

FORMULATION AND EVALUATION OF HERBAL ANTI DANDRUFF GEL USING HIBISCUS EXTRACT

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ABSTRACT

In the present work research has been done with the aim to formulate and evaluate the herbal gel containing hibiscus flower extract, alovera leave extract. The gel formulation is design aqueous as well as ethanolic extract. The physiochemical parameters of formulation (Ph, viscosity, spreadability, etc) was determined.

KEYWORD: Hibiscus flower extract, Alovera leaf extract, gel.

INTRODUCTION

Dandruff is a very common hair problem, nearly affecting every person irrespective of age dry dandruff appear slivery and white while grassy flash appear in yellowish and may have unpleasant smell. Historically they have been multiple other descriptive names reflecting the fungal cause of this condition.

Dandruff is skin conditions that manly affect the scalp symptoms include flaking and some time mild itchiness. It can result in social or self –esteem problem. A more severe form of condition, which include inflammation of the skin.

MATERIAL AND METHOD

Hibiscus flower extract, Alovera leaf extract, Carbopol, PEG, Methyl paraben, PVP, triethanol amine, glycerin and water.

Collection of Plant Material

The flowers of hibiscus and Alovera leaf were collected from the local area of Aurangabad (M.S.). The plant material was identified by taxonomist. Plant material was shade dried and coarsely powdered.

Preparation of Extract

The powdered alovera and hibiscus flower were weighted, transferred to round bottom flask and extracted using ethanol and water for 6 days respectively with continuously shaking. Filter the macerated powder and finally concentrate the solution to obtain extract.

Preparation of herbal gel

The required quantity of methyl paraben, glycerin and weighted quantity of polyethylene glycol were dissolved in about 30 ml of water in beaker. Then it was stirred at high speed using mechanical stirrer carbopol 940 and polyvinylpyrrolidone were added slowly to the beaker containing above liquid with stirring at last triethanolamine was added slowly till it attains gel like structure then required quantity of hibiscus and alovera extract were added.

Sr no.	Ingredients	Quantity
1	Hibiscus flower extract	1 gm
2	Alovera leaf extract	1 gm
3	carbopol	0.3 gm
4	Polyethylene glycol	6 gm
5	Methyl paraben	0.065 gm
6	Polyvinylpyrrolidone	0.04 gm
7	Triethanolamine	0.5ml
8	Glycerin	2 ml
9	Water	Upto 50 ml

Evaluation

- 1) Physical evaluation:** Physical parameter such as color, appearance and consistency were checked visually.
- 2) Washability:** Formulation was applied on the skin and then extent of washing with water was checked manually.
- 3) Homogeneity:** The gel was tested for the homogeneity by visual inspection. The gel was spread on a glass slide and then checked for presence of any type of lumps, flocculates or aggregates.
- 4) Ph:** Ph of 1% and 5% aqueous solution of the formulation was measured by using a calibrated ph meter at constant temperature.

- 5) **Skin irritation test:** The skin irritation test was carried out on 10 human volunteers.. 1 gram of formulation was applied were applied on area of 2 square inch to the back of the hand. The volunteers were observed for lesion or irritation
- 6) **Viscosity:** Brook field viscometer was used to determine viscosity. The sufficient quantity of gel was taken in the beaker so that is allow to deep the spindle sufficiently. The rpm spindle was adjusted to 2.5 rpm. The viscosity of the formulation was recorded.

RESULT AND DISCUSSION

The evaluation parameter was performed and result are found to be formulation was having pale red or pinkish color with semi solid consistency, homogenous and and easily washable. Formulation had very slightly alkaline ph which were compatible with normal skin physiology. It is non irritants to the skin.

CONCLUSION

The present article give us the idea of an anti dandruff formulation which content hibiscus extract which help in promote hair growth provide nourishment and are in rejuvenates scalp and alovera which is used in treatment of dry hair, reduce dandruff and moisturized hair and scalp.

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