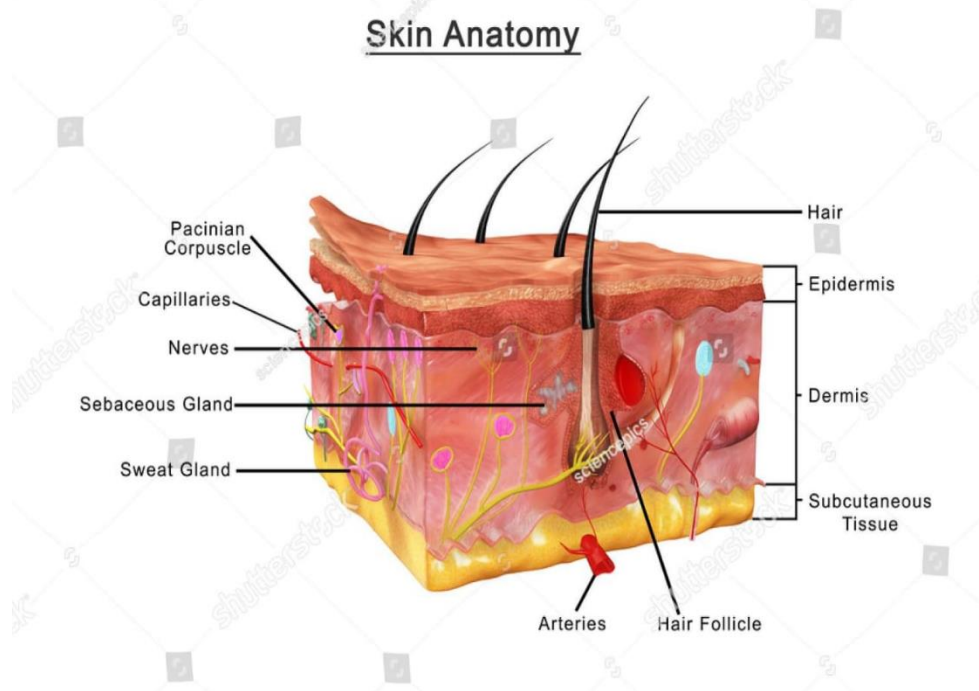


Figure.1 Skin

Three layers of skin made up the skin:

- 1) EPIDERMIS
- 2) DERMIS
- 3) HYPODERMIS

Epidermis

Epidermis is the outermost layers of the skin which is visible to your eye and normal to your touch. Skin is made active of keratin, a protein found inside the cells, and other proteins that are attached to each other in the form of sheath, it serves as a shield for the body in addition to offering skin tone.

Dermis

The middle layers of skin, has collagen and elastin elastin fiber, which is a protein, is responsible for strength and elasticity of skin cells an additional protein from the dermis, elastin, gives the skin flexibility. Moreover, it contributes in the process of skin tightening too Grows hair.

Hypodermis

Lowest of these skin layers is the oily layers known as hypodermis. Has connective tissue regulates body temperature.

HERBAL COLD CREAM

Herbal Cold cream is a water-based emulsion to which beeswax, scents, and various other fats are added, and which is used for the purpose of smoothing skin and removing makeup. Cold cream is a water-in-oil emulsion in contrast to the oil in water emulsions of vanishing cream.

Cosmetic is the product that is use for beautifying or making a person look prettier. Main objective of this study was the preparations & trial of plant extract containing the Neem oil made by means of water-in-oil method to treat your skin Cold cream with rose oil, marigold rose sinensis flower extract.



Figure.2 Herbal cold cream.

An ideal properties of cold cream

- 1)The equipment should have a small sensitization index.
- 2) It is look good.
- 4) It should give a horizontal feeling.
- 5) It has to be non-greasy and non-staining.
- 6) It shouldn't be irritating to skin.
- 7) It should not change the property of the membrane and skin.

AIM AND OBJECTIVE

Aim of current study to formulates and evaluates neem oil cold cream.

PLAN OF WORK

To achieve this objective the following plan of work was made

1. Material and methods
2. Selection of drug and excipients
3. Evaluation of the herbal cold cream
4. Literature survey
5. Conclusion

Material and methods

Material. The material uses in the formulation of the Herbal cold cream.

INGREDIENTS	QUANTITY taken for 50gm	USES OF INGREDIENTS
Bees wax	7.5	Emulsifying agent
Neem oil	12.5	Antioxidant
Borax	0.5	Emollients
Marigold	6.06	Anti-inflammatory
Methyl paraben	0.05	Preservative
Liquid paraffin	22.5	Laxative
Rose water	quantity sufficient	fragrance
water	quantity sufficient	Diluent

Bees Wax:

Beeswax is both a softening and water attraction skincare ingredient in this role. Of first is beeswax which act as firming agent and increase cold cream viscosity in this context this also bee's wax product is as a healing property and an excellent source of vit. A. Is the main component of virtually all the cosmetic products. For example: Body moisturizers, lip balm, lip gloss, eye shadow, lipstick. Wax not only provides health benefits in personal cosmetics but also.



Figure.3 Bees wax

Liquid Paraffin:

- It is minerals oil that are a top ingredient meant for skin care because helps skin stay moisturized.
- It is the skin's shield that prevents water evaporation.
- Liquid paraffin is one of the ingredients for the preparation of cosmetic products.
- Skin is naturally equipped with a barrier that helps to prevent the loss of moisture and maintain skin health. Symptoms of skin disorder can be alleviated with liquid paraffin.



Figure.4 Liquid paraffin

Borax:

Borax mainly consists of boron salt of hydrogen acid. This is achieved through the saponification process, whereby the free acids of the beeswax react with the soap of the oil.

- The chemical called an emulsifying agent is the key that ensures the water-oil miscibility. Borax keeps the pH neutral, while the Acidity inhibits bacterial growth.
- Like wax, borax is also a component of creams, gels, and lotions which are applied to the skin for cosmetic purposes.
- The essential alkaline feature of borax is the reason it is present in most detergent products where it is popularly used to remove stains from clothing as well as any grease or oil from the hands.



Figure.5 Borax

Methyl Paraben:

- The methyl paraben in this case is the preservative that hinders the proliferation of bothersome microorganism.
- It is one of a group of paraben. The parabens are the chemical which are used as preservative to increase the projection life of product
- In order to prevent the appearance of mold & other harmful germ, they are added to diet and cosmetic product.



Figure.6 Methyl paraben

Rose water

Rose water Use a diluent during research of cold cream to ensure improved viscosity and consistency. The rose petals are soaked in water to produce rose-flavored water. hydrosol it is the byproduct later rose oil are extracted from the rose petals for making fragrances. The whole of Eurasia makes use of rose water for spiritual purpose, a part of both cosmetics and pharmaceutical products, and food flavors.



Figure.7 Rose water

Neem oil

It is a usual insecticide take out from the seed of the Neem tree. Neem oil is a combination of constituents. Azadirachtin are the major constituent in deterring and kill pest & extracted from neem oil. Remaining fraction are converted into the simplified aquaphobic neem oil.



Figure.8 Neem oil

Marigold

- Marigolds are quite simple to grow and grow fast. People who are children or gardening newbies are the ones who are the best people to grow them. Marigolds grow and all season as long as they get full sun exposure e that they receive their sunlight throughout the day.
- The three main types are French (pointer), African, and Signet. The attribute of marigolds is that they deter deer and rabbits from repulsion because they dislike marigold smell.



Figure.9 Marigold

Methods of preparation

- Take required amount of liquid paraffin & bees wax in a beaker Heat on water bath up to 70°C to obtain molten mass (oil phase).
- In another beaker heat water up to 75°C and add borax (aqueous phases Mix oil phase in aqueous phase by rapid mixing, cool to 40°C
- Add preservative, methyl paraben and rose water
- Mix well and allow contents to stand aside before filling.
- Transfer the preparation into suitable wide mouth container, label it properly,

Apparatus Used:

- Glass rod
- China disc
- Measuring cylinder
- Thermometer
- Spatula
- Pipette
- Water bath

Raw Materials Used:

The cold creams can be made from mineral oils & vegetable oil, including fatty alcohol, fatty acid, fatty ester, emulsifying agent, preservative, & drinkable water. The following four major strategies should be in place.

components:

- Emulsifier
- Oil
- Water
- Thickening Agent

Review Literature

1. Manisha Yogesh Sonalkar et al'. Make a poly herbal cream then evaluate it. Makeups is the products. The detached of current study was to developed & analyze four extracts based on the water in oil method using cold aloe plant materials for the purposes of nourishing and hydrating the skin. In terms of the physical features of the cream, nothing was observed to have changed. The decoction with cold cream provides the calming and cooling effect because of measured vanishing of liquid from the emulsions. The cold cream is also slightly extra creaming set up an oily fence that helps to limit the aquatic damage from the stratum corneum which is the outmost coat of the skin.

2. N. Shaha et al. In their research, they revised that the anti-oxidant capability and formulations of creams as well as the evaluation of it were prioritized. The parts of plant chosen will be dried and next they will be extracted by maceration of 70% alcohol. In the course of the experiment, the citation was analyzed for their antioxidants action by superoxide hunting movement. The product excellence was measured with aid of different methods of evaluations. The pH obtained was in a correct range (about 6. 0). The extracted formulation and the profiling performed on it by HPLC showed a peak similar to the standard Curcumin obtained through HPLC. The test formulation manifested a good spread ability. The obtained result was that stickiness of cream got denser while on shear rate decreased, so thickness of the cream was directly relative to the degree of the shear (rpm).

3-Mishra B et al. The research objective was to develop a vitamin E and sweet almond oil enriched cold cream which would also provide moisturizing effect. 5 various preparations are ready & evaluation is done to assess the pharmacopeial parameters compliance. The prepared formulations are evaluated by various means such as pH, paint, similarity test, stickiness, rheologic study, constancy study, etc. Has best result and all the parameters of it are according to the IP standards.

4.Sujit Karpe et al. The main role of herbal cosmetics is to make the appearance of people more beautiful and pleasing to the eye. In the research work, we modified the water-in-oil technique to produce a herbal cold cream with herbal citations & liquid paraffins to lubricate the skin, beeswax to stabilize it and methylparaben to nourish skin. Neem oil is the ingredients use to type this cold cream. Pharmaceutical's cream have a broad spectrum of cosmetic uses. For instance, they cleanse, beautify, nourish, and alter the appearance of the skin. The main purpose of the current research was to develop and test herbal cold creams by applying prepared plant extracts employing water in oil method for nourishing and moisturizing.

5. Nemade Mahesh Sopan et.al. Cosmetics in general are compositions utilized for the purpose of beautification of the human appearance. The aim of this study has been to developed & perform tests on plants extracts consisting of aloe-vera which were made by the water-in-oil technique in order to nourished and moisturized the skin. The Cold cream with rose oil, hibiscus, and aloe vera extracts. The quality check of the finished products was carried out by different methods of evaluation. The prepared cream showed optimal consistency and spreading ability, as well as pH and no particles floating during the trials. Stability parameters e.g., appearance, properties, viscosity, or fragrance of the formulated cream did not show any sign of change during the study period. Herb-based cold creams, on the other hand, bring about a cooling and soothing sensation by allowing the water to evaporate slowly from the emulsion. Oil creams are more nourishing because they form a protective oil barrier on the skin that impedes the loss of water from the outermost layer of the skin, the stratum corneum.

6.Roshan Yadav Since et.al. Since ancient times, creams had been given a lot of importance in the cosmetic industry. In addition. These depot preparations can safely be used by the general population and society. Herbal cosmetics here, means products used to increase and beautify human appearances. Through using different ways of evaluation, the product's quality was evaluated. The physical characteristic of the cream formulation did not change. In the course of the research study period, the cream formulation showed good consistency and spread ability, uniformity as well as a pH. The water is evaporating slowly from the emulsion, and its cooling and soothing effect through the herbal extract and cold cream is generated. They as water-in-oil emulsions are meant to be used in skin or mucous membrane, thereby providing local occasionally a systemic effect at the site of application.

7.Anshul Sharma et.al. Herbal cosmetics are products designed to improve human appearance with regard to health and beauty. With the aim of nourishing and moisturizing the skin, therefore, our current study worked towards formulating and evaluating herbal cold creams which had plant extracts, liquid paraffin that acts as a emollient, bees wax as a preservative, & uncontaminated agents by employing the water-in-oil method. Cold

cream is prepared pretty easy by using neem oil and almond oil. Getting the feedback from the study, it was concluded that the formulation of the herbal face pack possessing naturally occurring components like neem and almond is a very good effort. Moreover, the prepared formula showed a high degree of physio-chemical and microbiological stability and also possessed attributes generally inherent with a formulation for skincare products.

EVALUATION OF COLD CREAM

- **Organoleptic evaluation:** It can be taken as the process of the physical evaluation of a cold creams' physical properties such as its color, flavor, and texture.
- **PH:** The pH meter was calibrated with the aid of a standard buffer solution. Digital pH meter is the tool I will use to measure (or weigh) 0.5 g of cream are to be dissolved in the 50 g prepared solution. 0 ml de ionized water.
- **Test for Spread ability:** The sample was compressed through the use of weight in a set manner to squeeze it into a uniform thickness between the two glass slides in about five minutes and then more weight is added into the weighing pan. Trial runs were done by measuring the distance that the upper glass slide covered along the underside of the lower glass slide in a given time.
- **Stability Test:** The stability examination is conduct on the develop formulation by storage it for one month at different diseases. Along with maintaining the temperature reaching from room temperature to 40°C, the crowded glass vial of preparation along with physical trait such as colors smell, pH, consistency, and feel were also observed.
- **Homogeneity:** The presence of homogeneity among the produced cream was examined by visualizing and touching the cream. The common positive points the herbal cold cream had were its appearance and touch.

RESULT

Organoleptic evaluation.

Sr. No.	Test	Result
1.	Colour	Light Green
2.	Odor	Pleasant
3.	Texture	Smooth

SPREAD ABILITY

After applying the cream sample between the two glass slides, 100 grams of weight was placed between them for five minutes to compress it to a consistent thickness before the weight was added to the weighing pan. Spread ability was determined by timing the movement of the upper glass slide over the lower slide.

PH

The PH Value of Herbal Cold Cream Was Determine 5.6- 6.5 By Using Ph Meter.

Homogeneity

The homogeneity of the formulated cream was judged by visual appearance and touch. The appearance and touch of the cream were good.

CONCLUSION

According to the study's findings, herbal cold cream served as the model for the development of cold cream formulations. Herbal cold cream works by eliminating waste from pores and hydrating dry skin while also cooling the body. Wetting, cleaning, and storing it is easy. They are. The liquid phase offers the skin further protection.

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