



Comparison Study Of Homemade Polyherbal Ubtan Soap With Branded Cosmeceuticals

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Abstract: Ayurvedic herbs with therapeutic qualities are used to make the natural skincare product Polyherbal Ubtan Soap. For generations, people have utilized these plants to treat skin conditions and encourage the growth of healthy skin. This herbal soap provides an antibacterial treatment that helps treat skin issues like bacterial infections and tans, in contrast to commercial soaps that frequently include dangerous chemicals. Because of its skin-rejuvenating and antioxidant qualities, it is a safe, affordable, and efficient substitute for natural skincare products that promote healthier skin.

Index Terms - Polyherbal Ubtan Soap, Skincare, Ayurveda, Antioxidant, Antibacterial.

I. INTRODUCTION

Herbal soap, a time-honored tradition dating back centuries, represents a fusion of nature's bounty and skincare innovation. Unlike conventional soaps laden with synthetic chemicals, herbal soaps harness the power of botanical extracts, essential oils, and herbs to cleanse, nourish, and rejuvenate the skin. From ancient civilizations to modern-day wellness enthusiasts, herbal soap has remained a cherished part of personal care routines, celebrated for its natural ingredients and holistic benefits. ⁽¹⁾

OBJECTIVES:

- Fights pigmentation and dark spots
- Hydrates the skin
- Nourishes the skin
- Soothes the skin
- Helps to control oil secretion
- Exfoliate dead skin
- Fights against acne, pimples
- Reduces sun tan
- Removes dark circles
- Removes blackheads
- Removes whiteheads
- Weakens the hair root thus reducing facial hair growth. ⁽²⁾

II. MATERIALS USED AND THEIR USES ⁽³⁻⁷⁾

1. Turmeric: Anti-inflammatory, Anti-aging, Anti oxidative agent, Anti-bacterial.
2. Gram flour: Exfoliator
3. Sandalwood powder: Skin smoothening
4. Orange peel powder: Skin Brightening, Skin Softening, Anti-Oxidant, Reduce pigmentation, Acne, Sun tan Removal
5. Glycerin: Moisturizer, soften skin, to treat dry, itchy skin
6. Vitamin E: Improve skin elasticity, Anti-aging, Skin conditioning,
7. Rice flour: Anti-inflammatory, Anti-oxidant, prevent skin aging, Reduce UV damage, Promote skin lightening
8. Multani mitti/ fuller's earth: to treat tanning, pigmentation, effective to treat sunburn, removing dirt, brighten skin, cleanses skin.
9. Rose petal powder: Skin toner, Skin softener, Glowing agent, antioxidant.

METHOD OF COLLECTION OF CRUDE DRUGS

1. Orange peel powder extract:

The oranges were collected and washed well with tap water. The peel was separated and cut into the small pieces. Then it was dried in shade for period of 3-4 days. The dried samples were grinded properly into the grinder. To obtain the fine powder it was passed through sieve no.60 and then from muslin cloth. Then this powder was soak in water for 1 hr. then used.

2. Sandal wood powder extract:

Marketed powder of sandal wood were soak into the water for 1 hr. and then used.

3. Turmeric, gram flour, rice flour, Multani mitti/ fullers earth, rose petal powder, vitamin E capsule, glycerin were purchased from local market and then used. (8)

Formulation of handmade Ubtan soap:**Table No. 1 Ingredients used**

Sr No	INGREDIENTS	QUANTITY TAKEN
1.	Turmeric	q.s
2.	Gram flour	1-2gm
3.	Sandalwood powder extract	0.25%
4.	Orange peel powder extract	5%
5.	Rose petal powder	q.s
6.	Glycerin base	60gm
7.	Vitamin E	1 capsule
8.	Rice flour	2 gm
9.	Multani mitti/fullers earth	3-4gm

Procedure:

- The required quantity of glycerin base is taken and melted (not directly).
- Simultaneously the required amount of turmeric powder, gram flour, rose petal powder, rice flour, fullers earth are taken and mixed well in motor pastel.
- Now, to the melted glycerin base required quantity of sandalwood extract, orange peel extract, drops of vitamin E are added and mixed well to avoid formation of lumps.
- After formation of a proper mixture remaining ingredients mixed in mortar pastel are added to glycerin base.
- Stir the mixture for some time.
- Pour the mixture in moulds and cover with aluminum foil.
- Keep aside for 6-7 hours.

Evaluation test ⁽¹⁰⁾

1. Determination of clarity, color and odour

Clarity and colour was checked by naked eyes against white background, the odour was smelled



2. pH

The pH of the all the prepared formulation was determined by using digital pH meter.

3. Foam Height

0.5 gm of sample of soap was taken dispersed in 25ml distilled water. Then, transferred it into 100 ml measuring cylinder, volume was made up to 50 ml with water. 25 strokes were given and stand till aqueous volume measured up to 50 ml and measured the foam height, above the aqueous volume.

4. Foam Retention

25 ml of the 1 % soap solution was taken in a 100 ml graduated measuring cylinder. The cylinder was covered with hand and shaken 10 times. The volume of foam at 1 minute an interval for 4 minutes was recorded.

5. Primary skinirritation test

For these three volunteers were selected and the prepared soap were given to them and checked for irritation.

6. High temperature stability

The soap was allow to stand at temperature above 50 degree Celsius

Result

Table No. 2 Evaluation and comparision with Branded uptan soap and Chemical soap

Sr no	Parameter	Handmade Ubtan soap	Branded Ubtan soap	Chemical soap
1	Colour	Light brown	Dark brown	Browm
2	Ph	8-9	6-7	5.5
3	Foam height (cm)	11	15	25
4	Foam retention (min)	4.5	5	7.5
		5.5	6.4	6.9
		4.9	5.7	7.2
		5.3	5.9	6.7
5	Skin irritation test	No irritation to skin	No irritation to skin	Can cause irritation to sensitive skin
6	High temperature stability	It withstand temperature above 50°C	Withstand temperature slightly above 50°C	Can withstand somewhat higher temperature

Discussion

The pH value of the handmade ubtan soap was found to be higher than other soaps which is found to be good for skin as low pH can cause itching, irritation to the skin, might cause damage to sensitive skin. Handmade ubtan soap is made from natural ingredients which are harmless while marketed ubtan contains certain chemicals that might affect sensitive skin. Thus, handmade ubtan soap is a good alternative for chemical soap to maintain proper skin care.

Conclusion

The handmade ubtan soap was prepared by using crude drug power and their extracts and then evaluated by various parameters. The prepared ubtan soap has good appearance better cleansing and foaming effect and does not have side effects.

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