



Research Article

Formulation And Evaluation Of Herbal Face Cream By Using Carrot

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ABSTRACT

In recent days every persons are facing a major problem with acne, blackheads, and pimples. Now a days everybody wants to get a fair and charming skin but these acne, pimples and blackheads are common among persons who suffer from it. According to Ayurveda, skin problems are normally due to impurity in blood. Herbal face creams are used to stimulate the blood circulation to remove the impurities which are present in the skin pores, rejuvenate the muscles and help to maintain the elasticity of the skin and remove the dirt from skin pores. In this present study describes the formulation of cream by using carrot. The purpose is to study the development if formulation of skin whitening cream with less side effects. The advantage of herbal face cream is their non-toxic in nature, reduce the allergic reactions and the tested usefulness of many ingredients.

INTRODUCTION

The demand of herbal cosmetics due to the availability of new ingredients are the financial reward for developing the successful products. Now a days herbs are widely used as remedial agents because herbs are easily available at less expensive and non-toxic. So the people have good faith in such remedies. These herbal formulations produces cleansing and beautifying effects and improves overall appearance when rubbed, poured, sprayed externally or applied to body parts. Cosmetic from natural sources are

considered better and safer. Plant are the natural sources of cosmetic formulation. They can be used to design some useful inorganic materials that are called green synthesis. They are made from original ingredients in plants, leaves, roots, fruits and flowers which have properties for health and beauty. From the ancient time people are using herbs for cleaning, beautifying and to manage the skin from acne, blackheads, pimples, dark circles. Excessive exposure to heat, that causes skin to dehydrate during summer and causes wrinkles, blemishes, pigmentation and sun burns. Extremes

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of winter causes damages to the skin and hairs in the form of cracks, cuts, infections, hair fall and dandruff. According to Ayurveda skin problems are normally due to impurities in blood. In order to overcome these problems, herbal cosmetics are used. The cosmetics which are formulated by using medicinal plants are with less side effects and with more skin glowing and skin whitening properties. Toxins are may accumulated in blood are due to improper food and lifestyle are causing skin related disease. Herbal face creams are helps to get rid of wrinkles, dark circles, pimples, and acne. Herbal face creams are may increases the fairness and smoothness of skin. Herbal face creams are one of the oldest and beautiful method of cleansing skin. There are various kind of face creams described in Ayurveda which have nourishing, healing, cleaning, astringents and antiseptic properties. Herbal face creams used in Ayurveda helps to reduce wrinkles, pimples, and acne and dark circles. Natural cosmetics contains some vital vitamins that are required for the health and glow of our skin. Herbal cosmetics or products are made from various cosmetic ingredients to form the base in which one or more herbal ingredients are incorporated for defined cosmetic benefits. The herbal paste which is applied on the face to treat acne, pimples, scars, marks, and pigments are known as “MOCHA LEAP” in Ayurveda. The process of smearing this herbal mix on face is known as ‘mocha leap’. This beauty therapy is popularly as facial. Herbal face creams which are recommended for acne, pimples, and blackheads usually control the discharge of sebum from sebaceous glands and remove the harmful bacteria inside acne lesion. The scars and marks of skin can be reduced by adding fine powders of sandal and orange peel with acne face creams. Cosmetics are defined as the products used for the purpose of cleaning, beautifying, promoting attractiveness or alternating the appearance. From the ancient times different herbs are used for

cleansing, beautifying and to manage them. Face skin is the major part of the body, which indicates the health of an individual. In Ayurveda, the herbal paste is called as “mocha leap” used as a facial therapy. This herbal paste smeared on face to treat acne, pimple, scars, marks and pigments. Face cream is the smooth power which is used for facial application. These preparations are applied on the face in the form of liquid or pastes and allowed to dry and set to form film giving tightening, strengthening and cleansing. Carrot are while beauty products and cosmetics have become a way of life to keep your skin looking flawless. They do have their side effect. Certain root vegetables like carrot with their antioxidant, antiaging properties. Protect your skin from sun damage and prevent premature wrinkles.

The carrot contains,

- Vitamin A
- Vitamin C
- Calcium
- Iron
- Beta- carotene

LITERATURE REVIEW

1. Formulation and evaluation of herbal face cream:

B.Badwaik, Updesin B.Lade, Tikesh Agarwal, Prachi Barsagade, Madhuri Nandgave, Nilam Gaddamwar. They made a study by evaluating a formulated cream by the parameters such as PH, Spread ability, wash ability, non irritancy test, viscosity and phase separation of cream.

2. Formulation and invitro evaluation of herbal skin whitening cream of glycyrrhizin extract and solanum tuberosum.

Smita shete, mukesh mohite, revan karodi. Has made a review article and reported that from invitro studies it is concluded that solanum tuberosum juice and olive oil both are used to increase the penetration and absorption of cream for 6 hours.



3. Formulation of herbal cosmetics

Ramakrishna S, Gopikrishna UV Has made an innovative research and concluded in their studies that the stability tests revealed the inert nature of pack.

4. Herbal carrot face cream

Himaja N, Ashok kumar A, Bhart kumar B Darwin Research and Aayur and Aayur harma, Andhrapradesh, India 521212 The main objective of the work is to formulate for herbal carrot face cream for cosmetics purpose.

5. Herbal antibacterial face cream

Mr K.G Bhutkur and Mrs M .Shah. Genba sopanrao Moze College of pharmacy Wagholi Pune. The objective of this work is to formulate a cosmetic preparation of herbal face cream made herbal ingredients.

6. Formulation of herbal face cream

Sachin Bhagwat Aglawe, Amol Uttamrao Gayke, Suraj Anil Mindle, Varsha Gajanan, Maharashtra, India. The objective this work is to formulate an herbal face cream for cosmetic purpose from herbal ingredient like carrot, saffron, coconut oil, aloe vera, rose oil.

7. Formulation of herbal face cream

Yadav N and Yadav R Department of pharmacy, Bareilly. U. P The objective is dried carrot of combined from had flow passable and suitable for face cream.

AIM AND OBJECTIVES

- The aim of this study is to give affordable alternative to costly synthetic medicines to poor people with various skin problems.
- The main objective of the work is to formulate and evaluate poly herbal fruit face cream for cosmetic purpose.
- The objective of this work is to formulate and evaluate a cosmetic preparation of poly herbal face cream from herbal ingredients.
- Herbal face creams are used to stimulate blood circulation, rejuvenates and help to

maintain the elasticity of skin and remove dirt from skin pores.

- It is a very good attempt to establish the herbal face cream containing different powders of plants.
- The advantage of herbal cosmetics is their non-toxic nature, reduce the allergic reactions and time tested usefulness of many ingredients.

PLAN OF WORK

1. Literature survey
 2. Materials and Equipments
 3. Pre-formulation studies Characterization of face cream
- Herbal powder
 - Not injury to skin
 - Not heavy systemic toxicity
 - Non-irritant

Preparation and evaluation of herbal face creams

- Weighing
- Mixing
- Sieving
- Collection and storage.

PLANT PROFILE

Synonyms:

Daucus carota sativa, Genus Daucus, Cultivated Daucus.

Ayurvedic Name:

Naranga varnaka, Naranga Kanda, Peetaka.

TAXONOMICAL CLASSIFICATION

Kingdom:

Plantae

Division:

Magnoliophyta

Class:

Magnoliopsida

Order:

Apiales

Family:

Apiaceae



Genus:

Daucus

Species:

D.carota

VERNACULAR NAMES

Tamil:

Carrot

Sanskrit:

Garjara, Grujjanakam

Hindi:

Gajar

Marathi:

Gajara

Telugu:

Karet

Kannada:

Kyaret

Malayalam:

Karrer

Bengali:

Gajara

DESCRIPTION

Carrot is high in vitamin A and E, beta carotene and also contains carotenoid which provides a natural protection against the effect of UV radiation. Carrot will give your skin a discreet and natural golden glow. The present study deals with the formulation of antiaging potential of carrot based cosmetic emulsion. Briefly, cosmetic emulsion composed of carrot in varying proportions (2, 4, 6%w/v) were prepared using HLB scale technique. Coconut, non-ionic surfactants (Tween 80 and Span 80) and xanthan gum were used as the oil phase, emulgent and emulsion stabilizer respectively.

MATERIALS AND METHODS

The face cream was prepared accordingly the particle size and their binding property mixed through in plastic bag.

Ingredients Required

1. Carrot-skin glow
2. Saffron- skin toning

3. Aloe Vera gel-Smoothing

4. Coconut oil-Consistency

5. Rose oil- Perfume

1. Carrot (Ducats Carota):

The fiber in carrots can help keep blood sugar levels under control. And they are loaded with vitamin A and beta-carotene, which lowers diabetic risk. Carrots can strengthen your bones because it contains vitamin K and calcium.

Botanical Name:

Ducaus Carota.

Family:

Apiaceae.

Uses:

Carrot is also used to prevent cancer, Digestive health, obesity, and other nutrient deficiencies.

2. Saffron:

Saffron used to reduce skin pigmentation. Saffron not only lightens the skin tone but also improves and reduces hyperpigmentation because of its rich vitamin content.

Botanical Name:

Crocus sativus.

Family:

Iriaceae.

Uses:

Saffron is highly rich in Anti-Bacterial, Anti-inflammatory properties. Beat the dark circles.

3. Aloe Vera (Aloe Barbadensis):

It contains 75 potentially active constituents like vitamins, enzymes, minerals, sugars, saponins, amino acids. Aloe vera is a great moisturizer intended for skin.

Botanical Name: Aloe vera.

Family:

Liliaceae.

Uses:

It is used to provide sunburn. Aloe vera may benefit your skin and due to Antioxidant properties.

4. Coconut Oil (Cocos Nucifera):



Moisturizing dry skin, including in peoples with conditions such as eczema. Reducing inflammation, which may result from UVB rays. Promoting wound healing. Possess antibacterial, antifungal, and antiviral properties. Botanical Name: Cocos Nucifera (L).

Family:

Arecaceae.

Uses:

Protect your skin from UV rays, relive skin irritation and Eczema.

5. Rose Oil (Rosa Centifolia L.):

Rose oil visibly helps to refine your skin texture, which aids in combating aging and dry skin. Used to lighten the skin. It improves skin tone and brightens the complexion. It also helps to blemishes, acne scars and dark spots.

Botanical Name: Rosa centifolis L.

Family:

Rosaceae.

Uses:

Decrease anxiety and stress, used to treat Antibacterial and antifungal properties, hydration and moisturizing, colour correcting, immune boosting.

FORMULATION

Step 1:

At the very first step a required quantity of carrot must be taken. Carrot is washed to remove waste debris in a running tap water. The carrots are remains free from cellular wastes. About 50g of carrot is used for our formulation. Then the carrots are cut into small pieces

Step 2:

In the next step, carrots are kept in a microwave oven for up to 1hr at 60degree Celsius. Microwave oven is used to remove the moisture content from it and to make it dry.

Step 3:

Then the dried carrot is removed from the microwave oven and about 4g of saffron is added with a dried carrot. 10ml of coconut oil is added

and at was stored at room temperature and to stand for about 24hrs.

Step 4:

After 24hrs it was filtered by using a white cotton cloth to separate the oil phase.

Step 5:

10g of Aloe vera gel is added to the oil phase which is obtained in previous phase then it was transferred to mortar and pestle. With continues mixing of contents in a clockwise direction until the formulation is obtained with good consistency. Finally 4ml of rose oil is added and mixed with them by using a pestle until it becomes creamy. Then the formulated cream was stored in a well closed container and maintained at 37c of room temperature.

SR No	INGREDIENTS	QUANTITY
1	Carrot	50g
2	Saffron	4g
3	Coconut oil	10ml
4	Aloe vera gel	10g
5	Rose oil	4ml

EVALUATION OF HERBAL FACE CREM BY USING CARROT

1. Organoleptic evaluation

The Face Cream thus obtained was evaluated for its organoleptic properties like colour, odour and state. The appearance of the cream was judged by its colour and roughness and graded.

2. Test for microbial growth in formulated cream

The Formulated Creams were inoculated on the plates of agar media by streak plate method and a control was prepared by excluding the cream. The plates were placed into the incubator and are incubated at 37°C for 24 hours. After the incubation period, plates were taken out and checked for the microbial growth by comparing it with the control.

3. Stability test



In the mechanical test cream samples were inserted into centrifuge tube at a speed of 3750 RPM for half an hour or 5000 to 10000 RPM for 15 Minutes then observed whether a separation exist or not.

4. Homogeneity

Homogeneity of the prepared creams was confirmed by the visual appearance and by touch.

5. After feel

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

6. Dye test

Under Microscopic observation the disperse globules appear red in colour and the ground is colorless the cream prepared is O/W type. The dye test confirms that all formulations were O/W type emulsion cream.

7. Removal

All the cream formulations are applied on the skin was easily removed by washing with tap water.

8. Irritancy test

All formulations shows no redness edema inflammation and irritation and during irritancy studies these formulations are found to be safe to use for the skin.

9. Skin whitening test

5 volunteers were selected for the following studies. All the preparation are applied and observed for 1 month. After 1 month skin test has been done that there is no pigmentation and skin gets whitens from F5 formulation than other formulations. So F5 formulation shows better result than other formulation containing single herb.

Sr No	PARAMETERS	ALOE VERA
1	Color	Ash Color
2	Oduor	Characteristic
3	PH	5.2
4	Removal	Easily removed by tap water
5	Irritancy Test	No irrattancy on the application, so safe for skin
6	Homogeneity	Satisfied
7	After feel	Emollient
8	Tex fuse	Smooth
9	Microbial growth	Absence
10	Stability Test	No separation occurs so its formed to be stable

10. Stability studies (Evaluation)

To assess the formulation stability, the stability studies were done. Each formulation were stored at 4°C room temperature and 40°C temperature for a month and observed for physical stability like colour.

11. Report of stability studies:

The colors were changed especially on the temperature of 40°C where as in other temperature it is stable.

CONCLUSION

Thus in present work, an attempt has been made in formulating an ideal herbal face cream suitable for

all skin types. According to Ayurveda, skin problems are normally arises due to impurity in blood. Herbal face creams are used to stimulate blood circulation, rejuvate the muscles and help to maintain the elasticity of the skin and remove dirt from skin pores. The formulation of cream was done by slabs method. This gives the best results:

- Face glowing
- Whitening
- Remove blackades
- Prevent from dry skin
- Avoids the ageing skin



The formulation of the cream shows the best resulting of highest percentage of skin brightening and also produces the cooling effect. The optimised formulation of herbal face cream was subjected to the stabilities studies there were no changes resulting during the 3 months period of study. Thus F1 formulation removes skin pigmentation and improves face complexion. So it can concluded that there no side effect during the application of cream on the surface of the skin.

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