



“ A Comprehensive Review on ‘Herbs used for hairs mask for multiple uses’.”

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Abstract : Herbal hair cosmetics are natural formulations that use plant based ingredients to nourish, repair and strengthen hair without side effects associated with synthetic chemicals. Herbal hair products are best known for their antifungal, antimicrobial & antioxidant activities. Key herbal components such as hibiscus powder, neem powder amla powder , flax seeds , curry leaves , coconut oil, aloe vera gel, bhringraj oil, shankpushpi powder, henna powder shankushpi powder were selected based on their traditional and pharmacological activities. The potential benefits of mask is in reducing hair fall ,improving scalp health, and enhancing hair texture & shine.

Keywords:- Herbal hair mask, Plant-based ingredients, Antifungal activity, Antioxidant activity, Scalp health, Hair fall prevention, Hair texture, Hair shine, Natural dye

INTRODUCTION



Hair cosmetics are products that help clean, nourish, color, and improve the look of hair, making it look healthy and nice. People have different kinds of hair, like dry, oily, or normal, and they often face common problems such as dandruff, split ends, hair loss, early greying, and scalp infections. These issues can be caused by stress, poor eating habits, changes in hormones, or using too many chemical shampoos. To deal with these problems, people use herbal hair masks, which are a natural way to take care of hair. These masks are made with safe ingredients like castor oil, coconut oil, and bhringraj oil, which help make hair stronger, more hydrated, and repair damage. Unlike chemical products, herbal masks do not have harmful effects and can even be made at home. Herbal remedies are popular because they are natural, cost-effective, and work well. Ayurveda, an old Indian medical system, talks about many herbs that help keep hair healthy. Herbs like neem, rosemary oil, clove oil, tea tree oil, and pepper extract are known to help with dandruff and heal the scalp. So, herbal hair masks are a simple, safe, and effective way to keep hair strong, shiny, and healthy. More people are interested in using herbal products these days. Our project aimed to meet this growing

need, so we created a multipurpose herbal hair mask that helps with dandruff, makes hair softer, and prevents hair loss for better overall hair care.

Herbal Ingredients:-

The Different parts of the Plants were Selected for Study Having Hair Care Property which is already Proven.Following are the ingredients which we have used in the Formulation of Hairs Mask .

- **SHANKHPUSHPI**
- **NATURAL DYE**
- **FLAX SEEDS**
- **NEEM POWDER**
- **ALOE VERA GEL**
- **HIBISCUS POWDER**
- **AMLA POWDER**
- **CURRY LEAVES**
- **BHRINGRAJ OIL**
- **COCONUT Oil**

1.SHANKHPUSHPI^[16]



- a. Biological Source:- Convolvulus pluricaulis choisy
- b. Family:- *Choisy*
- c. Kingdom:- Plantae
- d. Subkingdom:- Tracheobionta
- e. Subdivision:- Spermatophyta
- f. Division:- Magnoliophyta
- g. Class:- Magnoliophyta
- h. Subclass:- Asteridae
- i. Order:- Solanales
- j. Genus:- Convolvulus
- k. Species:- Pluricaulis

Constituent & Uses:-

- i. Alkaloids like convolamine, convolvaine, convoline, and shankhapushpine act as a gentle antioxidant and help improve blood flow to the scalp.
- ii. Fatty acids and proteins provide nourishment to both hair and the scalp.
- iii. Tannins have a mild astringent effect, which helps tighten the scalp.
- iv. These ingredients strengthen the hair roots and improve blood circulation to the scalp, which can reduce hair loss.
- v. They also promote hair growth, as they are traditionally used in Ayurveda to stimulate hair follicles.
- vi. The cooling and smoothing properties help calm an itchy or inflamed scalp.

2.NATURAL DYE^[1]



- i. Biological Source:- lawsonia inermis L
- ii. Family:- *Lythraceae*
- iii. Kingdom:- Plantae
- iv. Subkingdom:- Tracheobionta
- v. Subdivision:- Spermatophyta
- vi. Division:- Magnoliophyta
- vii. Class:- Magnoliopsida
- viii. Subclass:- Myrtidae
- ix. Order:- Myrtales
- x. Genus:- Lawsonia
- xi. Species:- Inermis

Constituent & Uses:-

- a. Natural reddish-brown dye sticks to the keratin in hair, giving it color and a shiny look.
- b. Tannis: These are natural astringents that help the dye stick better and tighten the scalp.
- c. Natural hair color adds a reddish-brown tone without using chemicals.
- d. It strengthens the hair shaft, coating each strand and helping to prevent breakage and split ends.
- e. The cooling and smoothing effect helps calm the scalp and gives a refreshing feel.

3.FLAXSEEDS^[1-2]



- i. Biological Source:-Linium Usitatissimum Linn
- ii. Family:- *Liliaceae*
- iii. Kingdom:-Plantae (Plants)
- iv. Subkingdom:-Trophobionts (Vascular Plants)
- v. Subdivision:- Spermatophyta (Seed Plants)
- vi. Division:-Magnoliphyta
- vii. Class:- Magnoliopsida (Dicotyledons)
- viii. Subclass:- Rosidae
- ix. Order:- Linales
- x. Genus:- Linum L
- xi. Species:- Usitatissimum L

Constituents & Uses:-

The flax seeds contain 35-45% oil which contain 9-10% of saturated fatty acids about 20% monosaturated fatty acids & more than 70% Alpha-linolenic Acid fatty acids.

The protein contents in the seeds of flax varies from 20-30%.

Flax seeds contains Nutrients & has most of hairs & health benefits due to its makeup of a. Protein

- b. Omega-3-fatty acids
- c. Fibers
- d. Antioxidants
- e. Vitamin E
- f. Bioactive compounds & ligans
- g. Vitamin B
- h. Magnesium
- i. Manganese
- j. selenium

4.NEEM POWDER [3]



- i. Biological Source:- Azadirachta Indica
- ii. Family:- *Meliaceae*
- iii. Kingdom:- *Plantae*
- iv. Division:- *Magnoliophyta*
- v. Class:- *Magnoliopsida*
- vi. Order:- *Sapindales*
- vii. Genus:- *Azardichta*[3]
- viii. Species:- *Azardichta Indica*

Constituents & uses:-

- Neem powder has many benefits for the hair. It is the more effective herbs that make your hair gorgeous looking. Neem works on everything medically for hair issues with scalp or dandruff. Neem powder has anti-inflammatory & antiseptic properties, making it a very useful product.[11]
 - Neem leaf extract have been found to exert some antimalarial activity, although this is not great, whereas considerable effectiveness against gastric ulcers has been demonstrated.[12]
- a. Neem helps to cleanse the scalp.
 - b. Congested pore blockages are cleared & healthy hairs development is encouraged.
 - c. The capacity to produce is essential for treating dry scalp.
 - d. The most common ingredient in hairs care products is neem.
 - e. Neem is essential herb for increasing hairs development, Decreasing hairs loss, & Increasing the volume of hairs.
 - f. Neem is most frequently used in our hair care Routines.[3]

5. ALOE VERA GEL [3]



- i. Biological Source:- Aloe
- ii. Family:- *Asphodelaceae*

- iii. Subfamily:- Asphodelodeae
- iv. Kingdom:- Plantae
- v. Class:- Liliopida-Monocotyledons
- vi. Order:- Liliale
- vii. Genus:- Aloes [3]

Constituents & Uses:-

- Anti-inflammatory properties that can help calm scalp irritation.
- Moisturizing benefits.
- Contains enzymes and fatty acids that may help lower inflammation.
- Has vitamin C, E, B -12, follic acid, and choline, which may help nourish and make hair stronger.

[13]

- a. Aloe vera is especially good for hair.
- b. It can help stop hair from falling out.
- c. It helps repair dead skin on the scalp.
- d. It gives hair a shiny look and works well as a conditioner, leaving hair smooth and shiny.
- e. It encourages hair growth. [3]
- f. It also helps reduce dandruff.

6. HIBISCUS POWDER [8/9]



- i. Biological Source:- Hibiscus rosa-sinensis
- ii. Family:- *Malvaceae*
- iii. Kingdom:- Plantae
- iv. Subkingdom:- Viridiplantae
- v. Division:- Tracheophyte
- vi. Subdivision:- Spermatophytina
- vii. Class:- Magnoliopsida
- viii. Genus:- Hibiscus L
- ix. Species:- Rosa Sinensis L

Constituents & Uses:-

- a. The preliminary Phytochemical analysis showed that hibiscus rosa sinensis contained tannins, anthroquinones, quinines, phenols, flavonoids, alkaloids, terpenoids, saponins, cardiac glycosides, proteins, essential oils, mucilages.
- b. Act as a scalp moisturizer : The hibiscus flower & leaf mixture are hydrating & nourishing tp scalp.
- c. Hairs is kept form drying out slimy quality of mucilage founds in leaves & flowers.
- d. Promote hair growth:- Because hibiscus is high in amino acids, which are essential for synthesis of keratin, it used for the promote hair growth.

Treats dandruff & itching:- Hibiscus flower & leaves have smoothing properties that can offer long-lasting comfort for dry, itchy scalps

7. AMLA POWDER [9/3]



- i. Biological Source:- Umbelica officinalis gaerth
- ii. Family:- *Euphorbiaceae*
- iii. Common Name:- Indian Gooseberry
- iv. Kingdom:- Plantae
- v. Subkingdom:- Angiosperm
- vi. Division:- Tracheophytes
- vii. Class:- Eudicot
- viii. Order:- Malphigials
- ix. Genus:- Phallanthus
- x. Species:- Emblica

Constituent & Uses:-

•Amla fruits are really rich in Vitamin C and also contain many other antioxidants and nutrients. Some of the important compounds and nutrients found in amla fruit are:

- Vitamin C,
- Vitamin A
- , polyphenols,
- proteins,
- carbohydrates,
- calcium,
- potassium,
- magnesium,
- iron,
- carotin,
- alkaloid and gallotannins.

Roots and stave against hair loss.[8/3]

Medicinal use: In traditional medicine systems like Ayurveda, curry leaves have been used for their possible health benefits.

They are thought to help with digestion, improve eyesight, and promote general health. [15]

Amla is most commonly used to help keep hair and the scalp healthy. Amla also has many other benefits. It helps make the scalp and hair stronger.

- It can help reduce early hair greying.
- It can also help promote hair growth.
- It can be used to treat dandruff and a dry scalp.
- It can help with infections on the hair and scalp like lice.
- It also helps make the hair look better overall

8. CURRY LEAVES [8/3]



- i. Biological Source:- Murrayakoenigii
- ii. Family:- *Rutaceae*
- iii. Kingdom:- *Plantae*
- iv. Subkingdom:- *Tracheophytus*
- v. Division:- *Angiosperm*
- vi. Class:- *Rosids*
- vii. Order:- *Sppindales*
- viii. Genus:- *Murraya*
- ix. Species:- *Koenigii*

Constituent & Uses:-

Curry Leaves are high in iron, calcium, proteins, vitamins B,C & antioxidants. Curry leaves have anti-hairs loss properties. Lossing -50-100 hairs in a day is typical. Losing over 100 hairs a day might not be a good indicator. Curry leaves are a great source of iron, Vitamin C, & antioxidants that support healthy hairs loss.[10]

9.BHRINGRAJ OIL [4-7]



- i. Biological Source:- Eclipta prostrata
- ii. Family:- *Astraceae*
- iii. Kingdom:- *Plantae*
- iv. Division:- *Magnoliophyta*
- v. Order:- *Astrales*
- vi. Genus:- *Eclipta*
- vii. Species:- *Rostrata*

Constituent & Uses:-

Bhringraj oil contains vitamins D and E, calcium, magnesium, iron, and keratin. It also has chemicals like alkaloids and flavonoids. These ingredients help make it useful for health and beauty.

- a. It is used as a hair tonic to help keep hair dark.
- b. It provides nourishment to the hair.
- c. It helps hair grow faster.[4-7]

It reduces hair fall :-

- Bhringraj oil is a complete solution for hair fall.
- It works by balancing Vata and Kapha doshas, cooling the scalp, and reducing hair fall.Reduces frizz & increase shine. [14]

10. COCONUT OIL [5/6]



- i. Biological Source:- Cocous nucifera
- ii. Family:- Arcaceae
- iii. Kingdom:- Plantae
- iv. Class:- Magnoliopsida
- v. Order:- Arecales
- vi. Genus:- Cocos L
- vii. Species:- Nucifera

Constituents & Uses:-

Coconut obtained from hard endocarp consists of mixture of triglycerides. The oil contains about 95% of saturated fatty acids with 8 & 10 carbon atoms.

- a. It is good for scalp & moisturise the hairs.
- b. It is natural, way to help your hairs growth longer, thicker & faster.
- c. It provides good fats.
- d. It improves skin health.
- e. It fights against bacteria. [5/6]
- f. Prevents protein loss.
- g. Hydrates dry hair.
- h. Improves the condition of hair.

Information of Hairs Mask

A hair mask is an intensive, deep-conditioning treatment that nourishes and repairs hair by penetrating the hair shaft with concentrated nutrients like oils, butters, vitamins, and proteins. Unlike regular conditioner, hair masks are left on for an extended period (e.g., 20 minutes to overnight) to provide more significant and long-lasting benefits, addressing issues like dryness, damage from heat or chemicals, split ends, frizz, and scalp problems, ultimately improving hair strength, elasticity, and shine.

Evaluation test [17]

- a. Organoleptic properties: The organoleptic properties of rejuvenation mask was observed for the color, odor and texture.
- b. pH: For testing pH of the rejuvenating mask weighed 0.5 g of cream dissolved it in 50.0ml of distilled water and its pH was measured with the help of digital pH meter.
- c. Viscosity: To test viscosity of the rejuvenating mask Brookfield viscometer was used at 1 rpm with the spindle no. 62

d. Spreadability test: The rejuvenating mask was tested for spreadability by placing sufficient amount of mask between two glass slides under 100g of weight to form thin layer.

Spreadability= $m \cdot l / t$

m =weight tight to upper slide

l =length moved on the glass slide

t =time take

e. Washability: Washability of the rejuvenating mask was tested by applying it on dorsal surface of left

hand and held under running water to observe.

f. Irritancy test: The rejuvenating mask was applied to the marked area (1sq.cm) on dorsal surface of left

hand to test for irritancy. Observed at regular interval upto 24 hours for irritancy, erythema& edema

g. Homogeneity: Homogeneity was tested by observing the rejuvenating hair and scalp mask visually and

its appearance.

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