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# HERBAL SHAMPOO: A REVIEW

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#### ABSTRACT

Herbal shampoo is used to cleansing of the hair also conditioning, smoothing, of the hair surface, good health of hair, hair free of dandruff, dirt grease and lice above all, it's safety benefits are expected. The advantage of herbal cosmetics is their non-toxic nature, reduce the allergic reactions and time tested usefulness of many ingredients. Thus in present work, we found good properties for the herbal shampoo and further optimization study benefits of herbal shampoo on human use as cosmetic product.

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, dirt, environmental pollution.

Keywords – Cosmetic, Herbal Shampoo, Ayurvedic Herbs

### 1. INTRODUCTION

Herbal Shampoo- Shampoos are may be the most widely used the cosmetic product for cleansing hairs and scalp in your daily life. A shampoo is basically a solution of a derergent containing suitable additives for other benefits such as hair conditioning, lubrication, medication etc. Nowdays many synthetic, herbal, medicated and non-medicated shampoos are available in the market [Ishii - 1997]. But popularity of the herbal shampoos among consumers is on rise because of the there belief. The herbal shampoos are shafe and free from side effect . Herbal shampoos is widely unstable product all over the world it has been used form many years .chemical herbal shampoos are preapared with several chemicals which can care hairs problems bur also responsible for damage of hairs. Some international researchaly said that the chemicals of herbal shampoos also responsible for cancer herbal shampoos are defined as preaparation of a surfactant in suitable form liquid, solid or powder wich when used under the condition specified will remove surface grease, dirt & skin debries from the hair shaft & scalp [Arora.P-2011]. Herbal shampoos have so many types are powder, liquid, lotion, cream ,jelly,aerosol and specialized herbal shampoos ( conditioning , antidandruff ) . Herbal shampoos contain all the natural ingredients with herb extract. It helps hair to improve their quality of moisture, growth ,thickening, strength of hair roots. The most important thin is that herbal shampoos has no any side effect. The herbal shampoos are better in performance & safer than the synthetic shampoos herbal shampoos are totally natural no any other ab delhi.bohot dur chemical are added . herbal shampoos won't irritate the skin or scalp .By using herbal shampoos we can prevent the hair loss .Hairs are the integral part of human beauty .people are using herbs for clansing ,beautifying &managing hair since ancient era .The large amount of people used herbal product which are less expensive and have less side effects. as for as ancient time people used natural extract and resources for heath care and cosmetic purposes [Sanskrit.L-1872]. They are large number of medicinal plant which are beneficially effect on hair and are commanlly used in formulation of shampoos. These plant product may used in there powder form, crude form, purified extract or derivate form. Herbal shampoos are used to promote hair growth by naturally stimulating the hair follicales. Herbal shampoos are environmentaly friendly as they contain bio-dregredable materials rather than harsh chemicals.Herbal shampoos are shafe because it contain all natural ingredients it is non-allergic product with make it suitable for all skin type including sensitive & allergy prone skin [Virginia.S.2007] .

## 2. STRUCTURE OF HAIR

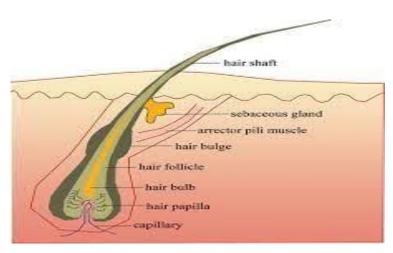


Figure 1- Structure Of Hair

At the base of the hair, the hair root widens to a spherical hair bulb. The hair papilla, which elements the hair root with blood, is discovered interior the backside of the hair bulb. New hair cells are continuously being in the hair bulb, shut to the papilla New cells are continuously forming in the hair bulb. These cells stick collectively and harden. The full strand of hair develops from this team of hardened hair cells. Because new hardened cells hold on attaching to the hair from below, it is progressively pushed up out of the skin. In this way, a single hair on your head grows at a fee of about 1 cm per month The shade of the hair is decided by means of the quantity of melanin in the hardened cells. This can fluctuate a lot from character to person, and it adjustments over the direction of a lifetime. The quantity of melanin typically decreases as human beings get older, and greater air receives trapped inner the hair – itthen loses its color and turns white. Depending on someone's authentic hair shade and the variety of white hairs that develop ,thehair on their net the the turns grey or white.

## 3. HISTORY

Indian subcontinent: It definitely made a lasting impression. "To this day, we still get requests from women to bring back the original Herbal Essences scent!" said Zipperian. In the Indian subcontinent, a variety of herbs and their extracts havebeen used as shampoos since ancient times. A very effective early shampoo was made by boiling Sapindus with dried Indian gooseberry (amla) and a selection of other herbs, using the strained extract. Sapindus, also known as soapberries or soapnuts, a tropical tree widespread in India, is called ksuna[3].In ancient Indian texts and its fruitpulp contains saponins which are a natural surfactant. The extract of soapberries creates a lather which Indian texts called phenaka[4]. It leaves the hair soft, shiny and manageable. Other products used for hair cleansing were shikakai (Acacia concinna), hibiscus flowers,[5][6] ritha (Sapindus mukorossi) and arappu (Albizzia amara)[7].Guru Nanak, the founder and the first Guru of Sikhism, made references to soapberry tree and soap in the 16th century.[8]

Cleansing with hair and body massage (champu) during one's daily bath was an indulgence of early colonial traders in India. When they returned to Europe, they introduced the newly learned habits, including the hair treatment they called shampoo [9]. The "Original Herbal Essences" shampoo from 1971 was a bold blend of green herbaceous notes with a big white floral middle and a balsamic musky background. Clairol introduced Herbal Essence in 1971. The original Herbal Essence (now called Herbal Essences) used a cartoon image of the nature girl in a pool on the front label.[Balsam-2008]

#### 4. IDEAL PROPERTIES OF HERBAL SHAMPOO

- 1. . . It should effectively and completely remove dust or soil, excessive sebum or other fatty substances and loose corneal cells from the hair.
- 2. It should produce a good amount of foam to satisfy the psychological requirements of user.
- 3. It should be easily removed on rinsing with water.
- 4. It should leave the hair non-dry, soft, lustrous with good manage ability and minimum fly away.
- 5. It should impart a pleasant fragrance to the hair.
- 6. It should not cause any side-effects / irritation to skin or eye.
- 7. It should not make the hand rough and chapped.

## 5. USE OF INGREDIENTS

- 1) Soap Nut Extract:-
- Stops Hair fall.
- Prevents Dandruff.
- Fight against scalp Infection



Figure 2- Soap Nut Extract

#### 1) Amla Extract

- Strengthen the scalp and Hair.
- Reduce Hair Loss.
- Stimulate Hair Growth.
- Prevent or treat dandruff and dry scalp.
- Improve overall appearance of Hairs.
- Prevent or treat fungal and Bacterial hair and scalp infections.



Figure 3- Amala Extract

- Prevents Grays.
- Add more shine to the Hairs.
- Cleanses Hair.
- Crubs Hair Loss.
- Prevents Lice, Psoriasis, Eczema & Scabies.
- Prevents Splits ends



#### Figure 4- Shikakai Extract

#### 3) Hibiscus-

- Stimulate Hair Growth &Lost hair volume & Luster over the years.
- Treat Dandruff & Itchy scalp. Conditions Hairs.
- Prevents premature greying.
- 4) Bhringraj Extract-
- Makes Hair Lustrous.
- Treats baldness and help in growth of hairs



Figure 5- Bhringraj Extract

#### 5) Senna Extract-

- Great Conditioner
- Strong Hairs

Combats Hair Loss



Figure 6- Senna Extract

#### 6) Aloe vera=

- Strengthens.
- Calms an itchy scalp.
- Deeps Cleans Oily hairs.
- Promote hair growth.
- Smooth natural curls.
- Reduce frizziness



Figure 7- Aloe Vera

## 6. METERIALS AND METHODS

#### **Preparation of extract:**

About 100 g of each powdered plant materials, namely Neem, Hibiscus flower, Aloe vera, Shikakae, Liquorice, Amla, Soap nut were homogenized. The powdered material was extracted with distilled water by boiling for 4h. The extract of each plant material was separated and evaporated. Shown in table 1.

#### Table 1 -Extraction of Hebal drug

Sn	Drugs name	Parts	Quantity
		For	
1.	Neem powder	Leaves	09%
2.	Hibiscus flower-	Flower	12%
	powder Aloe vera-	Leaves	07%
3.			
	powder Shikakae powder	Pods	22%
4.			
5.	Liquorice powder	Root	05%
6.	Amla powder	Fruit	25%
7	Soap Nut	Nut	20%

## 7. 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[**Badi.K.A**].

#### Table no 2- Ingredients

SR NO.	MATERIAL REQUIRED	QUANTITY	MEDICINAL USE
1	Neem	0.5g	Antibacterial agent
2	Soap nut extract	0.5g	Foaming agent
3	Amala extract	0.5g	Antidandruff agent
4	Shikakai extract	0.5g	Detergent
5	Hibiscus	0.5g	Conditioning agent
6	Bhringraj extract	0.5g	Hair growth
7	Aloe vera	0.1g	Moisturizing agent
8	Gelatin	q.s	Gelling agent
9	Lemon juice	q.s	Antimicrobial
10	Rose oil	q.s	fragrance

### 8. 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

**Determination of solid content percentage**-The percentage of solid substance was determined by weighing about 4 g of shampoo in a dry, clean, and evaporating dish. To confirm thef the items, particular tests were performed for surface tension, foam volume, foam stability, and wetting time using standard protocol[Gaud RS-2001].

Visual assessment-The prepared formulation was assessed forcolor, 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

**Determination of solid content percentage**-The percentage of solid substance was determined by weighing about 4 g of shampoo in a dry, clean, and evaporating dish. To confirm the result, the procedure was repeated again. The liquid portion of the shampoo was evaporated in a dish by placing on hot plate. The percentage and the weight of the solid contents present in the shampoo were calculated after drying completely.[Mainkar AR-2000].

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 . 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[klein K-2004]

#### 9. CONCLUSION

The results obtained during experimentation clearly indicate a promising formulation of quality enhanced herbal shampoo with a unique aroma, colour and potential for cleaning and foaming ability. Shampoo plays an important role in the removal of surface grease and dirt from the hair shaft and scalp.

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