

A REVIEW ON: HERBAL ALOE VERA SHEET MASK

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ABSTRACT:

For thousands of years, people have utilised the cactus-like plant aloe vera for traditional medical uses. Aloe leaves can be divided into two main products: the latex, which is a bitter yellow liquid that is found beneath the leaf's epidermis, and the gel, which is a tasteless, colourless substance that is found inside the leaf. Both of them include a multitude of physiologically active substances, primarily polysaccharides and anthraquinones (acemannan being the most active), which can function alone or in concert. Research from scientific investigations supports the use of aloe vera as a flavouring in food and cosmetic products like toothpaste and moisturisers. Compounds or preservatives used in both human and animal medicine as well as fresh goods. Because of its properties on wound healing, immunity, antidiabetic, antioxidant, laxative, antibacterial, antifungal, antiviral, and anticancer, aloe vera appears to cure a wide range of illnesses. In addition to these uses, it can also be incorporated into the animal's diet to optimise its advantages. The aim of this study is to determine the impact of including aloe vera extract into mask formulation and to determine the optimal mask formula. The amount of aloe vera extract added to the aloe vera mask formulation. The primary goal of the project was to create a herbal aloe vera sheet mask that would enhance hydration, relieve dry skin, and analyse the skin's natural radiance. Aloe vera was developed and tested as a moisturiser for the skin.

Keyword :Anti-inflammatory, anti-oxidant, hydration, acne fight, anti-pollution, moisturising of skin.

INTRODUCTION

Nowadays, young people have an intense desire for skin that is radiant and brilliant. They all want to appear younger and more appealing than they actually are. Instead of going to a skin specialist or taking medication, they would rather use cosmetics and similar goods at home because they are more expensive and not everyone can afford them. The best part about these aloe vera sheet masks is that the aloe vera helps to make skin soft and glowing, which is a significant need for any age group that is expanding your skin moisturised and nourished at a very reasonable price that is easily accessible in both urban and rural locations. Even skin that is delicate might benefit from these sheet masks.

The biggest organ, the skin acts as a barrier to prevent microorganisms from entering the body. Consequently, maintaining healthy skin is crucial to overall wellbeing. Moreover, it affects people and communication in a psychosocial way. As of yet, there is no accepted classification for the many varieties of facial skin. Helena Rubinstein identified four basic skin types in the 1900s, and the cosmeceutical business has long made use of this knowledge. It appears that the conventional skin type designations, which were based on only a small portion of the skin, were no longer appropriate due to advancements in the field of cosmetic products. In 2008, Leslie Baumann developed a novel method to divide skin into 16 more functional categories and define the skin types

on the face according to certain characteristics. One of the newest and most popular trends in Asia is the sheet mask. In contrast to other mask forms, sheet masks include an occlusive dressing treatment mechanism that provides an excellent penetration and absorption profile, effective and hygienic packing, and no cleaning requirement after use. Its superior sealing ability can enhance the effects of active ingredients in terms of moisturising, whitening, anti-aging, and other aspects. Aloe Vera is a member of the Liliaceae family. People refer to it as quargandale grithkumari. In medical, it's commonly utilised. Aloe vera has been shown to be a crucial component of cosmetics. [1] Aloe Vera is a plant with stemless or very short leaves that grows to a height of around 60 to 100 cm. This plant is referred to as gheekvarand or grithkumari in India. Around the world, tropical and subtropical regions are where it is grown. [2] The Arabic word *alloe*, which means "bitter and shiny substance," is the source of the genus name *aloe*. Aloe vera is also widely used in Ayurvedic and traditional Chinese medicine. India's traditional medicine is known as *ayurveda*. Aloe vera is taken internally as a laxative, uterine stimulant (menstrual regulator), and anti-helminthic haemorrhoid medication. Aloe vera is one of the few naturally occurring vegetarian sources of vitamin B12 that is also recognised to include a variety of minerals essential to the body's proper growth and function. Protein, calcium, magnesium, zinc, vitamin A, B12, c, E, and vital fatty acids are all present in aloe vera. Aloe Vera gel has anti-inflammatory and cooling qualities that help relieve sunburn. It aids in moisturising the skin. A common houseplant with therapeutic benefits for the skin is aloe vera. [3]

Types of masks:

- I. Sheet mask
- II. Rinse-off mask
- III. Peel-off mask
- IV. Hydrogel mask

Aloe vera is one of the few naturally occurring vegetarian sources of vitamin B12 that is also known to include a variety of minerals essential to healthy bodily systems and growth. Aloe vera is a source of vital fatty acids, protein, calcium, magnesium, zinc, and vitamins A, C, and E.

MATERIAL AND METHOD

Drug And Excipients Profile

Aloe Vera:

Synonyms:

musabbar, lolesara, aloe.

Biological Source:

Aloe derived from the juice of *Aloe barbadensis miller* leaves, also referred to as *carcao aloes*

Family:

Liliaceae, Asphodelaceae.

Chemical constituents:

Lignans, phytosterols, polyphenols, acetylated mannans, plymannans, antrones, and anthroquinone C-glycosides are among the chemical constituents.

Use: -

Sunburn is healed by treating and preventing acne.

Adds moisture.

Lessen the pigmentation stain.

It eliminates tan.

It moisturises the skin.

It soothes irritated and dry skin.

Cucumber:**Biological Source:**

Cucumis sativus L. is the source of it.

Family:

Cucurbitaceae

Chemical components:

metals such as calcium, potassium, and zinc; carbohydrates, fats, sugars, proteins, and vitamins.

Use:

Maintains yourhadyat.

Promotes healthy skin.

Address acne

Less puffy eyes

Coconut Oil:**Scientific Name:**

Prunus dulcis

Synonym:

Jordan almond,sweetalmond

Family:

Rosaceae

Chemical Constituents:

Benzaldehyde, Amygdalin,2-ethyipyrazine, 2-amylfuran, 3-octen-2-one, Oleic acid, hept-2-enal.

Uses:

A good source of copper, which affects skin pigmentation, is almonds.

It aids in avoiding dry skin.

It aids in skin brightening and smoothing.

It repairs UV ray damage.

Rose Water:**Scientific Name:**

Rosa damascene

Synonyms:

Attor of Roses

Family:

Rosaceae

Chemical constituents:

2-phenylethanol, linalool, citronellol, nerol, geraniol, rose oxide.

Uses:

Rose oil is used to cleanses and Brightens Skin.

It balances natural oils.

It helps to remove dirt from the skin.

It mainly gives healthy looking glow.

Honey:**Molecular formula:**

C₆H₁₂O₆.

Molecular weight: -

202 g/mol

Use:

As an anti-inflammatory.

As an antioxidant.
The skin is highly hydrated and nourished by honey.
Honey works well as a mild exfoliant and pore cleaner.^[17]

Turmeric:**Molecular formula:**

C₂₁H₂₀O₆

Molecular weight:

368.39 g/mol,

Use:

Diminishes areas of pigmentation.
Addresses drab skin

Vitamin C(lemon):**Scientific Name:**

Citrous limon

Synonyms:

Citrous fruit

Family:

Rutaceae

Chemical Constituents:

benzyl alcohol, biomineral, Ascaridole, limonin,cis,ocimene,

Use:

Handle acne.
lessen the dark area.
Avoid black heads and blemishes.
It possesses astringent qualities.

Xanthan Gum: -**Synonyms:**

Rhodopol 23, Xantempo

Molecular formula:

C₈H₁₄CL₂N₂O₂

Molecular weight:

933.748 g/mol,

Use:

As an agent for thickening
To improve texture
To stabilise.

Table 1: Formulation Table

Sr.no	Ingredients	F1	F2	F3
1.	Aloe vera juice	4ml	8ml	12ml
2.	Rose water	Qs	Qs	Qs
3.	Coconut oil	2drops	2 drops	2 drops
4.	Honey	0.3ml	0.5ml	0.7ml
5.	Turmeric	0.1gm	0.2gm	0.3gm
6.	Lemon drop	1drops	2drops	3drops
7.	Xanthan gum	0.3 gm	o.5 gm	0.7 gm

Preparation Of Aloe Vera Extract:

First, we gather the aloe vera from the nearby botanical garden, after which we authenticate and identify it.



After cutting off the aloe vera leaf's outer layer, we must gather the pulp.



After being rinsed, the aloe vera pulp was put in a beaker and mixed with a stirrer mixer.



Afterwards, muslin cloth was used to filter it and remove different kinds of contaminants.



Aloe vera extract was finally added to the sealed bottle to stop microbial growth. [7]

Method and Evaluation of sheet mask:

To make the sheet mask, ingredients included aloe vera, turmeric, rose water, and honey with vitamin C. It was made using a variety of laboratory procedures and technologies, particularly for blending excipients of all kinds, particularly herbal extracts.

Three distinct batches of our herbal sheet mask were created.

The various batch types designated as F1, F2, and F3.

Separate formulation and evaluation processes for every batch.

We assessed every herbal cream composition using metrics such as viscosity, pH, irritancy, etc.[9]

B) Preparation of Herbal aloe vera sheet mask:

Firstly, in order to formulate the herbal cream, we need to gather various glassware such as beakers, spatulas, measuring cylinders, petri dishes, or other equipment like stirrers and mixers, among others.

Next, we must extract pure aloe vera gel from Aloe barbadensis miller leaves.

Next, the formulation of the herbal sheet mask needs to be made.

A mortar was filled with xanthum gum, which was then somewhat dissolved a small amount of rose water.[11]

Next, combine coconut oil, honey, turmeric, cucumber water, rose petals, and enough vitamin C drops.

Afterwards, pour the aloe vera extract into a beaker and add the prepared mix1. Stir continuously until everything is well combined.

Each essence is manufactured using three different formulations.

C) Packaging of sheet mask:

The sheet masks were folded, inserted, and sized to fit into a packaging foil bag.

The 20g of sheet mask essence was then weighed, poured, sealed, and labelled.

Volunteers:

6 volunteers who had previously been evaluated for having dull or dry skin were used in the trial.

The volunteer requirements are: -

Aged between 20 and 30 years;

Female; Has no medical history related to allergies.

D) Evaluation tests of sheet mask:**Physical Evaluation:**

This is mostly used to inspect the cream's color, smell, texture, and stability.

Irritancy:

This is used to determine the safety of chemicals and materials for use on the skin and mucosa. The dorsal surface of our left hand must first be marked. The cream formulation must then be administered to that region, and the time must be recorded. After a few minutes, we must let the formulation sit so that we may check for irritation.[12]

PH test:

This essentially relates to a substance's acidity levels. pH (sheet mask) should be between 6-7. Either a digital pH meter or pH paper was used to measure this test.

Greasiness:

Basically, this test determines whether a solution is greasy or oily. The results indicate that none of the formulations were greasy.

Viscosity

This test is essentially used to measure the viscosity of a solution, and the results indicate that the formulation has a viscosity of 320.5.[13]

RESULTS:

After the herbal cream was formulated and assessed, we used a variety of methods and procedures to examine several kinds of outcomes, including physical evaluation, irritancy, phase separation, greasiness, viscosity, pH, washability, and stability. displays the evaluation's results. The formula is rather yellow, and formulas F1, F2, and F3 have semi-code compatibility. Each formulation is the same and absorbs well. Every formulation has a pH that is slightly alkaline, in line with the skin's natural physiology. Every batch (F1, F2, F3) possessed the maximum potential for spreading. The formulation batch F2 yielded more spaghetti than batches F2 and F3, and lot F2 was finished since, based on the characteristics of the F2, similar results were discovered close to the market requirements.[14]

Table.2: Physical Test

Sr.no	Parameter	Observation
1	Colour	Yellow
2	Odour	Pleasant
3	Texture	Smooth
4	State	Liquid
5	Irritant	Non irritant
6	Ph	6.7
7	Homogeneity	Homogenous
8	Greasiness	No greasy
9	Viscosity	320.5

DISCUSSION:

The prepared aloe vera sheet mask formulation was evaluated using a range of criteria. The outcomes fall within the ranges displayed in the tables above. The herbal aloe vera sheet formulation had a smooth texture and a yellow color. The formulation has a pH of approximately 6.7 and is smooth, non-greasy, and non-irritating.

CONCLUSION:

Aloe vera and turmeric herbal extracts used in herbal aloe vera sheet masks have the ability to improve skin health. Herbal creams aid in mitigating the harm that different chemical compounds in commercial items can cause. The formulation yields better results, according to the study's assessment. This sheet mask made of herbs brightens pigmentation on the face while moisturizing it. We recommend that all of these formulations are stable and safe for skin based on the results. An herbal aloe vera sheet mask helps treat sunburn, aged skin, and a host of other skin issues. It also nurtures and balances skin tone. This product can be produced on a big scale and sold as a substitute for chemical sheet masks.[15]

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