

Herbal Hair Oil : A Review

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ABSTRACT :

The concept of beauty and cosmetics is as old as humanity and civilization. Cosmetics play an essential role in human life. Herbal cosmetics is one of the most fruitful areas of cosmetic technology. Herbal cosmetics are developed by the combination of biologically active and pharmaceutical ingredients. Herbs are used for the purpose of beautifying the body, preparing cosmetic products, flavoring and coloring. Hair plays an important role in human personality and we use many cosmetic products for hair care. The study aimed to examine the importance of herbal oils and their uses in treating common hair problems such as baldness, hair loss, dry hair, dandruff, etc. Many beauty products and cosmetics contain herbs that are used to give a youthful and attractive appearance. Various herbal ingredients are used in herbal hair formulations; they provide essential nutrients like vitamins, antioxidants, etc. Herbal hair oils have been widely used to nourish hair and protect it from loss and damage. Nowadays, one day side effects are a big problem after using any beauty product, that's why herbal products are preferred due to less chances of side effects.

Keywords: Herbal hair oil, dandruff, herbal, cosmetics, hair.

INTRODUCTION :

Cosmetics are substances used to improve the appearance or smell of the human body. Cosmetics include skin care creams, lotions, powders, perfumes, lipsticks, manicures and pedicures. Nail polish, eye and facial makeup, hair perms, colored contact lenses, hair dye, hairsprays and gels, deodorants, baby products, bath oils, bubble baths, bath salts, butters and many other types of products. A subset of cosmetic products is called makeup which refers to mainly colored products intended to change the user's appearance. Many manufacturers distinguishing decorative cosmetics from care cosmetics[1]. Over the past three or four decades the use of cosmetic products has increased exponentially not only among women but also among men people are also passionate about their consumption. Hair dye, hair oil and hair cream are also popular among men with women. Most countries now have laws for control, production, labeling, sales, etc. cosmetic products to avoid the use of cosmetic products that are harmful to health.[2] Herbal cosmetics are increasingly in demand world wide market and constitutes a priceless gift of nature. There are many types of herbal cosmetics. The product meets the beauty regimen. Adding herbs to cosmetics is very safe for our skin. Herbal hair oil is one of the most recognized hair treatments. Herbal hair conditionernot only Provides moisture to the scalp but also reverses dry scalp and hair. It offers much Essential nutrients to maintain normal function of sebaceous glands and promote grow hair naturally. It was with this in mind that the present work was undertaken.[3] Hair loss, or alopecia, is a common patient complaint and a source of significant psychological and physical distress[4]. Androgens are considered to be one of the most important causes for alopecia apart from a variety of other factors [5]. Natural products In the form of herbal formulations are available in the market and are used as hair tonic, hair growth promoter, hair conditioner, hair-cleansing agent, antidandruff agents, as well as for the treatment of alopecia, dandruff and lice infection[6]. A number of herbal products have been acclaimed with hair growth-promoting activity[7]. The traditional system of medicine in India acclaims a number of herbal

drugs for hair growth promotion. In our study, we found that the ethanolic extracts of *Emblica officinalis*, *Bacopamonniera* and *Cyperusrotundus* is useful in the treatment of “Indralupta”(i.e. hair loss)[8]. Therefore, the present study is beg and eveloping a formulation containing ethanolic extracts of these drugs in the form of herbal hair conditioners in different ratios and concentrations and evaluate the oils formulated for hair growth. [9]

Herbal hair oil:

Hair is an important part of the body and affects the entire body. The appearance of that person. Hair care products are defined as formulations that can used to cleanse, correct hair texture, change color and give life to hair stressed hair, nourishes hair and gives it a healthy appearance . [15]There are two types of hair care products: hair tonics and the second type are hair care products. Grooming aids. Hair oils that contain medicinal plants are called hair tonics. That it prepared from plant extracts on an oil base. Hair conditioner is an applied formula for hair care to treat hair disorders such as baldness, hair damage, hair color change, and hair loss.Hair loss, dry hair, etc.[16]The most popular hair care products are herbal oils, they moisturize the scalp and are also very beneficial for dry scalp and hair. Herbal hair conditioner maintenance . The normal function of the sebaceous glands as they provide natural essential elements to the hair develop naturally. [17]

Global status of herbal hair oil:

According to the World Health Organization (WHO), Global medicinal plants market will grow by \$5 trillion by 2050. The National News of Nigeria Natural The Pharmaceutical Development Agency (NNMDA) has given hope that the herbal medicine market is now It represents \$160 billion annually globally. India is the largest producer after China Medicinal plants have a global diversity of more than 40%. Research training in “Herbal Medicine”. Industry Potential “Currently, the Indian medicinal plants market is worth Rs 7,000 crore (US\$ 1.7). Billion USD) and India exports herbal ingredients and medicines worth over Rs 3,600 billion (\$902 million USD). [21, 22]

Some important plants used for preparation of herbal hair oil

1.Emblica officinalis (Euphorbiaceae)



Fig 1.Emblica officinalis fruits

Emblica officinalis is rich in vitamin C, tannins and minerals such as phosphorus, iron and calcium both nourishes hair and darkens hair[10]

Chemical constituents:

Alkaloids (Phyllantidine, Phyllantine), Vitamin C, Gallotannis (5%), Carbohydrates (14%), Pectin, Minerals, Phenolic acid, Gallic acid, Ellagic acid, Phyllemblic acid, Emblicol, Amino acid (Alanine, Aspartic Acid, Glutamic acid, Lysine, Proline)[11]

2. *Bacopa monnieri* (Scrophulariaceae)

Fig. 2: *Bacopa monnieri* herb



Bacopa monnieri is small herb with purple flowers. It grows in wet and sandy areas and near the Streams in tropical regions. It is a creeping herb with numerous branches and small fleshy, oblong leaves. Flowers and fruits appear in summer. The stem and leaves of the plants are used[11,14] in Fig.2 Part used: Whole Plant.[12]

Chemical constituents:

Alkaloids (Brahmin, Herpestine), Saponins (Monnierin, Hersaponin, Bacoside A, A3, B), betulic acid, D-mannitol Steroids (Stigmasterol, Sitosterol) [13]

3. *Cyperus rotundus* (Cyperaceae)



Fig.3: Cyperus rotundus herb

Cyperus rotundus is a major weed of crops and gardens, but it is only a minor weed.

In another place. It is encouraged by regular cultivation and grows best in fertile, moist soil in Figure 3, and is partly used: Rhizome.[14]

Chemical Constituents:

Sesquiterpenes such as: α -Cyperone, β selinene, cicerone, cyperotundone, patchoulone, sugeonol, etc. It contains other terpenes such as pinene (monoterpene) and other sesquiterpene derivatives such as cypirol. Isocypirol and cyperone.[12]

4.Hibiscus

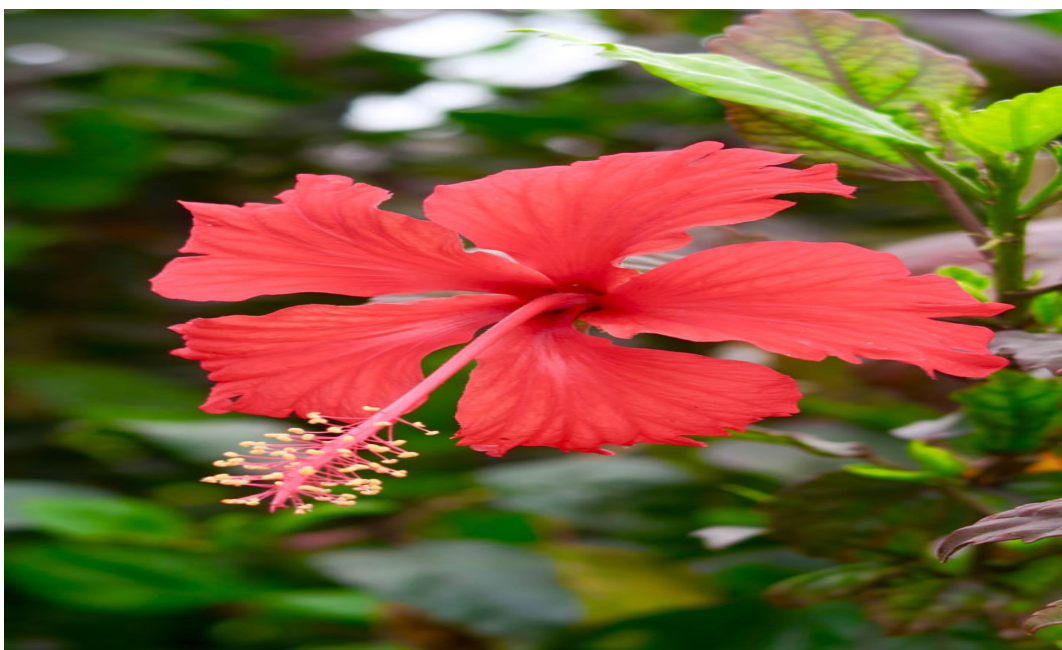


Fig. 4 Hibiscus

Hibiscus flowers are commonly known as azalea, or jaswand. Contains fresh flowers and rose leaves Sinensis, family Malvaceae.

Chemical Constituents:

Hibiscus flower contains cyanidin, di-glucosides, flavonoids, vitamins, and thiamin.

Riboflavin, niacin and ascorbic acid (vitamin C). Hibiscus is a rich source of flavonoids and amino acids. It provides hair with various nutrients. Micronutrients such as fibre, protein and carbohydrates stimulate hair growth by revitalizing it hibernating follicles. Since it contains large amounts of vitamin C, A and iron, it is effective Antibacterial and antioxidant properties. This crushed herb is said to have been used in the past. It is an anti-dandruff agent and a treatment for hair loss. [18]

5.Coconut oil



Fig 5.Coconut oil

Coconut oil or coconut oil is obtained from the dry solid part of the coconut endosperm, Family *Cocos nucifera* L. Palmae. It consists of triglycerides from lauric and myristic acids. With small parts of caproic, caprylic, oleic, palmitic and stearic acids.

The fatty acids found in coconut oil reduce sebum secretion. Lauric acid and caprylic acid found in coconut help prevent bacterial and viral infections. [19]

Evaluation

• **Sensory properties:** Various sensory properties of the Herbal hair conditioner are prepared like color, physical condition and smell. Polarity and solubility were determined.

• **Specific Gravity:** Take the bottle with the relative density and wash it with distilled water and dried in the oven for 15 minutes. Discard the water, cool, cover and weigh (A). The specific gravity bottle is filled with the sample and closed and weigh again (B). Determine the mass of the sample Per milliliter by subtracting the weight (b-a). • **Acid number:** number of moles of KOH prepared.

• **Sample preparation:** Measure 10 ml of vegetable oil measuring cylinder and dissolve the oil in a 1:1 ratio Ethanol: ether and alcohol. Add 1 ml of phenolphthalein into the mixture and titrate with

0.1 mole of KOH solution.

• **Saponification index:** Weight of 1 ml of botanical hair conditioner. Transfer it to a 25 ml conical flask. 25 now add 1 ml of KOH alcoholic solution. It was heated bath in the water for 30 minutes, mixing frequently. The contents of the vial are added to the cooled phenolphthalein. Liquid and titrate with 0.5M HCl. The empty solution is Saponification values were performed and calculated.[20]

• **pH:** The pH of manufactured oils is determined by usage pH.

• **Viscosity:** The viscosity of vegetable oils is determined by application Brookfield viscometer. • **Initial skin irritation test:** preparation Evaluated by our basic arm skin irritation test, A small amount of the composition was applied to the test site. The test site was noted for erythema and edema in 3 At 04:00.

• **Allergy test:** processed vegetable oil is applied to it 1 cm of hand skin and expose to the sun for 4 to 5 minutes.[20]

Recent studies on herbal oil preparations

In a study conducted by Singh et al in 2013, this activity was reported to help reduce hair loss. One of the endangered medicinal plants is *Nardostachys jatamansi*. They call it *jatamansi*. This extract has effective hair care properties and is used to protect against hair loss. This study It is reported that *jatamansi* has the ability to reduce the time it takes for hair to grow. [23] In one Hazrat J 2013 study reported that some medicinal plants such as *Sikakai*, *Aretha*, *Bhringraj* has greater therapeutic importance in hair care products intended for cosmetic purposes.[24] nagaba Et al., in 2005, studied the cosmetic potential of plant extracts. They describe as well Plant extracts have cosmetic uses because the most important properties of plant extracts are: Its antioxidant properties. They reported that azelaic acid is found in wheat, barley, and rye It has been used to protect against hair loss. This azelaic acid has natural properties Keratosis of skin and hair cells[25]

CONCLUSION

India has an extensive and widely recognized knowledge of traditional herbs and their formulations. This review aims to describe that several plants have potential medicinal importance. It is used to treat common types of hair problems. Herbal products are More common because it includes only grasses and shrubs. Today's generation Both men and women face common hair problems due to an increasingly polluted environment Which leads to hair disorders such as pigmentation problems (dullness), dandruff, and hair loss. Hair loss). The use of biologically active components of herbal formulas will stimulate Skin and hair biology for normal growth resulting in healthy hair and skin. In general The herbal formula provides vitamins, antioxidants, a variety of oils, proteins and terpenoids and many essential oils. This article aims to describe the benefits and applications of herbs as natural cosmetic products for natural hair growth.

Reference:

- 1.N. Sanju, N. Arun and K. K. Roop, *Cosmetic Technology*, 1st Edition, Birla Publications Pvt. Ltd, Delhi (2006) pp. 379-382.
- 2.S. Kaul and S. Dwivedi, *Indigenous Ayurvedic Knowledge of Some Species in the Treatment of Human Disease and Disorders*, *Int. J. Pharm. Life Sci.*, 1(1), 44-49 (2010).
- 3.R. Shoba Rani Hiremath *Textbook of Industrial Pharmacy*, 1st Edition, Orient Longman Pvt. Ltd., Hyderabad (2007) pp. 99-102.
- 4.Han A, Mirmirani P. Clinical approach to the patient with alopecia. *Semin Cutan Med Surg* 2006;25:11–23.
- 5.Bagatell C, Bremner WJ. Androgens in men – uses and abuses. *New Engl J Med* 1996; 334:707–15.
- 6.Olsen EA. Androgenetic alopecia. In: EA Olsen, ed. *Dis-orders of Hair Growth: Diagnosis and Treatment*. New York: McGraw Hill, Inc; 1993: 257–87.
- 7.Takahashi T, Kamiya T, Yokoo Y. Proanthocyanidins from grape seeds promote proliferation of mouse Hair follicle cells in vitro and convert hair cycle in vivo. *Ac-ta Derm Venereol* 1998; 78:428–32.
- 8.Adirajan N, Dixit VK, Gowri C. Development and evaluation of herbal formulations for hair growth. *In-dian Drugs* 1999; 38:559–63.
- 9.Roy RK, Thakur M, Dixit VK. Effect of *Cuscuta reflexa* Roxb, On hair growth in albino rats. *Indian Drugs* 2006; 43 (12): 951–6.
- 10.Shah C S, Qudry J S, *A Text book of Pharmacognosy*, 11th Ed., B.S. Shah Prakashan, Ahmedabad, 1996; 119.

- 11.Lipi, P., Suryaprakash, B. N., & Pande, M. S., Development and evaluation of herbal formulations for Hair growth, E-Journal of Chemistry, Vol-5, No-1, Jan 2008; 34-38.
- 12.Phyto-chemical Methods, A guide to modern techniques of plant analysis 3rd edition, J.B. Harbome, Chapman & Hall, 1998.
- 13.Daniel, M., Medicinal Plants Chemistry and Properties, Oxford and IBH Co. Pvt. Ltd., New Delhi,2006: 123.
- 14.Kokate C K, Purohit A P and Gokhale S B, In; Pharmacogonosy, 19th Ed., Nirali Prakashan, Pune,2002.
- 15.Pande SD, Joshi SB, Bobade NN, Wankhade VP, Tapar KT. Formulation and Development of a Liposome Based Hair Revitalizer. Research Journal of Topical and Cosmetic Science, 2011; 2(1): 14-17.
- 16.Nema RK, et al. Preparation, evaluation and hair growth stimulating activity of herbal Hair oil. Journal of chemical and pharmaceutical research, 2009; 1(1): 261-267.
- 17.Gautam S., et al; Fomulation and evaluation of herbal hair oil. Int. J. Chem. Sci., 2012;10(1): 349-353.
- 18.Kalluri Priyanka and Anil B. A Comprehensive Analysis of Antioxidant Activity, Total Phenolic Content and Vitamin C From Hibiscus Rosa Sinesis. International journal of Novel Research and Development (IJNRD), July 2023; 8(7).
- 19.Mishra Akanksha, Agrawal Neeraj, Chandravanshi Lowkesh, Rathia Satyawati, Dushyant, Bhatt Lalit Mohan. A Detail Story About Phytoconstituents and Clinical Uses Of Narikela (Coconut, Cocos Nucifera): Drug Review. An International Journal of Research in AYUSH and Allied Systems ISSN: 2393-9583 (P)/ 2393-9591 (O)
- 20.MIT International Journal of Pharmaceutical Sciences, Vol. 6, No. 1, January 2020, pp. 8–11 ISSN 2394-5338 (Print); 2394-5346 (Online) © MIT Publications
- 21.www.ngrguardiannews.com
- 22.[www.madefrom-india.com/article/Indian-herbal Industry-set to flourish-344](http://www.madefrom-india.com/article/Indian-herbal-Industry-set-to-flourish-344).
- 23.Singh UM, Gupta V, Rao VP, Sengar RS, Yadav MK. A review on biological activities And conservation of endangered medicinal herb Nardostachys jatamansi. Int. J. Med. Arom. Plants 2013; 3(1): 113-124.
- 24.Hazra J, Panda AK. Concept of beauty and ayurveda medicine. J Clinical Exp. Dermatol. Research 2013; 4(3): 1-4.
- 25.Nagappa AN, Kole PL, Jhadav HR, Desai PT. Cosmetics potential of herbal extracts. Natural product radiance 2005; 4(4): 315-321.