



FORMULATION AND EVALUATION OF HERBAL FACE PACK FOR GLOWING SKIN

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Abstract:-

Abstract Everybody wants to get a fair and charming skin. Now a day, acne, black heads, pimples are common among persons who suffer from it. According to ayurveda, skin problems are normally due to impurity in blood. Herbal face packs are used to simulate blood circulation, rejuvenate the muscles and help to maintain the elasticity of the skin and remove dirt from skin pores.

The aim of this work is to formulate and evaluate an herbal face pack for glowing skin by using natural herbal ingredients. The natural herbal ingredients such as multani mitti, turmeric, sandalwood, neem, orange peel, aloe vera, kaolin, liquorice, methyl paraben, gum tragacanth and rose water.

In the present work, we formulated a herbal face pack which can be easily made with the easily available ingredients. After evaluation, we found good properties for the face packs, free from skin irritation and maintained its consistency even after stability storage conditions. Results of the study scientifically verified that herbal face pack having enough potential to give efficient glowing effect on skin. The overall study is useful to substantiate product claims due its useful benefits on the human beings.

Introduction

Since the ancient era, people are aware of the use of plants for the essential needs of a healthy and beautiful skin. Cosmetics are products used to clean, beautify and promote attractive appearance. Skin of the face is the major part of the body, which is a mirror, reflecting the health of an individual. A balanced nutrition containing amino acids, lipids and carbohydrates are required for the skin to keep it clear, glossy and healthy. In ancient times, women were very conscious about their beauty and took special care of their specific skin types.

Even today, people especially in rural areas, and hilly regions go for the natural remedies like plants extracts for various cosmetics purposes like neem, alovera, tulsi, orange peel, rose *etc.*

Herbal cosmetics are the products which are used to purify and beautify the skin.

The main advantage of using herbal cosmetic is that it is pure and does not have any side effects on the human body.

People have rough skin and when they don't take sufficient care, then the skin turns dark due to overexposure to the sun, other pollutants *etc.* In this article we have formulated herbal face pack to whiten, lighten and brighten the skin naturally for men and women. This face pack has natural skin lightening property and can be easily prepared at home.

Face packs with natural constituents are rich in vital vitamins that are essential for the health and glow of the skin. These substances have been proven to be beneficial for skin in many ways. Natural facial packs are easy to use. They increase the circulation of the blood within the veins of the face, thereby increasing the liveliness of the skin. A good herbal face pack must supply necessary nutrients to the skin, available in the form of free-flowing powder applied facially for the external purpose. It should penetrate deep down the subcutaneous tissues to deliver the required nutrients. Every type of skin is specific for the requirement of skin pack. Nowadays different types of packs are available separately for the oily, normal and dry skin. It reduces wrinkles, pimples, acne and dark circles of the skin. Face packs which are recommended for oily skin prone to acne, blackheads, usually control the rate of sebum discharge from sebaceous glands and fight the harmful bacteria present inside acne lesion.

The leftover marks of skin can be reduced by incorporation of fine powders of

sandalwood, rose-petals and dried orange peels. Herbal face packs are nowadays being used on a large scale, due to the various benefits of them over chemical based packs. They have no added preservatives. They can be easily formulated and stored over a larger span of time. Present research article deals with the formulation and evaluation of herbal face pack for glowing skin by using natural materials i.e., multani mitti, turmeric, sandalwood, saffron, milk powder, rice flour, orange peel, banana peel. They contain healthy nutrients. Multani mitti is rich magnesium chloride.



OBJECTIVES

- * As due to increased pollution, allergy, microbe's etc. Human skin has become more sensitive and prone to faster aging. An attempt has been made to synthesize a pack ideal for all skin types. After the synthesis, all the parameters have been calculated in order to meet up the quality standards.
- * To formulate and evaluate a cosmetic preparation poly herbal face pack made From herbal ingredients.
- * Herbal face packs or masks are used to stimulate blood circulation, rejuvenates and help to maintain the elasticity of the skin and remove dirt from skin pores.
- *To moisturize, cleanse, tone and rejuvenate your skin. Masks are designed for each skin and age type.

2. MATERIALS & METHODS

Herbal Ingredients profile

2.1 Multani Mitti

Botanical Name: fuller's earth



Multani mitti helps skin by different ways like diminishing pore sizes, removing blackheads and whiteheads fading freckles, soothing sunburns, cleansing skin, improving blood circulation, complexion, reducing acne and blemishes and gives a glowing effect to a skin as they contain healthy nutrients. Multani mitti is rich magnesium chloride.

Modern uses of fuller's earth include as absorbents for oil, grease, and animal waste (cat litter) and as a carrier for pesticides and fertilizers. Minor uses include filtering, clarifying, and decolorizing; active and inactive ingredient in beauty products; and as a filler in paint, plaster, adhesives, and pharmaceuticals. It also has a number of uses in the film industry and on stage

2. Turmeric:-

Botanical Name: curcuma longa

Family : zingiberaceae

Genus: : curcuma



Turmeric has been used in this preparation due to its blood purifying property and helps in wound healing, because of its antiseptic action. It cures the skin diseases occurring due to blood impurities. It is a very good anti-inflammatory and anti-allergic agent. The phytoconstituents, mainly terpenoids present in it helps to lighten the skin tone. Turmeric delays the signs of aging like wrinkles, improves skin elasticity. It cures pigmentation, uneven skin tone and dull skin.

Turmeric and curcumin have been studied in numerous clinical trials for various human diseases and conditions, with no high-quality evidence of any anti-disease effect or health benefit. There is no scientific evidence that curcumin reduces inflammation, as of 2020. There is weak evidence that turmeric extracts may be beneficial for relieving symptoms of knee osteoarthritis.

3.Sandalwood

Botanical Name: Santalum album

Genus : Santalum



Sandalwood has an anti-tanning and anti-aging property. It also helps skin in many ways like toning effect, emollient, antibacterial properties, cooling astringent property, soothing and healing property.

sandalwood oil in india is widely used in the cosmetic industry. The main source of true sandalwood, *s. Album*, is a protected species, and demand for it cannot be met. Many species of plants are traded as "sandalwood". The genus *santalum* has more than 19 species. Traders often accept oil from closely related species, as well as from unrelated plants such as west indian sandalwood (*amyris balsamifera*) in the family *rutaceae* or bastard sandalwood (*myoporum sandwicense*, *myoporaceae*). However, most woods from these alternative sources lose their aroma within a few months or years. Sandalwood's main components are the two isomers of santalol (about 75%). It is used in aromatherapy and to prepare soaps.

4. Rose Powder :-

Botanical name - Rosa Damascena mill 1 Family - Rosaceae

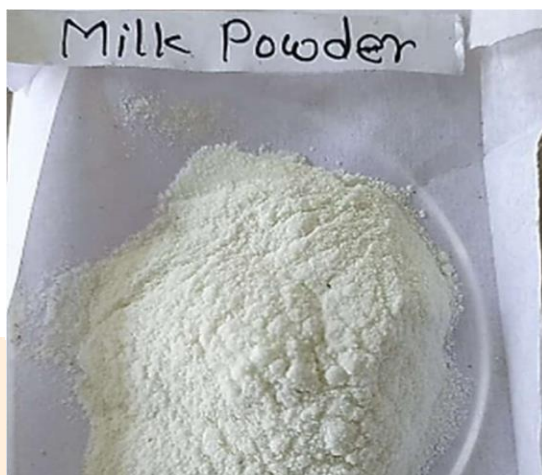
Genus - Rosa 1



Powder made from dried rose petals can be used to treat acne scars, lighten pigmented skin, and even out skin tone. Additionally, you can use this powder to whiten your skin while nourishing it with vitamins C and E. Rose petals also have anti-bacterial properties that can help with acne and outbreaks on the face.

Rose powder can help reduce skin redness, prevent additional swelling, and soothe the discomfort of acne. In medieval Europe, rose powder was used to wash hands at a meal table during feasts. Rose powder is a usual component of perfume. Rose powder ointment is occasionally used as an emollient, and rose powder is sometimes used in cosmetics such as cold creams, toners and face wash. Some people in India also use rose powder as a spray applied directly to the face as a perfume and moisturiser, especially during the winter; it is often sprinkled in Indian weddings to welcome guests.

5. Milk Powder:-



Milk powder is very beneficial for skin, as it provides nourishment for dry, rough skin for the longer duration.

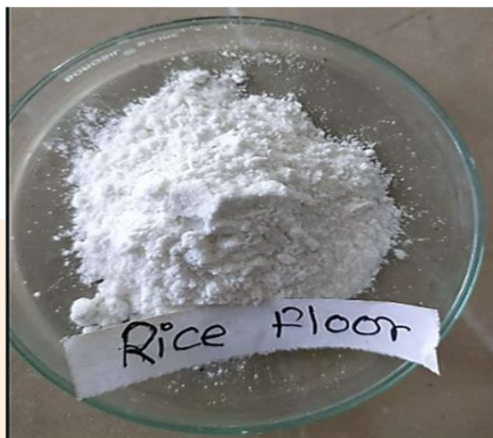
Milk cream either in the form of powdered raw milk or milk as such provides a brilliant shine to skin.

This is beneficial in hydrating the face deeply and makes skin youthful, lustrous and flawless. It bleaches the skin to remove dark spots, pigmentation, acne etc.

This pack also removes blackheads, whiteheads, and other skin imperfections naturally. This facial pack helps in fading sun tan.

6. Rice Flour:-

**Botanical Name - *Oryza sativa* family - Sativa
genus - *Oryza sativa***



Rice flour can be applied to cure some forms of skin ailments. In Indian subcontinent, rice water is duly prescribed by Ayurvedic practitioners as in undigested form. It aids the growth of useful bacteria for normal bowel movements and is an effective ointment to cool off inflamed skin surface.

7. Orange Peel:-

Botanical name - Citrus sinensis family - rutaceae

Genus - citrus



Orange peel is a covering of citrus fruit which contains different nutritional source such as vitamin C, calcium, potassium and magnesium. It prevents the skin from free radical damage, skin hydration and oxidative stress. Also it has instant glow property, prevent acne, blemishes, wrinkles and aging.

Orange peel is the outer, slightly bumpy skin of the orange fruit, along with some of the white pith beneath it. Orange peel is considered a boon for the skin as it treats blackheads, dead cells, acne, and blemishes. It also brightens your face. You can also add milk or curd to get that extra glow or for removing tan

8. Banana Peel:-
botanical name - Musa acuminata family - musacea
genus - musa



Banana peel has both antifungal and antibiotic components.

The natural antibiotic acts against Mycobacterium, Norepinephrine, dopamine, and serotonin are also present in the ripe peel and pulp.

3.Methods of preparation

Sr. No	Constituent	Scientific Name	Percentage
1.	Multani Mitti	Calcium bentonite	15
2.	Turmeric	<i>Curuma longa</i>	15
3.	Sandalwood	<i>Santalum album</i>	10
4.	Rose Powder	<i>Rosa spp</i>	05
5.	Milk Powder	-----	15
6.	Rice flour	<i>Oryza sativa</i>	20
7.	Orange peel	<i>Citrus sinensis</i>	10
8.	Banana peel	<i>Musa acuminata</i>	10



Prepared face pack

Step - 1 all the required herbal powders for the face pack preparation were accurately weighed individually by using digital balance.

Step - 2 The herbal drugs such as multani mitti, turmeric, sandalwood, orange peel, banana peel, rice flour, rose powder, milk powder were transferred to mortar and pestle and triturate.

Step - 3 Previously prepared mixture of herbal powders was transferred to the mixture of fine powders and triturated to obtain uniform drug powder of face pack.

Step - 4 The powders were passed through sieve no.#120-180.

Step - 5 The prepared face pack powder was packed into a self-sealable container, labelled and used for further studies.

3.1 Procedure for application of face pack

The pack should be applied daily on wet face, forming a paste of it in water with optimum thickness. It should be applied evenly on the face with the help of a brush. It should be left for 15 minutes for complete drying. Then it should be removed with the help of a wet sponge

4. Herbal face pack Uses

1. It cleanses the skin removes the dead skin sediments from the pores.
2. Glow up also caters a highly effective blood purification and antiallergic treatment.
3. It reduces Pimples, Acne, white heads, Black heads and blemishes.
4. It sucks the excess oil in case of excess oil secretion and reduces dermal manifestation.
5. An herbal face pack is used to rejuvenate the muscles, maintain the elasticity of the skin, remove adhered dirt particles and improve the blood circulation.
6. The benefits of herbal based cosmetics are their nontoxic nature.
7. This face pack supplies vital nourishment to the skin.

5. Precautions to be taken while applying face pack:-

- Select the face pack according to your skin type. If you have any serious skin concerns, take opinion of natural therapist or concerned skin expert before applying face pack.

- The face pack should not be left on face more than 15 to 20minutes. Keeping for very long time may result in formation of wrinkles, sagging of skin and enlargement of open pores.
- Apply face pack once in a week.

- Don't try to peel or scratch the dried face pack.

- Do not scrub face vigorously. This may result in eruption of pimples and dark spots.

- Avoid applying face pack near "eye zone". The skin around eye is very delicate. The process of removing face pack may damage the sensitive skin around eyes.

- Stay away from heat when you have applied face pack

- This may harm underlying skin. Spray water (which is at room temperature) on face before removing dried face pack. After removing the mask roll an ice cube on facial skin. This helps to close open pores and tightens skin. It also tones and sooths the skin

6. Evaluation of Face pack

Morphological Evaluation

It refers to the evaluation of the herbal face pack by its color, odor, appearance, texture etc. The external characters of the formulation were examined based on the method described by Siddiqui *et al.*

Physicochemical evaluation

Physicochemical parameters were determined, including the determination of extractive value, ash value, pH and moisture content.

Physical evaluation:-

The particle size was tested by microscopy method. The flow property of the dried powder of combined form was evaluated by performing Angle of Repose by funnel method, bulk density and tapped density by Tapping Method.

Irritancy test:-

Mark an area (1sq.cm) on the left-hand dorsal surface. Definite quantities of prepared face packs were applied to the specified area and time was noted. Irritancy, erythematic, edema, was checked if any for regular intervals up to 24 hrs and reported.

Stability studies.

Stability testing of prepared formulation was conducted by storing at different temperature conditions for the period of one month. The packed glass vials of formulation stored at different temperature conditions like, room temperature and 40°C and were evaluated for physical parameters like color, odour, pH, consistency and feel.

Sr.no	Parameter	Observation
1.	Colour	Pale Yellow
2.	Odour	Pleasant
3.	Appearance	Smooth Fine
4.	Texture	Fine
5.	Smoothness	Smooth

7. Result and Discussion

Following evaluation parameters were performed to ensure superiority of prepared face pack.

Morphological Evaluation

Herbal face pack was evaluated for morphological parameters showed in the **Table**. The colour of formulation was pale yellow.

The odour of prepared formulations was pleasant and good acceptable which is desirable to cosmetic formulations.

Texture and smoothness was acceptable as per requirement of cosmetic formulations.

Morphological Evaluation

Physicochemical Evaluation

Herbal face pack was evaluated for physicochemical parameters showed in the **Table**.

The pH of formulation was found close to neutral. The ash content and moisture content was within limit. The particle size of formulations was found in the range of $24.3 \pm 2.5 \mu\text{m}$.

Physicochemical Evaluation

Sr.no	Parameter	Observation
1.	Ph	6.92
2.	Loss of drying	2.9
3.	Ash content	89 ± 0.352
4.	Particle Size(UM)	24.3 ± 2.5

Irritancy Test

The results of irritancy test were shown in **Table**.

The formulation showed absence of irritation, redness and swelling during irritancy studies. This formulation have safe to use on skin.

Sr. No.	Parameter	Observation

1.	Irritation	No
2.	Redness	No
3.	swelling	No

Stability Studies

The results of stability were shown in **Table** . No change in color, odour, texture and smoothness was observed at mentioned conditions of stability except pH. The stability studies showed a slight change in pH of formulation at 40⁰C

Stability Test

Sr .no	Parameter	Room Temp.	40°C.
1.	Colour	No change	No change
2.	Odour	No change	No change
3.	Ph	6.92 ± 0.12	6.87 ± 0.13
4.	Texture	Fine	Fine
5.	Smoothness	Smooth	smooth

8. Conclusion

Natural remedies are more acceptable in the belief that they are safer with fewer side effects than the synthetic ones. Herbal formulations have growing demand in the world market. Herbal face packs are used to stimulate blood circulation, rejuvenate the muscles and help to maintain the elasticity of the skin and remove dirt from skin pores. It is a our good attempt to formulate the herbal face pack containing natural herbal ingredients such as multani mitti, turmeric, sandal wood, saffron, milk powder, rice flour, orange peel and banana peel.

After evaluation, we found good properties for the face packs, free from skin irritation and maintained its consistency even after stability storage conditions. It has been revealed that herbal face pack having enough potential to give efficient glowing effect on skin. The overall study is useful to substantiate product claims due its useful benefits on the human beings.

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