

A Review on Herbal Hair Scrub for Hair Problems

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Abstract: Hair plays a vital role in optimizing the personality of an individual as the hair is the primary noticeable part of external body and beauty for Women as well as men. The hair and scalp nature have important psychological impact on human societies. Even small changes in hairs like hair fall, whitening or greying of hair affect the self-confidence and self-esteem of an individual. For preventing and fighting against the hair problems, herbal hair scrub serves as an effective remedy. The goal of present review article is to highlights efficacy of herbal drugs on hair loss and also outlined that prevention and treatment can easily done by formulating hair scrub from those herbal drugs

Keywords: Hair, Hair Problems, Hair Scrub, Herbal drugs

I. INTRODUCTION

Cosmetics plays an important role in the life of women as well as men for beautifying and altering the appearance of the body. Hairs is a crucial factor when talking about beauty. Now a days hair loss is one of the biggest problem of our generation especially for people of age between 20-40[1]. It serves as a major headache during thinking about appearance and beauty of our body. It is due to suffering from diseases like, alopecia areata, telogen effluvium and tinea capitis etc. which are very prevalent in people these days [2]. So, considering all these conditions we have studied Aloe-Vera, Fenugreek, Hibiscus and lantana camera and found that they can be effective for beautifying and cure these hair problems. Large suspended particle, small airborne particles, smoke and gaseous pollution settle on the scalp and hair, causing irritation and damage. As hair covers scalp and has psychological importance in our society, patients with hair loss suffer tremendously[3]. The most common hair disorder is termed as alopecia which is commonly used to express the loss of scalp hair in genetically vulnerable men and women[4]. Due to the infrequent side effects and natural effects, demand in the market of herbal products for hairs is increasing[5].The review paper highlights and summarizes the herbal hair scrub containing the goodness of aloe vera gel, fenugreek seeds, hibiscus leaves and lantana camera leaves. Also provides a brief review on different causes of hair loss, followed by focus on the various types of herbal drugs and constituents for its prevention and treatment by formulating hair scrub. The mechanism of action of herbal drug in preventing the hair loss or hair growth promotion and evaluation of herbal hair scrub is outlined as well.

II. HAIR PROBLEMS

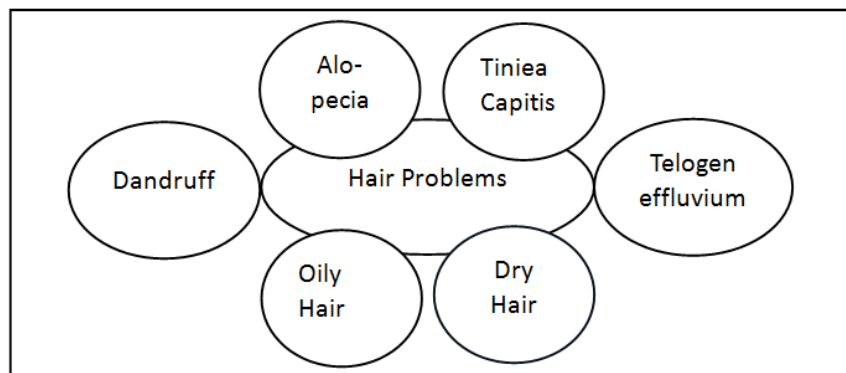


Fig 1. Major Hair Problems

1. Hair loss : It is also called as alopecia[6]. Although historically discussed, hair loss or hair thinning is common among women as well as men. For several men, it's getting to be male pattern balding. In female loss of hairs is typically caused by stress conditions, medication, changes in hormones and also menopause[7].
2. Dry hair : Shampooing too often causes dry hair. Although squeaky clean hair may be a good thing, many overdo it by washing once, sometimes twice or per day which will strip away all of the hair's natural oils[8].
3. Oily hair : Oily hair occurs when the scalp produces an excess amount of natural oil called sebum which is produced by Sebaceous glands, it may sometimes produce overload, leading to excess amounts of oil. Excessive shampooing also causes oily hairs [9].
4. Dandruff : Dandruff refers to the little white pieces of dead skin in or on persons hair, or fallen from someone's other hair. It's apparently caused by a fungus known as *Globosa malassezia* and *Malassezia restricta* formerly called *Pityrosporum*. It may be a yeast causing fungal infection on skins and scalp. It occurs when person not brushing hair, allergy, stress, not showering enough etc. [10,11]
5. Telogen effluvium : Telogen effluvium (TE) is a common cause of non-scarring hair loss which is usually precipitated by physiological stress such as childbirth or sudden weight loss[12].
6. Tinea capitis : It is also known as scalp ringworm, commonly occurs in children. Ringworm of the scalp (tinea capitis) is a rash and redness caused by a fungal infection. It usually causes scaly, itchy, red bald patches on the head or scalp [13].

III. HERBAL TREATMENT

Herbal treatment favors the human body as it locks the fear of side effects. Hair can be healthy using herbal formulations[14]. There are several Herbal plants having good activity for making and growing healthy hairs. Some of the herbs are listed below which can be used for fighting and preventing hair problems.

1) Aloe

Aloe covers wide range of health effects including moisturizing and curing alopecia [15]. Its leaves juice collected by incision, from the bases of the leaves of various species of Aloe [16]. Aloe can be used topically for skin as well as hairs for good effects[17].

2) Fenugreek

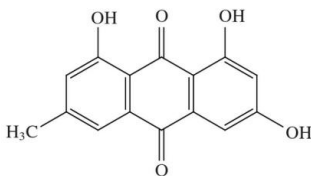
It consists of dried seeds of *Trigonella foenum graecum* belonging to the family Fabaceae [18]. Fenugreek seeds have anti-infective properties which protect the scalp from microbial infection. It also contains hormone regulating compounds which prevent hair loss caused due to hormonal imbalance. It strengthens the shafts of hair and optimizes the growth of healthy hairs [19].

3) Hibiscus

It is a shrub growing 1-3 meters long, the *Hibiscus rosa-sinensis* flowers and leaves used for various purposes belonging to family Malvaceae. The leaves of *Hibiscus* genus are traditionally acclaimed as hair tonic in the Indian system of medicine [20]. Accordingly, topical application of *H. syriacus* extract was found to increase hair growth and validating the medicinal use of this plant for hair loss prevention and treatment. *Hibiscus rosa-sinensis* leaves can improve hair growth, at optimum concentrations of 10% extract [21].

4) Lantana camara

Lantana camara L. is an aromatic shrub having effect on hairs belonging to the family Verbenaceae. It is a reservoir of several important bioactive molecules [22]. From various literature surveys, the researchers proved the use of *Lantana Camara* as anti-inflammatory, anti-cancer, antibacterial, antifungal [23].

Sr. no.	Active constituents	Structure	Effect
1.	Aloin		Calms an itchy scalp

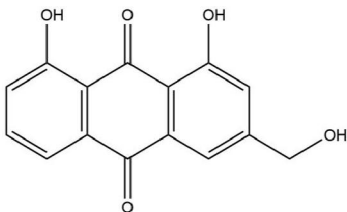
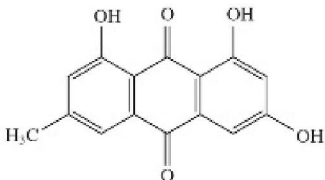
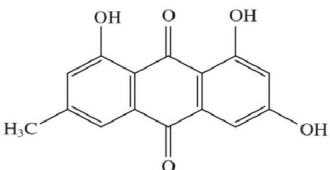
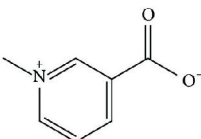
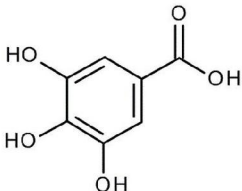
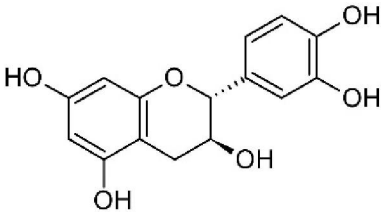
2.	Aloe emodine		Treats alopecia
3.	Rhein		Improves blood circulation
4.	Emodin		Good for hair and scalp [24]

Table no.1 Active constituents of Aloe

Table 2. Active Constituents of Fenugreek

Sr. no.	Active Constituents	Structure	Effect
1.	Trigonelline		Stimulate and enhance hair growth. Delivers nutrients to hair follicles
2.	Gallic acid		Protects hair from damaging, improves hair colour
3.	Catechin		Dyes the decolourized hairs[25].

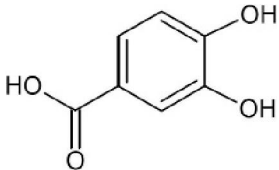
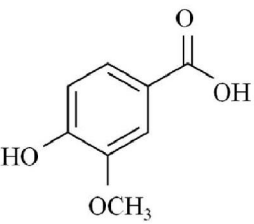
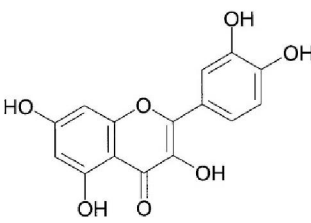
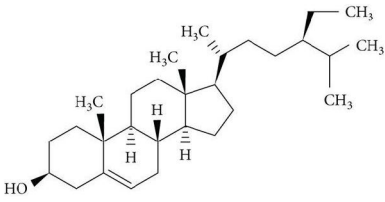
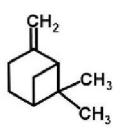
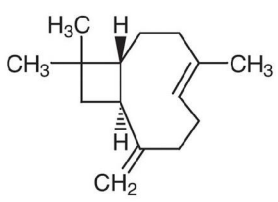
4.	Protocatecheuic acid		Anti-oxidant
5.	Vanillic acid		Stimulates anagen phase, an essential growth phase of hair [26].

Table 3. Active Constituents of Hibiscus rosa

Sr. No.	Active Constituents	Structure	Effect
1.	Quercetin		Stimulates resting hair follicles[27].
2.	B-Sitosterol		Strengthens hair follicles and improves hair growth[28].

Sr. no.	Active Constituents	Structure	Effects
1.	Beta pinene		Activates the hair follicles.
2.	Caryophyllene		Antibacterial [29]

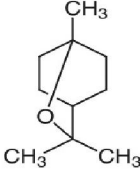
3.	1,8-cineole		Improves symptoms of hair loss
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Table 4. Active Constituents of Lantana Camera

IV. HERBAL HAIR SCRUB

It is a herbal cosmetic which applied, rubbed on hairs for beautifying, cleaning purpose. It provides conditioning to hairs, remove dead skin cells, cleans dusty matters, leads healthy follicle to work efficiently, and as a result can help with hair growth [30]. Use of chemical based topical applications on hairs extends fast damaging and destruction of hair. This requires immediate and suitable procedure which can not only extend benefits to the hair but also helpful for long duration making your hair look beautiful and charming [31].

A. Ideal Properties[32,33]

- It should be non irritant and non-toxic.
- It should possess non-stickiness.
- It should not cause hair damage rather than preventing from it.
- It should soften and moisturizes hairs.
- It should clean sebum and dust from the scalp.
- It should easily spreadable and washable.

B. Preparation of hair scrub

- Raw Aloe Vera gel easily obtain from raw aloe vera [35].
- Lantana Camara leaves will used for granules for scrub.
- Dried leaves of Lantana Camara were put in oven and crushed with help of mortar and pestle.
- The seeds of Fenugreek should grinded into powder form.
- Prepare aqueous extract of hibiscus rosa sinesis leaves.
- Gel, powder and extract mixed properly to form semisolid paste [36].

C. Evaluation Parameters[37,38]

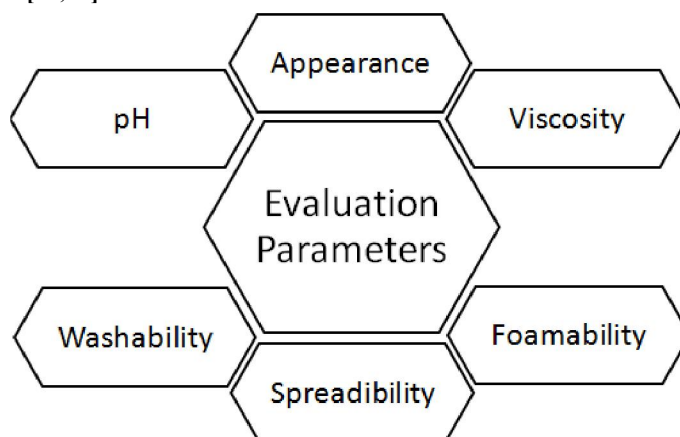


Fig 2. Evaluation parameters of herbal hair scrub

- 1) Appearance: The herbal scrub will be evaluated for its colour, odour and consistency by visual observation
- 2) pH: pH of the scrub should be evaluated by using pH paper and applying small amount of scrub on it. It should be between range 4 – 6 on pH spectrum.
- 3) Viscosity : The viscosity of prepared Herbal Hair scrub should be measured by using Brookfield Viscometer.
- 4) Spreadability : It is very important behavior of the scrub. It will determine the extent of spreading on hairs. Two slides are taken and small amount of scrub was placed on the glass slide and another glass slide was placed on the gel. A wooden weight was placed on it. The time required for the scrub to spread and the area was measured. The amount and the area of scrub on glass slide represent the efficiency of spreadability.
- 5) Washability: Little quantity of scrub will be applied over the hairs and scalp, after 20-30 min should be washed with water. Formulated scrub applied on hair should be easily removed by washing with water.
- 6) Foamability: Small amount of formulated hair scrub will be taken in a measuring cylinder and shaken by adding water for 10 times and note the final volume. Measure the amount of foam produced.

V. CONCLUSION

Hair problems, the major obstacle of the external appearance of the body can be prevented by effective use of natural herbal formulation. The above data suggest that the new scrub formulation for hairs can serve as a safe remedy to get relief from hair problems mainly alopecia. Aloe, Fenugreek, Hibiscus, Lantana Camara has good effects as a scrubbing agent on hairs. The substances are natural, and there are low chances of adverse effects which leads to the development of confidence and satisfaction in the people by eliminating the fears of adverse effects. Use of Herbal hair scrub can serve as an array which will denote the safety and prevention of hair problems.

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