

Review: Analysis and Formulation of the Herbal Shampoo

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ABSTRACT

Considering that shampoo is a common beauty product, the sector where hair care products are used the most will be the shampoo sector. Synthetic preservatives and detergents are sometimes responsible for adverse effects on consumers. One of the best ways to reduce synthetic ingredients is to combine natural ingredients that work equally well with their ingredients. Shampoo is a hair care product and is considered one of the most important beauty products. Today's shampoos have gone beyond just washing your hair. Other benefits include softening, smoothing hair, healthy hair i.e. Purify the air from dandruff, dirt, oil, lice and most importantly make it safe. Since the scalp is one of the most absorbent parts of the body, the products of the scalp mix directly into the bloodstream without being seen. Various skin and hair problems occur due to dietary changes, stress levels and dependence on the environment. This shampoo is made with natural ingredients like fenugreek seeds, acacia (shikakai), soap berry (reetha), basil (tulsi), aloe vera (aloe vera), hibiscus (rose flower), amla (amla) and more. With proven effective hair care preparations such as Henna (Henna) and Citrus Citrus (Lemon). The combination of various herbs like this makes it possible to obtain an excellent dry shampoo. The test model has been completed and tested on various parameters to ensure that it is safe and effective.

Keywords: Herbal shampoo, Natural health, Shampoo, Herbs

INTRODUCTION

Shampoo is the term for the liquid or sweetened preparation of soap. Shampoo is a hair care product that is used to wash hair and is typically liquid in nature. A significant aspect of human beauty is hair. Hair care products are used to clean hair. It also changes the hair texture and provides nutrients to the hair, making it look beautiful. For humans, hair serves many purposes, including protection from other factors, control of sebum, apophyseal sweat, and body temperature. Shampoo is the most used hair product. It can be purchased in liquid or powder form and is used to clean the scalp and hair, get rid of leftover hair styling product residue, and clean the environment. Herbal shampoo is beneficial for hair [1]. The shampoo is made from natural ingredients and is designed to clean your hair and scalp, just like shampoo. Since these shampoos do not contain surfactants, they have no side effects, are stable and less harmful than synthetic shampoos. Shampoos made synthetically contain surfactants. Serious side effects like dry hair, irritated scalps, hair loss, and itchy eyes can result from using surfactants for an extended period of time. For these reasons, people prefer herbal cosmetic products due to their low side effects and low cost. Shampoo, mostly used as a beauty ingredient, is a liquid that contains the necessary detergents, disinfectants and active ingredients [2].

Shampoo is often used cosmetically. We use this hair care product on a daily basis to clean our hair and scalp. Oil, dandruff, dirt, environmental pollution, etc. Their purpose is to eliminate objects. Usually applied to damp hair, it is massaged into the hair and then washed with water. Today's market is filled with a wide variety of synthetic shampoos. both medicinal and non-medicated, but shampoos are popular due to their natural origin, are safe, make customers want them and have no side effects [3].

Types of Shampoo

1. Shampoo in powder form
2. Shampoo with lotion
3. Shampoo, clear liquid
4. Shampoo with gel
5. OTC shampoo

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6. Plant-based liquid shampoo [4]

Role of Herbal Shampoo

1. Approval
2. Concern
3. The growth of hair
4. The retention of hair color
5. Pharmaceuticals [5]

The qualities that herbal shampoo is meant to have

1. Simplicity of Use
2. Clearing More Debris
3. Wet Combing Made Easy
4. Elegance
5. Minimal Angry Feeling
6. Exhibited Excellent Preservation
7. A stable environment [6]

Herbal Shampoos Features

1. Reduce hair loss
2. Long color
3. Strong hair
4. Completely natural and chemical-free
5. Does not irritate the skin or scalp
6. Preserves natural oils [7]

Benefits of Natural Shampoo

1. Absence of adverse effects
2. No SLS or other surfactants
3. Absence of artificial components
4. No use of animals in research
5. Earth and skin friendly
6. No oil-related products are offered
7. It is inexpensive to produce and simple to make
8. Extremely simple to obtain [8]

Drawbacks of Herbal Shampoo

1. Sometimes it is difficult to hide the smell and taste
2. Herbal medicines act more slowly than allopathic medicines, so long-term treatment is required
3. The production process is time consuming and complex [9]

INGREDIENTS (TABLE 1)

Table 1. Description of Ingredients.

Materials Required	Quantity to be weighted
Methi	6.25gm
Amla	3gm
Shikakai	2.5gm
Hibiscus	2.5gm
Orange Peel	Handful
Alovera	3.5gm
Lemon	3ml
Rose water	5ml
Ritha	4gm
Water	Quantity sufficient as 50ml

Methi (Figure 1):

Synonyms: Methi, Methika, Chandrika [10].

Biological Source: Methi consists of dried seeds of *Trigonella foenum-graecum*.

Family: Legumes.

Usage:

1. Methi seed is known to have many benefits for health and hair care.
2. It makes the hair shiny.
3. It helps hair growth.
4. Prevents hair loss and dandruff [11].



Figure 1. Methi.

Amla (Figure 2):

Synonyms: *Phyllanthus emblica*, Indian gooseberry, *Phyllanthus emblica*.

Biological resources: Dried and fresh fruit of the *Phyllanthus emblica*.

Family: Euphorbiaceae.

Uses:

1. Strengthen scalp and hair.
2. It reduces premature hair pigment loss or graying.
3. Promote hair growth.
4. Lesion hair loss.
5. Avoid and cure scalp irritation and dandruff.
6. Treat or prevent fungus related illness of the hair and scalp [12].



Figure 2. Amla.

Shikakai (Figure 3):

Synonym: Vimala, Bhuriphena.

Biological Source: There is a dry, gelatinous ooze from the trunk and branches of *Acacia arabica*.

Family: Legumes.

Usage:

1. Add more light.
2. Prevents hair loss.
3. Protect against pests, psoriasis and bacterial infection.
4. Prevent split ends [13].



Figure 3. Shikakai.

Orange Peel (Figure 4):

Synonyms: Orange peel, Bigarade orange, Seville orange, porcelain orange, bitter orange peel.

Biological sources: Orange peel is produced from fresh and dried *citrus aurantium*. The outer part of the peel. It includes the following:

Families: Rutaceae Contains not less than 2.5% essential oil.

Chemical composition: Limonene (90%) Citral (4%) Vitamin C Pectin Hesperidin Orange yellow Orange peel powder and orange-peel powder (both are glycosides that cause a bitter taste).

Usage:

1. Orange peel powder is very good for cooling the hair.
2. Apart from reducing dandruff, it increases blood flow, makes hair shinier and reduces hair loss [14].



Figure 4. Orange Peel.

Hibiscus (Figure 5):

Synonym: Hibiscus.

Biological Source: Rose, Rose.

Family: Malvaceae.

Usage:

1. Promote hair growth and reduce hair volume.
2. Good hair.
3. Protect skin.
4. Improve scalp and itching.
5. Prevent premature greying of hair [15].



Figure 5. Hibiscus.

Aloe Vera (Figure 6):

Synonyms: Aloe, *Kummari mussabar*.

Biological Source: Aloe, *Aloe barbadensis*, *Aloe perryi*, *Aloe Ferox* is the dried fruit juice obtained from the leaves of *Aloe spicata*.

Family: Liliaceae

Uses:

1. Calming the scalp and itching.
2. Deep cleansing of oily hair.
3. Have strength.
4. Aloe vera has proteolytic enzymes that help the scalp's dead skin regenerate.
5. Encourage hair development.
6. Natural, soft curls [16].



Figure 6. Aloe Vera.

Lemon Juice (Figure 7):

Synonym: *Cortex limonis*.

Biological Source: Lemon is a fruit obtained from the citrus lemon.

Family: Rutaceae.

Uses:

1. Add shine.
2. Get rid of dandruff.
3. Split ends.
4. Reduce hair loss.
5. Give natural hair color [17].



Figure 7. Lemon Juice.

Rose Water (Figure 8):

Synonym: Rose.

Biological Source: Rose oil, Rosaceae.

Family: Rosaceae.

Uses:

1. It is obtained from rose flowers. There should be no damaged hair.
2. Improve hair growth.
3. Reduces dandruff [18].



Figure 8. Rose Water.

Ritha (Figure 9):

Synonyms: Ritha, Arishta, Reetha.

Biological Source: Soapberry includes dried fruits of makorossi.

Family: Soapberry.

Uses:

1. Used to prepare shampoo.
2. It is also used to remove lice from hair.
3. Shampoos employ it as a foaming agent.



Figure 9. Ritha.

CONCLUSION

The aim of this study is to create a shampoo that is safer than conditioner and reduces hair loss during combing while promoting hair growth. Aqueous extracts of plants frequently used as shampoos in traditional culture are used as herbal shampoos. Use heat treatment to reduce protein or hair loss. Current research uses Shikakai, amla and other herbal extracts instead of cationic regulators to provide better results.

The main goal of this project is to create a durable and effective shampoo that does not contain synthetic ingredients that are often included in these formulas. We carry out extensive tests to evaluate the performance of the shampoos we produce as quality products. Scientific evaluation of shampoo formulation is compared to quality control evaluation, but all quality products require further scientific verification.

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