

Formulation and Evaluation of Herbal Shampoo

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Abstract: *The main object of this present study is to prepare and evaluate an herbal Shampoo and determine physiochemical function that emphasizes on safety, Efficacy and quality of the product Herbal Shampoo is the natural haircare product Which is use to remove grease, dirt, dandruff and promote hair growth. Strenthness and darkness of the hair. It is also supply softness, smoothness, and Shines for the hair. Various drugs are used for the pre mixture of cosmetics Shampoo. Such drugs shows different side effects such as hair loss, high scaling, Scratching, discomfort, nausea and headache. Therefore an experiment is made to prepare herbal shampoo that is free from side effects. (1) The aim of the present study is to Formulate and evaluate herbal Anti dandruff Shampoo containing natural ingredients with an Emphasis on safety and efficacy.(2).*

Keywords: herbal shampoo, natural ingredients, hair growth, scalp health, dandruff, itchiness, inflammation

I. INTRODUCTION

Herbal Shampoo are probably the most widely used cosmetic products for cleansing Hairs and scalp in our daily life Herbal shampoos are the cosmetic preparations That with the use of traditional ayurvedic herbs are meant for cleansing the hair And scalp just like the regular shampoo. They are used for removal of oils, dandruff,, environmental pollutions etc. shampoo is a type of cosmetic mixture that uses herbs from plants as

An alternative to the synthetic Shampoo available in the market. The herbal shampoo is important, as people today prefer herbal products than chemical ones for they proved to enhance. (1) Shampoos are most probably used as cosmetics. Shampoos are most likely utilized as beautifying agents and are a viscous solution of detergents contaning suitable additives preservatives and active ingredients(3). It is a harmless, chronic condition that occurs when scalp be.comes dry or greasy and produces white flakes of dead skin that appear in hair or on shoulders. People most often think of it as anything that produces a flaky scalp. (7)A good shampoo should almost Immed”atel’ form abundant foam irrespective of the type of water used Or the nature of soil or fat to be removed from hair,

DEFINITION

Herbal shampoo Shampoos are most probably used as beautifying It is a hair care product that is used for cleanse scalp and hair in our daily life. Shampoos are most likely utilized as beautifying agents and are sticky solution of detergents containing suitable additives preservatives and active Ingredients. It is usually applied on wet hair, Massaging into the hair, and cleansed by insing with water. The purpose of using herbal shampoo is used to remove dirt that is make up on the hair without stripping out much of the sebum.

Many artificial shampoos are present in the current market both medicated and non medicated, however, shampoo popularized due to natural origin which is safe, increases consumers demand and free from side effects (16).HS is defined as a preparation ofa surfactant (surface active material) insuitable form liquid solid or power whichwhen used under the conditions specifiedwill remove surface grease, dirt an skindebris from the hair shaft and scalp withoutaffecting adversely the hair, scalp or healthof the user. HS has so many types arepowder, liquid, lotion, cream, jelly, aerosol specialized HS (Conditioning. Anti-dandruff,Baby, Two Layers). But the future of HS isgoing to be herbal Shampoo It containsall the natural ingredients with herb extract.It helps hairs to improvise their standard of moisture, shine, growth, thickening,strength of hair roots. (17) Shampoos are may be the most widely used the cosmetic product for cleansing hairs and scalp in your daily life. A shampoo is Shampoos are may be the most widely used the cosmetic product for cleansing hairs and scalp in your

BENIFITS OF HEARBAL SHAMPOO:-

- More Shine
- Less Hair Loss
- Long Lasting Colour
- Stronger and More Fortified Hairs
- All Natural, No Chemicals
- Wont Irritate Skin or Scalp
- Keep Healthy Natural Oil



INGREDIENTS

| Materials required | Quantity to be Weighed |
|--------------------|------------------------|
| Soap nut extract | 0.5 g |
| Amla extract | 0.5 g |
| Shikakai extract | 0.5 g |
| Hibiscus | 0.5 g |
| Bhingraj extract | 0.5 g |
| Senna extract | 0.5 g |
| Gelatin | q.s |
| Lemon Juice | q.s |

USE OF INGREDIENTS

- Soap Nut Extract-
- Stops Hair Fall
- Prevents Dandruff
- Fight Against Scalp Infection



Amla Extract:-

- Strengthen the Scalp and Hair.
- Reduce premature pigment loss from hair, or greying.
- Stimulate Hair Growth. Iv. Reduce Hair Loss,
- Prevent or treat dandruff and dry scalp.
- Prevent or treat Fungal and Bacterial hair and Scalp infections.
- Improve overall appearance of Hairs



- Prevents Lice, Psoriasis, Eczema C Scabies.
- Provides Nourishment to the hair and promote healthy and rapid hair growth.
- Prevents Split ends.



Bhringraj Extract

- Treats baldness and helps in growth of hairs.
- Makes Hair Lustrous



Senna Extract

- Strong Hairs
- Great Conditioner
- Combats Hair Loss



Gelatin

- Gelatin Can improve hair thickness and growth.
- Gelatin supplement or placebo for 50 weeks to 24 people with alopecia..
- It gives thickness to hairs. Iv. For strengthening of Hairs



Lemon Juice

- Add More shine..
- Get rid of dandruff
- Split ends
- Reduces Hair fall

FORMULATION OF HERBAL SHAMPOO

Formulation of the herbal shampoo was done as per the formula given in Table 1. To the gelatin solution (10%), added the herbal extract and mixed by shaking continuously at the time interval of 20 min. 1 ml of lemon juice was also added with constant stirring. To improve aroma in the formulation, sufficient quantity of essential oil (rose oil) was added and made up the volume to 100 ml with gelatin.

EVALUATION OF HERBAL SHAMPOO

The prepared formulation was evaluated for product performance which includes organoleptic characters, pH, physicochemical characterization, and for solid content. To guarantee the nature of the items, particular tests were performed for surface tension, foam volume, foam stability, and wetting time using standard protocol.

Visual assessment: -The prepared formulation was assessed for color, clarity, odor, and froth content.

pH determination: The pH of the prepared herbal shampoo in distilled water (10% v/v) was evaluated by means of pH analyzer at room temperature.

Surface tension measurement: The prepared shampoo in distilled water (10% w/v) was evaluated for surface tension using stalagmometer in room temperature.

Testing of wetting:- Wetting time was calculated by noting the time required by the canvas paper to sink completely [3]. A canvas paper weighing 0.44 g was cut into a disc of diameter measuring 1-inch. Over the shampoo (1% v/v) surface, the canvas paper disc was kept and the time taken for the paper to sink was measured using the stopwatch

Foam stability test: -The stability of the foam was determined using cylinder shake method. About 50 ml of formulated shampoo (1%) solution was taken in a graduated cylinder of 250 ml capacity and shaken for 10 times vigorously. Foam stability was measured by recording the foam volume of shake test after 1 min and 4 min, respectively. The total foam volume was measured after 1 min of shaking.

Dirt dispersion test: To 10 ml of refined water two drops of cleanser were included and taken in a wide-mouthed test tube. To the formulated shampoo, added one drop of Indian ink and shaken for 10 min after closing the test tube with a stopper. The volume of ink in the froth was measured and the result was graded in terms of none, slight, medium, or heavy.

Conditioning performance evaluation:-An artificial hair tress of Indian women was received from a salon and divided into two swatches of length 10 cm approximately, weighing 5 g.

The control swatch was the one without washing and the test swatch using the formulated shampoo was washed with. Each tress was added for 2 min to the combination of shampoo

In water in the proportion 10:15 taken in a conical flask and washed using 50 ml of distilled

PHYSICOCHEMICAL PROPERTIES OF HERBAL SHAMPOO:-

| Evaluation test | Formulated Shampoo |
|----------------------------|--------------------|
| Colour | Brown |
| Transparency | Clear |
| Odour | Good |
| pH of 10% solution | 7 |
| Solid contents (%) | 23.25 |
| Foam volume (ml) | 25 |
| Foam type | Dense, small |
| Surface tension (dynes/cm) | 35.18 |
| Wetting time (s) | 120 s |

II. CONCLUSION

The present study was carried out with the aim of preparing the herbal shampoo that reduces hair loss during combing, safer than the chemical conditioning agents as well as to strengthen the hair growth. Herbal shampoo was formulated with the aqueous extract of medicinal plants that are commonly used for cleansing hair traditionally. Use of conditioning agents (synthetic) reduces the protein or hair loss. To provide the effective conditioning effects, the present study involves the use of shikakai, amla, and other plant extracts instead of synthetic cationic conditioners. The main purpose behind this investigation was to develop a stable and functionally effective shampoo by excluding all types of synthetic additives, which are normally incorporated in such formulations. To evaluate for good product performance of the prepared shampoo, many tests were performed. The results of the evaluation study of the developed shampoo revealed a comparable result for quality control test, but further scientific validation is needed for its overall quality.

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