

Formulation and Evaluation of Skin Care Herbal Cream

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Abstract: *This herbal skin care was formulated by using various herbs such as Aloe vera, Saffron, Multani Soil, Sandal wood powder, rose water, Raw honey, Bee wax, turmeric, glycerin and Vitamin E . The Ayurvedic cosmetics are very helpful and it is less prone any side effects. Ayurvedic cosmetics are also known as herbal cosmetics. All herbal ingredients are easily available in market This herbal skin care cream used in treatment of common skin problems like spots, wrinkles , dry skin ,allergies, black heads, acne and unclogs pores. All the herbal ingredients used in formulation provide essential nutrients such as vitamins, antioxidant, protein and many essential oils. Procedure for oil preparation is divided into two parts 1) Grinding of ingredients and 2) cream preparation. Excellent results in prevention of skin related were seen in formulation prepared by the above mentioned procedure. Formulated herbal skin care cream was evaluated for various parameters such as Homogeneity, viscosity, pH ,irritation , After Feel, removal, spread ability, penetration and skin whitening tests in general herbal formulations provides good blend of vitamins , antioxidants , and essential oils. All the values in the evaluation of finished product showed that they are within the acceptable limits. hence, it is concluded that the skin care cream is beneficial in maintaining glowing skin, prevents skin from drying, removes dark spots, prevents wrinkles, acnes , providing protection from sunlight and results in healthy skin...*

Keywords: *herbal skin*

I. INTRODUCTION





Herbal cosmetics are prepared by the association of bioactive ingredients and pharmaceutical products. The presence of number of phytochemicals and botanical in the herbal products have dual significance, one that they are used as Cosmetics for body care and another that phytochemicals improve the biological Functions of human body naturally results in healthy

skin . As the name Suggests the herbal extracts means the extracts of herbs. It is an ancient methodology because its origin was discovered from the holy Vedas and in Unani scriptures. As the realization said that the chemical medicines are not Always work as magic bullets and they may have side effects. The current trend Moves toward the herbalism and use of natural products. Indian herbs are the richest source to be used in cosmetic industries .Herbal cosmetics were gaining tremendous demand In the world market. There is a wide range of herbal cosmetic products used as beauty regime to satisfy the purpose of beautification







Adding herbs in cosmetics is safer for our skin. Herbal skin care cream were serving the purpose of skin treatment . Herbal skin care cream not only moisturizes skin but also reverses dryness and conditions . It provides numerous essential nutrients required to maintain healthy skin



Materials used :-

Commonname	Part used	Figure
Aloe vera	Aloe vera pulp	
Sandal Wood	Sandal wood powder	
Rose water	Rose water	
Vitamin E	Vitamin E tablet	



Commonname	Part used	Figure
Glycerin	Glycerin	
Turmeric	Turmeric powder	
Saffron	Saffron	
Multani soil	Multani soil	
Raw honey	Honey	
Beeswax	Whole Beeswax	

All the materials used in this preparation were purchased and collected from local market and botanical garden.





Figure-1

1} Aloe vera:

aloe vera has cooling properties and is anti- inflammatory. Hence, it is one of the most natural remedies for sunburn or burn skin. Applying this gel helps with a protective layer for the skin, and it also helps to retain moisture. It is rich in antioxidants and minerals that boost the healing process. Era pulp- Hydrating aloe vera juice may help reduce the frequency and appearance of acne. It may also help reduce skin conditions like psoriasis and dermatitis. Aloe vera is a rich source of antioxidants and vitamins that may help protect your skin.

Biological source:-cape aloe Synonym: Barbados mill



Figure-2

2) Sandalwood:-

The astringent and antiseptic properties of Sandalwood clear the skin of excess moisture and acne, making it a key ingredient to look for in skin care products for oily skin. The Truffula Anti-Aging Cream has aloe, saffron and



sandalwood and can be used during day or night on mature skin to work on dry patches, fine lines, wrinkles and crow's feet.....The Old Tree Sandalwood Essential Oil can be added to a carrier oil to massage into dry skin.

Biological source:-Roots of Santalum album Linn Synonym:-Neroli



Figure-3

3) Rose water :-

Rose oil, when used along with another carrier oil, is known to add luster to hair. It also works effectively towards promoting hair growth and makes the scalp healthier with its antifungal properties. You could use it with tea tree oil to help with an itchy scalp. Rose oil moisturizes your hair strands leaving them soft and shiny. Few drops of the rose essential oil blended with a carrier oil such as coconut oil or Olive oil will intensely moisturize dry hair. ...

Rose oil is also a good source of Vitamin C and lycopene which have anti-oxidant activity

Biological source:-Rose Petals Synonym:-Odoriferous

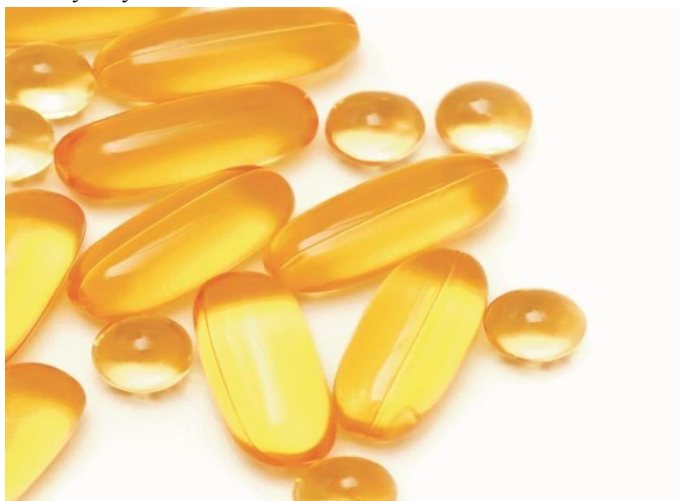


Figure-4

4) Vitamin E :-

Vitamin E is a nutrient your body needs to support your immune system and help your cells to regenerate. It also has antioxidant and anti-inflammatory properties that make getting enough essential to your everyday health. Vitamin E is most commonly known for its benefits for skin health and appearance. It can be applied topically to your face to reduce



inflammation and make your skin look younger. Vitamin E oil can be used on your face as an overnight anti-aging treatment. Since vitamin E has a thick consistency, it's best to apply it before bed so that it can fully absorb. Typically, you can apply a serum or oil mixture containing vitamin E as an all-over treatment on your face. This is different than using vitamin E to spot-treat a blemish, using a beauty treatment mask for a brief period of time, or taking an oral supplement that contains vitamin E

Biological source:- Vegetable oil Synonym:- Tocopherol



Figure-5

5) Glycerin

Glycerin is great for the skin because it acts as a humectant, which is a substance that allows the skin to retain moisture. It can increase skin hydration, relieve dryness, and refresh the skin's surface. It's also an emollient, which means it can soften skin. You can use glycerin as a moisturizer but keep in mind that using only glycerin on the face might not be a good idea because it is thick. It attracts dust which may lead to acne and pimples. You should always dilute it. You can dilute it with water or a little bit of rose water before applying it to the face. Applying glycerin to your skin traps moisture in your skin and gives it a youthful, healthy glow. By drawing moisture to the top layer of skin, glycerin helps reduce the appearance of wrinkles and keeps skin looking soft and smooth. Glycerin also improves skin function to slow down aging. Glycerin cleanses the skin pores and removes dirt.

It keeps the skin healthy. Glycerin reduces acne and keeps the skin pores clean

Biological source:- Triglycerides Synonym:- Glycerol



Figure-6



6) Turmeric Powder:-Turmeric doesn't darken the skin. In fact, turmeric has skin-lightening properties which help you get rid of dark spots effectively without causing any side-effects. Using turmeric along with other moisturizing ingredients such as milk or honey will help improve your skin complexion. Turmeric contains antioxidants and anti-inflammatory

components. These characteristics may provide glow and luster to the skin. Turmeric may also revive your skin by bringing out its natural glow. You may want to try a turmeric face mask at home to see if the spice has any positive effects on your skin. Turmeric also helps even out skin tone, and its extract may also help reduce the appearance of acne scars. Studies have shown turmeric to reduce dark spots on the skin AKA hyperpigmentation. In fact, one study showed that a turmeric extract cream reduced hyper-pigmentation up to 14 per cent after four weeks of use

Biological source:-*Curcuma longa* Synonym:-cardamon



Figure-7

7) Saffron :

If you'd like to enhance your skin care routine, try using saffron. Its active compounds work against inflammation, hyperpigmentation, and UV radiation. It also offers protection from UV radiation, a common cause of premature skin aging. Be cautious if it's your first time using saffron. To use saffron essential oil as a moisturizer, mix it with carrier oils like grapeseed or almond in order to avoid overly sensitizing your skin. Saffron oils can be used as a natural moisturizer for clear, glowing skin.

Biological source:-Saffron crocus Synonym:-Waldon



Figure-8



8) Multani Soil:-

Multani mitti or fuller's earth is used as a natural cleanser and astringent, offering a host of benefits for the skin, including: reducing oil, fighting acne.

Biological Source:-Deposits of volcanic ash of cretaceous and youn
Synonym:-Bleaching clay



9) Raw Honey:-

Raw honey helps balance the bacteria on your skin, which makes it a great product to use for acne. Manuka honey has been studied as an anti-acne product and found to be significantly more effective than other popular products. Honey speeds up your skin cells' healing processes. Honey has skin brightening properties and also lends a healthy moisturized glow to the face after

usage. Honey is good to treat dry skin but also works extremely well in treating oily, acne-prone and combination skin types as well. It might be time to ditch your daily face wash. Honey's antioxidants, antiseptic and antibacterial properties make this ingredient a go-to for fighting acne. It'll open your pores and get rid of those pesky blackheads while keeping your skin hydrated all day long.

Biological source:-The nectar of flowers by the hive-bee apish malefice and bees o other species of Apies



10) Beeswax:-Beeswax can create a protective layer on the skin. It's also a humectant, which means that it attracts water. Both of these qualities can help the skin stay hydrated. Beeswax is also a natural exfoliator, ideal for sloughing away dead skin cells. "Beeswax is an effective occlusive, which means that it can create a protective layer on the skin, sealing in moisture. It also has antibacterial, anti-inflammatory and antiviral properties, which can help protect the skin as well," Hadley adds.

Biological source:- honey bees of the geus Apis



Synonym- crude wax

Method of preparation:-

For the preparation of herbal skin care cream, I have selected nine important ingredients such as Aloe vera, Saffron, Multani Soil, Sandal wood powder, rose water, Raw honey, Bee wax, turmeric, glycerin and Vitamin E were collected from local market. We have to take each herbal ingredient and convert into the fine powder. The conversion of fine powder is done by the help of grinder. With the help of sieves we can separate out particles of same size each herbal ingredients I have taken Rose water because it provides cooling effect and scent First Bee wax was melted down and then put in a wide mouth vessel then gradually add the herbs Bee wax- 50, Turmeric powder 10g, sandalwood powder 10g aloe vera pulp 10g, Saffron 5g, Multani soil 20g, Rose water 9ml Raw honey 20g glycerin 10g vitamin E 6g.

List and Quantity of ingredients used in formulation:-

Sr.No	Ingredients	Quantity (g)
1	Aloe vera	10
2	Turmeric	10
3	Multani soil	20
4	Sandalwood	10
5	Bee wax	50
6	Raw Honey	20
7	Saffron	5
8	Rose water	9ml
9	Glycerin	10
10	Vitamin E	6

Ideal batch was found to batch No. B3 Evaluation: Organoleptic Evaluation:

The Face Cream thus obtained was evaluated for its organoleptic properties like colour, odour and state. The appearance of the cream was judged by its colour and roughness and graded.

Homogeneity:

Homogeneity of the prepared creams was confirmed by the visual appearance and by touch. After Feel:

Emollience, slipperiness and amount of residue left after the application of the fixed amount of cream was found to be good.

Removal:

All the cream formulations are applied on the skin was easily removed by washing with tap water

Irritancy Test:

All formulations shows no redness enema inflammation and irritation and during irritancy studies these formulations are found to be safe to use for the skin.

Spread ability test



Cream base should spread easily without too much drag and should not produce greater friction in the rubbing process. Spread ability was calculated using the spread ability apparatus made of wooden board with scale and two glass slides having two pans on both sides mounted on a pulley

Skin Whitening Test:

volunteers were selected for the following studies. All the preparation are applied and observed for 1 month. After 1 month skin test has been done that there is no pigmentation and skin gets whitens from F5 formulation than other formulations. So F5 formulation shows better result than other formulation containing single herb.

The penetration test: using a hemispherical probe, is an imitative test simulating the ease by which a human finger will deform the sample during application of the cream. This test allows the consistencies of creams to be assessed.

Test Speed: 2.0 mm/s(ideal test result)Test Type: Compression Pre-Test Speed: 1.0 mm/sTrigger Force: 10 g

Viscosity -Instruments called “rheometers” and “viscometers” are used to measure viscosity of pharmaceutical liquids and semi-solid materials like creams/ ointments. Viscosity flow curves shown in the instrument display - see Figure 1 – characterize typical behavior of pharmaceutical products.

PH Test -First, you have to make sure that the cream is o/w and not w/o. Only for the o/w system based products, you should do the pH of the finished product (as is) using a properly calibrated pH meter and then (50% dilution with water.) This will give you the true pH of your product.

(1) The penetration Test:

Sr.no	The penetration test	Observation
1	Batch1	1.7mn/s
2	Batch2	1.2 mn/s
1	Batch3	2.0mn/s

2) Viscosity Test:

Sr.no	Viscosity test	Observation
1	Batch 1	32 42 46
2	Batch 2	
1	Batch 3	

3) PH Test:

Sr.no	pH test	Observation
1	Batch 1	5.9 5.2 6.8
2	Batch 2	
3	Batch 3	<input type="checkbox"/>



Final product-



Result :

The herbal cream showed good homogeneity, spreadability, and after-feel. No irritation was observed during the irritancy test.

The cream demonstrated effective penetration and appropriate viscosity. pH values were within acceptable limits for skin care products.

The cream was beneficial in maintaining glowing skin, preventing dryness, removing dark spots, preventing wrinkles and acne, and providing sun protection.

Benefits :-

Protection from environmental damage such as pollution help fighting the effects of aging such as wrinkles and sunburn it has no side effects manufacturing doesn't harm animals they are packed with beneficial nutrients

Colour: the colour of cream is pale yellow. Odour: the odour of cream is fantastic.

II. CONCLUSION

The study successfully formulated and evaluated an herbal skin care cream that demonstrated desirable properties such as good penetration, appropriate viscosity, suitable pH levels, and effective skin whitening results. The cream also showed no adverse effects, confirming its safety for use. The project highlights the potential of using natural ingredients in skin care products for enhanced benefits and environmental sustainability. The formulated herbal skin care cream, which includes ingredients like Aloe vera, Saffron, Multani Soil, Sandalwood powder, Rose water, Raw honey, Beeswax, Turmeric, Glycerin, and Vitamin E, has shown excellent results in preventing various skin-related issues. The cream was evaluated for multiple parameters such as homogeneity, viscosity, pH, irritancy, after-feel, removal, spreadability, penetration, and skin whitening. All the values from the evaluations fell within acceptable limits, indicating the cream's effectiveness and safety. The study concluded that the herbal skin care cream is beneficial in maintaining glowing, healthy skin. It prevents dryness, removes dark spots, prevents wrinkles and acne, provides protection from sunlight, and generally results in healthier skin. The cream is advantageous due to its lack of side effects and the beneficial nutrients it provides, such as vitamins, antioxidants, and essential oil.

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