Preparation herbal beauty skin cream by slab method and their evaluation of physicochemical parameters

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Abstract

Cream is defined as semisolid emulsions which are oil in water (o/w) or water in oil (w/o) type and these semisolid emulsions are intended for external application. Numerous herbal plants are available naturally they having different chemical constituents used for various cosmetics preparations and also enhance the health and beauty of skin. Several literatures expressed already reported formulations are very few but no proper scientific validation. Based on the survey results indicated clinically practiced multipurpose skin care herbal creams have some adverse effects. As per the guidelines selected some herbs like neem, turmeric and carrot which are authenticated form BSI, Coimbatore. The neem, turmeric and carrot were separately extracted by shoxlet apparatus and filtered. Above ingredients were used for the preparation of cream by the help of slab method. After the preparation of different formulation (F1-F5) cream were evaluated some parameters such as washability, pH, phase separation, spreadability. From the above observation, it was found that formulation F1 and F2 of cream base obeys the all the specification given in standard for cream, Hence the trial F1 and F2 formulation is selected for further evaluation study and also augment the health and beauty of skin.

Keywords: Cream, Emulsion, Skin, Scientific, Shoxlet Apparatus, Formulation, Health.

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Introduction

Cream is classified as oil in water and water in oil emulsion. It is applied on outer part or superficial part of the skin and its main ability is to remain for a longer period of time at the site of application. The function of a skin cream is to protect the skin against different environmental condition,

weather and gives soothing effect to the skin. There are different types of creams like cleansing, cold, foundation, vanishing, night, massage, hand and

ssbody creams. The main aim of our work is to develop herbal cream which can give multipurpose effect, like moisturizer, reduce acne and skin irritation, reduce skin diseases like eczema, psoriasis, dry skin, wrinkles, rashes etc. and also adding glow to the face. We have used three herbal ingredients in our preparation which are Carrot, Neem. Neem is used as an antifungal and anti-inflammatory and it is also used to reduce scar, pigmentation, redness and itching of the skin. Carrot is used to add glow to the skin, promote wound healing, scar and blemishes. Turmeric is used to anti – inflammatory, lightens dark circles, prevents acne and moisturizer skin. The herbal cosmetics natural cosmetics. Herbal cosmetics are used differently cosmetic ingredients create a base in one or more herbs ingredients are used for the development of new pharmaceutical products for cosmetics drugs uses. Contains herbal cosmetics which herbs are used in raw or juice form. Nowadays, the use of herbs in cosmetic production in personal care has increased exponentially and there is a high demand for herbal cosmetics. Cosmetics should be used on the human body for cleansing, Beautifying, promoting glamor and changing the look without affecting the body structure or functions. Cosmetics are associated with hunting, fighting, religion and superstition, and later with medicine.

Various synthetics Compounds, chemicals, and dyes have been shown to cause a variety of skin diseases with a variety of side effects. Thus, we use the herb Cosmetics as much as possible. The basic idea of skin care cosmetics is deep in Ayurveda and Unani and Homeopathy system. Herbs should have various properties such as anti-oxidant, anti-inflammatory, antiseptic, emollient, seborrheic, Such as anti-karyolitic activity and anti-bacterial, etc. Cosmetics are made to reduce wrinkles, fight acne and control oil secretion. for various skin diseases formulas like skin care, sunscreen, anti-acne, anti-wrinkle and anti-aging are designed using different ingredients natural or artificial. The beauty of skin and hair of individuals depends on health, habits, regular work, climate etc. Extreme heat can dehydrate in the summer and cause wrinkles, blemishes and blemishes on the skin Pigment. Severe winter damages the skin in the form of cracks, cuts, spots and infections. Cosmetics is a collection of a wide variety of products and products including creams, powders, perfumes, lotions and washes. Wide range of products, and decorative cosmetics or cosmetics. Natural ingredients are widely used in the preparation there is always a growing interest in understanding the way cosmetics work and many other things. The demand for this specialty has increased significantly as a result of recent corporate scandals. And no side effects. The best thing about herbal cosmetics is that it is completely made up of herbs and shrubs, hence there are no side effects. The natural ingredients of herbs do not cause any side effects in the human body but provide nutrients to the body and Other Useful Minerals. Botanical extracts

that promote health, structure and integrity widely used in leather and hair business cosmetics Formulas. Plant products from this extract made, traditional "cosmetics" have a long history in use, the term has a recent origin.

Materials and methods

The plants materials like neem, turmeric and carrot were produced from a local market and garden in coimbatore. All other chemicals were purchased from various sectors given below

Table .3 Manufacturing supplier details

S.NO	INGREDIENTS	MANUFACTURER DETALIS
1.	**Methyl paraben**	Nice chemicals Pvt, Ltd., P.B.No. 2217, Kochi - 682024, Kerala.
2	**Liquid paraffin**	Reachem Laboratory chemical private limited, Chennai
3	**Beeswax**	Spectrum reagents and chemicals Pvt, Ltd, edayar, cochin
4	**Borax**	Molychem private limited, Mumbai

Neem and turmeric powdered were weighted accurately and aqueous extraction had been done (10 time of the weighted of the drug i.e.5g in 50ml of water on the water bath at 80-100°C) As the solution concentration, up to 20ml, filtration was done. Residue had been taken and volume was making up to 40ml, again boiled. After remaining 20ml was filtered and collected in the form of powder and the same procedure was followed again. Heat liquid paraffin and beexwax in a borasilicate glass beaker at 75°C and maintain that heating temperature. (oil phase) In another beaker, dissolve borax, methyl paraben in distilled water and heat this to 75°C to dissolve borax and methyl paraben and to get a clear solution (aqueous phase). Then slowely add this aquous phase to heated oily phase.Then add a measured amount of neem extract. turmeric extract and carrot extract stir vigorously untill it forms a smooth cream . Then add few drops rose water as a fragrance. put this cream on the slab and add few drop of distilled water if necessary and mix the cream in a geometric manner on the slab to give a smooth texture to the cream and to mix the all ingredients properly.

Table,2: Preparation of different formulations From F1-F5

S.NO	INGRIDIENTS	F1	F2	F3	F4	F5

1.	**Carrot Extract**	2ml	2ml	2ml	2ml	2ml
2.	**Neem Extract**	2ml	2ml	2ml	2ml	2ml
3.	**Turmeric Extract**	2ml	2ml	2ml	2ml	2ml
4.	**Beeswax**	2g	3g	4g	4.5g	5g
5.	**Borax**	0.2g	0.3g	0.4g	0.5g	0.6g
6.	**Methyl Paraben**	0.02g	0.02g	0.02 g	0.02g	0.02g
7.	**Liquid Paraffin**	10ml	10ml	10m l	10ml	10ml
8.	**Rose Water**	5 drops	5 drops	5 drops	5 drops	5 drops
9.	**Distilled Water**	Q. S	Q. S	Q. S	Q. S	Q. S

Washability test was carried out by applying a small amount of cream on the glass rod and then washing it with tap water.

Spreadability of the formulations was determined by measuring the spreading diameter of 1 g of sample between two horizontal glass plates (10 cm × 20 cm) after one minute. The standard weight applied to the upper plate was 25 g. Each formulation was tested three times.

pH Values. One gram of each formulation (including the blank, i.e., formulation without any active ingredients or preservatives, and drug-loaded formulation) was dispersed in 25 mL of deionized water, and the pH was determined using a pH meter (Mettler-Toledo Ingold Inc., Billerica, MA). Measurements were made in triplicate. The pH meter was calibrated with standard buffer solutions (pH 4, 7, and 10) before each use.

Prepared cream was kept in a closed container at a temperature of 25-100 ℃ away from light. Then phase separation was checked for 24 h for 30 d. Any change in the phase separation was observed and checked. According to the results no phase separation was observed in all the three formulations.

The spreadability of the three formulations that is F1, F2, F3, F4 and F5 was carried out and out of that for F2 the time taken by the 2 slides to separate is less so as said in the description of evaluation test lesser the time taken for separation of the two slides better the spreadability so according to this statement F2 showed better spreadability.

Results and discussion

Washability test was carried out by applying a small amount of cream on the five glass rod then washing it with tap water. All five formulations were washable. According to the result, the pH of all the five formulation that is

F1, F2, F3, F4 and F5 were found to be nearer to skin pH so it can be safely used on the skin. Spreadability of semisolid formulations, that is, the ability of a cream or gel to evenly spread on the skin, plays an important role in the administration of a standard dose of a medicated formulation to the skin and the efficacy of a topical therapy The values refer to the extent to which the formulations readily spread on the application surface by applying a small amount of shear. Results indicated that our cream and gels had comparable spreadability to that of commercial products used as comparators in the study.

Table,3; Results of Physicochemical parameters

S No	Apperance	Washability	pH	Speardability	Phase Separation
F1	Pale yellow colour	Washable	6.2±0.3	9.1± 0.3	No phase separation
F2	Pale yellow colour	Washable	6.4±0.4	10.7±0.2	No phase separation
F3	Pale yellow colour	Washable	6.7±0.5	11.4± 0.2	No phase separation
F4	Pale yellow colour	Washable	6.8±0.6	12.6±0.4	No phase separation
F5	Pale yellow colour	Washable	6.9±0.6	13.2±0.3	No phase separation

Summary and Conclusion

The prepared herbal cream protects the skin from various skin problems by using chemicals that have better properties and nutritional values less. Sour cream is also economical as the cream is made using simple ingredients and simple methods. The use of herbal cosmetics is safe and can be used as a barrier to protect the skin. The current work focuses on the potential of herbal extracts for cosmetics purpose. The use of cosmetics in the personal care system has multiplied. The formulas prepared had good dispersed, no evidence of phase separation and showed good consistency during the study period. Stability parameters during storage condition last 3 months the visual parameter such as appearance, nature and odour of formulas show that there are no significant variations during that period. So, it is concluded that F1 and F2 formulations proceeded for

further Evaluation and clinical study.

Conflict of Interest: The authors declare that they have no conflict of interest for this study.

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