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## Formulation and Evaluation of Anti-acne Herbal Face Pack by using Red Lentils and Bael leaves

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## ABSTRACT

Herbal formulations have growing demand in the world market. The present work deals with the development and evaluation of the herbal anti-acne face pack containing dried powder of Bael leaves, Papaya, Turmeric, Masoor Daal (Red Lentils), Gram flour. The plants have been reported in the literature having good antimicrobial, Anti-oxidant and anti-inflammatory activity. Face Pack were prepared and evaluated for various parameters like colour, appearance, consistency, washability, pH, total ash, acid insoluble ash, particle size.

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.

Keywords: Bael leaves, Papaya, Turmeric, Masoor Daal (Red Lentils), Gram flour.

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## **INTRODUCTION**

Acne vulgaris is an extremely common disorder of the skin (pilocebaceous unit) that affects virtually all individuals at least once during life red lentils, commonly known as masoor dal, is not only good for weight loss, but also for your skin.<sup>[1]</sup> Masoor dal comes loaded with vitamin C, iron, calcium, vitamin B-6, and magnesium. And these nutrient-loaded red lentils are an amazing natural remedy to keep skin troubles at bay. Active constituents Leaves contain Alkaloids, Mermesinin, Rutin, Phenylethyl Cinnamides, Anhydromarmeline, and Aegelinosides Sterols, and Essential oils. Aegelenine, Aegeline, Aegelinosides A, Aegelinosides B, Dictamine, Ethyl cinnamamide, Ethyl cinnamate, Fragrine, Halfordinol, Imperatorin, Isoimperatorin, Marmelide, Marmelosin, Marmesin, Marmin. The incidence of acne peaks of teenage, but substantial numbers of men and women between 20-30 years of age are also affected by the disorder.<sup>[2]</sup> Acne may be classified as comedonal, papular, pustular, cystic and nodular. Comedonal acne is non-inflammatory and divided into two types: whiteheads and blackheads. White heads (closed comedo) present as fresh or white colored, raised bumps whereas blackhead (open comedo) present as open pores containing dark colored skin roughage consisting of melanin, sebum and follicular cells. The natural face pack contain some vital vitamins that are required for the health and glow of our skin. These subsatances also prove to be beneficial for our skin in many ways.<sup>[3]</sup> Natural face pack are less complicated and pretty simple to use. They help us in looking after skin and also prove its worthiness by increasing the circulation of the blood within the veins of the face. Effects of the face pack are generally temporary and for the regular glow it should be used 2-3 times a week.

In Ayurveda, the herbal paste is called as 'mukha lepa' used for as a facial therapy. this herbal paste smeared on face to treat acne, pimple, scars, marks and pigments. Herbal face packs are cheaper and have no side effect for getting fair skin naturally Herbal cosmetics are the products which are used to purify and beautify the skin.<sup>[4]</sup> The main advantage of using herbal cosmetics is that it is pure and does not have any side effects on human body Face pack is the smooth powder which is used for facial application.<sup>[5]</sup> These preparations are applied on the face in the form of liquid or pastes and allowed to dry and set to form film giving tightening, strengthening and cleansing effect to the skin. They are usually left on the skin for ten to twenty-five minutes to allow all the water to evaporate, the resulting film thus contracts and hardens and can easily be removed.<sup>[6]</sup> The warmth and tightening effect produced by application of face pack produces the stimulating sensation of a rejuvenated face, while the colloidal and adsorption clays used in these preparations remove the dirt and grease from the skin of the face.<sup>[7]</sup> When the applied face pack is eventually removed skin debris and deposited dirt gets removed with it.<sup>[8]</sup>

#### **Benefits of applying Face Pack**

Face pack usually remove dead cells of skin.

These face pack provide a soothing and relaxing effect.<sup>[9]</sup>

Regular use of natural face pack bring glow to skin, improve skin texture and complexion.

The harmful effects of pollution and harsh climates can be effectively combated with judicial use of face pack.<sup>[10]</sup>

They help to prevent premature aging of skin.

Formation of wrinkles, fine lines and sagging of skin can be effectively controlled by using natural face masks.

Red Lentil: Exfoliates and cleanses.<sup>[11]</sup>

Bael Leaves: Antibacterial and anti-inflammatory properties.

Turmeric: Antimicrobial and anti-inflammatory.

Papaya: Contains papain enzyme which exfoliates and cleanses.

Gram Flour: Cleanses and exfoliates.<sup>[12]</sup>

Aloe Vera: Deeply moisturizes the skin

#### Precautions

The face pack is used according to your type.<sup>[13]</sup>

Concerned to the skin expert before use of any natural therapy on face.

Maximum 15-20 minutes stay on face and after that wash the face and completely remove the medicaments.<sup>[14]</sup>

When you are applied face pack on face then the face should be completely dried.

Do not scrub vigorously.

Avoid applying face pack near "eye zone" because the skin around eye is very fragile. The process of removing face pack may damage skin around the eyes.<sup>[15]</sup>

#### Ideal Characteristic of face pack

It should be non-irritating and nontoxic.<sup>[16]</sup>

It should be stable both physically and chemically.

It should be free from gritty particles.

It should have pleasant odour.<sup>[17]</sup>

## MATERIALS AND METHOD

Ingredients	Role	
Red Lentils	Cleanser	
Turmeric	Antimicrobial, Antiseptic	
Bael Leaves	Antifungal, Antiseptic	
Gramflour	Cleanser	
Alovera	Antibacterial, Antifungal	
Papaya	Antioxident, Bleaching agent	
Rose Water	Antibacterial	
	Red Lentils Turmeric Bael Leaves Gramflour Alovera Papaya	

Table No.1: Ingredients and Their role for herbal face pack

#### FORMULATION OF HERBAL FACE PACK

**Step 1:** All the required herbal powders for the face pack preparation were accurately weighed individually by using digital balance. The quantity and compositions are listed.

**Step 2.** The herbal drugs such as Bael leaves, Gram flour, Papaya leaves, were transferred to mortar and pestle and triturated.

**Step 3.** Herbal drugs such as all ingredients triturated in a separate mortar and pestle to form a uniform fine mixture.

**Step 4.** 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 5. The powders were passed through sieve no 44.

**Step 6.** The prepared face pack powder was packed into container, labelled and used for further studies. Procedure of face pack application.

Take prepared face pack powder in a bowl as per the requirement and add rose water. Mix well to form a paste with optimum thickness. It should be applied evenly on the face with the help of a brush. Cover the acne and blemishes spots. Keep as it is for complete dryness for 20-25 minutes. Then it should be washed with cold water Formulation of face pack.



## **Fig.1: Formulation of Herbal Face pack**

Sr.no	Ingradiants	Quantity		
	Ingredients	<b>F1</b>	F2	<b>F3</b>
1	Red Lentils	10gm	10gm	10gm
2	Turmeric	4gm	5gm	6gm
3	Bael Leaves	10gm	10gm	10gm
4	Gram flour	7gm	10gm	10gm
5	Рарауа	9gm	5gm	4gm
6	Aloe vera	Q. S.	Q. S	Q. S.
7	Rose Water	Q. S.	Q.S.	Q. S.

 Table No.2.: Formulation Table of Herbal Face pack

## **EVALUATION TEST OF FACE PACK**

#### **Organoleptic evaluation**

Physical Evaluation Formulated herbal creams was further <sup>[18.]</sup> Evaluated by using the following physical parameter physical parameter colour, odour, consistency, and state.

Sr.no	Parameter	F1	F2	<b>F3</b>
1	Colour	Greenish	Greenish	Greenish
2	Odour	Pleasant	Pleasant	Pleasant
3	Appearance	Smooth	Smooth	Smooth
4	Texture	Fine	Fine	Fine
5	Smoothness	Good	Good	Good

 Table No.3.: Organoleptic evaluation

#### **Physico-chemical test**

Herbal face pack was evaluated for physiochemical parameters. The pH of the formulation was found to be 6. The moisture content was within limit.

Sr.no	Parameter	Observation		
		F1	F2	<b>F3</b>
1	рН	5.31	6.75	5.65
2	Total ash value	2.30%	2.06%	2.79%
3	Alcohol soluble	12.67%	13.6%	12.99%
4	Water soluble	1.88%	1.48%	1.17%
5	Moisture content	10.67%	11.34%	10.91%

#### **Irritancy test**

#### Table No.4: Physico-chemical test

The prepared herbal face was subjected for irritancy test and the results. The herbal face pack formulation doesn't show any sigh of irritation, redness and swelling during irritancy studies.

Sr.no	Parameter	Observation
1	Irritation	No
2	Redness	No
3	Swelling	No

**Table No.5: Irritancy test** 

#### Washability

Formulation was applied on the skin and then ease extends of washing with water was checked.

Sr.no	Formulation	Washability
1	F1	Easily washable
2	F2	Easily washable
3	F3	Easily washable

#### Table No.6.: Washability



#### Figure No.2: Herbal anti-acne Face Pack

#### RESULT

Sr.no	Parameter	Observation
1	Colour	Greenish
2	Odour	Pleasant
3	Appearance	Smooth
4	Texture	Fine
5	Smoothness	Good
6	рН	6.75
7	Total Ash value	2.06%
8	Moisture content	11.34%
9	Washability	Easily washable
10	Irritancy	No

 Table No.7: Evaluation Parameter

## DISCUSSION

Preparation and Evolution of Anti Acne Herbal Face pack by using red lentils, Beal leaves Papaya powder, Turmeric, Gram flour, Aloe Vera, Rose Water, in that 3 different formulations F1, F2, F3 are prepared and evaluated. According to evaluation test the 3 formulations were compared. Evaluation test confirmed that the formulation F2 is more stable and good than the other.

## CONCLUSION

Herbal formulations are more acceptable in the belief that they are safer with less side effects than the synthetic ones. Herbs have growing demand in the world market. It is a very good attempt to establish the herbal anti-acne face pack containing different powders of materials. Thus, in the present work found good properties for the face pack on human use as cosmetic product. Formulation showed good antimicrobial activity when compared to other and the results of formulation was very nearer compared to standard drug which clearly indicates that the prepared formulate face pack best suits for skin as cosmetic.

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