



Preparation And Evaluation of Polyherbal Face Wash

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Abstract — Herbal formulations are gaining remarkable global attention as natural, sustainable alternatives in cosmetics, nutrition, and medicine. In the present work, a novel polyherbal formulation was designed using **Turmeric (Curcuma longa)**, **Orange powder (Citrus sinensis)**, **Lemon powder (Citrus limon)**, **Rose petals (Rosa indica)**, and **Soapnut (Sapindus mukorossi)**. The selection of these botanicals was based on their complementary therapeutic actions, safety profile, and traditional as well as scientific validation of skin health benefits. Each ingredient was incorporated for its unique multifunctional role: **Turmeric** as a potent antioxidant and anti-inflammatory agent, **Orange and Lemon powders** as natural vitamin C sources for skin brightening and defense against oxidative stress, **Rose petals** for their soothing, antimicrobial, and complexion-enhancing potential, and **Soapnut** as an eco-friendly natural cleanser owing to its saponin content. Unlike conventional single-herb products, this synergistic blend was formulated to target multiple dermatological concerns simultaneously—oil control, acne prevention, and skin texture improvement—offering a holistic skin-care solution. The formulation underwent preliminary evaluation based on **organoleptic and physicochemical parameters**, including color, odour, appearance, consistency, spreadability, washability, and pH. The results confirmed that the product was **aesthetically acceptable, easily washable, well-spreadable, and maintained a skin-compatible PH**, highlighting its potential as a safe, novel, and consumer-friendly herbal cosmetic preparation.

Index Terms—herbal Face Wash, Polyherbal Formulation, novel.

Introduction:

Herbal formulations are gaining remarkable global attention as natural, sustainable alternatives in cosmetics, nutrition, and medicine. In the present work, a novel polyherbal formulation was designed using **Turmeric (Curcuma longa)**, **Orange powder (Citrus sinensis)**, **Lemon powder (Citrus limon)**, **Rose petals (Rosa indica)**, and **Soapnut (Sapindus mukorossi)**. The selection of these botanicals was based on their complementary therapeutic actions, safety profile, and traditional as well as scientific validation of skin health benefits.

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Material and Method

1. Turmeric Powder

Botanical name: *Curcuma longa*

Family: Zingiberaceae

Uses: Turmeric powder is well known for its antibacterial, antifungal, and anti-inflammatory properties. It protects the skin from infections, reduces scarring, promotes healing, and imparts a natural glow to the skin.

Chemical constituents: Curcumin (principal active compound), vitamins, enzymes, minerals, sugars, lignin, saponins, salicylic acid, and amino acids.

Form used: The rhizomes are boiled, dried, and ground into a deep orange-yellow powder, which is used in skincare, cosmetics, and herbal formulations.



2. Orange Peel Powder

Botanical name: *Citrus sinensis*

Family: Rutaceae

Uses: Orange peel powder is widely used as a natural exfoliant and skin brightener. It helps remove excess oil, unclogs pores, reduces acne, and improves skin texture.

Chemical constituents: Vitamin C, flavonoids, citric acid, pectin, essential oils (limonene), and carotenoids.

Form used: Fresh orange peels are dried and ground into fine powder, which is incorporated into face packs, scrubs, soaps, and herbal cosmetics.



3. Lemon Peel Powder

Botanical name: *Citrus limon*

Family: Rutaceae

Uses:

Lemon peel powder acts as a natural cleanser and skin toner. It helps in removing dead skin cells, controlling excess sebum, reducing acne and pigmentation, and promoting a clear, glowing complexion. Its antibacterial and antioxidant properties make it beneficial for oily and acne-prone skin.

Chemical Constituents:

Vitamin C, citric acid, flavonoids (hesperidin, eriocitrin), limonene, pectin, and essential oils.

Form Used:

Fresh lemon peels are shade-dried and finely powdered. The powder is commonly used in **face packs, scrubs, masks, soaps, and herbal cosmetics** for brightening and purifying the skin.



4. Banana Peel Powder

Botanical name: *Musa paradisiaca*

Family: Musaceae

Uses:

Banana powder is rich in natural moisture and nutrients that help nourish and soften the skin. It improves skin elasticity, provides hydration, and helps reduce dryness and wrinkles. It is suitable for dry and sensitive skin types and is also used in hair care for nourishment.

Chemical Constituents:

Vitamins A, B6, C, and E, potassium, magnesium, natural sugars, amino acids, and antioxidants.

Form Used:

Ripe bananas are sliced, dried, and ground into a fine powder. It is incorporated into **face masks, creams, lotions, and hair packs for moisturizing and rejuvenating effects.**

5. Rose Petal Powder

Botanical name: *Rosa centifolia* / *Rosa damascena*

Family: Rosaceae

Uses:

Rose petal powder is widely used as a natural skin toner and rejuvenator. It helps soothe irritated skin, reduces redness, controls excess oil, and imparts a natural glow. Its mild astringent and antioxidant properties make it suitable for all skin types, especially for sensitive and aging skin.

Chemical Constituents:

Flavonoids, phenolic compounds, vitamin C, tannins, essential oils (citronellol, geraniol), and anthocyanins.

Form Used:

Fresh rose petals are shade-dried and ground into a fine powder. It is used in **face packs, masks, cleansers, soaps, and herbal cosmetics** for its cooling, fragrant, and beautifying properties.



Soapnut Powder

Botanical name: *Sapindus mukorossi*

Family: Sapindaceae

Uses:

Soapnut powder acts as a natural cleanser and foaming agent. It gently removes dirt, oil, and impurities from the skin and hair without stripping away natural moisture. It is widely used in herbal shampoos, face cleansers, and body washes for its cleansing and anti-microbial action.

Chemical Constituents:

Saponins, sugars, fatty acids, tannins, and proteins.

Form Used:

The dried fruit pericarp is powdered to obtain fine soapnut powder. It is incorporated into **herbal shampoos, soaps, facial cleansers, and scrubs** for its natural foaming and cleansing ability.



Method of preparation for Polyherbal face wash:

Prepare the Base: In a clean container, mix rose water and guar gum to create a gel-like base. Guar gum will thicken the face wash.

1. Add Active Ingredients: To the base,
2. add the following ingredients:
 - ❖ Turmeric Powder: Turmeric is excellent for brightening the skin and reducing inflammation.
 - ❖ Lemon Powder :Lemon peel powder acts as a natural cleanser and skin toner
 - ❖ Orange Powder: Orange is antioxidant &a pleasant fragrance
 - ❖ Banana Peel Powder : Banana powder is rich in natural moisture and nutrients that help nourish and soften the skin
 - ❖ A few drops of Tea tree oil: Tea tree oilhas antioxidants and can improve skin tone.
 - ❖ Reetha powder: Reetha functions as a natural cleaning agent by creating foam.
 - ❖ Methyl Paraben: Natural Preservative used in the preparation as base used forthe preparation is water.
3. Mix Thoroughly: Stir all the ingredients together until well-blended.
4. To get the appropriate consistency, adjust the amounts.

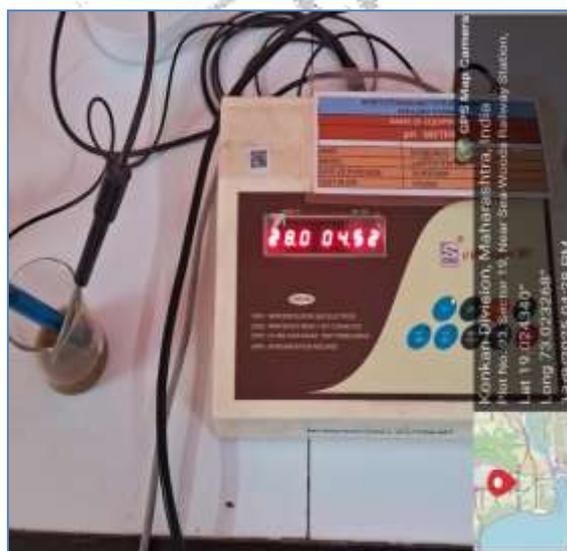
Ingredients Batch	Formulation	
	B1	B2
Turmeric Powder	0.5gm	0.5gm
Orange peel	0-5 gm	0-5 gm
Lemon peel	0.5gm	0.5gm
Banana Peel	0.5gm	0.5gm
Rose Petal	0.5gm	0.5gm
Methyl Paraben	-	0.2 %
Soapnut/Reetha powder	0.25	0.25
Gum Acacia	0.025GM	0.025GM
Tea tree oil	2drop	2drop
Water	q.s. to make 50ml	q.s. to make 50ml

IV. RESULTS AND DISCUSSION

The formulations developed exhibited a yellowish color, with the intensity of the shade varying according to the quantity of turmeric used. The data obtained demonstrated the results for the parameters listed below. The polyherbal face wash successfully passed all the evaluated parameters along with 1-month and 3-month stability tests.

Table 4.1: Descriptive Statics

Formulation	Color	Parameters					
		Viscosity	PH	Spreadability	Washability	Consistency	Stability
B1	Yellow	1.00	4.56	Good	Good	Semisolid	1month only
B2	Yellow	2.40	4.52	Good	Good	Semisolid	1month & 3month



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