



# “Review On Phytochemical & Pharmacognostic Evaluation On *Beal Fruit & Aloe Vera & Allium Cepa*”

SUBMITTED TO

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## **INTRODUCTION: -**

**Shampoo: -** Shampoo is defined as a it is a hair care product and preparation of surfactant in suitable form of liquid, solid or semisolid used for removal of oil , dirt , skin particle , dandruff environmental pollutants and other contaminated particle that gradually build in hair.

### ➤ **Classification of Shampoo-**

A) Based on appearance: -

- Powder Shampoo
- Liquid Shampoo
- Lotion Shampoo
- Cream Shampoo

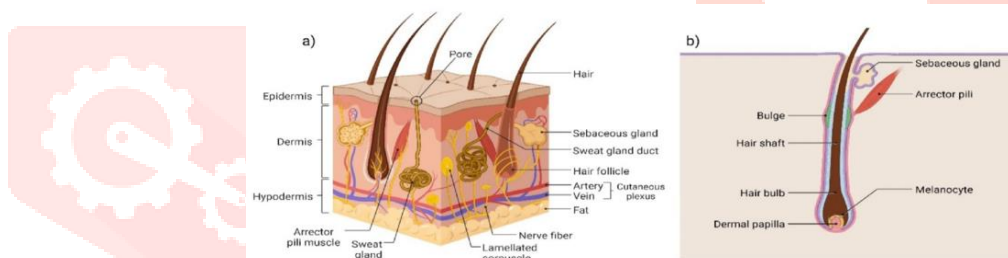
- Jelly Shampoo
- Aerosol Shampoo
- Specialized Shampoo

B) Based on origin: -

- Anti-dandruff shampoo
- Therapeutic shampoo
- Baby shampoo
- Conditioning shampoo.

#### ❖ HAIR ANATOMY: -

- ✓ Hair is the derivative of epidermis consist of two parts –Follicle and the hair shaft.
- ✓ Each hair has a hair shaft and a hair root. The shaft is the visible part of the hair that sticks out of the skin.
- ✓ The hair root is in the skin and extends down to the deeper layers of the skin. To each hair follicle is
- ✓ Attached to a little muscle (arrector pili) that can make the hair arise. Many nerves termination at the hair follicle too.
- ✓ Hair produces from hair follicles located within the fatty cover of the scalp.



*Fig. Anatomy of Hair*

#### ❖ HAIR PROBLEM: -

- a) **Hair loss:** - Hair loss occurs due to several factors such as stress, hormonal imbalance, and using the wrong products. Prevention is possible by using protein-rich food, switching to mild shampoos, massage with hot oil, staying hydrated, And exercise regularly



*Fig Hair Loss*

- b) **Dandruff:** - The scaly particles that cling to the root of the hair is dandruff which is caused by poor diet, dry scalp, in excess sebum, and sensitivity to certain products. It is a harmless, non-inflammatory skin condition that Affects the scalp and can lead to hair loss.

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*Fig. Dandruff*

- c) **Split Ends:** - When the oil from the scalp doesn't reach the ends of the hair, it tends to dry and split over time and another reason is heat worsens the ends. Applying a dash of oil on the ends can avoid split ends



*Fig. Split Ends*

- d) **Hair Colour Damage:** - Regular colouring sessions can damage the hair in the long run. The chemicals in the dye can also cause dryness, dandruff, breakage, and split ends. Medicated shampoos, extra care, conditioning, and nourishing can treat the damaged hair.



*Fig. Hair Colour Damag*

- e) **Oily Scalp:** - Many reasons like poor diet, genetics, or hormonal changes, the biggest culprit of an oily scalp is excessive washing. Ingredients like lactic acid help to regulate the production of oil.



*Fig. Oily Scalp*

## ❖ FUNCTIONS OF HERBAL SHAMPOO: -

- 1) The selection of active ingredients for hair care shampoo is often based on the ability of the ingredient
- 2) To prevent damage to skin as well as to improve the quality of the skin by way of cleansing, nourishing, and protecting the skin.
- 3) It has not made the hand rough and chapped.
- 4) It's not given any side effects or causes irritation to the eye.
- 5) It produces a good amount of foam to satisfy the psychological requirements.

## 1) LITERATURE & REVIEW: -

- ✓ **Suchita Gokhale, et al (2020):** The shampoo sector is probably the largest unit sale among the hair care products since shampoos are one of the cosmetic products used in Daily life. The herbal shampoo was Formulated using natural ingredient like *Aloevera, beal fruit, onion, SHIKAKAI, Ritha & Rose* water with proven efficacy of hair care preparation is Prepared. The combination of several such ingredient of herbal origin has made it possible to secure highly effective herbal shampoo. The formulation at laboratory scale was done and evaluated for number of parameters to ensure its safety and efficacy.
- ✓ **Priya D. Gaikwad et al. (2018):** The objective of this study is to formulate and evaluate poly-Herbal shampoo for cosmetic purpose from herbal ingredients. *Beal fruit, Shikakai powder, Ritha powder, Alo-vera gel & onion & Rose* water was ingredients and Mixing with each other and evaluated for it's organoleptic and physico-chemical Characteristics. 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, its safety benefits are expected.
- ✓ **Dhayanithi S. et al (2021):** The aim of the article is to formulate a pure herbal shampoo and to evaluate its physicochemical properties. The shampoo is enriched with herbal extracts without any synthetic additives. The herbal extracts used in formulation are *Sapindus mukorossi, Glycyrrhizaglabra, Azadirachta indica, Nardostachys jatamansi, Ocimum tenuiflorum, Lavandula angustifolia, Musa acuminata*.

## 2) AIM & OBJECTIVE: -

### ➤ Aim: -

Review on Phytochemical & Pharmacognostic Evaluation on *Fruit & Aloe Vera & Allium Cepa*

### ➤ Objectives: -

- 1) Herbal shampoos for hair fall are made out of natural ayurvedic ingredients, natural oils, minerals, and herbal extracted compounds. These ingredients work on to improve the moisture in your hair by hydrating the follicles and roots of your hair.
- 2) Herbal shampoos for hair growth are made to strengthen the hair follicles by giving essential oils and nourishment all through the root and follicles. This, in turn, promotes hair growth and stimulates the formation of new and healthy hair roots.
- 3) Regular usage of Herbal shampoos can do wonders for your hairs. Our scalps need to Maintain a perfect balance of oil and pH levels in order to have beautiful, healthy, and Strong hair. By using Herbal shampoos, you can get the perfect oil balance.
- 4) Herbal shampoos are made out of natural and essential antiseptic properties that prevent Our hair and scalp from the harsh UV rays of the sun thus preventing skin infections.
- 5) Ayurvedic Herbal shampoos are made of natural ingredients suitable for every type of Skin. So, there is no need to worry about any skin allergies with the use of herbal Shampoos.
- 6) Hair grows healthy with regular usage of herbal shampoos thus giving your hair a Lustrous, shiny, and bouncy hair.
- 7) Herbal shampoos also keep the natural color of your hair and with regular usage, even Enhance them. Along with this, they keep the hair healthy, shiny, bouncy with a well-balanced and healthy scalp.

### 3) PLANT PROFILE: -

#### a) **BAEL FRUIT**: -



*Fig. Aegle marmelos*

- **Synonyms:** *Bael*
- **Botanical Name:** Aegle Marmelos
- **Biological source:** Bael also known as golden apple, Japanese bitter orange, stone apple, wood apple & found in Himalayan tract and throughout India. The uses of bael for hair is it reduces hair loss, fights Against dandruff, prevent premature greying of hair and strengthens hair. *Bael* contains marmelosin A, B and C as well as protein, volatile oil and vitamin C.
- **Family:** *Rutaceae*
- **Chemical constituent:**
  - **Vitamins:** Certain vitamins, such as biotin (vitamin B7), are often included in hair care products. Biotin is believed to promote hair growth and improve hair health.
  - **Protein:** Proteins, such as keratin and hydrolyzed wheat protein, are commonly found in hair care Products. These proteins can help strengthen the hair strands and improve their overall appearance.
- **Uses:**
  - 1) Promotes hair growth
  - 2) Bael for hair is it reduces hair loss, fights against dandruff.
- **Part Use:** Fruit
- **Category:** Promoting hair Growth.



**b) ALLIUM CEPA: -**

*Fig. Allium cepa*

- **Synonyms:** *Kanda, Onion*
- **Botanical Name:** *Allium cepa*
- **Biological source:** Onion is a monocotyledonous plant and is cultivated worldwide as a vegetable and medicinal plant. The bulb is the main edible and medicinal part, rich in sulfur-containing compounds, flavonoids (*like quercetin*), and essential oils.
- **Family:** *Amaryllidaceae*
- **Chemical Constituents:** - chemical compounds, including organosulfur compounds, flavonoids, phenolic acids, saponins, and polysaccharides
- **Uses:** Hair Growth
- **Part Use:** Onion
- **Category:** Strong & Growth

**c) ALOVERA: -**

*Fig. Alovera*

- **Synonyms:** *Alovera*
- **Botanical Name:** *Aloe Barbadensis*
- **Biological Source:** Dried juice of the leaves of various species of the genus *Aloe* & *Aloe Barbadensis*
- **Family:** *liliaceae*
- **Chemical Constituents:** Anthraquinones and chromones
- **Uses:**
  - 1) Increase hair growth
  - 2) Balance the pH level

- **Part Use: Pulp**
- **Category:** Smoothing Agent & pH balance.

#### d) SHIKAKAI: -



*Fig. Shikakai*

- **Synonyms:** *Shikakai, sap-pod*
- **Botanical Name:** *Acacia concinna*
- **Biological Source:** It consists of dried fruit of *Acacia Concinna*
- **Family:** *Leguminosae*
- **Chemical Constituents:** Lupeol, Spinasterol, Acacic Acid, Lactones, Glucose, Arabinose, Rhamnose and Ascorbic acid
- **Uses:**
  - 1) foaming
  - 2) antidandruff
  - 3) Antifungal
  - 4) Antibacterial & Anthelmintic
- **Part Use: Fruits**
- **Category:** Antifungal, Nourish, Follicles, Curb Dandruff.

#### e) RITHA: -



*Fig. Ritha*

- **Synonyms:** *Aritha, arishta, Soapnut, washnut, Kumbhabeeja*
- **Botanical Name:** *Sapindus mukorossi*
- **Biological Source:** It consist of dried fruits of *Spindus Mukorossi*
- **Family:** *Sapindaceae*



- **Chemical Constitution:** Saponins, Hedera-genin, Oleanolic acid, Sopindic acid
- **Uses:**
  - 1) Antifungal and Antibacterial Properties make Them an Excellent
  - 2) Treatment for Hair fall
  - 3) Foaming and detergent
- **Part Use: Fruits**
- **Category:** soapberry, Soapnut, Washnut, Aritha.

**f) ROSE: -**



*Fig. Rose Water*

- **Synonyms:** *Taruni, Charukeshra*
- **Botanical Name:** *Rosa*
- **Biological Source:** It consists of dried petals of *Rosa Centifolia*
- **Family:** *Rosaceae*
- **Chemical Composition:** Phenyl ethanol, Geranyl Acetate, Geraniol, Linalool, Benzyl Alcohol and Benzaldehyde
- **Uses:**
  - 1) Promote hair growth
  - 2) Fragrance
- **Part Use: Flower**
- **Category:** Flavoured Water, Perfume Age

#### 4) **PLAN OF WORK:-**



#### 5) **REFERENCE: -**

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