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RESEARCH ARTICLE

FORMULATION AND EVALUATION OF HERBAL FACE PACK: EXPLORING BEAUTY WITH NATURAL BEAUTY

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ABSTRACT

Over time, there has been a sharp rise in the quantity of skin care products available. People employ a range of skin care products in an effort to protect their bodies, stay away from smells, and develop appealing personalities. Mouthwash, lipsticks, foot powder, and complexion creams are some of these goods. Substances intended to be applied, rubbed, poured, sprinkled, sprayed, or inserted into the human body or any part of the body in order to cleanse, beautify, enhance attractiveness, or alter the appearance of skin are referred to as skin care preparations. The herbal plants such as chandan, alevore, calcium bentonite, etc. have the importance since ancient. Such plants are used and herbal face pack has been prepared. We have prepare the herbal face pack by such mentioned herbal plants. The evaluation of the product is done by the physical and chemical parameters as Ph, colour, odour, etc. For more evalution some voluntre were selected to check of the product. The result was found to be that this Herbal face pack can be used in day to day life without any harmful effect.

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INTRODUCTION

The number of skin care products has increased dramatically over time. A variety of skin care products are used by people in an attempt to protect their bodies, avoid odors, and cultivate a pleasant personality. These products include mouth wash, lipsticks, foot powder, and complexion creams. Skin care preparations are defined as substances designed to be applied, rubbed, poured, sprinkled, sprayed, or otherwise introduced into the human body or any portion of the body with the purpose of cleansing, beautifying, enhancing attractive skin [1,2]. Ayurveda explains how certain plants, such as haldi and amla, are used in cosmetic formulations. Many European women in the eighteenth century used lead carbonate to whiten their faces without realizing the risks involved [2,3]. Cosmetics are described as beauty cosmetics with desired physiological effects, like those that are restorative, smoothing, enhancing, or conditioning [4]. These days, acne, blackheads, pimples, and dark circles are prevalent in young people and those who have the condition. Ayurveda says that blood impurities are typically the cause of skin issues. Skin-related disorders are brought on by blood toxins that have accumulated as a result of poor diet and lifestyle choices [2,6]. Cosmetics are designed to be applied to the human body in order to clean, beautify, decorate, promote attractiveness, and/or change the way the skin looks. Without altering the skin's natural physiological characteristics, skin cosmetics work on the epidermis, or outermost layers of the skin [5,7].

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To enhance the beauty of skin, these substances are regularly added in a variety of forms. The use of cosmetic items has increased significantly in recent years as consumers' attention has been drawn more to their appearance. But despite its purported advantages, overuse of synthetic cosmetics is having a negative impact on human skin. Consequently, there is a growing need for plant-based herbal cosmetics [8].

Importance of Herbal Formulations in India:

1. Historical Significance: India has a rich tradition of using herbal medicines across various recognized health systems, including Ayurveda, Yoga, Unani, Siddha, Homeopathy, and Naturopathy. These systems coexist with Allopathy, demonstrating a long-standing integration into healthcare practices [2,9].
2. Widespread Usage: Millions of Indians regularly utilize herbal drugs in their daily lives, whether as spices, home remedies, health foods, or over-the-counter medications. This extensive use highlights the deep-rooted cultural acceptance of herbal formulations [10].
3. Professional Training and Structure: Over 500,000 practitioners are trained in more than 400 accredited medical colleges for these non-allopathic systems, ensuring professionalism and regulatory oversight. This formal training underscores the scientific principles behind herbal medicine, moving beyond mere folklore to structured systems of diagnosis and treatment [10,11].
4. Research and Innovation: The quest for new biodynamic substances, as highlighted by Nobel laureate Ernst Boris Chain, emphasizes the importance of studying traditional medicinal plants. While past research may not have yielded many

breakthroughs, the potential for discovering new pharmacological compounds remains significant [5,10].

5. Novel Discoveries: Contemporary research has begun to challenge earlier assumptions about the limitations of traditional plant studies. New findings are emerging that showcase the unique pharmacological activities of Indian medicinal plants, indicating that traditional knowledge may still hold valuable insights for modern medicine [12,13].

Benefits

- ***Skin elasticity:*** The elasticity of the skin is preserved with herbal face packs.
- ***Blood circulation:*** The use of herbal face packs promotes blood flow [14].
- ***Skin tone:*** Muscle tone can be enhanced using herbal face packs.
- ***Skin impurities:*** Dirt and impurities can be eliminated from the skin with herbal face packs.
- ***Skin nourishment:*** The skin receives vitamins and nutrients from herbal face packs.
- ***Skin renewal:*** Herbal face masks can aid in skin renewal [15,13].

Ingredients

Herbal Drugs

Alovera

Synonyms- Aloafricana, Aloearborescens, Aloebarbadensis.
Biological source- Aloe is obtained from the driedjuice of the leaves of Aloe barbadensis.
Family- *Liliaceae*
Chemical constituents- Aloin, Aloe-emodin
Use: It is used as a moisturizing agent.

Coffee

Synonyms- Caffeine, Brew, Cappuccino
Biological source- The biological source of coffee is its dried ripe seed.
Family- *Rubiaceae*
Chemical constituents- Caffeine
Uses- Anti-Aging Effect, Enhance Skin.

Chandan

Synonyms: Chandan, Cendana, white sandalwood.
Biological source: It normally grows in sandy or well drained stony red soils, but a wide range of soil types are inhabited.
Family: *Santalaceae*
Chemical constituents: More than 90% sesquiterpenic alcohols of which 50–60% is the tricyclic α-santalolUses: As an antiseptic and astringent, stomachache.

Calcium Bentonite

Synonyms: Multanimitti, - Activated clay, Bentonite clay.
Biological source: Calcium bentonite clay is an absorbent kind of clay that typically forms after volcanic ash ages.
Family*: Smectite group* (a type of clay mineral)
Chemical constituents: Silica (SiO_2), alumina, (Al_2O_3), iron (Fe_2O_3), calcium (CaO) and potassium (K_2O)
Uses: Cosmetics (face masks, skin care), Pharmaceuticals (tableting, filtration), Industrial applications.

Cocount Oil

Synonyms: Shree Phal oil, Coconut tree oil.
Biological source: Coconut oil is derived from the fruit of the coconut palm tree (Cocosnucifera).
Family*: Arecaceae (Palm family)*
Chemical constituents: Triglycerides (95-100%): Glycerol esters of fatty acids, Fatty Acids (85-90%): Saturated, monounsaturated, and polyunsaturated.
Uses: Skincare: moisturizer, anti-aging, and acne treatment.

Rose water

Synonym: Rose extract, Rose essence, Rose infusion.
Biological source: Rose water is derived from the flowers of various Rosa species, primaril Rosa damascena (Damask rose), Rosa centifolia (Cabbage rose)
Family: *Rosaceae (Rose family)*
Chemical constituents: Volatile Oil Content: 0.5-2.5% (essential oils).
Uses: Hydration, Skintone.

Table 1. Formulation Table for 5 gm

NGRIDIENTS	F1[gm]	F2[gm]	F3[gm]	USES
ALOVERA	1	1.5	2.5	Moisturzing
COFFEE	0.5	0.4	0.3	Cleansing effect
CALCIUM BENTONITE	3	2.5	1.5	Detoxifying Skin
CHANDAN	2.5	2	3	Skin Brightening
GLYCERIN	0.5	0.5	0.5	Glow
COCOUNT OIL	1-2 Drop	1-2 Drop	1-2 Drop	Reducing Inflamation
CITRIC ACID	1-2 Drop	1-2 Drop	1-2 Drop	Preservative
ROSE WATER	QS	QS	QS	Solvent

Method of preparation

- The fresh leaves of the alovera are taken and dried until the gel of alovera is removed completely.
- After the complete dry the leaves are triturated till the uniform powder is form.
- Pass the aloe powder from the mesh sieve 40.
- Then after the chandan is taken and dried and triturated in motor pestal till become the fine powder.
- Calcium bentonite crystals are also triturated till fine powder.
- Similarly the coffee seeds are also triturated to fine powder.
- Then now pass all the powders through the sieve 40.

Preparation of Face Pack

- Take accurately 3gm of calcium bentonite and 2.5gm of the chandan powder and mix them well.
- Add 1gm alovera and mix it to uniform form.
- The pinch of coffee powder is add to the above mixture.
- The drop of gycerin and coconut oil is add to mix the powder properly.
- The rose water is added as solvent to make it emulsion form and give proper Spreadability.
- After the proper formation the rose oil is added as essence and citric acid as preservative.

Evaluation OF Herbal Face Pack

SR.NO	PARAMETER	F1	F2	F3
1	Colour	Reddish	RedishBrown	Brownish
2	Consistency	Semisolid	Semisolid	Semisolid
3	Wash Ability	Passable	Moderate	Good
4	PH	4.9	5.0	5.1
5	Spreadability	Poor	Moderate	Good
6	Irritation	No Irritation	No Irritation	No Irritation

Advantages

1. Anti-aging: Reduces fine lines, wrinkles, and age spots.
2. Skin brightening: Evens out skin tone and complexion.
3. Hydration: Moisturizes and softens skin.
4. Acne control: Reduces inflammation and prevents breakouts.
5. Skin clarity: Unclogs pores, reducing blackheads and whiteheads.

Specific Herbal Benefits

1. Turmeric: Anti-inflammatory, antioxidant, and skin brightening.
2. Neem: Antibacterial, antifungal, and acne-controlling.
3. Alovera: Soothes, hydrates, and calms skin.
4. Rose petals: Anti-aging, antioxidant, and skin toning.

RESULT AND DISCUSSION

The various parameter are used to evaluate the formulation. As the F3 was found to be useable. Hence, these are the results of F3 parameters.

Ph for F3: The ph of the formulation is compared with the ph of the skin. Ph of skin is 4.5 to 5.7. The ph meter was used tom determine the ph of the formulation. It was found to be 5.1

Table 3. Irritancy test for F3

Sr no	Parameter	Observation
1	Irritancy	No irritation
2	Inflamation	No inflamation
3	Rashes	No effect

Washability for F3: Any of the face applied formulation must be wash easily by the water. Hence when the formulation was applied on skin after 10 min it was wash easily.

Oragnoleptic property for F3

Table 4.

Sr no	Parameter	Observation
1	Colour	Brownish
2	Spreadability	Good
3	Consistency	Semi solid

CONCLUSION

Herbal face pack contaningalovera and calcium bentonite gives effect like mostrizing, cleansing. Hence during formulation F1,F2 contain less amount of alovera and calcium bentonite so, it shows the less effect as compaire to F3 because F3 contain the large amount of alovera and calcium bentonite. Hence F3was found to be useable. F3 underwent evaluation tests for color, irrtancy, pH, spreadability, washability, and the findings were compatible. Accordingly, the developed formulation can be utilized for facial care in an effective manner, according to the investigations.

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