A Review on Formulation and Evaluation of Anti-Acne Herbal Face Wash

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ABSTRACT

Herbal cosmetics are the preparation used to enhance the human appearance. Herbal formulations have significant demand in the global market. It is more acceptable to believe that natural remedies are safer with synthetic subjects than with fewer side effects. The herbal plant use in formulation gives cosmetic properties as well as medicinal properties. Herbal face wash it is use to pore cleaning and prevention of skin condition like acne. The ingredient use in herbal face wash like neem, aloe Vera, turmeric, Honey, glycerin, rose water, xanthan gum, lemon juice. Having properties for softening of skin, remove acne as well as promote healing. the herbal formulation was evaluated by different type of parameter like – spread ability, stability test, cleansing test, foam ability, grittiness.

KEYWORDS: Herbal drug, Herbal extract, Herbal formulation, Evaluation.

INTRODUCTION

Skin is the major part of body and face skin is one of the sensitive and representative parameter human personality. It performs many vital functions, including protection against external, physical, chemical and biological assailants. To skin healthy, clear, glossy, a balanced nutrition is required. Acne is a skin disorder (that nearly everyone will experience at some point in their lifetime. Although the prevalence of acne increases during adolescence, it affects many men and women between the ages of 20 and 30.

In which face wash preparation mainly content Turmeric Rhizomes, Honey, Xanthan gum, Rose water, neem, aloe vera, Lemon juice. It shows many property like antibacterial, anti-fungal or many skin problem.

SKIN: Although you may not typically think of the skin as an organ, it is in fact made of tissues that work together as a single structure to perform unique and critical functions. The skin and its accessory structures make up the integumentary system, which provides the body with overall protection. The skin is made of multiple layers of cells and tissues, which are held to underlying structures by connective tissue. The deeper layer of skin is well vascularized (has numerous blood vessels). It also has numerous sensory, and autonomic and sympathetic nerve fibers ensuring communication to and from the brain. Skin is made up of following three layers: ¹

1. Epidermis
2. Dermis

Figure 1: Skin
3. Subcutaneous (hypodermis)

FACE WASH: A face wash is a type of facial cleanser that is specifically designed to remove makeup, dirt, oil, dead skin cells, and other impurities from the skin of the face. This helps to unclog pores and prevent skin conditions such as acne, leaving the skin feeling clean and refreshed. A face wash is typically used as part of a daily skincare routine, along with a toner and moisturizer. [3]

ADVANTAGES OF FACE WASH:

1. Helps keep skin clear and healthy.
2. It makes the skin radiant.
3. The combination of dead skin cells and excess oil can clog pores, causing acne, white heads, black heads and a tired appearance.
4. Regular pore exfoliation prevents all of the above skin problems.
5. Exfoliation accelerates the blood circulation.

It helps to remove dead skin cells and helps new skin cells replace old ones. Promotes skin regeneration and rejuvenation. [2, 4, 5]

PROPERTIES OF FACE WASH:

1. Oily skin requires cleansers with herbs and botanical which will clean the pores and reduce oil
2. A good face wash should be stable and have a pleasant appearance.
3. The face wash should soften on application to the skin, making it easy to spread.
4. The face wash should spread easily on the skin without dragging or feeling oily or greasy.
5. After the water has evaporated, the residue of the face wash should not become viscous.
6. The physical action of the face wash should be that of flushing the skin and opening pores, rather than absorbing into the skin. [1,3,4]

MATERIALS AND METHODS: [1]

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Crude drugs / Medicinal plants</th>
<th>Picture</th>
<th>Chemical constituent</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neem (Azadirachta indica)</td>
<td></td>
<td>Azadirachtin, nimbin, nimbolinin</td>
<td>Antiseptic, it is use in the treatment and prevention of acne</td>
</tr>
<tr>
<td>2</td>
<td>Aloe vera</td>
<td></td>
<td>Salicylic acid, Cinnamon acid.</td>
<td>Hydrating agent, Antiwrinkles</td>
</tr>
<tr>
<td></td>
<td>Crude Drug</td>
<td>Pigments/Properties</td>
<td>Uses</td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td>----------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Turmeric</td>
<td>Curcuminoids</td>
<td>Antimicrobial agent, Anti-inflammatory,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Antioxidant</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Honey</td>
<td>Pigments, Vitamins.</td>
<td>Antioxidant</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Xanthan gum</td>
<td>---</td>
<td>non-toxic thickener and stabilizer</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Rose water</td>
<td>Citronellol, Geraniol.</td>
<td>Flavoring Emollient, agent, Cooling</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Lemon juice</td>
<td>limonene</td>
<td>natural pH adjuster</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Different of crude drug and their uses
PREPARATION OF HERBAL FACE WASH:

1. Preparation of extract:

Ethanol extract of turmeric, and extract of neem was prepared by soxhlet extraction. For neem extract used 50gm dried leaves neem powder with 500ml ethanol. For turmeric extract 50gm dried rhizome powder with 500ml ethanol is used. [2]

2. Preparation of soap by saponification method:

1. Measure 25ml coconut oil in measuring cylinder then add in beaker then measure 30ml 20% NaOH solution into in it then add beaker containing coconut oil and then stir mixture vigorously using glass rod.

2. Touch the beaker from outside it will be observed by that beaker is warm this is due to exothermic reaction between coconut oil and sodium hydroxide solution.

3. Then place the beaker on burner and heat it until the mixture become whitish paste a mixture made up of soap in suspension form and glycerol, remove the beaker from flame and then cool.

4. Then add 50gm common salt into the suspension stir it well with glass rod it is observe at the soap is precipitate out as a solid.

5. Then filtrate, remove the soap using spatula and place on another filter paper dry this soap using with another filter paper.

3. Preparation of herbal formulation:

1. Take appropriate amount of xanthan gum add in warm rose water and allow to soak overnight

2. Then add sufficient amount of honey, few drops of lemon juice with glycerin and fresh aloe vera.

3. Then add desired amount of herbal extract to it then add sufficient soap and blend it.

EVALUATION PARAMETERS:

1. Physical evaluation:

Physical parameters, such as color, appearance and consistency, are examined for people with visual Impairment

2. Wash-ability: The product will be painted by hand and was observed under running water.

3. \(PH\) test: Using a digital pH meter calibrated at constant temperature, the pH of 1% of the hydro transpiration is calculated.

4. Cleansing test: The Facial Residue Test’s white surface displays all residue on facial skin by pressing the whole test area of the test strip onto the facial skin for 3 to 5 seconds. Within seconds the residue test will show how effective your cleanser has worked – even better than any competitive product.

6. Stability test: Place the product at -100C for 24 hours and place it at room Temperature (250C) for 24 hours. This completes one cycle. If the product passes three cycles then you can have a good degree of confidence in the stability of the product. An even more rigorous test is a -100C to 450C five-cycle test.

7. Foamability: Shaking Tube Method – 40 ml of Surfactant solution was taken in a 100 ml measuring cylinder. The solution was vigorously shaken by hand. The amplitude of shaking was around 5 cm while the frequency of shaking around 3 Hz. The maximum foam height gave the foaming ability.

8. Spread-ability: Spread-ability 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. By slides spread-ability 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 spread-ability

9. Grittiness: The product was checked for the presence of any gritty particles by applying it on the skin

CONCLUSION:

From the above discussion, it is concluded that face wash exhibits excellent anti acne, cleansing, moisturize properties. The formulation was subjected to various evaluations parameters including color, odor, consistency, pH, spread-ability, wash-ability, grittiness, and foam ability, cleansing Test. Herbal formulation it is more acceptable to believe that natural remedies are safer with synthetic subjects than with fewer side effects.

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