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RESEARCH ARTICLE

FORMULATION AND EVALUATION OF HERBAL FACEWASH

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ABSTRACT

Herbal remedies are plants like a medicine. some herbs can make you feel better and help keep healthy. It is more acceptable to believe that natural remedies are safer with synthetic than with fewer side effects. The global market demand of herbal cosmetics is increasing due to the fewer side effects or no side effect. Current work Herbal facewash is the development and evaluation of flammable extracts with facial spray containing leaf extract of Tulsi (*Ocimum Sanctum*), Hydroalcoholic extract of turmeric (*curcuma longa*), orange peel and nutmeg (myristic fragrance). Although there are some specific local herbal formulas available on the market, we propose to make pure herbal formulations without using any artificial ingredient. The plants have been reported in the literature with microorganisms, anti-oxidants and anti-inflammatory activity. Several formulas from batch F1 to F5 were created. Color, appearance, stability, fraud, pH and spaghetti were evaluated for various formulations of formulations prepared (F1 to F5). Comparison compared to the market construction of tradable lots. Lot F2 of all formulation studies was optimal for all parameters.

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INTRODUCTION

Herbal remedies are plants like a medicine. some herbs can make you feel better and help keep healthy. Acne, pimple, in men is one of the most common skin disorders affected at least once in life. Perennial peaks in adolescence, but the number of men and women between 20 and 30 years of age is also affected by this disorder. Herbal face packs are more affordable and offer no negative effects in the quest for naturally pale skin. Herbs have been used for management, cleaning, and beauty since the beginning of time. Cosmetics are described as items intended to enhance, clean, promote attractiveness, or otherwise change one's look (Rani and Hiremanth, 2002). Smooth, vibrant, and silky skin are made possible by homemade natural face packs and masks. "Mukha lepa" is the name for the herbal paste used to cure acne, pimples, scars, markings, and pigmentation on the face in ayurveda. "Mukha lepana" refers to the application of an herbal facial. Nowadays, this treatment is commonly. A face pack is a smooth powder that is applied to the face. A good herbal face pack should penetrate the subcutaneous tissue and provide the skin with the nutrients it needs. To provide the necessary nutrition. They also improve the skin's fairness and suppleness (Mithal and Saha, 2004). These compounds demonstrate numerous benefits for our skin as well. Natural Facial Packs are easier to use and less complicated. They may have different mechanism like, Control sebum secretion. Antibiotics which inhibit *Propionibacterium acne* and *Staphylococcus epidermidis*, Keratolytic which removes the keratin layer and prevents the trapping of sebum under the skin. Anti-inflammatory which prevents the worsening of condition due to inflammation or redness.

These face packs have nourishing, healing, cleaning, astringent, and antiseptic properties. With common ingredients found in the kitchen and house, we may make face packs at home. "Mukha lepa" is the name for the herbal paste used to cure acne, pimples, scars, markings, and pigmentation on the face in ayurveda. "Mukha lepana" refers to the application of an herbal facial. Nowadays, this treatment is commonly. A face pack is a smooth powder that is applied to the face. A good herbal face pack should penetrate the subcutaneous tissue and provide the skin with the nutrients it needs. To provide the necessary nutrition. They also improve the skin's fairness and suppleness (Mithal and Saha, 2004). These compounds demonstrate numerous benefits for our skin as well. Natural Facial Packs are easier to use and less complicated. They may have different mechanism like, Control sebum secretion. Antibiotics which inhibit *Propionibacterium acne* and *Staphylococcus epidermidis*, Keratolytic which removes the keratin layer and prevents the trapping of sebum under the skin. Anti-inflammatory which prevents the worsening of condition due to inflammation or redness.

Advantages using a Face Pack

- Feeds the skin. Essential fruit face packs are available. vitamins for the skin.
- Depending on its herbal ingredients, aids in reducing acne, pimples, scars, and marks.
- Face packs typically remove skin's dead cells.

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- The skin is soothed and relaxed by these face masks.
- They aid in quickly restoring the skin's lost radiance and glow.
- Regular use of natural face masks improves skin texture and complexion while giving skin a glow.
- The wise application of face packs can effectively counteract the negative effects of pollution and harsh environments.
- They aid in preventing early skin ageing.

MATERIALS

Tulsi (holy Basil)

Botanical Name- *Ocimum sanctum*

Family- Lamiaceae (mint)

Uses- It purifies the blood from toxins and prevents appearance of acne and pimples

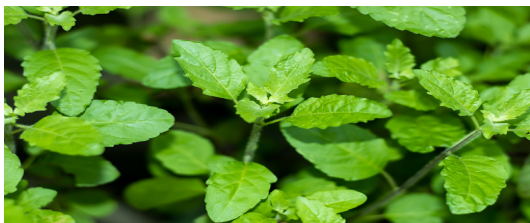


Fig. 1. Tulsi leaves

Turmeric (Haldi)

Botanical Name- *Curcuma longa*

Family- Zingiberaceae

Uses-The anti-inflammatory and antimicrobial qualities can target your pores and calm the skin. curcuma is also known to reduce scarring.



Fig. 2. Turmeric (Haldi)

Liquorice root (Mulethi)

Botanical Name- *Glycyrrhiza glabra*

Family-Leguminosae

Uses-Give precious property to the skin. Very resuscitation and nutritional qualities are the attributes.



Fig. 3. Glycyrrhiza Root

Orange peel extract

Botanical Name-*Citrus sinensis*

Family-Rutaceae

Uses-Antioxidants, anti-inflammatories, antimicrobial microbialsproperties. The acidic properties of orange acid can maintain the natural balance of the skin oil and harden the skin by eliminating the excessive absorption of oil and dead skin cells.



Fig. 4. Orange peel

Xanthan Gum: Source- Is a polysaccharide secreted by bacterium *Xanthomonas campestris* and composed of Penta saccharides Uses-Pure carbohydrate culture is also known as corn sugar gum, which is made by fermentation. It is used as a stabilizer and a non-toxic thickener.



Fig. 5. Xanthan Gum

Nutmeg seed

Botanical Name-*Myristica fragrans*

Family-Myristicaceae

Uses-Antibacterial, anti-inflammatory, antiseptic, bactericidal activity.



Fig. 6. Nutmeg Seeds

Lemon juice

Botanical Name-*Citrus limon*

Family-Rutaceae

Uses-To reduce blurring or lack of definition of the skin. Due to the treatment of roots and murals, it is also effective. As a natural pH adjuster in cosmetics



Fig. 7. Lemon

Honey

Biosource-*Apis mellifera*

Family- Apidae

Uses-A nourishing substance used as a liquid-looking agent.



Fig. 8 Honey

Rose water

Uses-Used as solvent; it also has antibacterial and antiseptic properties which eventually cure acne

Walnut (Akharot)

Botanical Name-*Juglans regia*

Family-Juglandaceae

Uses- Scraping Granule Scraping Action helps in the disinfection of soft oils and cleans dead skin cells and debris



Fig. 9. Walnut

Marketed Formulation: Himalaya Purifying neem face wash was purchased from local market, Azamgarh U.P

EVALUATION OF FORMULATION

Physical evaluation: Physical parameters, such as color, appearance, and consistency, are examined for people with visual impairment.

Washability: The formulation has been used on the skin and then easily verified after washing with water.

pH: Using a digital pH meter calibrated at constant temperature, the pH of 1% of the hydro transpiration is calculated.

Spreadability: Spreadability indicate the limit of the area in which the gel spreads easily on the skin or the affected part. The biological availability of the functionality to create a gel also depends on the value of the extension^{[10] [11]}. By slides spelabiliti two seconds, put the second slide to slide out of jail, it shows below a certain weight. Reduce the time needed to separate the two slides, a good Spreadability. Two standard sizes of standard glass were taken. Herbal gel was designed in one of the slides. The other was placed on top of the slide gel, like a gel sandwich between the two slides on the 6-centimeter slide on the slide. The weight of 100 gems was placed in the upper slide so that the gel between the two slides were pressed evenly with a thin layer. The weight was eliminated and eliminated much more than the prisons that adhere to the slides. In the position, two slides are placed without interruption, thus remaining in such a way that, in this way, the weight of the body built in the upper slide is like a free dream. A weight of 20 gm was built in the upper slide. The time needed for the previous slide is to go to a distance of 6 cm 7, separated from the next slide by the weight of the weight. This experiment was performed three times in the average time taken^{[12] [13]} to gel and commercialize gels and calculate three times. Spreadability was calculated by using the following formula,

$$S=M \times L / T$$

Where,

S-Spreadability

M-Weight tied to the upper slide (20gm).

L-Length of the glass (6.5cm).

T-Time in sec.

RESULT AND DISCUSSION

The results of the evaluation are shown in Table 2. The formulation was bright orange, but the marketing was green. Semi-code compatibility is found in the formula F1, F2, F3 and F4. All the formulations are identical, they wash easily. All the formulas had a slightly alkaline pH that is compatible with the normal physiology of the skin. All batches F1, F2 and F5 had the optimum spreading capacity. The batch of formulation F2 comparatively shows more spaghetti than the batch of formulas F1, F3, F4 and F5. And according to the parameters of lot F2, similar results were found near the market instructions and, therefore, lot F2 was completed.

Table 1. Composition of developed formulation

Sr.No.	Ingredients	Quantity taken for 10 g gel				
		F1	F2	F3	F4	F5
1	Tulsi (ocimum sanctum)	0.25 ml	0.25 ml	0.25ml	0.25 ml	0.25 ml
2	Turmeric (Curcuma longa)	0.2 ml	0.25 ml	0.5 ml	0.2 ml	o.2 ml
3	Lemon juice	0.15 ml	0.15 ml	0.15ml	0.15 ml	0.15 ml
4	Nutmeg seed (Myristica fragrance)	0.5 ml	0.25 ml	0.50ml	0.25 ml	0.25 ml
5	Xanthan Gum	0.05 g	0.1 g	0.15 g	0.02 g	0.01 g
6	Liquorice root (Glycyrrhiza glabra)	0.3 ml	0.3 ml	0.3 ml	0.3 ml	0.3 ml
7	Orange peel extract	0.25ml	0.25ml	0.25ml	0.25ml	0.25 ml
8	Honey	0.5 ml	0.5 ml	0.5 ml	0.5 ml	0.5 ml
9	Walnut	q.s.	q.s.	q.s.	q.s.	q.s.
10	Rose water	q.s.	q.s.	q.s.	q.s.	q.s.

Table 2. Evaluation of formulations

Formulation/Batch (Code)	Colour	Consistency	Washability	pH	Spreadability (gm-m/sec)
Marketed	Green	Semi-solid	Good	5.4	4.702
F1	Orange	Semi-solid	Good	4.6	3.765
F2	Orange	Semi-solid	Good	4.9	4.356
F3	Orange	Semi-solid	Good	4.8	1.735
F4	Orange	Semi-solid	Good	4.5	1.978
F5	Orange	liquid	Good	4.2	3.648

CONCLUSION

It is more acceptable to believe that natural remedies are safer with synthetic subjects than with fewer side effects. The global market demand is increasing due to the fusion of herbs. It is a very good effort to establish an herbal facial wash, which includes Tulsi leaves, turmeric rhizomes, rooted roots and aqueous extracts of nutmeg. In this study, it was found that the herbal fixation developed from Batch F2 would be relatively better than other formulations.

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