

A Research on ‘Preparation and Evaltion of Vanishing Cream Containing Ethanolic Taproot Extract of Daucus Carota’

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Abstract- Our beauty market is filled with synthetic origin cosmetics. Vanishing cream of synthetic origin found in the market provide glow to the skin but also imparts side effects to the skin. Whereas the vanishing cream containing natural extracts are safe, beneficial to skin with negligible side effects. So the purpose of present research work was to Design, develop and Evaluate of vanishing cream containing ethanolic taproot extract of daucus carota for providing smoothing as well as moisturizing effect to the skin without causing any irritation to the skin. The vanishing cream was prepared by using natural extract of carrot. The natural ethanolic extract of daucus carota was rich in vitamins. These creams do not have any side effects and it gives wrinkle free and fair look to the skin. The method employed to prepare this vanishing cream was very simple. Quality of formulated product was assessed by various evaluation parameters. The formulated cream showed good consistency, spreadability, homogeneity, PH.

Keywords – Taproot, daucus carota, Vitamins, Skin, Synthetic origin.

INTRODUCTION

A cream is a semisolid formulation comprising more than 20% of water and 50% of lipid vehicles usually to apply on skin. A drug molecule is also incorporated by dissolving or dispersing it in a suitable cream base (1). Various sorts of creams are accessible in the market to protect the consistency of the skin. Many irritable and unpleasant substances sticking on the skin includes skin secretions, sweat, salts, sebum as well as deposits of dirt bounded by oily substances require a special process of expulsion. Hence, a vanishing cream is eminent in protecting the skin from the above substances.(2).Herbalism has become a center of

research and focus in pharmaceutical formulation and drug discovery due to the advancements in analysis and quality along with enhanced clinical research in treating and preventing disease(3)..Vanishing cream is so termed due to their no presence or zero evidence of presence upon application and rubbing on the surface of the skin(4).The traditional system of medicine evolved over centuries had been responsible for safe guarding healthcare of the world.(5)

IDEAL PROPERTIES OF HERBAL VANISHING CREAM--

1. High melting point
2. Pure whiteness
3. Reduce moisture from dry skin
4. Very little odour and less iodine number
5. Rubbed easily on the skin

• ADVANTAGES OF HERBAL VANISHING CREAM--

1. Convenient and easy to apply
2. Prevent skin chapping and roughening
3. Used to blemish any pimples or scars
4. Soften the skin and provides a shiny texture to the skin

• DISADVANTAGES OF HERBAL VANISHING CREAM—

1. Storage condition may affect stability
2. Uniform and accurate dose may not be achieved
3. Skin reaction like itching, redness etc.
4. Difficult to manufacture
5. Bulky, difficult to transport and hence prone to container breakages.

PLANT PROFILE

Synonym: Carrot



Fig No.1 Daucus Carota

Biological source. The carrot Daucus Carota is a root vegetable, usually orange in color, though purple, red,

Following are the list of materials used in preparation of vanishing cream:

Sr. no	Common name	Biological name	Medicinal use
1.	Stearic acid	Octadecanoic acid	Maintain consistency, Effective softener.
2.	Glycerin	Glycerol	Prevent champs, Prevent cream from drying.
3.	Triethanolamine	Tertiary amine	PH Adjuster
4.	Potassium hydroxide	Caustic potash	Imparts fine texture without hardness.
5.	Methyl Paraben	Methyl 4-hydroxybenzoate	Prevent deterioration
6.	Extract of carrot	Daucus carota	Good tonic for eyes and skin.

Table No.1 Ingredients of vanishing cream

White, and yellow varieties exist Family. Apiaceae
 Geographical source: Europe and West and central Asia
 Constituents-Carrots contain carotenes, especially alpha and beta-carotenes, vitamin A and C, and dietary fiber. It is rich in calcium and potassium. Red carrots also contains lycopene.

MATERIAL AND METHOD

❖ Materials used--

List of all materials for research work are present in the college.

❖ Method of preparation--

Steps carried out in preparation of herbal vanishing cream were as follows:

- Preparation of alcoholic extract of crude drug--
 All above mentioned crude drugs of 5gm was taken into conical flask and then 100ml of ethanol was added to it. Then the conical flask was capped with aluminum foil and 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 °C)
- Preparation of aqueous phase—
 Alcoholic extracts of crude drugs mentioned in step 1 that is glycerin, water was taken into another porcelain dish and heated this mixture at 70 °C)
- Addition of aqueous phase to oil phase—
 1. The aqueous phase was added to the oil phase with continuous stirring at 70 °C).
 2. Now once the transfer was completed it was allowed to come at room temperature while being stirring.
 3. Perfume was added at last just before the finished product.

4. Also, preservative extract was added and mixed them thoroughly to obtain uniform product.

• Experimental work--

- Selection of herbal material—
 Selection of Daucus carota which contains active ingredients i.e. beta carotene.
- Extraction procedure—
 1. Fresh carrots were collected and washed thoroughly and cut into small pieces.
 2. These cut pieces of carrots was grinded with 166.6 ml of ethanol, and keep in Soxhlet apparatus for 30 min. and kept it close for 5 mins.
 3. Then this mixture was filtered of and the filtrate (extract) was collected.
 4. Then, extract was added into the round bottom flask and heated in metal at constant temperature so that ethanol was evaporated.
 5. Then result residue containing the beta carotene was collected.

• Formulation of vanishing cream—

Ingredients	Quantity taken
Stearic acid	12 gm
Glycerin	6 ml
Triethanolamine	1 ml
Cetyl alcohol	0.5 gm
Alc.extract	2 gm
Methyl paraben	0.18 mg

water	78.3 ml
Perfume	q. s

Table No. 2

EVALUTION OF VANISHING CREAM

Prepared vanishing cream containing alcoholic extract of *Daucus carota* was evaluated for following test and procedure and evaluation result mentioned at result.

Evaluation of vanishing cream are carried out by following methods:

1. In-vitro method
2. In-vivo method
3. Determination of organoleptic properties

Here the vanishing cream can be evaluated by In-vivo method this method include following tests:

1.Determination of organoleptic properties:

The appearance of the cream was judged by its color, pearlescence and Roughness and graded.

2. Determination of washability:

The removal of the cream applied on skin was done by washing under The tap water with minimal force to remove the cream.

3.determination of PH:

The PH meter was calibrated and measured the PH by placing in the Beaker containing 20mg of the cream.

4.Determination of viscosity:

The viscosity determinations were carried out using a Brookfield Viscometer using spindle number S-64.

5.Determination of spreadability:

Spreadability may be expressed by the extent of the area to which the Topical application spreads when applied to the affected parts on the Skin. The therapeutic efficiency of the formulation also depends upon Its spreading value. Hence, it was found necessary to determine the Spreadability of the formulation. In this method 500 mgs of cream Was placed between two slides. A weight of 100gm was placed on Upper slide for 10mins. The weight was removed and extra Formulation was scrapped off. The lower slide was fixed on apparatus And upper slide was fixed with non-flexible string on which 20gms load Was applied. Time taken by upper slide to slip off was noted don. The Spreadability was calculated using the formula:

$$S = m \cdot L / T$$

Where,

S = Spreadability

M = weight tied to upper glass slide

L = Length moved on the glass slide

T = time taken

6.Determination of homogeneity:

The formulation was tested for the homogeneity by visual Appearance and by touch.

7.Determination of dye test:

The test was done by mixing the cream with red dye then place the Drop of cream on a slide and cover it with cover slip, observed under Microscope. If the dispersion phase appears in red colored globules The cream was O/W type. If the continuous phase appears red color The cream was W/O type.

8.Determination of emolliency:

Emolliency, slipperiness and amount of residue left after the application Of fixed amounts of cream was checked.

9.determination of smear test:

The test was conducted after the application of cream on the skin the Smear formed was oily or aqueous in nature.

10.Determination of patch test:

About 1-3gm of material to be tested was placed on a piece of Fabric or Funnel and applied to the sensitive part of the skin e.g. skin behind the Ears. The cosmetic to be tested was applied to an area of 1sq.m. of the Skin. Control patches (of similar cosmetic of known brand) were also Applied. The site of patch is inspected after 24 hrs. as there was no Reaction the test was repeated three times. As no reaction was observed On third application, the person may be taken as not hypersensitive.

CONCLUSION

The vanishing cream of crude drug with the best properties having the nutritional value was prepared by employing simple method and less equipment's. the prepared herbal cream also has antioxidant and antibacterial activity due to this it reduces the pimple formation on the face. Further studies are required for this herbal cream. According to literature survey this type of formulation containing *daucus carota* was not prepared earlier.

RESULT AND DISSCUSION

1.Preparation of ethanolic extract of *Daucus carota*
Ethanolic extract of *daucus carota* was successfully performed by using Soxhlet apparatus method.

2.Preparation of vanishing cream

Vanishing cream containing ethanolic extract of daucus carota was successfully prepared by using melt emulsification method.



Fig No. 4 Prepared vanishing cream

3.Evaluation of vanishing cream

SR.NO	PARAMETERS	RESULT
		Color—White
1.	Organoleptic properties	Appearance--smooth Odor--Pleasant
2.	Washability	Easily washable
3.	PH	6
4.	Viscosity	27025cps
5.	Spreadability	Spreadability= =m*/t =50*12/6 =600/6 =100 gm cm/sec. Uniform and easily spread.
6.	Homogeneity	homogeneous
7.	dye test	Continuous phase appears in red color so the cream is O/W Type.
8.	Emolliency	No residue on skin
9.	Smear test	Non-greasy in nature
10.	Patch test	No any reaction is observed.

Evaluation of ethanolic extract containing daucus carota of vanishing cream evaluated successfully.

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