

Research Article

Formulation and Evaluation of Herbal Face Pack

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ARTICLE INFO

Article history:
Received: 29/01/2022;
Revised: 25/02/2022;
and 30-03/2022;
Accepted: 08/04/2022.

Key Words:
Herbal cosmetics,
synthetic chemicals,
organoleptic
parameters.

Please cite this
article as:
Suryavanshi, K.A., et
al.
Formulation and
Evaluation of Herbal
Face Pack.
4(2), 050-054.

ABSTRACT

The important objective of this work is to evaluate and formulate herbal face pack for glowing and healthy skin by using herbal ingredients. Herbal cosmetics have been growing demand in the World Market. There are wide range of herbal cosmetics and herbal face pack is one of them. The demand and uses of herbal products are increasing day by days. The natural herbal face pack influences the function of skin and provides nutrients necessary for the healthy skin. And nowadays most women prefer natural products over chemicals one for their skin care to enhance their beauty. And herbal products provide satisfaction as these are free from synthetic chemicals. By using natural herbal face pack it cure various skin ailments. In these work natural herbal ingredients like Gram flour, Bajari flour, Charcoal powder, Arjuna powder, Multanimitti, Alovera powder. All these ingredients are in the form of dried powder. All natural powder ingredients were sieved. By using Sieve No: 180. All these herbal natural ingredients were weighed accurately and then all were mixed for uniform formulation and evaluated by using different parameters like Organoleptic, physiochemical, irritancy and stability. The combined form of dried powder had passable flow property and it is suitable for herbal face pack. Thus in the present work we formulated herbal face pack which is made from easily available ingredients. Herbal face pack are non-toxic in nature and nourishes the facial skin and it helps to circulation of blood and help to maintain the elasticity of skin and helps remove dirt. Thus in this work we had concluded good properties for the herbal face pack and further optimization studies are required on this study to find the useful and important benefits of herbal face pack on human cosmetic products.

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INTRODUCTION

Natural remedies are mostly used by the people in the belief that they are safer and do not have any side effects, than synthetic ones. The herb used in cosmetics formulation possesses antioxidant, anti-inflammatory, antibacterial and antiseptic properties Ashawat MS, et al (2009). Herbal formulations have more demand in the market. It is nontoxic in nature. It is used for nourishing the facial skin. Herbal face pack can be applied daily without any side effects. And now days everyone wants to get fair and good looking. But dark circle, Dark spots, Pimples are common. By using various chemical

products like face pack, face scrub the skin become Dark or pimple may come. So to avoid all these problems the herbal face pack is the best remedies. It is safe and to use. As compare to other face packs flooded in the market, Natural and herbal cosmetics are safest to use and effective also. It is suitable for all skin types. It is easily available. Herbal face pack helps women to get rid of wrinkles, pimples, acne. There are many benefits of herbal face pack by using them according to our skin type. Herbal face pack increases fairness and glow.

Herbal face packs having properties like nourishing, healing, cleansing, astringent and antiseptic. Herbal face packs are rich in vital vitamins. Herbal face packs make the skin to look young and healthy. An herbal face pack helps to improve skin texture and remove dead cells of skin (K.G Bhutkar & M. Shah, 2019).

MATERIALS AND METHODS

All herbal and natural ingredients are used in the present study i.e, Gram flour, Bajari flour, Charcoal powder, Arjuna powder, Lemon peel powder, Nutmeg, Manjishta, Multani Mitti, Turmeric, Aloe-vera powder. All these natural and herbal ingredients were purchased from local market Nashik in dried powder form and were authenticated at SMBT Institute of Diploma Pharmacy Dhamangaon, Nashik, India.

Ingredients of Formulation

Gram flour

Gram flour has been used as absorbing the excess oil and used for cleansing the skin. And it helps to keep the PH levels of skin in balanced. The zinc in besan has been used to fight against infectious that causes acne on face. It is used to treat acne.

Bajari flour

Bajari flour has been used as for Glowing the skin. It helps to getting rid of dead skin cells. It helps to fight against infection on face. It helps in anti-ageing.

Charcoal powder

Charcoal powder is used in face pack for clean the pores of the skin. And it helps to clear bacteria and dirt. It is used for cleaning acne and blackheads, lightening blemishes and to reduce oil from face skin.

Arjuna powder

Arjuna powder is used to prevent from skin damage. It is used to prevent skin from aging. It is also helps in the formulation of new skin cells, hydrates the skin and improves the skin elasticity.

Lemon peel powder

Lemon peel powders are good for treating the acne and pimples. It also helps to remove dark spots caused by sun tanning. It helps to keep the pores clean. It helps to reduce the skin problems like blackheads and whiteheads.

Nutmeg powder

Nutmeg is used as a toning cleanser. It is used in the treatment of oily skin .It helps to reduce pigmentation, discoloration on face.

Manjishta

Manjishta helps in the managing of skin diseases like acne and infection on face. It helps to reduce dark spots.

MultaniMitti

Multani mittiis used as natural cleanser. It I used for reducing oil and fight against acne. It helps to remove blackheads and whiteheads. It improves blood circulation and gives tightening effect.

Turmeric

Turmeric is used for glowing skin. It has boosts healing properties. It is used to reduce acne. It is used for various skin diseases. It is used as anti-inflammatory agent.

Aloe Vera powder

Aloevera has antioxidant properties. It has been used for healing the skin. It Improves elasticity of the skin. It is used as moisturizer. It hydrates the skin. It has anti-microbial property. It keeps skin fresh all the time.

Method of preparation

Five different formulations were prepared with different concentration of all ingredients named as F1 to F5. Concentration of each ingredient has mentioned in Table1.The natural ingredients in dried form were sieved using #180 mesh, weighed accurately and mixed for uniform formulation. This formulation was then stored in an air tight container. Then the evaluation of various parameters was performed to ensure quality of prepared face pack.

Table 1: Formulation and Composition of Herbal face pack.

Name of Ingredients	Scientific Name	Quantity of Sample for 100g				
		F1	F2	F3	F4	F5
Gram flour	<i>Cicer arietinum</i>	15	15	20	15	15
Bajari flour	<i>Pennisetum glaucum</i>	10	10	10	10	15
Charcoal powder	<i>Tremaorientalis</i>	5	5	5	5	10
Arjuna powder	<i>Terminalia arjuna</i>	5	10	5	5	5
Lemon Peel powder	<i>Citrus limon</i>	15	15	15	15	15
Nutmeg	<i>Myristica fragrans</i>	10	10	10	5	5
Manjishta	<i>Rubia cordifolia</i>	10	5	5	10	5
MultaniMitti	<i>Calcium bentonite</i>	10	10	10	10	10
Turmeric	<i>Curuma longa</i>	10	10	10	15	10
Aloevera powder	<i>Aloe barbadensis</i>	10	10	10	10	10

Procedure for application of face pack

Take face pack in the bowl as per required quantity and then add rose water, forming a paste with optimum

thickness. It can be applied on face with the help of brush and keep for 15 to 20 minutes for complete

drying, and then use wet sponge or wash with cold water.

Evaluation of face pack

Organoleptic Evaluation

The Parameters of Organoleptic were evaluate by its odour, colour, appearance, texture, feel were evaluated for its physical properties.

Physiochemical evaluation

Physicochemical parameters were evaluated by evaluating of extractive value, ash value, pH and moisture content.

Physical evaluation

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

Phytochemical evaluation

The aqueous extract of the herbal face pack was evaluated to determine the presence of different Phytoconstituents as per the standard procedures.

Irritancy test

Make an area (1sq.cm) on the left-hand dorsal surface and prepared face pack in sufficient quantity was

applied to the specified area and the time was noted. Irritancy, erythematic, edema, was checked.

Stability studies

Stability testing of prepared herbal face pack formulation was conducted for formulation F3 by storing it at different temperature conditions. And then it is stored for the period at different temperature conditions for one month. It is stored in packed glass container of formulation at different temperature like room temperature and 40°C and then they were evaluated for physical parameters like colour, odour, pH, consistency and feel.

RESULT AND DISCUSSION

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

Organoleptic Evaluation

Herbal face pack was evaluated for organoleptic parameters showed in the **Table 2**. The colour of prepared herbal natural formulation was Greenish Yellow. The odor of prepared herbal formulation was pleasant. Texture and smoothness was acceptable as it was per requirement of cosmetic formulation.

Table 2: Organoleptic Evaluation.

Parameters	Observation				
	F1	F2	F3	F4	F5
Apperance	Fine, Powder	Fine, Powder	Fine, Powder	Fine, Powder	Fine, Powder
Colour	Greenish Yellow	Greenish Yellow	Greenish Yellow	Greenish Yellow	Greenish Black
Odour	Pleasant	Pleasant	Pleasant	Pleasant	Pleasant
Texture	Fine	Fine	Fine	Fine	Fine
Smoothness	Smooth	Smooth	Smooth	Smooth	Smooth

Physicochemical Evaluation

Herbal face pack was evaluated for physicochemical parameters showed in the **Table 3**.The pH of the herbal formulation was found near to neutral. The ash content

and moisture content was in limit. The particle size of the herbal formulation was found in the range of 23.3±2.4µm

Table 3: Physicochemical Evaluation of Herbal formulations

Parameters	Observation				
	F1	F2	F3	F4	F5
Particle Size(µm)	22.3±2.4	24.4±2.5	22.3±2.3	24.5±2.5	24.3±2.5
Ash content	88±0.556	89±0.352	87±0.859	90±0.732	93±0.462
Loss On Drying	3.2±0.2	3.34±0.72	3.1±0.18	3.33±0.2	3.37±0.35
PH	6.68±0.6	6.78±0.16	6.66±0.1	6.78±0.7	6.79±0.1

Phytochemical Evaluation

Herbal face pack was evaluated for phytochemical parameters that are shown in the **Table 4**. In this

formulation the presence of Phytoconstituents such as carbohydrates, glycosides, tannins and volatile oil were found and they act as good nourished for skin.

Table 4: Phytochemical Evaluation of Herbal formulation

Phytoconstituents	Observation				
	F1	F2	F3	F4	F5
Carbohydrates	+	+	+	+	+
Alkaloids	+	+	+	+	+
Glycoside	+	+	+	+	+
Tannins	+	+	+	+	+
Volatile Oil	+	+	+	+	+

Physical Evaluation

Herbal face pack was evaluated for physical parameters shown in **Table 5**. The flow properties of natural herbal

face pack was found to be free-flowing and it was non-sticky in nature.

Table 5: Evaluation of flow properties

Parameters	Observation				
	F1	F2	F3	F4	F5
Tapped density	0.48gm/ml	0.50gm/ml	0.48gm/ml	0.50gm/ml	0.50gm/ml
Bulk density	0.40gm/ml	0.40gm/ml	0.40gm/ml	0.40gm/ml	0.40gm/ml
Angle of repose	32.68°	34.61°	32.61°	33.66°	34.40°
Hausner's ratio	1.2	1.25	1.2	1.25	1.25
Carr's index	16%	20%	16%	20%	20%

Irritancy Test

The results of irritancy test shown in **Table 6**. The herbal formulation showed in table has absence of irritation,

redness and swelling during irritancy studies. It is Safe for use on face.

Table 6: Irritancy Test

Parameter	Observation				
	F1	F2	F3	F4	F5
Irritation	No	yes	No	No	No
Redness	yes	No	No	No	yes
Swelling	No	No	No	yes	yes

Stability studies

As from irritation study data it was found that F3 formulation shows no irritation, redness and swelling when applied and therefore F3 formulation was considered for stability studies. The results of stability

test shown in **Table 7**. No color change, odour, texture smoothness was observed of different condition of stability except pH. The stability studies show slight change in pH of formulation at 40°C.

Table 7: Stability Test

Parameter	Observation (Formulation F3)	
	Room temperature	40°C
Colour	No Change	No Change
Odour	No Change	No Change
Ph	6.66±0.1	6.55±0.13
Texture	Fine	Fine
Smoothness	Smooth	Smooth

CONCLUSION

In present people need cure for various skin problems without any side effects. Herbal Natural Ingredients are

safer than marketed or synthetic ones. Herbal natural face pack can be applied on skin without any side effects. In the present work, It is a very good attempt to formulate the natural herbal face pack containing naturally available ingredients like Gram flour, Bajari flour, Charcoal powder, Arjuna powder, Lemon peel powder, Nutmeg, Manjishta, Multani mitti, Turmeric, Aloe-vera powder. After evaluation of face pack we found that it is free from skin irritation. It has been concluded that herbal face pack give effective glowing effect to skin. In the overall study found that it is useful to substantiate product and has useful benefits on human beings.

CONFLICT OF INTEREST

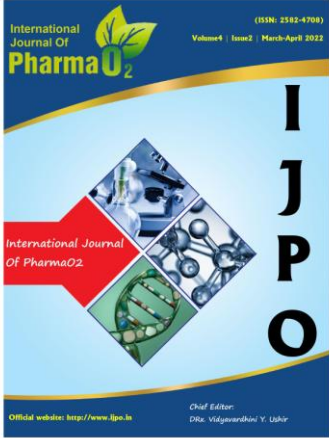
The authors declare no conflict of interest.

ACKNOWLEDGEMENT

The author is thankful to the SMBT Institute of Diploma Pharmacy, Nashik for providing all the necessary facilities for the successful completion of this work.

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