

# Review Article on: Formulation and Evaluation of Herbal Hair Oil

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## Abstract

*Cosmetology is defined as the wisdom of revision in the appearance. In India, the use of herbals for the purpose of beautification finds its circumstance in the traditional literature drug similar as Ayurveda. Herbal cosmetics is one of the most potent and effective area of ornamental technology. It's used for beautifying and overall enhancing the mortal personality. Herbal products are characterized by a better tolerability compared with other synthetic products. This study aimed at reviewing the significance of herbal hair oil painting for the treatment of common hair problems as baldness, alopecia, hair fall, argentine hair, blankness, and most common dandruff. Herbal products earnings fashionability over worldwide because it's lack of side goods as compared with synthetic products. The purpose of using ornamental medications is to attain deification and voluptuous enjoyment. From the centuries the herbal excerpts are used as whole or as a part for the affections of hair, skin and overall appearance. Hair loss or baldness isn't a life hanging complaint but it leads to emotional stress and traumatic experience. For the treatment of similar hair diaseases the hair oil painting is prepared from sauces and herbal excerpts. But, still no bone herbal hair oil painting is sufficiently effective as 100. The request check shows the increase in the demand of herbal products for the hair care medications. The current review deals with the enormous quantum of scientific exploration, reports and patents available in different aspects of the herbal hair oil painting for the treatment of hair diseases.*

**Keywords:** *Cosmetics, herbal products, herbal hair oil, hair problems, hair.*

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## Introduction

Cosmetics are substances used to enhance the appearance or odour of the mortal body. Cosmetics include skin-care creams, poultices, maquillages, scents, powders, fingernail and toe nail polish, eye and facial makeup, endless swells, coloured contact lenses, hair colours, hair sprays and gels, deodorants, baby products, bath canvases, bubble cataracts, bath mariners, flannel and numerous other types of products. A subset of cosmetics is called "make-up," which refers primarily to multicoloured products intended to alter the stoner's appearance. Numerous manufacturers distinguish between ornamental cosmetics and care cosmetics<sup>1</sup>. In the last three- four decades the use of cosmetics has increased exponentially not only among ladies but the manly population also indulges in their use. Hair colorings, hair oil painting, creams are as popular with males as with ladies. utmost countries now have laws to control, manufacturing, marker, tradeets. of cosmetics in such a way that use of cosmetics dangerous to health is averted.

The conception of beauty and cosmetics is as ancient as humanity and civilization. So, they use colourful beauty products that have sauces to look fascinating and youthful. Indian sauces and its significance are popular worldwide<sup>2</sup>. Herbal cosmetics have growing demand in the world request and are an inestimable gift of nature. There are a wide range of herbal ornamental products to satisfy beauty governance. Adding sauces in cosmetics is veritably safe for our skin<sup>3- 5</sup>. Herbal hair canvases are one of the most well honored hair treatments. Herbal hair oil painting not only moisturizes crown but also reverses dry crown and dry hair condition. It provides multitudinous essential nutrients needed to maintain normal functions of sebaceous gland and promote natural

hair growth. Keeping this point in consideration the present work was accepted. India herbal drugs are the top form of drugs. In India around 6000 manufacturers for herbal drugs are available. According to WHO around 80 people of the world uses herbal drugs. Although numerous synthetic medicine motes mimic the natural being patch and have structure that completely or incompletely analogous to natural patch. Herbal treatments have growing demand in worldwide as they're lack of any adverse and goods as compare to synthetic phrasings. In ornamental assiduity hair canvases are astronomically used by the peoples. Herbal phrasings gains an important part in all over the world as it's fully made up of natural sources deduced from the shops. Pre-mature hair loss is one of the common types of dermatological condition. The etiology of hair loss is still not fully understood and also its complete medical treatment isn't satisfactorily developed. One of the major causes of hair loss is the insufficiency of iron anemia). As there's numerous further hair loss treatment available but no bone of them is 100 effective. For the treatment of hair loss generally plethora of sauces are used similar as hibiscus, neem, amla, methi, tulsi, brahmi, bomb, shikakai, liquorice, nutmeg, henna, reetha, liquorice root, musk root, mahabhringraj, jantamasi, chitraka, marigold, parsley, rosemary, thyme. From the amongst factory amla is the major source of vitamin C and also contain phosphorus, calcium and iron which provides nutrition to normal hair growth and also use for the darkening of hair. Hibiscus contains calcium, iron, vitamin B1, phosphorus, riboflavin, niacin and vitamin C, which prevents unseasonable graying of hairs and also give thicker hair. Brahmi consists of alkaloids that enhance exertion of protein kinase. Methi having high protein fodder that works as protein supplement to force nutrition for hair.1.1 Cosmetics the first archaeological substantiation to the use of osmetics was set up from in Egypt during 3500 BC. The origin of the word dress is from Greek.

Cosmeceuticals are that ornamental products which having natural active substances that have advantage analogous to medicines or drug. The beauty of hair and skin unnaturally depends on the individual health, diet, job routine, climatic condition and conservation. From the 20th century the fashionability of cosmetics has increased suddenly. numerous manufactures separates the ornamental dress from care cosmetics. The word cosmetics is defined as that composition which is rubbed, poured, sprinkled or applicable to any part of mortal body for the purpose of sanctification, beautifying or enhancing the appearance is called as cosmetics. The main end of cosmetics is to ameliorate and cure the skin and hair. There are three objects of cosmetics these are as cerebral, social, and clinical. The cosmetics products are classified according to their physical countries in three main orders as.

1. Solids face maquillages, talcum maquillages, face packsetc.
2. Semi solids creams, ointments, liniments, wax base creams, pasteetc.
3. Liquids poultices, moisturizers, hair oil painting, conditioners, soaps, sanctifying milk, mouthwashes, scents, nail polish, deodorants etc.

**2. Herbal Cosmetics** are prepared by the association of active bioactive constituents or medicinals. The presence of variety of phytochemicals and botanicals in the herbal products have binary significance, one is that they used as cosmetics to watch body and another is the phytochemical improves the natural functions of mortal body naturally results in healthy skin and healthy hair. In the expression of herbal cosmetics shops are used in three ways either it's a total excerpts or a single patch attained from the sanctification of excerpts (e.g. aloe vera gel, teas, factory excerpts) picky excerpt like wheat origin, ginkgo or single natural patch like vitamins, coenzyme Q10. As the name suggests the herbal excerpts means the excerpts of sauces. It's an ancient methodology because its origin was discovered from the holy Vedas and in Unani Holy Writ. As the consummation said that the chemical drugs aren't always work as magic pellets and they may have side goods. Now a day in this world there's turn towards the herbalism and use of herbal products and to live more natural way of life. Indian sauces are the source and tested for use in ornamental diligence and also in beauty parlours. presently these sauces are used in their crude forms either in dried forms or pulverized forms by using mortar pestle. still the final product may contain inactive gratuitous substances in large quantities. inadequate quantum of active substances in the final product will leads to it ineffective thus the attention of active emulsion from herbal excerpts have to be increased.

**2.1 Herbal hair oil painting** Hair is the one of the vital part of our body and it influences the overall appearance of the person. Hair care products are defined as those phrasings which are used for sanctification, modifying the texture of hair, changing of the color, giving life to the stressed-out hair, furnishing aliment to the hair and giving the healthy appearance to the hair. There are two orders of hair care products these are hair mixers and alternate is hair fixing aids. Hair oil painting those contains herbal medicines are called as hair mixers. These are formulated by herbal excerpts in an oil painting base. Hair canvases are the hair care phrasings applied for treatment of hair diseases similar as baldness, aggression of hair, discoloring of hair, hair falling, and blankness of hair etc. The nature of oil painting is non sticky and addition of scents enhances the scent and overall improves its fashionability. Proper operation of hair oil painting gives luster to hair, softening the hair, gives flowness to hair and more important gives cooling effect to brain. The most honored hair care medication is herbal hair canvases, they moisturizes the crown and also helpful in dry crown and dry hairs

**2.2 Global status of herbal hair oil painting** According to World Health Organization (WHO) the global herbal request will grow \$ 5 trillion by 2050. The News National from Nigeria Natural Medicine Development Agency (NNMDA) has projected stopgap that herbal request presently is \$ 160 billion encyclopedically annually. Next to the China India is the largest patron of medicinal shops having lesser than 40 global diversity. From the study on Herbal Assiduity Biz Implicit', presently, the Indian herbal request is worth Rs 7,000 crore (\$1.7 billion) and India exports herbal raw accoutrements and drugs worth over Rs 3,600 crore \$ 902million).

**2.3 Hair** A mortal have around further than 2 million hair follicles which have both positive as well as negative effect on skin health. It's one of the vital corridour of our body which is deduced from the ectoderm of the skin, it's work as a defensive accessory for the body and is consider as an appurtenant structure of the body having integument like structure along with sebaceous gland and sweat gland. In embryonic stage development they're began from the epidermis hence they're also known as epidermal derivations. Hair follicle and hair shaft are the two introductory corridour of a hair. The natural exertion of hair follicle is hair growth, saturation. Hair shaft is substantially made up of protein and is considered to be dead. For healthy and good looking manageable hair, to take care of both hair follicle and hair shaft is important. Coconut grounded hair canvases access both into the hair shaft and hair follicle and also into the medulla which is the inmost subcaste of the hair shaft. In different seasons hair behaves elsee.g. in summer heat removes humidity from the hair making it dry and brittle. By the operation of oil painting, loss of humidity can be help and keeps hair soft and supple. Hair growth cycle There are three phases of hair growth cycle, these are as

**1. Anagen( Growth phase)** – this is a short phase as 2- 8 times and about 80 of hair is in this phase.

**2. Catagen( Involution)** – this is veritably short phase 10- 14 days and in this phase the exertion of hair growth increases and also hair moves to the coming phase.

**3. Telogen( Resting phase)** – in this stage hair is in resting stage and this stage is lasts for 90- 100 days. Generally 50- 100 hairs are exfoliate aimlessly every day. The telogen phase isa state at which the hairs move into resting state. further than 100 hair per day causes a state of alopecia (hair loss), albeit it could be temporary.

**3. Hair complaint treatment** The changes in hair follicle viscosity, size and/ or changes to the hair growth cycle are the unnaturally causes of hair diseases. Androgen also a one of major cause of hair loss. Another cause of hair loss is use of chemotherapeutic agents. The treatment of any hair complaint involves altering or modulating one or further of these causes of diseases. The treatment is depending on the nature of hair complaint. If the causes of the changes to hair growth viscosity, size and growth cycle is known also the most effective approach of treatment is to target the original complaint medium. The treatment enables the damaged hair follicles to recover through their essential regenerative capacity, they don't affecting directly on the damaged hair follicles. substantially hair diseases involve changes to hair follicle distribution, size and growth cycle. By modulating one or further of these parameters the complaint can be treated potentially. Patents are available that claim the goods are due to the stimulation of hair follicle and crown metabolism by perfecting

blood rotation, activation of dermal papilla, antitestosterone action and increased nutrition to the hair follicle through accelerated blood inflow but the medium are still not clear.

**3.1 Common Hair diseases** In Ayurveda, hair conditions are described in three types as Khalitya (loss of hairs), Palitya (Prematured hair graying), Indralupta (alopecia areata, totalis, universalis) (37- 38). They can be farther manifested clinically as

**1. Natural diseases of hair growth** this type of hair complaint is genetically not environmentally. It's also called hypertrichosis because it's results in blights in normal growth of hair follicle in embryonic stage. It's one kind of alopecia.

**2. Acquired diseases of hair growth** this type of complaint is more complex in nature and is caused by natural factors of hair.

**3. Dandruff dandruff** is the scaled flyspeck which is cleave to the root of the hair. It's caused by a poor diet, infection, and slow rate of metabolism also by stress. Dandruff occurs at puberty and it's most common in men than women.



**4. Split Ends** it's generally faced women. When the hair is dry and brittle also results in split ends.

**5. Frizzy Hair** this is caused by the dwindling in normal hair humidity position. High brushing condition leads to limp hair.

**6. short Crown** it's white flakes of dead skin that prevents growth of hair and causes to hair loss. This problem is most common in women.

**7. Dull, sticky Hair** it's occurs due to the use of hard water for washing hair. 8. Hair Loss it's common in women and men also. This caused by stress, menopause, birth control, drug, changing hormones, and the plethora of hair styling products. Alopecia is a common hair problem in cosmetics and also in Primary Health Care Practice, has been honored for further than 2000 times. roughly 0.2- 2 of the world population has been affected from alopecia.



Sr no.	Common name and biological source	Distribution	Part used	Uses	Figure
1	Phyllanthus emblica, Euphorbiaceae (Amla)	Throughout India	Fruit	Hair Growth	
2	Arnica Montana, Asteraceae (Arnica)	Cultivate sparingly in India	Flowers	Hair tonic and Stimulate hair Folicles	
3	Ficus racemosa, Moraceae (Bargad)	Throughout India	Root	Massage and to reduce hair fall	

## Experimental

### Materials and methods Collection of plant part

For the preparation of herbal hair oil various plant materials were collected viz., Neem, Amla, Shankpushpi, Brahmi, Bhringaraj, Jatamansi, Nirgundi, Shatavari, Gammhari and Pudina from the Medicinal Plant Garden Of department of pharmacognosy.

### Formulation of herbal hair oil

The various ingredients used in the formulation of herbal oil are presented in Table 1. Accurately weigh all the dried and fresh herbs such as Amla, Nirgundi, Bringaraj, Jatamansi, Neem, Gammhari, Aprajita, Shankpushpi, Brahmi, Kapur and Pudina and were grinded in the mixture and was mixed in 63% of til oil. The above content was boiled for 15 min. and was filtered through muslin cloth. To the filtrate coconut oil was added to make up the volume (100 mL). Finally small amount of color and flavoring agent was added to the oil and it was placed in amber coloured bottle.

**Table 1: Ingredients used in formulation of herbal hair oil**

Sr. No.	Ingredients	Quantity (%)
1	Amla	85
2	Nirgundi	2
3	Bringaraj	10
4	Jatamansi	3
5	Neem	2.5
6	Gammbhari	3
7	Aprajita	2
8	Shatavari	2.5
9	Shankpushpi	3.5
10	Brahmi	7
11	Kapur	1
12	Pudina	1
13	Til Oil	63
14	Coconut Oil	37
15	Colour	5

## Evaluation of herbal hair oil

The formulated herbal hair oil was subjected to physical and biological evaluation.

### Sensitivity test

The prepared herbal hair oil was applied on 1 cm skin of hand and exposed to sunlight for 6,7 min.

### Acid value

Preparation of 0.1 molar solution: Weighed 0.56 g KOH pellets and dissolved in 100 mL of distilled water and stirred continuously. The prepared 0.1 molar KOH solution was filled in the burette. Preparation of sample: Measured 10 mL oil and dissolved in 25 mL of ethanol and 25 mL of ether mixture and shaken. Added 1 mL of phenolphthalein solution and titrated with 0.1 molar KOH solution.

### Saponification value

Accurately weighed 1 mL of oil into a 250 mL of conical flask and 10 mL of ethanol: ether mixture (2:1) was added. To this flask 25 mL of 0.5 N alcoholic KOH was. Kept the flask for 30 min. and the flask was cooled. The cooled solution was titrated against 0.5 N HCl using phenolphthalein indicator. Similarly the blank titration was performed without taking oil (sample). Amount of KOH in mg used was calculated.

**pH:** The pH of herbal hair oil was determined using pH meter.

**Viscosity:** The viscosity was determined using Ostwald's viscometer.

**Specific gravity:** Take the specific gravity bottle, rinsed it with distilled water, dry it in oven for 15 minutes, cool, closed it with cap and weigh it (a). Now fill the same specific gravity bottle with the sample and closed it with cap and again weigh it (b). Determine the weight of sample per milliliter by subtracting the weight (b-a).



## RESULTS AND CONCLUSION

Herbal hair oil painting is one of the most well honored hair treatments. Herbal hair oil painting not only moisturize crown but also reverses dry crown and dry hair condition. It provides multitudinous essential

nutrients needed to maintain normal function of sebaceous glands and promotes natural hair growth. The herbal hair oil painting was prepared from colorful sauces (Table 1) and their significance in the expression is presented in Table 2. The colorful parameters like perceptivity test, density, pH, vexation test, grit test, saponification value and acid value of herbal hair oil painting was estimated (Table 3). Hence, from the present disquisition it was set up that the formulated herbal hair oil painting has optimum norms and farther standardization and natural webbing establishes the efficacy of formulated herbal hair oil painting.

Sr. No.	Parameters	Inference
1	Specific Gravity	1.088
2	Viscosity	0.56
3	Acid value	5.5
4	Saponi. value	105.05
5	pH	7.8
6	Sensitivity test	No irritation
7	Irritation test	No irritation



## CONCLUSION

India has the well honoured and well knowledge on traditional sauces and their phrasings. This review was an attempt to describe that numerous shops of medicinally significance can b used for the treatment of colourful kinds of common hair problems. Herbal products are of topmost fashionability because they're purely made up of sauces and shrubs. moment's generation both men and women, suffers normal hair problems as there's further weakened terrain which leads to hair diseases similar as saturation problems, dandruff and falling of hair. The use of bioactive constituents from the herbal expression stimulates the biology of skin and hair for natural growth that provides healthy hair and skin. Generally herbal expression provides numerous vitamins, antioxidants, colorful canvases, proteins, terpenoids and numerous essential canvases. This composition is bid to describe the advantage and operation of sauces as natural cosmetics for the purpose of natural hair growth



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