
**FORMULATION AND EVALUATION OF HERBAL FACE SCRUB
CONTAINING DRAGON FRUIT POWDER**

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ABSTRACT

Herbal cosmetics are widely used due to their natural origin, safety and fewer side effects compared to synthetic cosmetic products. The present study was aimed to formulate and evaluate a herbal face scrub containing dragon fruit powder as the main active ingredient. Dragon fruit possesses antioxidant, moisturizing and skin nourishing properties due to the presence of flavonoids, polyphenols and betalains. The prepared formulation showed good spreadability, suitable pH, smooth texture and good exfoliating property without irritation.

KEYWORDS: Herbal cosmetics, Herbal face scrub, Dragon fruit, Antioxidant, Aloe vera gel, Butterfly pea flower, Exfoliation.

INTRODUCTION

Herbal cosmetics are cosmetic preparations containing natural ingredients such as herbs, fruits and plant extracts used for skin and hair care. Dragon fruit is rich in antioxidants and skin nourishing compounds which are beneficial for skincare applications.

MATERIALS AND METHODS

Step 1: Selection of Raw Material

Fresh dragon fruit was selected and washed properly.

Step 2: Preparation of Dragon Fruit Pulp

The peel was removed and pulp was separated.

Step 3: Drying of Pulp

Shade drying method was used to remove moisture.

Step 4: Powder Preparation

Dried pulp was powdered and sieved.

Step 5: Preparation of Butterfly Pea Powder

Flowers were dried and powdered.

Step 6: Preparation of Aloe Vera Gel

Fresh aloe vera gel was extracted.

Step 7: Mixing of Gel Base

Aloe vera gel was mixed properly to obtain smooth consistency.

Step 8: Addition of Ingredients

Dragon fruit powder, butterfly pea powder, honey, glycerin and vitamin E were added.

Step 9: Mixing

All ingredients were mixed thoroughly.

Step 10: Addition of Rose Water

Rose water was added to improve fragrance and consistency.

Step 11: Final Product

Prepared scrub was stored properly for evaluation.

Formulation Table

Dragon fruit powder - 1 g

Butterfly pea powder - 0.75 g

Aloe vera gel - 6.3 g

Honey - 1 g

Glycerin - 0.5 g

Rose water - 0.25 g

Vitamin E - 0.2 g

Evaluation Tests

1) Organoleptic Evaluation

2) pH Determination

3) Homogeneity Test\\

4) Spreadability Test

- 5) Washability Test
- 6) Irritation Test
- 7) Consistency Test
- 8) Stability Study
- 9) Exfoliation Test
- 10) Foamability Test

RESULTS AND DISCUSSION

The prepared herbal face scrub showed light pink-purple colour with pleasant odour and smooth semisolid consistency. The pH of formulation was found to be 6.4 indicating skin compatibility. No irritation was observed during irritation test. Stability study showed no significant changes in colour and odour. The scrub showed good exfoliating property.

CONCLUSION

Dragon fruit can be effectively used in herbal face scrub formulation due to its antioxidant and skin nourishing properties. The prepared formulation showed good physical appearance, stability, spreadability and exfoliating property with skin-friendly pH.

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