

Formulation and Evaluation of Polyherbal Vanishing Cream

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Abstract: In present study, polyherbal oil in water vanishing emulsion cream was formulated based on the antifungal, anti-microbial, anti-inflammatory, skin-soothing, and anti-aging potential of holy basil, clove, linseed, liquorice and peppermint. All herbs were extracted by using the maceration method with ethanol as solvent. The prepared vanishing cream was then evaluated for various parameters, and results were obtained within acceptable values. The prepared vanishing cream was found stable and firm during the stability studies performed as per the guidelines of international council for harmonization at different temperatures for a period of a month. result have shown that formulation have good stability. It can be concluded that the prepared polyherbal vanishing cream was pleasing, simply washable without side effect, and can be utilized to protect and avoid degradation of the skin.

Keywords: Holy basil, clove, linseed, liquorice, peppermint polyherbal vanishing cream adverse effects safety ethanolic extract.

I. INTRODUCTION

1.1 Herbal Cosmetic

The herbal cosmetics are the preparations containing phytochemical from a variety of botanical sources, which influences the functions of skin and provide nutrients necessary for the healthy skin or hair. The natural herbs and their products when used for their aromatic value in cosmetic preparation are termed as herbal cosmetics. There is common belief that chemical-based cosmetics are harmful to the skin and an Increased awareness among consumers for herbal products triggered the demand for natural products and natural extracts in cosmetics preparations. Now-a-days herbal extracts are used in the cosmetic preparations for augmenting beauty and attractiveness. Creams are semisolid emulsions intended for application to the skin or mucous membrane. A low-fat moisturizer that disappears into the skin is called as a vanishing cream.

II. METHOD AND MATERIAL

S. No.	Ingredient	Role of Ingredient	Quantity
1.	Holy basil powder	Make your skin looks younger and better and give even skin tone	5gm
2.	Clove bud powder	Antibacterial and antifungal properties it helps in treatment of acne and pimple	5gm
3.	Linseed powder	Antioxidant property, help in the preventions of wrinkles on the face it also helps in keeping the skin moisturized 5gm	5gm
4.	Peppermint powder	Improve the tone of skin, minimize pores, reduce swelling and restore skin elasticity 5gm	5gm
5.	Liquorice powder	Very rich source of antioxidant to provide skin lightening and anti-aging effect	5gm
6.	Stearic acid	Provide shining appearance to cream	17gm

7.	Sodium hydroxide	Sodium hydroxide Used in combination with KOH to get cream to desired thickness if alone used the resulting cream become too hard	0.5gm
8.	Sodium carbonate	Sodium carbonate Liberate carbon dioxide gas and cream become spongy	0.5gm
9.	Glycerine	Glycerine As a humectant & prevent the loss of water from the cream	6ml
10.	Rose water	Rose water Rose water act as a carrier or vehicle and as a pleasant fragrance	71ml

2.1 Method

- **Preparations of Alcoholic Extract of Crude Drugs:** All above mentioned powdered Crude drugs of 5gms were taken into the conical flask and then 100ml. of ethanol was added to it, then the conical flask was capped with aluminium foil. Then this mixture was placed for maceration for 5 days.
- **Preparation of Oil Phase:** Stearic acid (17%), potassium hydroxide (0.5%), sodium carbonate (0.5%) was taken into one porcelain dish and this mixture was melted at 70 0 c.
- **Preparation of Aqueous Phase:** Alcoholic extract of crude drugs mentioned in step-1 (4.5%), Glycerine (6%), Water (71%) were taken into another porcelain dish and heated this mixture at 70 0 c.
- **Addition of Aqueous Phase:** To Oil Phase The aqueous phase was added to the oil Phase with continuous stirring at 70 0 c. Now, once the transfer was completed it was allowed to come at room temperature, all the while being stirred. Perfume (0.5%) was added at last just before the finished product was transferred to suitable container. Then cream was evaluated for various physical parameters

2.2 Evaluation

- **1 pH:** - The pH meter was calibrated and measured the pH by placing in the beaker containing 20mg Of the cream.
- **Spreadability:** -Test 500mg of the cream was sandwiched between 2 slides. A weight of 100gm was placed on upper slide. The weight was removed and extra formulation was scrapped off. The lower slide was fixed on board of apparatus and upper slide was fixed with non-flexible string on which 20g load was applied. Time taken by upper slide to slip off was noted down.

3.3 Determination of Type of Emulsion

- **Dilution test:** - In this test the emulsion is diluted either with oil or water. If the emulsion is o/w type and it is diluted with water, it will remain stable as water is the dispersion medium" but if it is diluted with oil, the emulsion will break as oil and water are not miscible with each other. Oil in water emulsion can easily be diluted with an aqueous solvent, whereas water in oil emulsion can be diluted with an oily liquid.
- **Dye solubility test:** - In this test an emulsion is mixed with a water-soluble dye (amaranth) and observed under the microscope. If the continuous phase appears red, it means that the emulsion is o/w type as the water is in the external phase and the dye will dissolve in it to give colour. If the scattered globules appear red and continuous phase colourless, then it is w/o type. Similarly, if an oil soluble dye (Scarlet red C or Sudan III) is added to an emulsion and the continuous phase appears red, then it is w/o emulsion.
- **Homogeneity:** - The test was done by physical touch with hands.
- **Appearance:** - The appearance of the cream was found by observing its color, opacity, etc.
After Feel After applying the herbal cream on skin the properties like emollient nature, slipperiness and the amount of cream left after applying to the skin was checked.

- **Smear type:** - The test was conducted after the application of cream on the skin the smear formed was oily or aqueous in nature.
- **Removal:** - The removal of the cream applied on skin was done by washing under tap water with minimal force to remove the cream.
- **Irritancy test:** - The cream was applied on left hand dorsal side surface of 1sq.cm and observed in equal intervals up to 24hrs for irritancy, redness and edema.
- **Accelerated Stability Studies:** Accelerated stability studies were performed on all the formulations by maintaining at room temperature for 20 days with constant time interval. During the stability studies the parameters like homogeneity, viscosity, physical changes, pH and type of smear were studied

IV. RESULT

Physical parameters	Observation
Apperance	Yellowish color
PH	6.1
Homogeneity By visual By Touch	Homogeneous consist and smooth
Type of smear	Non greasy
Emollience	Non reduce left
Dilution test	O/w type emulsion
Dye solubility test	O/w type emulsion
Irritation test	Non irritate
Removal	Easy to remove water

V. CONCLUSION

The vanishing cream of crude drugs with the best properties and having nutritional value was to be prepared by simple methods and less equipment are required. The prepared herbal cream also has antioxidant and antibacterial activity due to this it retards aging signs and pimple formation on the face. Further studies are required for this vanishing herbal cream. It was found that this type of formulation of the vanishing herbal cream was not prepared earlier. Oil in water emulsion-based cream was formulated using natural ingredients and was evaluated. By combining all these ingredients, it can be concluded that this cream can be used as a multipurpose cream and the ingredients mixed can produce synergistic effect of the other.

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