



REVIEW ON FORMULATION AND EVALUATION OF ANTIAGING CREAM FROM DRAGON FRUIT PEEL EXTRACT

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ABSTRACT

The two different kinds of what are known as dragon fruits are *Hylocereus polyrhizus* and *Hylocereus undatus*, and they are both members of the Cactaceae family. Many antioxidants found in dragon fruit, such as betalains, which are hydroxycinnamates, and flavonoids, shield cells against unstable molecules known as free radicals, which are connected to aging and the risk of chronic diseases. Dragon fruit also contains significant levels of vitamin C and phytoalbumins, which are recognized for their antioxidant qualities and may tighten and supple your skin while giving you a radiant, healthy complexion. Using this prepared dragon fruit cream on your face regularly might help to slow down the ageing process. Additionally, burns and acne are treated with it...

KEYWORDS:, acne, sunburn Dragon fruits, herbal cream, anti-ageing

INTRODUCTION:

A dragon or dragon fruit is the fruit of several cactus species indigenous to the Americas. *Hylocereus polyrhizus* and *Hylocereus undatus* are two varieties of the commonly called dragon fruits, belonging to the Cactaceae family and dragon fruits have gained popularity in many countries all over the world. The fruit of various Native American cactus species is known as a dragon or dragon fruit. Both *Hylocereus polyrhizus* and *Hylocereus undatus*, often known as dragon fruits, are members of the Cactaceae family and are becoming more and more popular in many nations around the world. The dragon fruit may weigh up to one kilogram when its spines sprout. Depending on the kind, the edible flesh of dragon fruit can be either red or white, while the skin can range in colour from yellow to dark red. It features a large number of tasty little black seeds. Naturally occurring flavonoids, which are mostly found in dragon fruit peel, are abundant in dragon fruit. Additionally abundant in phytoalbumins, which are prized for their potent antioxidant qualities, is dragon fruit. It supports our body's defence against free radicals. After the amount of free radicals is decreased, it also aids in delaying the ageing process. As a result, the skin appears taut, elastic, and youthful. Large concentrations of vitamins C, B1, B2, and B3 may be found in dragon fruit. Furthermore, it is abundant in some vital minerals including calcium, phosphorus, and iron. In addition, it has a healthy amount of fibre, niacin, and protein, and last but not least, it is 80% water. Therefore, it is reasonable to refer to it as a "super fruit" that improves nutrition and treats physical illnesses. Additionally, dragon fruit may play a significant role in your everyday beauty routine. Unsaturated fats from dragon fruit seeds lower harmful cholesterol.



Fig1:dragon fruit



Fig2:dragon fruit plant



Fig3:dragon fruit peel

1.1) A facial cream made of dragon fruit to prevent ageing

You can use a facial lotion with dragon fruit once a week to help prevent premature ageing. The anti-ageing properties of this face cream help to successfully slow down the progression of ageing cells.

1.2) Face cream made with dragon fruit to cure acne

Due to its high vitamin C content, dragon fruit is a great acne treatment. Use this frequently—ideally twice a day for optimal effects.

1.3) A face cream containing dragon fruit to soothe burned skin because dragon fruit has a lot of vitamin B3. It help to hydrate and calm

dry skin after sunburn. Dragon fruit juice is also an excellent sunscreen. Put some fruit cream on your face before you go. As you wash wash your face with cold water, let the skin absorb. Let the skin absorb. This will shield you. UV radiation damage effect

1.4)face cream made with dragon fruit for radiant,bright skin

Put cream on your neck,face,and entire body. Allow it to seep into your body. Have a shower. Twice a week,do it.

2.1 PROCEDURE FOR EXTRACTION

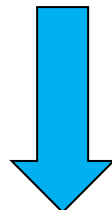
Peel the dragon fruit and let it dry for two hours at 700°C.



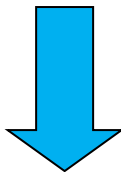
The big particles are subsequently removed by powdering the dry particles.



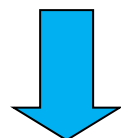
Weigh 5 grams of powder precisely and transfer it to a beaker.



One hour is spent measuring in a water bath.



Filter the extract, then use the same to wash the residue.



Let it settle, then concentrate and put it in a paper container.

2.2 FORMULATION TABLE

Ingredients	Quantity
Stearic acid	2gm
Isopropyl alcohol	0.4ml
Triethanolamine	0.26ml
Mineral oil	0.7ml
Cetyl alcohol	0.2gm
Propyl paraben	0.004gm
Peel extract	5ml
Glycerin	Q.S
Water	Q.S

3. EVALUATION PARAMETERS

3.1 Appearance and Homogeneity :

The developed cream was examined visually to ensure homogeneity and physical appearance...

3.2 Viscosity :

The Brookfield Viscometer was used to determine the prepared cream's viscosity. At 100 rpm, the reading was obtained.

3.3 Spreadability :

After a minute, the spreading diameter of 1g of cream between two horizontal plates (20 cm by 20 cm) was measured to assess the cream formulation's spreadability. 125g was the typical weight that was placed on the top plate.

3.4 Skin Irritation Studies :

After applying cream to the human volunteers, the skin was visually inspected to check for erythema and oedema..

3.5 Dye test :

The cream is combined with the red color. A drop of the cream is applied to a tiny slide, which is then covered with a cover slip and examined under a microscope. When dispersing in w/o type Cream, that is, when the dispersed globules show less colouration on the red ground. Globules show as red on a colourless ground. The Cream is in reverse condition or o/w kind.

3.6 After feel :

Checks were made for emollience, slipperiness, and quantity of residue remaining after a certain amount of cream was applied.

3.7 Type of smear :

Following cream application, the kind of film or smear that developed on the skin was examined.

4. CONCLUSIONS

Based on this research, we can conclude that the cream made from dragon fruit may help prevent wrinkles, treat acne, relieve sunburn, improve skin health, and provide dry skin the vital moisture it needs.

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