



# FORMULATION AND EVALUATION OF HERBAL FACE PACK

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## ABSTRACT

The idea that natural medicines are safer and have fewer negative effects than synthetic ones makes them more acceptable. The demand for herbal formulations is rising on the global market. This project's goal is to create and assess a polyherbal face pack that uses herbal substances as cosmetic ingredients. The goal of this effort is to create and assess a polyherbal face pack using herbal constituents for cosmetic use. The following ingredients were purchased from the neighbourhood market: lemon grass, Multani mitti, Sandalwood powder, Turmeric powder, and Rose powder. They were then dried, powdered, passed through sieve number 80, mixed geometrically, and evaluated for their organoleptic and physico-chemical, general powder, microscopical characteristics, and chemical evaluation. This project aims to create and assess a cosmetic herbal face pack for healthy-looking skin utilising natural components. Four distinct formulations incorporating components like Lemon grass, Multani mitti, Sandalwood powder, Turmeric powder, and Rose powder. were created with differing quantities. The creation and assessment of a herbal anti-acne face pack are the topics of the current study.

The usage of herbal face packs or masks helps to retain the flexibility of the skin, promote blood flow, and purge pores of impurities. The development of a herbal face mask with various plant powders is a really impressive effort. Herbal cosmetics have the benefit of being non-toxic, reducing allergic responses, and using components that have been proven effective through time. Herbal cosmetics have the benefit of being nontoxic, reducing allergy responses, and using numerous components that have been used for a long time. As a result, the face packs in the current work have good qualities, and additional optimisation research on this study are needed to discover the practical advantages of face packs for human usage as cosmetics. The plants' potent antibacterial, antioxidant, and anti-inflammatory properties have been documented in the literature. As a result, we discovered that face packs had good qualities in the current work, and additional research is needed to figure out how face packs may benefit humans and be used as cosmetics.

**Key Words:** Cosmetic, Face Pack, Natura, Formulation, Evaluation.

## INTRODUCTION:

Everyone aspires to have beautiful skin that is fair. Acne, black heads, pimples, and dark circles are now very frequent among young people and those who have the condition. According to Ayurveda, blood impurities are typically the cause of skin issues. Skin-related disorders are brought on by toxins that have built up in the blood due to poor diet and lifestyle choices. In Ayurveda, many plants and medications are specified for purifying the blood. Acne, black heads, pimples, and dark circles are now very frequent among young people and those who have the condition. According to Ayurveda, blood impurities are typically the cause of skin issues. Skin-related disorders are brought on by toxins that have accumulated in the blood due to poor diet and lifestyle choices. In Ayurveda, many plants and medications are specified for purifying the blood. Blood purifier herbs include Manjistha, Lodhra, Chandana, Haridra, etc. Everyone aspires to have beautiful skin that is fair. Acne, black heads, pimples, and dark circles are now very frequent among young people and those who have the condition. According to Ayurveda, blood impurities are typically the cause of skin issues. Skin-related disorders are brought on by toxins that have built up in the blood due to poor diet and lifestyle choices. There are several types of acne, including comedonal, popular, pustular, cystic, and nodular. Whiteheads and blackheads are the two forms of comedonal acne, which is not inflamed.

Women who have wrinkles, dark bags under their eyes, pimples, or acne can get rid of them with the use of the ayurvedic face packs. The fairness and smoothness of the skin are improved by herbal face packs. By applying herbal face packs in accordance with the needs of our skin, we may maximise their advantages. These face packs improve skin radiance and are the greatest ayurvedic remedy for boosting fairness. One of the most traditional and attractive ways to cleanse the skin is using face packs. Women who have wrinkles, dark bags under their eyes, pimples, or acne can get rid of them with the use of the ayurvedic face packs. The fairness and smoothness of the skin are improved by herbal face packs. By applying herbal face packs in accordance with the needs of our skin, we may maximise their advantages. These face packs improve skin radiance and are the greatest ayurvedic remedy for boosting fairness. The fairness and smoothness of the skin are improved by herbal face packs. By applying herbal face packs in accordance with the needs of our skin, we may maximise their advantages. The greatest ayurvedic therapy to promote fairness is ayurvedic face packs, which make the skin glow. Face packs with ingredients like lemongrass powder, multani mitti, turmeric powder, sandalwood powder, rose powder, rose water are beneficial for skin disorders that need to be prevented, promoted, or treated.

Ayurveda describes a variety of face packs with nourishing, healing, cleansing, astringent, and antiseptic effects. Herbs have been used for management, cleansing, and beauty since the beginning of time. Cosmetics are items that are used to clean, beautify, make someone look more appealing, or change their appearance. Smooth, vibrant, and silky skin are made possible by homemade natural face packs and masks. Ayurvedic face packs are used to minimise wrinkles, zits, acne, and dark circles. These ingredients provide several benefits for our skin as well. Natural face packs are easier to use and less complex. They assist us in caring for our skin and demonstrate its value by promoting blood flow via the face's veins. The face pack should be used two to three times a week for the consistent glow because its effects are typically transient.

## Benefits of Applying Face Pack :

1. They aid in preventing early skin ageing.
2. Face packs often remove skin's dead cells.
3. Enhances skin's elasticity.
4. Reduces the visibility of wrinkles and fine lines.
5. Enhances the appearance of breakouts.
6. Moisturises and hydrates dry skin.
7. Tightens up wide pores.
8. They quickly assist in restoring the skin's lost radiance and lustre.
9. Natural face packs provide skin a youthful, healthy appearance.
10. Wise use of face packs can successfully counteract the negative effects of pollutants and severe weather.

## MATERIAL AND METHODS:

### Material :

The study's ingredients were bought from a local market, dried, and powdered for later use. The information on the plants used to make the face pack is provided below.

1. **Lemon Grass:** Lemongrass is a natural toner that tightens and firms skin while also reducing pore size. Lemongrass is a fantastic astringent because of its special antifungal, antibacterial, and antiseptic qualities. To combat *Acne vulgaris*, the acne-causing bacterium, these actions must be combined. It also contains vitamin C .



2. **Multani Mitti :** Our skin benefits from the natural cleansing, astringent, acne-fighting, sebum-controlling, and skin-rejuvenating properties of multani mitti. This is why it, along with key skin care items like face wash and moisturising moisturiser, should be a part of any skin care routine.



3. **Sandalwood Powder:** Sandalwood may soothe inflammatory skin diseases including eczema, dermatitis, and psoriasis in the form of oil or powder. It can also calm sensitive skin and reduce outbreaks. It is acknowledged in Ayurvedic traditions to ease the pitta dosha, indicating that it possesses cooling effects.



4. **Turmeric Powder:** The first benefit of turmeric is that it stops skin cells from collecting and blocking pores. It may successfully halt the growth of germs that cause acne since it is antiseptic and antibacterial. Additionally, by relaxing previously irritated regions, its anti-inflammatory qualities accelerate recovery.



5. **Rose Powder:** Rose powder is packed with antioxidants to help regenerate skin tissues and delay the signs of aging. The antioxidants neutralize free radicals that quicken the appearance of wrinkles, fine lines, and freckles. The antioxidants in rose strengthen skin against environmental elements by creating a barrier for your skin.



6. **Rose water:** Since rose water has been used as a cosmetic for hundreds of years, it should come as no surprise that it helps lighten skin redness and enhance complexion. The antimicrobial qualities might lessen acne. The anti-inflammatory effects can lessen skin inflammation and blotchiness.



**METHOD OF PREPARATION:** The ingredient concentrations are shown in the table below. The components were weighed precisely and then ground into a fine powder using Sieve #120. The next step was to blend all the materials equally by serial dilution. The resulting face pack was then labelled, sealed, and utilised for future study.

**Table : Formulation of Face Pack:**

Sr No.	Ingredients	Quantity
1	Lemon Grass Powder	5 gm
2	Multani Mitti	8 gm
3	Sandalwood Powder	3 gm
4	Turmeric Powder	2 gm
5	Rose Powder	2 gm
6	Rose water	Qs

#### Mixing:

With the use of a mixer, all of these fine ingredients—Lemon grass, Multani mitti, Sandalwood powder, Turmeric powder, and Rose Powder—were fully combined to create a fine powder.

#### Sieving:

After combining, all elements for fine powder were run through sieve no. 80 to get the necessary amount of extra fine powder.

#### Collection and Storage:

The powder combination was gathered, stored in an appropriate plastic container, and utilised for performing assessment criteria.

#### How to use?

1. Prepare the following powders: Rose powder, Sandalwood powder, Turmeric powder, Lemon grass powder, and Multani mitti powder.
2. Combine all of the powder according to the recipe.
3. Create the paste by combining the final herb combination with either rosewater or water.
4. Locally apply paste to the face.
5. Use clean water to wash your face.

## Evaluation of Formulations:

### Organoleptic evaluation:

Physical characteristics including colour, shape, and texture were evaluated. Colour and texture were assessed using touch and vision, respectively. A group of five people who are sensitive to odours was chosen to evaluate odours.

### Physicochemical Evaluation:

#### 1. pH:

a typical pH metre with one or two electrodes is employed. The instrument must be calibrated initially with the proper buffer solution at pH 7.4 and 9.2. The pH of the test sample, which is a 10 percent (m/v) dispersion of either kind of product in previously cooked and cooled water, must be calculated without any dilution within 5 to 10 minutes.

#### 2. Washability:

Formula was applied to the skin before physical inspection of the ease and depth of water washing.

#### 3. Ash value:

To assess the inorganic components that are typical for a plant, the ash value is computed. A face pack weighing about 2 grammes was placed in a glass crucible dish that had already been lit and weighed. By steadily raising the heat, the temperature was raised without reaching a crimson hue. Ash is cooled and weighed after it has burned completely.

#### 4. Bulk Density:

When powder is put in a container, bulk density is calculated by dividing its mass by the volume of the area under its top surface. The volume that includes both the spaces between the component particles and the voids inside the particles is referred to as the bulk density.

#### 5. Tapped Density:

The powder sample was contained in a container that was mechanically tapped to enhance the bulk density, which is known as the tapped density. Mechanically tapping a graduated measuring cylinder or vessel containing the powder sample yields the tapped density.

#### 6. Skin irritation Test:-

The SkinEthic Skin Irritation Test A specific number of ready-made face packs were applied to the chosen area, and the application period was noted. For up to 24 hours, Irritation, Redness, and Swelling were tracked and reported at regular intervals. The photo-irritation (sun present) was checked every 15 minutes. It is an in vitro method based on a model of the repaired human epidermis with the same name. The model is constructed of typical human keratinocytes that were cultured on an inert polycarbonate filter for 17 days at the air-liquid interface.

#### 7. Eye Irritation Tes:-

The Eye Irritation Test (EIT) was developed to particularly identify compounds that do not need to be categorised or labelled as agents that might seriously irritate or harm the eyes. Over a period of 4 seconds on average, the rabbit's eyes were watched for signs of increasing injury, and particular intervals were recorded to monitor how the damage developed.



## RESULTS AND DISCUSSION

For the evaluation of general powder, physico-chemical powder, and organoleptic powder, the findings are shown in Table. The significant element of organoleptic and physicochemical assessment was supplied by the inquiry into the nature, colour, aroma, taste, texture, ash values, and pH of dried powders in mixed form. For preformulation investigations, the formulation was characterised for its chemical assessment, general powder, microscopical characteristics, and organoleptic and physico-chemical characteristics. The significant element of organoleptic and physico-chemical assessment was supplied by the examination of the nature, colour, odour, taste, texture, ash values, moisture content, and pH of the dry powders in combination form under research.

**Table for Evaluation of Face Pack:**

Sr No.	Evaluation parameters	Observations
<b>A</b>	<b>Organoleptic evaluation</b>	
1	Nature (appearance)	Powder
2	Colour	Yellow
3	Odour	Slight
4	Taste	Characteristic
5	Texture	Fine
<b>B</b>	<b>Physicochemical Evaluation</b>	
6	Total ash	0.732
7	pH	7
<b>C</b>	<b>General Powder Characteristics</b>	
8	Particle size	0.180mm
9	Bulk density	0.4gm/ml
10	Tapped density	0.67gm/ml
11	Angle of repose	49.72
<b>D</b>	<b>Evaluation Tests</b>	
12	Washability	Easily washable
13	Irritancy test	No irritation
14	Redness	No redness occur
15	Swelling	No swelling occur
14	Nature of face after wash	Soft and fresh, Clean from dirt

**CONCLUSION:**

The perception that herbal formulations are safer and have fewer adverse effects than synthetic ones makes them more acceptable. The demand for herbs is rising on the global market. Establishing a herbal anti-acne face pack with various powdered elements is a really nice effort. The formulation of a herbal face pack using readily accessible components like lemongrass powder, multani mitti, turmeric powder, sandalwood powder, rose powder and rose water is a really nice attempt in the current study. It is hypothesised that the created formulation had the properties of a typical cosmeceuticals formulation for skincare and was physicochemically and microbiologically stable.

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