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Formulation and Evalaution: The Nourishing Properties of Palash Soap

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A B S T R A C T :

Herbal Palash Soap is a unique and effective skincare solution. This article explores the benefits of Palash a herb rich in antioxidants, anti-inflammatory properties.

It is combination with other natural ingredients like Orange Peel, Lentils, and Milk Base,honey, Glycerin.

The article Satisfactory into the formulation and development of Palash Soap, its physical, chemical and its potential as a natural alternative to synthetic soaps. With its moisturizing, soothing, and exfoliating properties,this soap offers a natural and effective skincare solution for a healthier and more radiant complexion.

KEYWORD: Herbal soap ,Palash Flower , Orange Peel , Lentils Powder , Milk Base, Honey ,Vitamin -E.

1.INTRODUCTION

In today's world, where harsh chemicals and artificial ingredients dominate the skincare industry,Palash Soap stands out as a illuminate of natural goodness. Made from the finest, hand-selected ingredients, including pure orange peel, lentil, honey, and a base of milk, Palash Soap is a game changer for those seeking a gentle, effective, and sustainable skincare solution. In this article, we will develop into the wonders of Palash Soap and explore what makes it a truly unique and nourishing experience for the skin.

The Power of Natural Ingredients:

Palash Soap's formula is built with five core ingredients, each chosen for its exceptional skin benefits:

1.2.BENEFITS:

- **Milk Base :**

1. Moisturizing: hydrate and soften the skin.
2. Gentle: suitable for sensitive skin
3. pH Balanced: non irritating cleanser.

- **Orange Peel :**

1. Antibacterial: reduce the growth of bacteria on skin.
2. Astringent:o tighten and tone the skin.
3. Natural Exfoliant: removing dead skin cells

- **Palash flower:**

1. Antioxidant: protect the skin from damage caused by free radicals.
2. Anti-Aging: reduce the appearance of fine lines and wrinkles.

3. Skin Brightening: reducing the appearance of Hyper-pigmentation. □

◆ **Lentil powder:**

1. Exfoliating: revealing brighter, smoother skin.
2. Anti-Inflammatory:reduce redness and swelling in the skin.
3. Nourishing: nourish and moisturize the skin.

Material

SR	INGRIDIENTS	WEIGHT(100g)
1	Milk Base	70g
2	Palash Flower Extract	10ml
3	Lentil Powder	3g
4	Orange Peel Extract	5ml
5	Honey	5ml
6	Glycerin	3ml
7	Vitamin E	2ml
8	Rose Oil (Optional)	2ml

PREPARATION OF PALASH EXTRACT(10ml):

1. Dry and grind 25gm Palash flowers: Dry the Palash flowers thoroughly and grind them into a fine powder.
2. Extract with 50-100ml water : Mix the ground Palash flowers with 50-100ml of water
3. heat the mixture for 2-3 hours gently (40-50°C) for 30 minutes to 1 hour.
4. Filter the mixture using filter paper or cheesecloth to separate the liquid extract from the solids.
5. Concentrate the extract: Concentrate the liquid extract through evaporation or using a rotary evaporator to obtain 10gm of Palash extract.

PREPARATION OF ORANGE PEEL EXTRACT(5ml):

1. Dry the orange peels thoroughly and grind them into a fine powder.
2. Mix the ground orange peels with 10-20ml of water
3. heat the mixture for 2-3 hours gently (40-50°C) for 30 minutes to 1 hour.
4. Filter the mixture using filter paper or cheesecloth to separate the liquid extract from the solids.
5. Concentrate the extract (optional): If necessary, concentrate the extract through evaporation to obtain 5ml of orange peel extract.

FIG .1

FIG .2

FIG .3

FIG.4

FIG.5

FIG.6

3. PROCEDURE

1. Cut the milk base into small pieces and melt them in a double boiler,stirring until smooth.
2. Add Palash and Orange Peel Extract and lentil powder into the melted milk base until well combined.
3. Add Honey and Glycerin Mix the honey and glycerin into the melted milk base until well combined.
4. Add Vitamin E Oil Mix the vitamin E oil into the melted milk base, Essential Oil mix it into the melted milk base.
5. Pour into Mold Pour the soap mixture into a soap mold, Let the soap set and harden in the mold.
6. Unmold the soap from the mold .

4.1.Evaluation of Herbal soap

- **Physical Tests**

The palash formulated was evaluated for the following properties:

pH :- the pH was determined by using pH paper.
The pH found to be basic in nature around 7 to 7.5.

FIG.4.1 PH TEST

Foam retention: 25 ml of the one soap solution was taken into 100ml graduate measuring cylinder was covered with hand and shaken 10 times. The volume of foam at 1 interval for 4 minutes was recorded. It was found to be 5 min.

Foam height : 15cm
Foam retention: 4min

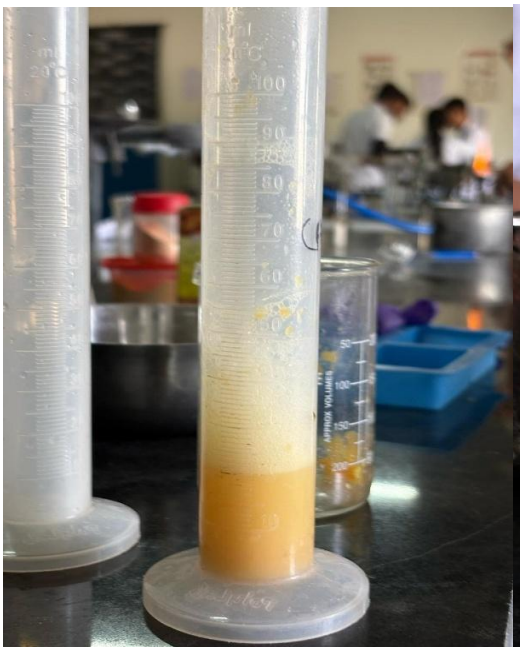


FIG.4.2Foam height

FIG.4.3 Foam retention

Irritations test: Took about 0.5 grams of soap that has been soaked in water. Then applied to the skin, allowed for 15 to20 minutes, observed the symptoms caused after applied.

No reaction occurs during an irritation test for soap, the result indicates that the soap is likely non-irritating and safe for normal use. This means that the soap is unlikely to cause skin irritation, redness, itching, or other signs of adverse reactions.

- **Chemical Tests**

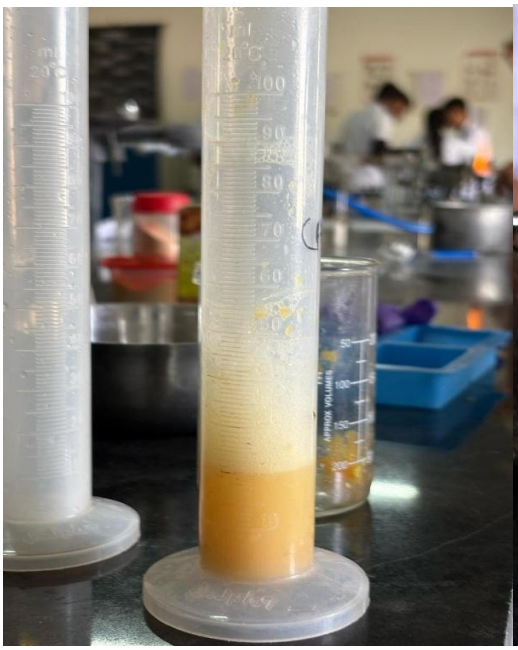
High temperature stability: The allow stand at temperature above 50 °C.

Total Fatty Matter Content Test : 5gm of soap sample is dissolved in 100ml hot Water. About 40ml of 0.5N HNO3 is added to make it acidic. The mixture is heated Until fatty acids are floating as a layer above the solution. It is cooled in ice water to Solidify the fatty acids. The fatty acids were separated and the aqueous solution was Treated with 50ml chloroform to remove the remaining fatty acids. The separated Fatty matter was mixed together, solvent was evaporated and the yield is noted. The Total fatty matter can be calculated using the following method

Calculation Weight of the china dish (x) = 28.76
Weight of china dish + Soap after drying (y) = 32.33

Weight of soap sample = 5 g
% of fatty mater = (y – x) x 100

Weight of soap sample = 71.4 %



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5. Results and discussion

PARAMETERS	FORMULATION
1. Colour	Yellowish
2. Odour	Aromatic
3. Texture	Solid
4. pH	7-7.5
5. Foam height	15cm
6. Foam retention	3-4 min
7. High temperature stability	Melts above 50°C

Glycerin base soap **5.2 Milk base soap**

5.1 Organoleptic Result For Glycerin Soap base:

Colour :- light yellowish brown
Odour :- sweet
Texture :-solid

5.2 Organoleptic Result For Milk Soap base:

Colour :- Daisy yellow
Odour :- sweet
Texture :-solid

Preparation and evaluation of Polyherbal soap was done.

Physicochemical parameters, including appearance and pH(ranging from 7-7.5),
were determined. Other parameters, such as foam height, foam retention, and temperature stability, were also evaluated tabulated. The soap, formulated using ethanolic extracts of herbal drugs, was a dry, stable solid with no color change. It had good skin compatibility and caused no irritation. With an estimated TFM of 71.4%, the soap was characterized as Grade 2 soap. Herbal soap has fewer adverse effects compared to chemical soap and acts as a bacteria and microbe-firefighting.

6 Conclusion

The formulated Herbal Palash soap is an excellent choice for those seeking a cost-effective and natural skincare solution. With its unique blend of herbs and affordable price point, it's an attractive option for anyone looking to prioritize their skin health without breaking the bank.

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