Formulation And Evaluation of Herbal Face Pack for Glowing Skin

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Abstract- Herbal products are largely prepared in the current time. From herbal preparation gets good responses. The objective of this work is to formulate and evaluate a cosmetic herbal face pack for glowing skin by using natural ingredients with varying concentrations, four different formulations containing ingredients such as Turmeric, red sandal wood, orange peel, alovera, hibiscus rose, multani mitti, ashwagandha, neem, nutmeg, rise flour, besan flour are purchased in the local market in the form dried powder. Each of powdered natural ingredients were sieved using #120 mesh, weighed accurately and mixed geometrical for uniform formulation and then evaluated for parameters including morphological, physicochemical, physical, phytochemical, irritancy along with stability examination. This face pack is used for the glowing the skin and remove the ance and black heads and pimples. Majority of the cosmetic products available in market are of artificial origin and causes a lot of side effects when used for longer period of time. single of the solutions for this problem is use of herbal cosmetics.

Keywords: Skin, Herbal face pack, Turmeric, Aloe vera, Evaluation and formulation

INTRODUCTION

Since ancient times, people have known how to use plants to meet the needs of healthy and beautiful skin. Cosmetics are products used to clean, beautify and improve physical appearance (1). The skin of the face is an important part of the body and is a mirror of a person's health. Cosmetics are designed to be used to cleanse, beautify, enhance the attractiveness of the human body and/or change the natural of the skin. Dermal cosmetics form the epidermis or outer layer of the skin without affecting the physiological properties of the skin. These representatives are regularly combined in different forms or types to enhance the

beauty of the skin. In general, cosmetics are used to prevent and glowing skin(2,3). Ace packs are fine powders or pastes with smooth texture that should be applied to facial skin and allowed to dry for a few minutes, leaving a film that can be easily removed with water. Daily use of the face mask provides exfoliation, removes dry and dead skin, provides soothing, cooling, moisturizing and nourishing effects and, depending on the formula, provides firming, skin strengthening and also helps remove dirt and oil from the skin without actually destroying it. Change the soreness of your skin. Normal physiological functions of the skin. (4,5) All these effects lead to skin rejuvenation, which is the purpose of cosmetics. Use herbal masks according to needs, uses and different skin types. Herbal face mask containing natural ingredients helps reduce acne, redness, pimples, wrinkles and dark circles. Such preparations will also help keep the skin fair while promoting skin nourishing and soothing effects. (5,6,7) (8, 9, 10). Flour sacks are an important value-adding addition. Different types of herbal masks are suitable for different skin types. These packages are available in a variety of shapes and forms and are further divided into the following categories:(11)

- 1. Plastic Masks: Wax-based, latex-based, or vinylbased
- 2. Hydrocolloid Mask: Gel Mask (ready for use)
- 3. Argillaceous Masks: Clay-based or earth-based (ready for use or dry powder).

Benefits of using a facial pack:

It beneficial for the skin. Fruits for face provide important nutrients to the skin. Due to its medicinal ingredients, it helps reduce acne, pimples, scars and scars. Face masks made from Turmeric, Sandal wood, hibiscus and multani Mitti it help to the glowing for skin. Masks recommended for acne, pimples and blackheads generally control sebum in the sebaceous glands and destroy harmful bacteria in the wound. Reduce scars and scars on your skin by adding red sandals, floral and orange lenses, and acne masks. Regular use of facial mask can make the face glow and improve the beauty and tone of the skin. It helps prevent premature aging of the skin. Wrinkles, fine lines and thin skin can be effectively controlled using a beauty mask. Facial mask makes skin beautiful and healthy. (12)

Materials and methods

The research article deals with the evalution and formulation of herbal face pack by using the glowing skin. They are used in the natural ingredients such as the turmeric, Aloe vera, Turmeric, hibiscus rose, rose water, Sandal wood, Coffee, Curd and Honey.

Ingredients of formulation 1.Turmeric Botanical Name: Curcuma Longa Family: Zingiberaceae Genus: Curcuma



Fig No: 1

Uses: Turmeric has anti-allergic and antiinflammatory activity. Turmeric is used in this preparation due to its blood purifying properties and helps wound healing due to its antibacterial effect. It treats skin diseases caused by foreign substances in the blood. It is used only to rejuvenate the skin. It may delay signs of aging such as wrinkles, and there is also weak evidence that turmeric extract may help reduce symptoms of knee osteoarthritis. They are provide a youthful glow to the skin. (13) 2.Multani mitti Botanical Name : Calcium benotide Family: Montmorillonite



Fig No: 2

Uses: Multani mitti helps the skin in various ways such as reducing the size of pores, removing blackheads and fading white spots, cooling sunscreen, cleansing the skin, improving blood circulation, color, reducing acne and blemishes and giving a radiant effect to the skin as it contains healthy nutrients. Multani mitti is rich magnesium chloride. They are the smoothing and giving the glowing effect to skin.(14)

3. sandal wood:Botanical Name: Pterocarpus santalinusFamily: FabaceaeGenus: Pterocarpus santalinus



Fig No: 3

Uses: Sandalwood has a moisturizing and anti-aging properties. It also helps the skin in many ways such as toning effect, emollient, antibacterial properties, astringent properties, cooling and therapeutic properties. (15) There are many advantages of using sandalwood on the skin. It nourishes our skin and keeps it healthy, fair and glowing. Red sandalwood is also considered as a savior for dull, lifeless skin.

4. Aloe vera

Botanical Name: Aloe Barbadensis Miller Family: Aloaceae Genus: Aloe



Fig No: 4

Uses: Aloe vera is an excellent moisturizer made for the skin. Aloe vera rejuvenates the skin, hydrates this and keeps the skin layer looking fresh all the time. It's A Great Skin Burn Treatment. It Also Helps To Speed Up Skin Cell Reproduction As Much As Eight Times. Aloe Vera Is Also Known To Penetrate the Epidermis, I.E., The Outer Layer Of The Skin Faster Than Water. Aloe vera gel is used commercially as an ingredient in yogurts, beverages, and some desserts,but at high or prolonged doses, ingesting aloe latex or whole leaf extract can be toxic. Use of topical aloe vera in small amounts is likely to be safe.

5.Hibiscus Rosa Sinesis Botanical Name: Hibiscus rosa-sinensis Family: Malvaceae Genus: Hibiscus



Fig No: 5

Uses: Lastly, Hibiscus has a naturally high mucilage content, a sticky substance produced by plants that help with the storage of water and food. Mucilage makes a fantastic natural skin moisturiser that is gentle on sensitive skin. This high mucilage content of Hibiscus enhances the skin's ability to retain moisture, which is a key factor in retaining a youthful complexion.

6. Rose WaterBotanical Name: Rosa Damascena Mill L.Family: RosaceaeGenus: Rosa L.



Fig No: 6

Uses: Rose Water Can Help Reduce Skin Redness, Prevent Additional Swelling, And Soothe The Discomfort Of Acne. In medieval Europe, rose water was used to wash hands at a meal table during feasts. Rose water is a usual component of perfume.

7. Coffee Botanical Name: Coffea arabica Family: Rubiaceae Genus: Coffee



Fig No: 7

Uses: coffee they are used to reduce the inflammation and reduce the ance and decreases the dark circles and glowing for the skin.

8. Curd

Botanical Name: Lactobacillus



Fig No: 8 Uses: Curd are used in moisture and booster the skin elasticity. To treat remove the ance.

9. Honey Botanical Name : Apis mellifera Family : Apidae Genu: Apis Linnaeus



Fig No: 9

Uses : Protects against pollution. Honey is rich in antioxidants and works against pollutants in the environment. Moisturises well. Honey is a naturally nourishing and moisturising agent.

Method Of Preparation Formulation Of Herbal Face Pack :

All the required herbal powders for the face pack preparation were accurately weighed individually by using digital balance.

Table 1: Composition of Herbal Face Pack

Sr. No.	Ingredients	Scientific Name	Quantity
1.	Turmeric	Curcuma Longa	1gm
2.	Multani mitti	Calcium benotide	4 gm
3.	sandal wood	Pterocarpus santalinus	4gm
4.	Aloe vera	Aloe Barbadensis	3 gm
5.	Hibiscus Rosa Sinesis	Hibiscus rosa- sinensis	4 gm
6.	Rose Water	Rosa Damascena	Q.S.
7.	Curd	Lactobacillus	1 gm
8.	coffee	Coffea arabica	2 gm
9.	Honey	Apis mellifera	1 gm

Procedure for application of face pack :

The pack should be applied daily on wet face, \triangleright forming a paste of it in water with optimum thickness. It should be applied evenly 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 wet sponge.



Fig No: 10 Prepared Face Pack

Evaluation of face pack:

To evaluate the goodness of our prepared face pack we performed following parameter.

Morphological assessment: View the face based on physical characteristics such as color, smell, appearance and texture. Determination of moisture: Weigh approximately 2 grams of face powder into a fine bowl, dry in a desiccator in a hot oven and heat at 100° C - 105° C until the mixing difference between two consecutive readings is greater than 0.5. mg. Cool in a desiccator and weigh; weight loss is usually recorded as moisture. (21,22,23)

Phytochemical evaluation: A method for evaluating aqueous extracts of herbal masks for the presence of different phytoconstituents according to the following criteria.

Irritation test: Mark an area (1 cm²) on the back left side. Apply a certain amount of mask to the selected area and record the time. Check and report regularly for itching, redness, edema for up to 24 hours.

Stability test: Stability test of the face mask is done by keeping it at different temperature for one month. Glass vials were stored at different temperatures such as room temperature and 400°C, and physical parameters such as color, odor, pH, consistency, and tenderness were evaluated.

Spread ability Test: Spread ability was determined by an apparatus suggested by fabricated in- house. The apparatus consist of a wooden block with a fixed glass slide and movable glass slide with one end tied to weight pan rolled on the pulley, which was

in the horizontal level with fixed slide. The spread ability of the formulated gel was measured on the basis of 'Slip and Drag' characteristics of gel. An excess of gel (about 2g) under study was placed on this ground slide. The gel was then sandwiched between two slides. One kg weight was placed on the top of the two slides for 5 min to excel air and to provide a uniform film of the gel between the slides. Excess of the gel was scrapped off from the edges. The top plate was then subjected to pull off 50 gm. Mix with the help of string attached to the hook and the time(T, in seconds) required by the top slide to move a distance of 7.5 cm be noted. A shorter interval indicated better spread ability.



Fig No:11

Rheological Evaluation: It involved evaluation of powder characteristics. The sample was subjected for evaluation by various physical parameters like angle of repose, bulk density, tapped density.

A. Angle of Repose: The required amount of sample was allowed to drop down from the funnel mounted at the height of 6 cm, the height and radius of the heap was recorded for further calculations. Angle of repose (θ) can be calculated by using following formula:

Angle of repose $(\theta) = \tan \theta$

Where,

- θ Angle of repose
- h Height of the heap
- r Radius of the base

Table No: 2

Flow Property	Angle Of Repose
Excellent	25-30
Good	31-35
Fair-aid not needed	36-40
Passable- may hang up	41-45
Poor-must agitate, vibrate	46-55
Very poor	56-65
Very, very poor	>66

B.Bulk Density: It is calculated by the ratio of given mass of powder and its bulk volume. Determined by transferring 25 gm of accurately weighed amount of powder sample to the graduated cylinder. Bulk density = Mass/Volume

C.Tapped density: It is measured by transferring a known quantity (10 gm) of powder sample into a graduated cylinder. The initial volume of sample in measuring cylinder was recorded and it was placed on tapped density determining apparatus to give subsequent tapping to the measuring cylinder containing sample continuously for a period of 10-15 min. Tapped density was determined as ratio of mass of powder and tapped volume which is calculated by following formula:



IR Spectra For Caffeine

Above mention spectra clearly shows the presence of caffeine in a given spectra there is a presence of some peaks like, ketone and some amino group. Confirms the presence of caffeine in significant ratio.

RESULT AND DISCUSSION

1. Morphological Evaluation:

Herbal face pack was evaluated for morphological parameters showed in the Table No 3

Table No : 3

Sr. No	Parameter	Observation
1.	Colour	Brown
2.	Odour	Pleasant
3.	Appearance	Smooth
4.	Texture	Fine
5.	Smoothness	Smooth

Observation

The Result Of Evaluation Are Displayed In Table Form Of Organoleptic And Physico-Chemical And General Face pack Evaluation. The Study Of Nature, Colour, Odor, Texture, Of Face pack Combined Form Under Investigation Provided The Important Features Of Organoleptic And Physico-Chemical Evaluation, Irritancy Test And Sperad ability Test. 1. Physico-chemical Evaluation:

Herbal face pack was evaluated for physic chemical parameters showed in the Table No 4

Tabl	le N	Vo	:4
I abi	le r	NO	:4

Sr. No	Parameter	Observation
1.	Tabbed density	0.80 g/Ml
2.	Bulk density	0.58 g/Ml
3.	Angle of repose	32^{0}
4.	Carres Index	7.5%
5.	Hansion ratio	1.37

Observation

Physico-Chemical Evaluation Justified The Flow Properties Of The Face pack As It Was Found To Be Free Flowing And Non-Sticky In Nature. The Results Proved That The Formulation Was Stable In All Aspects.

Irritancy Test

Table No: 5

Sr. No	Parameter	Obseration
1.	Irritant	No Irrittion
2.	Erythema	No Irritation
3.	Edema	No irritation

CONCLUSION

The turmeric, sandal wood, and aloe vera are essential ingredients for radiant skin. Natural treatments are becoming more accepted because they are believed to be safer and have fewer side effects than synthetic treatments. There is a growing demand for herbal preparations in the commercial world. Herbal facial treatments are used to promote blood circulation, rejuvenate muscles, help maintain skin elasticity, and clear dirt from skin pores. Currently, people need a way to treat various skin problems without side effects. Herbal ingredients gave the way for cosmetics without causing harm. Herbal facial treatments are considered a good and effective way to improve your skin. Therefore, in the present study, it is a good initiative to create herbal facial treatments containing natural ingredients such as Multani mitti, turmeric, aloe vera, sandalwood, coffee, neem and coconut.

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