

# Formulation And Evaluation of Herbal Facewash Tablets by Using *Rosa Gallica* and Multani Mitti

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**Abstract**— *The global market for herbal formulations is expanding due to the fact that natural remedies are safer than synthetic ones. The use of plants to achieve beautiful, healthy skin is becoming more widely known. Good anti-oxidant, anti-microbial, and anti-inflammatory properties of the Rosa gallica plant have been reported in the literature. Furthermore, the medicinal and cosmetic qualities of multani mitti have long been recognized. Creating and testing a herbal face wash tablet with multani mitti and Rosa gallica was the goal of this study. The final formulation (T3) was assessed for a number of functional parameters, including color, appearance, consistency, foaming ability, pH, odour, and spreadability. The formulation was tested through three separate trials. The creation and assessment of cosmetic Herbal Facewash Tablets using natural ingredients is the aim of this project. People have been aware of the benefits of using plants for a healthy, beautiful complexion since prehistoric times. Cleansing, beautifying, and promoting an attractive appearance are all accomplished with cosmetics. Designers of cosmetics have found great success in accommodating today's nerds with varying skin types by utilizing natural materials like herbs. Since prehistoric times, people have understood the value of utilizing herbs to achieve a clear, healthy complexion.*

**Index Terms**— *Rosa Gallica, Multani Mitti, Natural Remedies, Cosmetics, Herbal Tablets, Facewash.*

## I. INTRODUCTION

Herbal cosmetics are in high demand, and the use of herbs in the manufacturing of cosmeceuticals has increased significantly in the personal care system in recent years. Cosmetics are substances applied to the human body with the intention of enhancing beauty, increasing attractiveness, and changing appearance without having an adverse effect on the functions or structure of the body. The word "cosmetics" comes

from the Greek word "kosmeticos," which means to decorate. Cosmetics have been associated with beatification and aesthetic enhancement since antiquity. Cosmetics are made to reduce wrinkles, treat acne, and control oil production. Various natural and synthetic materials are used to create formulations for a range of skin disorders, including skin protection, sunscreen, anti-acne, anti-wrinkle, and anti-aging. In order to create more complex skin care product designs, there is growing interest in understanding the mechanisms of action of the natural compounds that are widely used in the production of cosmetic preparations. Herbal cosmetics are becoming more and more popular because they are safe for sensitive skin and have no negative side effects. A face wash is a mild cleaner that keeps the skin clear, smooth, and free of germs. It also moisturizes the horny layer without irritating it, giving the skin a youthful, vibrant appearance. Facewash can be used to clean, moisturize, treat acne, reduce wrinkles, and make skin more fair. Commonly used in skin care are herbs like neem, aloe vera, turmeric, liquorice, and others. The *Rosa gallica* species is an herb used for medicinal purposes that grows widely. Specifically, one of the *Rosa* species that is most frequently used for its medicinal and cosmetic qualities is the *Rosa gallica* plant. Its good cleansing, soothing, anti-oxidant, antimicrobial, and skin-anti-inflammatory properties have been documented in the literature. Its petals are rich in anthocyanin, flavonols, and phenolic acid. It's always a risk to carry face wash when traveling, especially when flying. Not only do they take up valuable luggage space, but they run the risk of breaking or exploding while in transit. The herbal face wash tablet is a single-use item with a sufficient quantity to prevent abuse. Multani mitti helps to

reduce excessive oiliness and balance the pH level due to its Ruksa (dry) and Sita (cold) properties. Multani Mitti, also known as Fuller's Earth, is a mineral-rich clay material that has long been used as a beauty ingredient. It is a 100% natural skin exfoliation powder for a youthful and vibrant look. Multani mitti helps to reduce the secretion of excess oil and gives a healthy glow to the skin. This naturally occurring form of clay has several other uses for skin and hair. It does this by getting rid of all the impurities from your skin and scalp and by unclogging your pores. It is known to clear spots and lighten the skin tone, which helps in enhancing skin complexion, while apricot oil firms and tones skin due to the vitamin A and E present in it. It also soothes and slows down the aging process. It also helps protect the skin cells from free radical damage.

**Materials & Methods:**

- Collection of herbs
- Collection of Rosa gallica

The fresh petals of Rosa gallica were collected from the local market of Kankavli to obtain a Rosa gallica powder.

- Preparation of herbal extract powder

The petals of the Rosa gallica flowers were washed and separated from each flower bud. They were carefully shade dried and then grinded in a grinder to obtain a powder. The powder was then passed through the sieve to get a fine powder and stored in an air-tight container [8].

- Collection of Multani Mitti

The Multani Mitti powder was procured from the local market of Kankavli.

The multani mitti powder was also passed through the sieve to get a fine powder and stored in an air-tight container.

Table no 1: Composition of ingredients

Sr.n o	Ingredie nts	Quantity			Role
		T1	T2	T3	
1	Methyl cellulose	120 0 mg	150 0 mg	120 0 mg	Thickner
2	Carbapol 940	100 0 mg	120 0 mg	140 0 mg	Thickenin g agent

3	Citric acid	70 mg	70 mg	70 mg	Preservati ves
4	Sodium Lauryl sulphate	220 0 mg	200 0 mg	240 0 mg	Foaming agent
5	Glycerin e	880 mg	900 mg	800 mg	Humectant
6	Span 20	120 0 mg	120 0 mg	108 0 mg	Surfactant
7	Rossa gallica	110 0 mg	115 0 mg	110 0 mg	Cleanser
8	Multani mitti	850 mg	880 mg	850 mg	Exfolliatin g agent
9	Starch	140 0 mg	100 0 mg	100 0 mg	Binder
10	Vanillin	100 mg	100 mg	100 mg	Flavouring agent

- Preparation Of Herbal Facewash Tablet:

- 1) Firstly the required amount of Rossa Gallica powder and Multani mitti powder were taken and triturated in a mortar.
- 2) In this further Starch was added to the above mixture as a binder.
- 3) SLS was added into this as a foaming agent.
- 4) To the above mixture Citric Acid, Glycerin and Span 20 were added as Preservative, Humectant and Surfactant.
- 5) Vanillin was added as perfume to the preparation.
- 6) The total mixture was passed through sieve no. 22 for granules.
- 7) The granules were put into tablet punching machine and tablets were punched.
- 8) All the test for tablet were done and tablet was ready.

- EVALUATION TESTS

Evaluation of herbal facewash tablet:

To evaluate the prepared formulation evaluation tests like visual appearances, physiochemical properties, pH, hardness and various other tests were done.

- 1) pH:

The pH of the tablet was calculated by using a digital pH meter by dissolving the tablet in distilled water and measuring the pH on the pH meter.

2) Spreadability:

The spreadability of the tablet was tested in laboratory by rubbing the tablet on both hands with water. The spreadability of the tablet was found to be good.

3) Hardness:

The hardness of the tablet was tested by using the Monsanto type of hardness testing apparatus.

4) Foamability:

Foamability test of the tablet was done by rubbing the tablet on both hands using water and observing the amount of foam formed.

Also the tablet was put into a container containing distilled water and shaking it till foam was formed.

5) Visual Appearance:

In these tablets were observed for its colour, odour and foam producing ability.

6) Friability:

The friability of the tablets was tested using the friability testing apparatus. The initial and the final weights of tablet were calculated.

$$F = \frac{W_o - W_p}{W_o} \times 100$$

Where, F=Friability

W<sub>o</sub>=Initial weight of testing tablets

W<sub>p</sub>=Weight of tablets after testing

7) Weight Variation:

The weights of 20 tablets were calculated and average weight was found in weight variation testing.

$$\text{Weight Variation} = \frac{(Iw - Aw)}{Aw} \times 100\%$$

Where, Iw = Individual weight of tablet;

Aw = Average weight of tablet

II. RESULT

Table 2. Result of functional parameters of herbal facewash tablet formulation.

Sr.no	Parameters	Standard	Final Herbal Facewah
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			Tablet formulation
1	Colour	Tan colour	Tan colour
2	Appearance	Good	Good
3	Consistency	Solid	Solid
4	Cleansing Ability	Good	Good
5	Foaming Ability	Good	Good
6	Spreadability	Better	Fine
7	pH	Between 5 to 7	6.05
8	Odour	Pleasant	Pleasant
9	Hardness	Not more than 8	5
10	Thickness	4	4
11	Weight variation	More than 250	5%
12	Friability	Not more than 1%	0.56

Table 3. Results of accelerated stability study

Sr. no	Formulation	Parameters	Oven(45°C)	Refrigerator(4°C)	Room Temp.
1	Herbal facewash tablet formulation	Colour	No Change	No Change	No Change
2		Odour	No Change	No Change	No Change
3		pH	6.5	6	6.05



Fig.no.1. Herbal facewash tablet



Fig.no.2.Foam formed of final facewash tablet (T3)



Fig.5.Foamability test.



Fig.3.Hardness testing



Fig.6.Friability test.



Fig.4.Spreadability test.



Fig.7.pH test.

## CONCLUSION

The creation and assessment of a herbal facewash tablet aimed to lower costs, increase accessibility for the general public, and make it more convenient for people. We carried out an experiment using facewash tableting technology, which offers great convenience for people traveling and short facewash usage while decreasing waste. After all comparative research on the drug and excipients with evaluation, the produced batch T3 yields good foam and excellent facewash.

The study mentioned above leads to the conclusion that the formulation of the herbal face wash tablet, which includes powdered *Rosa gallica* and Multani mitti, can be a convenient one-time-use tablet that creates a good amount of foam and has a cleansing and soothing effect on skin in good condition.

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