POLYHERBAL FACE CREAM

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Abstract:
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The purpose of this study was to create and test a herbal face cream with extracts of Aloe Vera, Brassica oleracea, Curcuma longa, Daucus carota, Emblica officinalis, Glycyrrhiza glabra, Rosa rubiginosa (flowers), and Solanum lycopersicum. Oil in water (O/W) herbal creams F1 through F7 were created using an ethanol extract of Aloe vera (leaves), Brassica oleracea (fruits), and Curcuma longa (rhizomes).

In various concentrations, Daucus carota (roots), Emblica officinalis (fruits), Glycyrrhiza glabra (bark), cucumber peels, and almond oil. All seven formulations (F1 to F7) were analyzed for various criteria such as pH, viscosity, spreadability, rheological study, stability, and irritancy test. F4 and F5 formulations demonstrated good spreadability, consistency, homogeneity, appearance, pH, and ease of removal, as well as no signs of phase separation. During irritancy trials, the formulations F4 and F5 show no redness, edema, inflammation, or irritation. These compositions are suitable for use on the skin.

Keywords: Aloe vera, Brassica oleracea, Curcuma longa, Daucus carota, Emblica officinalis, Glycyrrhiza glabra, Rosa rubiginosa, and Solanum lycopersicum are some of the key ingredients.

Introduction:

Cream is described as semisolid emulsions of the oil in water (o/w) or water in oil (w/o) type that are intended for external application. We all want to seem youthful and beautiful, therefore we take various steps to tone up our skin and reduce the appearance of pimples, acne, wrinkles, and other indicators of age. Nowadays, most people prefer natural components to synthetic ones, especially when it comes to skin care.
A natural skin cosmetic should hydrate, moisturize, and nourish the skin. The current work is an attempt to create a natural face cream with multipurpose properties. A natural face cream is essential in any skin care program.

Skin is a highly flexible, self-repairing layer that protects interior organs/tissues/cells from external environmental and stress elements. In order to fulfill its physiological job correctly, it requires moisture to stay smooth and supple. It is vulnerable to trauma or infection as a result of its exposure to chemicals, radiation, and fluctuating temperatures, which cause dryness, rashes, and fungal and bacterial infections that cause redness and inflammation.

Certain skin care aspects, such as gentle washing, proper hydration and moisturization of the skin, prevention of friction and maceration in body folds, and protection from irritants and harsh sunlight, must be stressed. Aloe vera has a wide spectrum of pharmacological activity mediated by reactive oxygen species, including anti-inflammatory, anti-oxidant, anti-aging, anticancer, and immunomodulatory properties. Aloe gel's hydrating and anti-inflammatory properties are well-known. It has been reported for its wound healing effects, which are backed by clinical studies.

Materials and methods:

A. aloe verae Plant material was taken from the local botanical garden in Karad, including Aloe Vera, Brassica, Curcuma longa, Emblica officinalis, Glycyrrhiza glabra, Rosa rubiginosa (flowers), and Solanum lycopersicum.

1. Extraction methods

Aloe Vera leaves that were healthy and fresh were picked and rinsed with distilled water. The outer section of the leaf was dissected lengthwise using a sterile knife after proper drying in a hot air oven. The aloe Vera gel, which is colorless parenchymatous tissue, was then removed using a sterile knife.

2) Rosa rubiginosa (Rosa rubiginosa):

In a separate sterile conical flask, 5g powdered petals of Rosa rubiginosa were taken. 100ml of distilled water was added, and the mixer was placed in an incubator at room temperature for 48 hours. After incubation, the solution is centrifuged at 6000 rpm for 10 minutes. The supernatant solution was then taken from the centrifuge tube and allowed to evaporate (to sediment the particles) until it was completely evaporated.

3) Daucus carota (carrot):

To begin, 25 g of sliced carrot samples were mixed with 100 g of 96% ethanol. Carrot slices were extracted in water baths (20°C, 40°C, and 60°C), shook every 10 minutes, and a 5 ml sample was obtained and combined
with petroleum ether (20 ml) after each hour of extraction. Water was used to separate the phases, and the petroleum-ether-carotenoid phase was formed up to a volume of 50 ml following the separation.

Cream formulation

A cream based on an oil in water (O/W) emulsion (semisolid formulation) was created. The oil phase (Part A) was heated to 75° C after the emulsifier (stearic acid) and other oil soluble components (Cetyl alcohol, almond oil) were dissolved. The preservatives and other water soluble components (Methyl paraban, Propyl paraban, Triethanolamine, Propylene glycol, ethanol extract of Aloe vera, Brassica oleracea, Curcuma longa, Daucus carota, Emblica officinalis, Glycyrrhiza glabra and Solanum lycopersicum and water) were dissolved in the aqueous phase (Part B) and heated to 75° C. Following heating, the aqueous phase was introduced in parts to the oil phase while continuously stirring until the emulsifier cooled. The cream's formula is shown in the table.

<table>
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<th>Sr</th>
<th>INGREDIENTS</th>
<th>FORMULA % W/W</th>
<th></th>
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<th>F7</th>
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Cream evaluation

The pH of the cream was calibrated using a standard buffer solution. The pH of the cream was measured after 0.5g of cream was weighed and diluted in 50.0 ml of distilled water.

Viscosity: The formulation's viscosity was evaluated using a Brookfield Viscometer at 100 rpm and spindle no. 7.

Scarlet red dye is combined with cream in a dye test. A drop of the cream is placed on a microscopic slide, which is then covered with a cover slip and examined under a microscope. The ground is colorless if the distributed globules are crimson. The cream is of the o/w variety. In the case of w/o type cream, the dispersed globules appear colorless in the red ground.

Homogeneity: was assessed for in the formulations through visual appearance and touch.

Appearance: The cream's appearance was rated based on its color, pearlescence, and roughness.

After feel: Emolliency, slipperiness, and the amount of residue remaining after applying a given amount of cream were evaluated.

Smear kind: After applying the cream, the type of film or smear created on the skin was examined. Washing the applied section with tap water was used to test the ease of removal of the cream

References:


2) Raja Babu*, Amit Semwal, Shilpa Sharma, Sachin Kumar, and Arif Khan, Volume 11, Issue 8, pages 646-660. ISSN 2277-7105 Article of Research

3) Prathyusha*, N. S. Yamani, G. Santhosh, A. Aravind, B. Naresh

Vibhavari M. Chatur*, Nazma M. Ansari, Sanket K. Joshi, and Sanjay G. Walode are the four members of the group.


