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Formulation and Evaluation of Ubtan Facewash

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Abstract: *People have been aware of the importance of using plants for the basic need of having healthy and beautiful skin since ancient times. Herbal formulations have always gotten a lot of interest because they have good activity and have fewer or no negative effects than synthetic medications. Because Natural face care uses tropical face washes made of ingredients available in nature, much of the recent literature review plant derived ingredients, which may include herbs, flowers, roots, flowers, and essential oil, the best thing about herbal cosmetics is that they provide the body with nutrients and other useful minerals. The natural-based personal face care market has experienced rapid expansion. The goal of this research was to create and test a herbal formula.*

Keywords: Cosmatics, Face wash, Herbal Formulation.

I. INTRODUCTION

1.1 Cosmetics

The word "cosmetic" is derived from the Greek word "Kosmeticos" which means cosmetics or cosmetics. The term ‘cosmesis’ (Gr. Kosmesia) is used for two things: restoring or preserving the beauty of the body, surgical repair of a damaged physical effect

1.2 Herbal Cosmetics

The blessings of natural beauty and the help of cosmetics in introducing and developing aspects of human beauty and personality. Nowadays, people prefer natural foods, herbal remedies and natural remedies for healthy living
Herbal cosmetics are a phytochemical compound from a variety of botanical sources, which influence skin function and provide essential nutrients for healthy skin.
Natural remedies and their products when used for fragrance in cosmetic products are called herbal cosmetics.
Herbal products have created the need for natural products and natural extracts in the preparation of cosmetics, because there is a widespread belief that chemical-based cosmetics are harmful to the skin.

1.3 Skin

As we know skin is the largest organ of the body, about 15% of the total adult body weight. It performs many vital functions, including protection against external, physical, chemical and biological agents. It also helps in prevention of excess water loss from the body and a role in thermoregulation. A balanced nutrition is required, to keep skin healthy, clear and glossy. When it comes to human skin not all parts of human body are created equal. Face skin is the important

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part of the body which indicates the health of an individual.Normal, dry, oily, and mixed skin are the four main types of healthy skin. Cleansers/face washes should be chosen based on the skin type.

1.4 Skin Care Preparations

The skin care preparations industry has exploded in recent years. People use a variety of skin care products, such as mouthwash, lipsticks, complexion creams, and foot powders, in the hopes of building a pleasant personality, safeguarding their bodies, and preventing odour. Skin care preparations are substances that are intended to be rubbed, poured, sprinkled, sprayed, or otherwise applied to the human body or any part of the body for the purposes of cleansing, beautifying, promoting attractiveness, or changing the appearance of skin. The role of many herbs, such as amla, is described in Ayurveda.

1.5 Face Wash

Definition: A cleanser is a facial cleansing product that removes makeup, dead skin cells, oil, grime, and other impurities from the face's skin. This aids in the unclogging of pores and the prevention of skin disorders like acne. A cleanser, together with a toner and moisturiser, can be used as part of a skin care routine.

The Benefits of Face Wash:

- It aids in the removal of dead skin cells, which aids in the healing process.
- Old skin cells are replaced by new ones.
- It keeps the skin looking young and healthy.
- It gives the skin a healthy glow.
- Dead skin cells and excess oil block pores, resulting in acne white heads, blackheads, and an overall tired appearance. Regularly exfoliating the pores.

Face wash has the following properties:

- Exfoliation stimulates skin regeneration and renewal by speeding up blood circulation.
- Sebaceous glands secrete too much sebum, which clogs the pores and makes the skin oilier.
- Cleansers with herbs and botanicals that clear the pores and minimise oil buildup are necessary for oily skin. Anti-inflammatory and antioxidant ingredients in these exfoliating cleansers help to repair and nourish damaged skin.
- Herbal face wash is used to cure acne and pimples because of its therapeutic characteristics.
- Herbal face cleanser, which contains rich plant-based components like neem, eliminates excess oil without stripping the skin of its nutrients.
- It must be both stable and appealing to the eye.
- When applied to the skin, it should soften.
- It is expected to spread.

Uses of Face-Wash

- To remove all traces of makeup every day
- For cleansing the skin.
- Anti-aging,
- Bath and renewal keeping the skin clean and
- shiny.
- Stimulates there generation of the skin cells and their renewal.
- Help plug the pores clear.

Forms of Facewash

- Cream Based Facewash

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- Gel Based Facewash
- Liquid Based Facewash
- Face Based Facewash

Types of Facewash

- Oily Skin Facewash
- Dry Skin Facewash
- Normal Skin Facewash

II. MATERIALS AND METHODS

Table 1: Materials required for formulation of facewash

Sr. No.	Name of ingredient	Scientific Name	Quantity (for 50 ml)
1	Curry extract	Murraya Koenigii	2.5 ml
2	Turmuric extract	Curcuma	1.25 ml
3	Honey	Genus Apis	2.5 ml
4	Rose water	-	Q.S
5	Sandalwood oil	Santalum Album	0.2 ml
6	Glycerin	-	5 ml
7	Xanthum gum	-	0.5 ml
8	Methyl Paraben	-	0.05 mg
9	Propyl Paraben	-	0.03 mg
10	SLS	-	1.05 mg
11	Carbopol	-	0.5 mg
12	Chickpea flour	-	1.5 mg

2.1 Extraction of Curry Leaves

1. The curry leaves in oven were dried at 105 for 3 hr Dried leaves were triturated using mortor & Pestle & screened through a sieve with mesh 80 to obtain uniform powder
2. The powder was stored properly to prevent moisture
3. The soxhlet extraction method is used, 10 gm of curry leaves powder was weighed and embeded in a thimble put in the soxhlet apparatus which was gradually filled with methanol and water at 1:1 portion
4. The extraction was carried out at 60° within 9 hrs
5. Upon completion of the extraction the solvent was saparated from the extract using rotary evaporator
6. The evaporated extract is Then evaluated and used for the formulation of anti acne facewash

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2.2 Extraction of Curcumin

The rhizomes of turmeric were dried in oven at 105 °C for 3 h. Dried rhizomes were triturated using mortar and screened Through a sieve with mesh 80 to obtain uniform powder with particle size of 0.18 mm

The turmuic powder was stored in refrigerator to prevent moisture uptake.

The Soxhlet extraction, as the reference method, was performed as:15 g ground turmuric powder was weighed and embedded in apparatus which was gradually filled with acetone as the extraction solvent

The extraction experiment was carried out at 60° within 8 hours.

Upon completion of the extraction , the acetone was separated from the extract using rotary evaporator.

The evaporator extract is then evaluated and used for the formulation of Facewash.

Fig. 2: Extraction of curcumin by soxhlet

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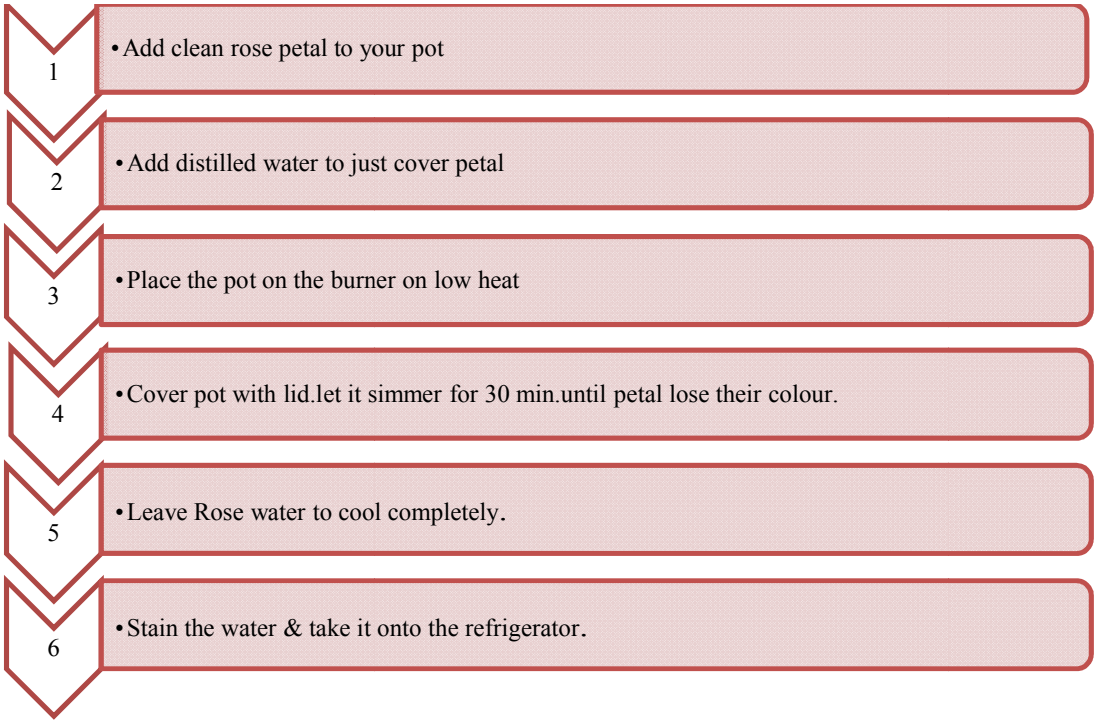
2.3 Extraction of Rose Water



III. PREFORMULATION EVALUATION

Table 2: Preformulation Evaluation of Curcumin extract

Test	Observation	Inference
Carbohydrates: The extract was dissolved in 10ml of distilled water & filtered through filter paper & the filtrate is subjected to tests for carbohydrate a)MolishTest:-2ml of solution was placed in a test tube.1 drop of Molish Reagent was added .2ml of conc.HCL was added from the sides of test tube	A Voilet ring at the junction of the two liquids indicates presence of carbohydrates.	Present
Protein: The extract was dissolved in 10ml of distilled water & filtered through filter paper & the filtrate is subjected to test for proteins. a)Millons test:- To 2ml of filtrate few drops of Millon's reagent are added. The result was observed.	A white precipitate indicates presence of proteins Present	Present
Alkaloid: About 50 mg of solvent free extract stirred with 3ml of dil. HCL & then filtered thoroughly. The filtrate was tested carefully with various alkaloid reagent as follows. a) Mayer's test:- To a 1ml of filtrate, few drop of Mayer's reagent are added by side of the test tube.	The white or creamy precipitate indicated test as positive	Present
Tannins: To 0.5ml of the extract solution 1ml of water & 1-2 drop of FeCl soln was added.	Blue colour was observed for gallic tannins & green black for catecholic tannins	

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IV. METHOD OF FORMULATION OF FACEWASH

All the powder ingredients are seived in seive no. 80 and are weighed in above given quantity

After that the curry and turmuric extract were added also with the addition of sandalwood oil

Then addition of honey and glycerin is done

At last the rose water is added to make up the quantity upto 50 ml

Afterwards the mixture is stirred in magnetic stirrer to obtain a uniform mixing and proper viscosity of formulation

Fig. 3: Prepared Facewash

V. METHODS OF EVALUATION FOR PREPAREED FACEWASH

The following parameters were assessed when the Facewash was prepared:

5.1 Organoleptic Evaluation

- **Color:** The colour of the face wash formulation was visually assessed.
- **Odour**: The odour of the formulation was assessed by sniffing it.
- **Consistency**: Consistensy is important. It was calculated manually.

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After the created facewash has been placed in the container, it is visually inspected. The look of the facewash is examined, as well as the presence of any aggregates.

5.2 Physicochemical Assessment

- **pH:** At constant temperature, the pH of a 1 percent aqueous solution of the formulation was determined using a calibrated digital pH metre.

Fig. 4: Determination of pH By digital pH meter

5.3 Evaluation of Performance

- **Washability:** After applying the formulation to the skin, the ease and extent of washing with water were personally assessed.
- **Foaming ability:** Only a small amount of gel was used.
- **Spreadabillity**: A glass slide with conventional dimensions was taken in two sets. The polyherbal formulation gel was sandwiched between the two slides for a total length of 60mm. Removed the extra gel that had attached to the glass slides' surface and secured them to a stand without causing any disruption. A 20 g weight was linked to the top slide, and the time it took for the upper slide to move to a distance of 60mm under the influence of the weight was recorded.

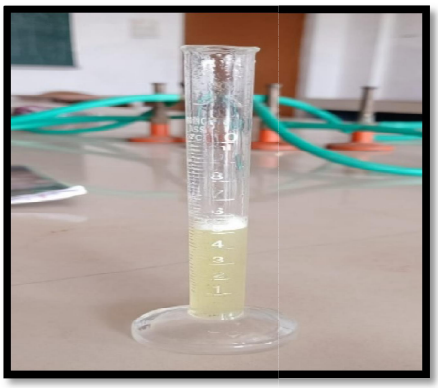

Fig 5: Foam Ability test

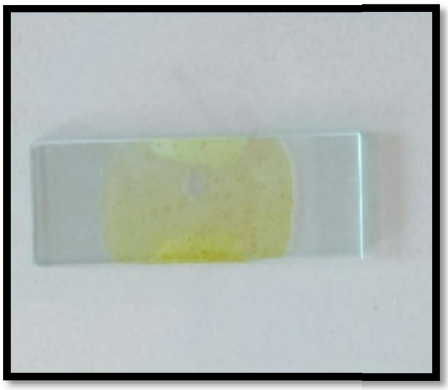

Fig. 6: Spread Ability Test

5.4 Irritation Test on the Skin

For 10 minutes, a small amount of the produced formulation was applied to the dorsal side of the left hand. After 10 minutes, irritability and any allergic reactions were assessed.

5.5 Microbial Assay

A cup-plate agar diffusion method was employed to test for microbials.

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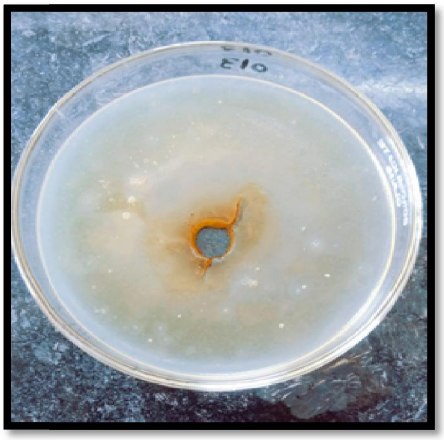

Fig. 7: Microbial Assay

5.6 Stabillity Studies

The produced formulation was tested for stability by storing it at various temperatures for 30 days.Facewash was tested at both room temperature and in the refrigerator.

VI. RESULT

6.1 Organoleptic evaluation

Table 3: Organoleptic Evaluation

Types of evaluation	Parameter	Observation
Organoleptic Evaluation	Colour	Yellowish Green
	Odour	Characteristic
	Consistency	Gel like consistency
	Homogeneity	Uniform

6.2 Physicochemical Assessment

Table 4: Physicochemical Evaluation

Types of evaluation	Parameter	Observation
Physicochemical Evaluation	pH	5.55

6.3 Evaluation of Performance

Table 5: Evaluation Performance

Types of evaluation	Parameter	Observation
Performance Evaluation	Washability	Washable
	Foamability	Foam appears
	Spreadabillity	Pass

6.4 Irritation Test on the Skin

Table 6: Irritation skin on the skin

Type of Evaluation	Parameter	Observation
Skin Irritation	Irritation	No
	Itching	No
	Redness	No
	Pain	No

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6.5 Microbial Assay

Table 7: Microbial Assay

Type of Evaluation	Parameter	Observation
Microbial Evaluation	Antimicrobial activity	Present (17 mm)

6.6 Stabillity Studies

Table 8: Stability Study

Type of Evaluation	Parameters	At room Temperature	At Refrigerator
Stability Study	Appearance	Normal	Normal
	Colour	Normal	Normal
	Odour	Normal	Normal
	Texture	Normal	Normal

VII. CONCLUSION

The herbal facewash is one of the most well demanded products for daily facial care It can definitely provide all the essential nutrients required for healthy skin functioning. The study aimed at formulating herbal Ubtan facewash using turmeric and curry extracts together with essence of ubtan, The method used for extraction is Soxhlet Extraction Method. Desired formulation of facewash was prepared and evaluated for their various parameters like organoleptic evaluation, Physicochemical evaluation, Performance evaluation, Skin irritation test, Microbial evaluation and Stability studies. Three batches are formulated amongst which batch B2 show compatible results. So from the above studies it was concluded that the prepared formulation can be effectively used for facial care

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CONFLICT OF INTEREST

The author declared no conflict of interest.

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