



Formulation And Evaluation Of Inhouse Preparation Of Herbal Cosmetics Face Packs.

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ABSTRACT:

An eco- friendly product has been the primary agenda of 21st century of the global scientists. Herbal cosmetics have growing demand in the global market. The aim of present work is to In-house preparation, development and evaluation of herbal cosmetics face pack using various natural powders for glowing skin by using natural Ingredients. The natural powders used are shade dried commercial turmeric, rice flour, gram flour, rose powder, tomato powder, orange peel powder. Sandalwood powder, milk powder, camphor powder were purchased from local market in the form of dried powder, all powdered natural ingredients were sieved using #120 mesh, weighed accurately and mixed geometrically for uniform formulation and then evaluated for parameters including morphological, physicochemical, physical, phytochemical, irritancy along with stability examination. Thus, 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.

Keywords: Skin, Herbal face pack, Formulation, Evaluation.

INTRODUCTION:

Herbal cosmetics are the preparations, which represent cosmetics associated with bioactive ingredient or pharmaceutical. The use of Phytochemical from a variety of botanicals have dual functions

i) They serve as cosmetics for the care of body and its parts and ii) The presence of botanical ingredients influence biological function of skin and provide nutrients necessary for the healthy skin. The herbal cosmetics formulation is a sophisticated and sensitive technological profile because it retains the bioactivity of the botanicals during excessive processing and ascertains their availability after application on skin. It is desirable that manufacturers should ensure the quality of products through systematic testing at their level.

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.[4] 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. [5] 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. Face packs are used to increase the fairness and smoothness of the skin. It reduces wrinkles, pimples, acne and dark circles of the skin. [6] 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

Benefits of Applying Face pack:

1. Nourishes the skin, fruit face packs supply essential nutrients to the skin.
2. Face pack which is recommended for acne, pimple, black heads, usually control the over discharge of sebum from sebaceous glands and remove the harmful bacteria inside acne lesion.
3. The scars and marks of skin can be reduced by adding fine powder of sandal, rose petals and orange lentils with acne face pack.
 - a. Face packs usually remove dead cells of the skin.
4. These face packs and masks provide soothing and relaxing effects on the skin.
5. They help to restore the lost shine and glow of skin in short span of time.
6. Regular use of natural face packs brings a glow to the skin, improve skin texture and complexion.
7. The harmful effects of pollution and harsh elements can be effectively combated with judicious use of face pack.
8. They help to prevent premature aging of the skin.
9. Formulation of wrinkles, fine lines and sagging of skin can be effectively controlled by using natural face packs.
10. Natural face packs make the skin look young and healthy.

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Precautions to be taken while applying for face and body :

1. Select the face pack according to your skin type. Take the opinion of a natural therapist or concerned skin expert before applying a face pack.
2. The face pack should not be left on the face more than 15 to 20 min. Keeping for very long time may result in the formation of wrinkles, sagging skin and enlargement of open pores.
3. Apply face pack once in a week.
4. Don't try to peel or scratch the dried face packs this may harm underlying skin. Spray water (which is at room temperature) on the 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 soothes the skin.
5. Do not scrub face vigorously. This may result in the eruption of pimple and dark spots.
6. Stay away from heat when you have applied a face pack.
7. Avoid applying face pack near "eye zone". The skin around the eye is very delicate. The process of removing face pack may damage the skin around eyes.

Preparation of Natural Powders:

1. Preparation of Turmeric Powder:

Turmeric rhizome are collected and dried under sunlight. Later turmeric rhizomes are grind to make a fine powder and sieved. 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 skindiseases 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.



Figure 1: Turmeric Powder

2. Preparation of Rice flour:

Required quantity of rice taken and soaked in water for at least 2hrs. Drain water completely and rinse again and the spread the raw rice on a soft cloth and allow it to dry for 30-45 mins. It will be slightly moist only and few rice will stick to your hands when touch. This is the perfect stage then transfers this to a mixer or grinder. Grind to a fine powder transfer to sieve. Sieve it well until get a coarse mixture powder.



Figure 2: Rice flour

3. Preparation of Orange peels Powder:

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 oxidativestress. Also it has instant glow property, prevent acne, blemishes, wrinkles and aging



Figure 3: Orange peel powder

collect fresh sweet oranges. The fruits were washed, weighed, peeled by using knife and were cut into small pieces (10 to 20 mm), after that they were washed using hot water at 90°C for 5 min. After that peel surface moisture was removed, then it was followed by solar tunnel drying. After dried, peel were grinded mixer jar or coffee grinder to make a fine powder.

3. Multani Mitti

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.



Figure 4: Multani mitti

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 suntan.



Figure 5: Milk Powder

SR.NO	Ingredients	Amount in gms	Activity
1.	Turmeric powder	10 gm	Anti-aging agent
2.	Rice flour	10 gm	Vitamin B
3.	Orange peel powder	10 gm	Complexion
4.	Multani mitti	10 gm	Binder
5.	Milk powder	10 gm	Hydration

Table 1: Composition of Herbal face pack

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

❖ 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.

❖ 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.

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

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.

S. No	Parameter	Observation
1.	Color	Pale yellow
2.	Odour	Pleasant
3.	Appearance	Smooth, fine
4.	Texture	fine
5.	Smoothness	smooth

Table 2: Morphological Evaluation

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

Table 3: Irritancy Test Physicochemical Evaluation

Herbal face pack was evaluated for physicochemical parameters showed in the

Table 4.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 $24.3 \pm 2.5 \mu\text{m}$.

Sr. No	Parameter	Observation
1.	pH	6.92
2.	Loss on Drying	2.9
3.	Ash content	89 ± 0.352
4.	Particle size (μm)	24.3 ± 2.5

Table 4: Physicochemical Evaluation

Antimicrobial evaluation:

Formulation was tested for antibacterial activity against test organisms namely *Staphylococcus aureus* and *Propioni bacterium* acnes were obtained from the Pharmaceutical Biotechnology lab. In this method, nutrient agar plates and reinforced clostridial agar (RCA) were seeded with 100 micro liter standardized bacterial suspension. After optimization of dose, 200 mg of formulation was mixed with distilled water and poured into the wells. Standard conditions and antibacterial activity was evaluated by measuring the diameter of Zones of inhibition (mm) including cupsize. The experiments were repeated three times.

Antimicrobial evaluation			
SR.N O.	<i>Staphylococcus Propioni bacterium</i>	<i>aureus</i>	acne
1.	Clindamycin	12	13
2.	Herbal Face Pack	08	08

Table 5. Antimicrobial evaluation Antimicrobial evaluation

Stability Studies

The results of stability were shown in **Table 5**. 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 40°C.

S. No	Parameter	Room temperature	40°C
1.	Color	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

Table 6.: Stability Test

CONCLUSION:

Natural and home remedies are widely acceptable in the belief that they are safer with fewer side effects than the synthetic materials. Herbal face packs are used to stimulate blood circulation, rejuvenate the muscle and help to maintain the elasticity of the skin and remove dirt from skin pores. Herbal cosmetics advantages are nontoxic nature, reduce the allergic reaction. This face pack is beneficial, economical, and passed all evaluation parameters.

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.

REFERENCES:

1. Kapoor VP, Herbal Cosmetics for skin and Hair care Indian Journal of Natural Products and Resources, Aug 2005; 4:306-314.
2. Saxena R, Pal Y, Pranaywal In-House Preparation and standardization of Herbal face pack. the open Dermatology Journal. 2017; 11:72-80.
3. Yadav N And Yadav R, Preparation and evaluation of Herbal face pack International Journal of Recent Scientific Research 2015; 6(6):4334-4337.
4. Pathashala. MHRD Govt. of India. An MHRD Project under its National mission on education through ICT (NME-ICT).
5. Saraf S, Saraf S. Cosmetics a Practical manual, Pharma med Press, 2nd edition, 2005; 126-129.
6. Mieloch M, Witulska M, Evaluation of skin colouring properties of Curcuma longa extract. Int. J Pharm Sci 2014; 76(4):374-8.
7. Bhat KV, Balasundaran M, Balagopalan M, Identification of Santalum album and Osyris lanceolata through morphological and biochemical characteristics and molecular markers to check adulteration (Final Report of the project KFRI 509/06)
8. Umadevi M, Puspha R, Sampath kumar KP, Bhowmik D. Rice-traditional medicinal plant in India. Journal of Pharmacognosy and Phytochemistry 2012; 1(1):6-12.
9. Bhat KV, Balasundaran M, Balagopalan M, Identification of Santalum album and Osyris lanceolata through morphological and biochemical characteristics and molecular markers to check adulteration (Final Report of the project KFRI 509/06).
10. Kokate CK, Purohit AP, Gokhale SB. Textbook of Pharmacognosy 49th ed. 20 Sinha N. K. Beauty and Skin Benefits of Milk Powder: Milk Powder Home Made Facial Mask Recipes, available from <http://nutankumarsinha.expertscolumn.com/article/10-beauty-and-skin-benefits-milk-powder-home-made-facial-mask-r-2017>.
11. Umadevi M, Pushpa R, Sampathkumar KP, Bhowmik D. Rice-traditional medicinal plant in India. Journal of Pharmacognosy and Phytochemistry. 2012 May 1; 1(1):6-12.
12. Himaja N, Ashok Kumar A, Bhart Kumar B. Preparation and Evaluation of Poly Herbal Fruit Face Mask. J Res Pharm Sci 2015; 2(11): 07-13.
13. Kumar KS, Bhowmik D, Duraivel S, Umadevi M. Traditional and medicinal uses of banana. Journal of Pharmacognosy and Phytochemistry. 2012 Sep 1; 1(3):51-63.

14. Farheen B, Mohammad I. Design and Development of Unani Face Pack for Skincare. *European J Pharm Med Res* 2016; 3(12): 627-632.
15. Siddhiqi MA. Format for the pharmacopoeial analytical standards of compound formulation, workshop on standardization of Unani drugs, Central Council for Research in Unani Medicine 1995. New Delhi. 1995.
16. World Health Organisation. Pharmaceuticals Unit: Quality control methods for medicinal plant materials: 1992: Available from: <http://www.who.int/iris/handle/10665/63096>.
17. Banchhor M, Ashawat MS, Saraf S. Herbal cosmetics: Trends in Skin Care Formulation. *Pharmacogn Reviews* 2009; 3(5): 82-89.
18. Khandelwal KR. Practical Pharmacognosy 12th ed. 2004.

