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A RESEARCH ON "FORMULATION AND EVALUATION OF POLYHERBAL ANTI-AGING CREAM"

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ABSTRACT
Aloe vera, amla, soapnut and cucumber peel are medicinal plant they are used as traditionally from ancient year in various herbal medicines such Ayurveda, siddha, and Homeopathic. Cosmetics and some medicinal products are made up from the mucilaginous tissue in the center of aloe vera leaf and called Aloe vera gel. The fruits of Sapindas mukorossi (Family- Sapindaceae) also called as soapnuts, contain Saponins about 6-10% by weight. Soapnut has been traditionally used for cleansing purposes and owes detergent action due to its saponin content. Use of synthetic surface-active agents like sodium lauryl sulphate (SLS) has been found to show adverse actions on the skin like irritation and inflammation. Soapnut extracts is traditionally used in household remedies and is documented to have beneficial effects on skin. Hence the objective of the work was to formulate a cream replacing SLS by soapnut extract. Aloe vera gel contains no Anthraquinone. Which are Responsible for the strong laxative effects of aloes. However, total leaf extract may contain Anthraquinone. Aloe vera contains 75 potentially active constituents like Vitamin's, Enzymes, Minerals, Sugars, Saponi's, Amino acids. Amla contains Amino acid like glutamic acid, proline, and Aspartic acids etc. Protein, Minerals. Cucumber peels are rich in fiber and contain minerals like magnesium, potassium, and silica. The silica is an essential component to keep your muscles, bones, and tendons healthy. It also hydrates our skin, improves complexion and vision.
KEYWORD: *Soapnut, Aloe vera, Amla, Cucumber peels, face cream, Evaluation.*

INTRODUCTION

The Demand of herbal cosmetics due to the availability of new ingredients the financial rewards for developing successful products and maintained of quality standard. Cosmetics are the products applying on the body. Face cream are used as cosmetic for softening and cleansing action. The Ayurvedic system of medicine was one of the most important systems that uses herbal plant and extract of the treatment of management of various Diseases state . Sapindas mukorossi (fam: Sapindaceae), well known as soapnuts, are used medicinally. The potent moisturizing property of the soapnut keeps the skin well hydrated, prevents drying of the skin and making the skin look radiant and supple. Furthermore, the powerful antibacterial and anti-inflammatory properties treat skin disorders like acne, eczema and psoriasis. Aloe vera Synonyms-Aloe Barbadensis Belong To Family- Liliaceae, which having 300 specie, Aloe vera is cactus like plant that grow readily in hot, dry climates, and Aloe vera cultivated in very large Quantities. Cosmetics and some medicinal products are made up from the mucilaginous tissue in the center of aloe vera leaf and called Aloe vera gel. Aloe vera gel contains no Anthraquinone. Which are Responsible for the strong laxative effects of aloes. However, total leaf extract may contain Anthraquinone.

Amla-Synonyms- Emblica Officinalis. Family- Euphorbiaceous. Which also known as Indian gooseberry. It contains Vitamin C considered important to slow the ageing radicals. Vitamins C isa Scavenger of free radicals which break them down. And also contain Amino acid like glutamic acid, proline, And Aspartic acids etc. Protein, Minerals. [4,5] Amla having shown Antioxidant, Anti- cancer, Antibacterial Activity. [6.7.8.9] Cucumber (Cucumis sativus L.) belongs to Cucurbitaceae family such as melon, watermelon, pumpkin and zucchini. It is widely consumed fresh in salads or fermented (pickles) or as a cooked vegetable. They are widely used for various skin problems including swelling under the eyes and sunburn. It is believed that they promote refreshing, cooling, healing, soothing, emollient and anti-itching effect to irritated skin. The nutrient profile of Cucumis sativus L. includes water (96.4%), protein (0.4%), fat (0.1%), carbohydrate (2.8%), mineral (0.3%), calcium (0.01%), phosphorus (0.03%), iron (1.5 mg/100 g) and vitamin B (30IU/100g.

MATERIAL AND METHODS

Experimental work

Plant Materials

The proposed study of Sop nut, Aloe Vera, Alma, Cucumber peel Collected from the local area.

Preparation of Extract

Air dried and coarsely powdered of Soapnut, Aloe Vera, Amla and cucumber peel. Were placed in Soxhlet separately, using petroleum ether and then successively with Ethanol. The extract was then concentrated to dryness under reduced pressure and

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controlled Temperature, and they were preserved in a Refrigerator. Cream Formulation: Triethanolamine, propylene glycol was taken in first beaker. Then heat on a water bath for uniform mixing. After few minutes oil phase was formed. Aloe Vera extract and Amla extract, cucumber peel extract, Distilled water, white soft paraffin and glycerin, zinc oxide, Sodium benzoate was taken in second beaker. Mixing all the ingredients by heating on a water bath, the aqueous phase was formed. Oil phase was added into aqueous phase and continuous stirring was done until semisolid mass was formed.

EVALUATION O FCREAM

Evaluation of herbal cream was following. Physical Evaluation

Formulated herbal creams was further Evaluated by using the following physical parameter physical parameter color, odor, consistency, and state of the formulation.

a) Colour: The colour of the cream was observed by visual examination. The result was shown in table 2.
b) Odour: The odour of cream was found to be characteristics.
c) State: The state was cream was examined visually. The cream was solid in state result was shows in table 2.
d) Consistency: The formulation was examined by rubbing cream on hand manually. The cream having smooth consistency.
e) Ph: ph of prepared herbal cream was measured by using digital ph meter. The solution of cream waspreparedbyusing100mlof Distilled water and set aside 2h. Ph was determined in three times for solution and the average value was calculated. Results were shown in table 2.
f) Spread ability: spread ability of formulated cream was measured by placing sample in between two slides then compressed to uniform thickness by placing a definite weight for defined time. The specified time required to separate the two slides was measured as Spread ability. Lesser the time taken for separation of two slides results showed better Spread ability. Spread ability was calculated by the following formula.
g) Wash ability: formulation was applied on the skin and then ease extends of washing with water was checked. Results were shown in table 2.
h) Non- irritancy test: Herbal cream formulation was evaluated for the non- irritancy test. Preparation shown no redness and irritancy. Observation of the state was done for 24hr.

RESULT

The present research was the formulation and evaluation of poly herbal cream. The evaluation parameters were coming under results, like the physical evaluation of poly herbal cream, Ph of the cream, Spread ability, Wash ability, non-irritancy test, viscosity and phase separation of the polyhedral pain reliving cream was shown in table 2.

CONCLUSION

Formulation of cream was done by slab method and further evaluated by various evaluation parameters such as physical properties, PH, spread ability, wash ability, non-irritancy test, viscosity and phase separation of cream and gives good results. By using Aloe Vera gel, the cream showed a multipurpose effect and all these herbal ingredients showed significant different activities. Based on results and discussion, the formulationsF1H, F2Hand F3Hwere stable at room temperature and can be safely used on the skin.

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