

# Formulation & Evaluation of Multipurpose Herbal Cram

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#### **Abstract**

Herbal cosmetics are the preparations used toenhance the human appearance.

The aim of the present research was to formulate the herbal Cream for the purpose of Moistening, Nourishing, lightening, & Treatment of various diseases of the skin. Different crude drugs, Aloe barbadensis (Aloe Vera- leaves), Azadirachta Indica (Neem-leaves), Curcuma longa (Turmeric- rhizomes), Accelerated stability testing of two final sample has been conducted in the environmental chamber with temperature 25 10C and humidity 60 10 % RH.

All the products were found to be stable with no sign of phase separation and no change in the color.

Keywords :- Aloe barbadensis (gel), Azadirachta indica (Neem), Curcuma longa (Turmeric), Multipurposecream, Herbal cosmetic.

#### Introduction

The concept of beauty and cosmetics is as ancient as mankind and civilization. Indian herbs and its significance are popular worldwide. An herbal cosmetic have growing demand within the world market and is a useful gift of nature.

Herbal formulations always have attracted considerable attention due to their good activity and relatively lesser or nil side effects with synthetic drugs. Herbal cosmetics are defined because the beauty products which possess desirable physiological activity like healing, smoothing appearance, enhancing and conditioning properties due to herbal ingredient.

Now-a-days the usefulness of herbs withinthe cosmeceutical production has been extensively increased in care system and there's an excellent demand for the herbal cosmetics. Cosmetics are the substances intended to be applied to the physical body for cleansing, beautifying, promoting attractiveness, and altering the looks without affecting the body's structure or functions.

But the usage of synthetic products becomes very harmful from while for the youth also as our surroundings. Various synthetic compounds, chemicals, dye and their derivative proved to cause various skin diseases having numerous side effects. Thus we are using herbal cosmetics the maximum amount as possible. The basic idea of skin care cosmetic lies deep within the Rigveda, Yajurveda, Ayurveda, Unani and Homeopathic system of medicine.

## **Literature Review:**

Sk Uddandu Saheb, Aduri Prakash Reddy, K Rajitha, B Sravani, B Vanitha. Formulation and evaluation of cream from naturally containing plant extracts. World J Pharm Pharm Sci 2018;7:851-62.

Bhakti Mali, Sumedh N Moharil, Vaibhav Mhasal, Mahesh B Narkhede. Drug-excipient interaction study of Tramadol HCL with polymers. World J Pharm Res 2017;6:848-61.

Donald L Pavia, Gary M Lampman, George S kriz, James R Vyvyan. Introduction to spectroscopy. 5th edition. Patparganj-Delhi; Cengage learning India pvt. ltd. Chapter 2: Infrared spectroscopy; 2015.p. 14-106.

Kawada A, Konishi N, Momma T, Oiso N, Kawara

S. Evaluation of anti- wrinkle effects of a novel cosmetic containing Niacinamide. J Dermatol2008;35:637–642

MarieLode N, Buraczewska I, Halvarsson K. Facial anti-wrinkle cream: influence of product presentation on effectiveness: a randomized and controlled study. Skin Res Technol 2007; 13:189–194.

## Aim and objectives: -

## Aim :- Formulation & Evaluation of MultipurposeHerbal Cream.(10ml)

## **Objectives:-**

- 1. Safety And Efficacy Assesment.
- 2. Standardization.
- 3. It Should Be Easy To Use.
- 4. It Should Be Stable At Any Temperature.
- 5. It Is Non Toxic.
- 6. It has less side effect.

## **Health Benefit Of Turmeric:**

- Medicine Use
- o Natural Anti-Inflamentry
- Powerful Antioxident
- Protect Heart Diseases
- Treat Or Prevent Diabetes
- o Improve Skin Health
- o Protect Youre Body From FreeRadicals.

## Research Through Innovation

## **Drug Profile:-**

## **\*** Turmeric:-



Turmeric is a plant that has a very lengthy history of medicinal use since almost 4000 years .in southest Asia turmeric is used no longer as an important spice but also used in spiritual ceremonies it is used due to its wonderful yellow colour turmeric is likewise called Indian saffron

Synonym: - Curcum longa, Curcuma domestica, Herbaceous plant, Genus curcuma, Seasoner Saffron, Indian Haladi, Curcumae.

Biological source: Turmeric is the dried rhizome of curcuma longa Linn. Belonging to family zingiberaceae.

Geographical source: They grow in warm, humid climates and thrive only in temperatures above 60°F (29.8°C). India, shri Lanka, the east Indies, Fiji, and Queensland (Australia) all have climates that are conducive to growing turmeric. Ageing, anti- inflammatory, moisturizer, reduce acne and pimples.

## Chemical constituents:-

Curcuminoids - Non-volatile colouring matter

1. Volatile oil.

## \* Aloe:-



Aloevera is a wonder plant with health and benefits so myraid and as to unding that hardly any part of human body remains uninfluenced by its healing touch. It has been used for medicinal value for several thousand years its applications have been recorded in ancient cultures of india egypt greece rome and china

## Synonyms:-Aloe, Ghritkumari, Aliyo (Guj.) Botanical source:-

Aloe is the dried juice collected by incision from thebases of the leaves of various species of aloe.

Family:- Liliaceae.

#### **Chemical Constituents:-**

Aloe may contain upto 30% aloin which is a mixture of three isomers: barbaloin,  $\beta$ - barbaioinand isobarbaloin.

Barbaloin present in all the four varieties is slightly yellow- coloured, bitter, water- soluble, crystalline glycoside Aloe also contains aloinsides A and B, O-glycosides of aloin in which L- rhamnose is combined withOH of hydroxymethylgroup at 11-.C. atom.

## **Benefit Of Aloe Vera For Face:-**

- Aloe Vera help in keeping youre face healthy & gives you a natural shine.
- O Aloe Vera is rich in moisturizing properties, it help in removing deadcells.
- O Aloe Vera is very beneficial for the people withdry and cracked skin.

## **⋄** Neem Plant :-



Neem plant is tropical evergreen trees to Inadian subcontinent and easily available. It has been used in Ayurvedic medicine for more than 4000 years due to its medicinal properties. Most of the plant parts such as fruits, leaves, seeds, bark and root contain



compound with proven antiseptic, antiviral, antipyretic, anti-inflammatory, antiulcer, antifungal

## Synonym:-

Margosa, Neem tree, Azadirachta indica, Melia Azadirachta, Arishth, Nim tree.

## **Biological source:**

Neem consists of almost all parts of the plants which are used as drug. Some important morphological parts are the dried stem bark, root bark, leaves and fruits of Azadirachta indica also, known as Melia azadirachta.

**Family :-** Meliaceae.

## Geographical source:-

It is found in India, Pakistan, ShriLanka, Malaya, Indonesia, Japan, tropical region of Australia an

Africa .In India its is found in Uttar Pradesh, Maharashtra

## **Benefit Of Neem Leaf:**

- Act AS A Shield Against Dandruff.
- o It Can Be Used For Both Face And Hair.
- Treats Dry Scalp Making It Smooth AndShiny.
- With Its Vitamin C Properties, It Iscapable Of Removing BlackheadsAnd Dullness In The Face.

Increases Radiancec And Produces, Anti-Ageing Effect.

## **MATERIALS AND METHODS:**

Collection of plant material

Aloe vera, Neem were collected from local botanical garden Excipients And Herbal Ingredients With TheirRoles.

## **Extraction processes:-**

#### 1. Neem:-

The neem leaves were washed using distilled water. During thedrying process, the leaves were left under sunlight for three days. Then, the leaves were ground to powder form. Two methods were implemented to extract the neem leaves. In the first method, 26.0 g neem leaves powder was extracted with 300 ml methanol solvent by using Soxhlet extractor in 2 hrs. After the extraction, it was fil-tered and the methanol solvent was evaporated completely byusing a rotary vacuum evaporator, brand BUCHI R-215 manufactured by Buchi, German. The same stepswere repeated by using other solvents; ethanol, ethyl acetate, and hexane.

#### 2. Aloe Vera:-

Collect mature and fresh aloe vera leaf from plant. Washed it with distilled water. Dried it in hot air oven. Leaf is dissected longitudinally by sterile knife. Then semi-solid aloe vera is collected. Remove fibres and impurities from it. Aloe vera extract is obtained.

#### 3. Turmeric:-

Take 1g turmeric powder in 10ml distilled water and shaken in volumetric flask. Heated in water bath at 80 to 1000C for 5 to 10 minutes. Then filtered it and turmeric extract is obtained.

Fig :- Extraction Of Natural Plant Ingredient.

## Formulation of cream :-

Take the liquid paraffin and beeswax in a borosilicate glass beaker at 750C and maintain that heating temperature (Oil phase).

When the cream is formed, then add rose oil as fragrance.

Then transfer this cream on slab and mix the cream in geometric manner to provide a smooth texture and for mixing of all ingredients properly.

Add few drops of distilled water if necessary. This method is called as slab technique or extemporaneous method for preparation of cream.

In this test colour, odour, texture and state of cream are observed.

## **Irritancy:-**

Mark 1cm2 area on left hand dorsal. Cream was applied on that area and note that time. After interval upto 24 hours it is checked for irritant effect, erythema and edema if any then reported.

## Washability:-

Apply small amount of cream on hand and wash it under running tap water.

#### **RESULT:-**

The Cream Was Prepared And Evaluated. Turmeric, Aloe Vera And Neem Leaves Extract Obatained By Soxhlet Apparatus Method And CreamWas Prepared By Slab Method.

## **CONCLUSION:-**

By using Aloe vera gel, Neem and Turmeric the cream showed multipurpose effect and all herbal ingredients were used showed different significant activities. Based on the results we can say that all three formulations F1, F2 and F3 were stable at roomtemperature and can be safely used on the skin.

#### **REFERENCES:-**

- 1. Manisha Yogesh Sonalkar, Sachin Annasaheb Nitave. Formulation and evaluation of polyherbalcosmetic cream. World J Pharm Pharm Sci 2016;5:772-9.
- 2. T Reynolds, AC Dweck. Aloe vera leaf gel: a review update. J Ethno Pharmacol 1999;68:3-37.
- 3. Priyanka Sharma, Amit C Kharkwal, Harsha Kharkwal, MZ Abdin, Ajit Varma. A review on thepharmacological properties of Aloe Vera. Int JPharm Sci Rev Res 2014;29:31-7.
- 4. Sharma Pankaj, Tomar Lokeshwar, Bachwani Mukesh, Bansal Vishnu. Review on neem (Azadirachtaindica): thousand problems one solution. Int Res J Pharm 2011;2:97-102.
- 5. KP Sampath Kumar, Debjit Bhowmik, Biswajit, Chiranjib, Pankaj, KK Tripathi Margret Chandira. Traditional Indian herbal plants Tulsi and its medical importance: a review. Res Rev: J Pharmacogn Phytochem 2010;2:103-8.
- 6. Kalpesh Chhotalal Ashara. Importance of trituration technique on preparation and evaluation of cold cream. Inventi Rapid Pharm Tech 2013;1-2:2012.

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