IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

FORMULATION AND EVALUATION OF ANTI-AGEING HERBAL POWDER FACE PACK

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ABSTRACT

The aim of this project is to formulate a cosmetic face pack which contain various herbal ingredients that are aloevera powder, neem powder, orange peel powder, sandal wood powder, giloy powder in dry form. The various parameters that were used to evaluate the preparation of the face pack are organoleptic properties, partical size, moisture contain, stability, etc. Face pack is a type of mask that can help maintain the skin's elasticity and remove dirt from it. It can also help stimulate the blood circulation and improve the appearance of skin.

KEYWORDS: Face pack, antiageing, cosmetic, ayurvedic treatment.

INTRODUCTION

Herbal face packs improve skin's radiance and smoothness. We can get the most out of herbal face packs if we use them appropriately for our skin type. These face packs improve skin radiance and are the most effective ayurvedic treatment for increasing fairness. Face packs are one of the most ancient and attractive ways to cleanse the skin. face packs is helps to feeding, healing, cleansing, astringent, antiseptic effects and antiageing effect.

Herbs have been used for cleansing, beautification, and management since antiquity. Cosmetics are described as products that are used to cleanse, beautify, promote attractiveness, or change the appearance of a person. Smooth, vibrant, and silky skin can be achieved with homemade natural face packs and masks.

AIM AND OBJECTIVE

Aim: Formulation and Evaluation of Antiageing Herbal Powder Face Pack.

Objective:

1. Face packs are used to remove dead skin cells.
2. Using natural face masks on a regular basis will give your skin a healthy glow and improve the texture and appearance of your skin.
3. They aid in the prevention of premature skin ageing
4. Using natural face products can effectively control the formation of wrinkles, finelines, and sagging skin.
5. The soothing and relaxing properties of these face masks are beneficial to the skin.

DRUG PROFILE

1.**Orange Peel:** The botanical name of orange peel is **citrus sinesis** (sweet orange) and **Citrus aurantium (**bitter orange). Family of orange peel is **Rutaceae**. The active constituents present in orange peel is Limonene (90%), Citral (4%), Pectin, Vitamin C,Octanal (39%),Decanal (42%), Monoterpene (91%) and2.5% Volatile oil.

2. **Sandalwood:** The botanical name of sandalwood is **Santalum album.** Family of sandalwood is **Santalaceae**. Active constituents present in sandalwood are sandalwood oil contains more than 90% sesquiterpenic alcohols of which 50–60% is the tricyclic α-santalol. β-Santalol comprises 20–25%.

3.Neem: The botanical name of neem is **Azadirachtaindica**. The family of neem is **Meliaceae**. Active constituents present in neem is Azadirachtinhes the four best Limonoids compounds are azadirachtin, salannin, meliantriol, and nimbin. limonoids .

4.**Aloe:** The Botanical name of aloe is **aloe barbadensis**. Family name of aloe is **Asphodelaceae** (Liliaceae). The active constituents of Aloe vera contains more than 75 different compounds, including vitamins (vitamin A, C, E, and B12), minerals (i.e., zinc, copper, selenium, and calcium).

5.**Giloy:** The botanical name of giloy is **Tinospora cordifolia**. Family of giloy is **Menispermaceae**. Active constituents present in giloy is giloin, diterpenoid lactones, tinosporic acid are also present in giloy. Alkaloids are found in the stem and root. Giloy show the antiageing property.

MATERIAL AND MATHOD

Ingredients : Orange peel powder, sandalwood powder, neem powder, aloe powder, giloy powder

Equipment : Mortar pestle, weighing balance, sieve (#120), spatula.

FORMULATAION PROCEDURE

Table1. Formulation Table

Sr .No	Ingredients	F1	F2
1	Orange peel powder	3 gm	4 gm
2	Sandalwood powder	5 gm	6 gm
3	Neem powder	6 gm	3.5 gm
4	Aloe powder	3.5 gm	3 gm
5	Giloy powder	2.5 gm	3.5 gm

Fig.1 Ingredients in powder form

PROCEDURE FOR PREPARATION OF FACE PACK

1.Weigh the required quantity of orange peel powder, giloy powder, sandalwood powder, neem powder and aloe powder.

2.Then, all the powder ingredients are pass through the sieve no. #120.

3.The fine powder is passing through the sieve. Then, for uniform mixing, all of the ingredients.

4. Combine all the ingredients by using the serial dilution method.
5. The face pack was transfer in a self-sealing polyethylene bag, tagged, and used for further.

PROCEDURE FOR DEVELOPMENT OF FORMULATION FOR APPLICATION

Take the prepared face pack powder in a mixing dish and add rose water to combine. Mix thoroughly and apply to the face. Allow for thorough drying for 20 to 25 minutes before washing with cold water.

Fig.2 Facepack Formulation(F1)

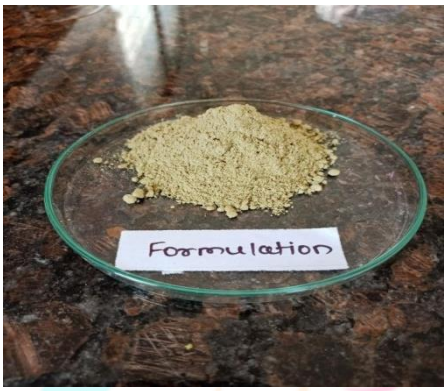

Fig.3 Facepack Formulation(F2)

EVALUATION TEST FOR FACE PACK

1. **Organoleptic Paramenters:** Physical parameters such as nature, colour, odour, and texture were checked visually

2. **Determination of moisture content:**
Weigh about 1.5 gm of the powdered drug into a weighed flat and thin porcelain dish. Dry at 100°C or 105°C in the oven until two successive weighing differ by no more than 0.5 mg. Allow to cool in desiccators before weighing. Moisture is frequently reported as a loss of weight. [18]

3. **Particle size :**Particle size is a parameter, which affect various properties like spread ability, grittiness etc., particle size was determined by sieving method by using I.P. Standard sieves by mechanical shaking for 10 min

4. **Angle of repose:** It is defined as the maximum angle possible in between the surface of pile of powder to the horizontal flow.
Open - ended cylinder method
It required amount of dried powder is placed in a cylindrical tube open at both ends is placed on a horizontal surface. Then the funnel should be raised to form a heap. The height and radius of the heap is noted and recorded. For the above method, the angleof repose (θ) can be calculated by using the formula.

$\theta = \tan^{-1}(h / r)$

Where,

θ – Angle of repose,
h – Height of the heap,

r – Radius of the base

5. **Bulk Density:**
Bulk Density is the ratio between the given mass of a powder and its bulk volume. Required amount of the powder is dried and

filled in a 50 ml measuring cylinder up to50 ml mark. Then the cylinder is dropped onto a hard wood surface from a height of 1inch at 2 second intervals. The volume of the powder is measured. Then the powder isweighed. This is repeated to get average values. The Bulk Density is calculated by using the below given formula.

Bulk Density = $Mass\ Of\ Powder / Bulk\ Volume\ Of\ Powder$

6.**Tapped Density:** Tapped density is an increased bulk density attained after mechanically tapping a container containing the powder sample. After observing the initial powder volume ormass, the measuring cylinder or vessel is mechanically tapped for 1 min and volumeor mass readings are taken until little further volume or mass change was observed. It was expressed in grams per cubic centimeter (g/cm^3).

Tapped Density = $Mass\ Of\ Powder / Bulk\ Volume\ Of\ Powder$

7.**pH :** The pH of formulated herbal face pack was determined by using pH meter. 1gm of face pack powder was dissolved in 100ml of distilled water and measured its pH in pH meter.

8.**Washability:** The formulation were applied on the skin and then ease and extent of washing with water were checked manually by using 1 liter of water is used to remove all content of the formulation were applied on the surface.**RESULT AND DISCUSSION**

1.ORGANOLEPTIC EVALUATION

Table 2 Organoleptic Evaluation

Sr. No	Evalution parameter	F1	F2
1	Nature	Powder	Powder
2	Odour	Pleasant	Pleasant
3	Colour	Yellowish	Yellowish
4	Texture	Fine	Fine

2.GENERAL CHARACTERISTICS

Table 3 General Characteristics

Sr. No	Evalution parameter	F1	F2
1	Particle size	25 – 30	28 – 32
2	Angle of Repose	18	21
3	Bulk density	0.6	0.5
4	Tapped density	0.27	0.35

3.OTHER PARAMETERS

Table 4 Parameters

Sr. No	Evalution parameter	F1	F2
1	pH	7.3	6.7
2	Moisture content	0.52	0.32
3	Washability	Easily washable	Easily washable
4	Nature of face afterwash	Soft and clean	Soft and clean

The herbal face pack show the effect due to their non-toxic nature, they can be used safely and effectively. In the present study, we have found that the face packs exhibited good properties. The formulation F2 was show the best result. F2 formulation show the less moisture content because of low moisture content the possibility of the microbial growth was less.

CONCLUSION

Herbal face pack is used to stimulate blood circulation, rejuvenates those muscles and help to maintain the elasticity of the skin and remove dirt from skin pores. It is a very good attempt to establish the herbal face pack containing different powders of plants. Herbal face pack show the less moisture content in formulation thus the microbial growth of bacteria chances is less. The giloy show the antiageing property. Thus in the present work, we found good properties for the face packs and further optimization studies are required study to find the useful benefits of face packs on human.

ACKNOWLEDGMENT

The authors are thankful to my teachers the Mrs. Madhuri Sonawane, Miss. Vidya Kale Assistant Professor of Yashodeep Institute Of Pharmacy, Aurangabad for guidance and also thanks to friend Miss. Payal Chinchpure for help.

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