

INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES

[ISSN: 0975-4725; CODEN(USA):IJPS00] Journal Homepage: https://www.ijpsjournal.com



Research Article

To Formulate And Evaluate Herbal Hair Oil For Healthier Hair

Pravin D. Chand*1, Prachi P. Udhapurkar2, Vitthal R. Muley3, Ghule Govind Arjun1

ARTICLE INFO

Received: 30 June 2024 Accepted: 04 July 2024 Published: 06 July 2024

Keywords:

Hair Growth, Hair oil, Herbals, Healthy Hair

DOI:

10.5281/zenodo.12673214

ABSTRACT

Antioxidants play a major role in increasing the blood circulation and thus help in hair growth as well as in the treatment of a lot of diseases. Now - a - days there is a wide use of herbal cosmetics due to the belief that they have fewer side effects and better safety. The objective of the present study is to prepare and evaluate herbal hair oil using coconut oil, almond oil, olive oil, fenugreek, onion, rose petals, curry leaves. The preparation was also subjected to various tests for analysis including sensitivity test, skin irritation test.

INTRODUCTION

The concept of beauty and cosmetics is important part of modern world. Cosmetic products are used to enhance the appearance or odor of body parts and to hide acne, wounds, wrinkles on skin. Cosmetics are used on face, hairs, body to make it look attractive. Beauty care products have mainly two categories SYNTHETIC and HERBAL. While synthetic products may have variety of side effects compared to herbal products. Hence, products that are obtained from nature and are herbal are in more preferred nowadays. Cosmetic preparations help to look charming and young. Cosmetics include body lotion, hair oil, baby

products, shampoos, moisturizers, deodorants, lipsticks, powders, eye and facial makeup products etc. Herbal cosmetics are growing in demand and production, it is freely given gift of nature. Natural herbs are grown their particular properties are evaluated and through extraction required chemical constituent is taken to see the results. Herbal products are safe, natural, and has no side effect, these properties of herbal products made them grow worldwide. To take care of hairs Indian market has variety of hair care products available synthetic as well as natural that consist of hair oil, shampoos, conditioners, hair sprays, jellies, etc. All these products are important when health of

Address: Student, Dr. Babasaheb Ambedkar Technological University, India.

Email : chandpravin44@gmail.com

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



¹Student, Dr. Babasaheb Ambedkar Technological University, India.

²Principal, Dr. Babasaheb Ambedkar Technological University, India.

³Assistant Professor, Dr. Babasaheb Ambedkar Technological University, India.

^{*}Corresponding Author: Pravin D. Chand

hairs is considered. Hair oil is used to nourish the scalp and hairs, to reduce dryness of scalp, to repair damaged hairs, and to regrow new hairs. Hair loss is dermatological disorder which can be controlled by using cosmetics that promote hair growth. Hair oil is formulated to give hair shine & gloss. They are mainly oils of low viscosity applied on scalp & hairs as thin layer for growth and other benefits. Hair oil moisturizes scalp also reverses dry scalp and other hair conditions. Hair oil helps to promote essential nutrients required to maintain normal function of sebaceous gland which is mainly responsible for hair growth. This research paper will aim at formulating an oil which has benefits like – promote hair growth, repair hair conditions, reverses dry scalp, provide all nutrients that help hair growth and keeps hair glossy & shiny by using herbal drug which will have no side effect.



LITERATURE SURVEY

K. Sudheer Kuma. et al., (2016)

Cloth pouch method was done to formulate hair oil from herbal drugs Embllica officinalis, Bacopamonnieri, Hibiscus rosasinensis, trigonella foenumgraecum. All the following herbal drugs were boiled in coconut oil which was used as base for hair oil preparation. The research provides guidelines on use of herbal ingredients on preparation of herbal hair having minimal or no side effects

Mahavir Chhajed. et al., (2020)

Hair growth cycle is divided into phases as following: Anagen (growth), catagen (involution),

telogen (rest). Decrease in anagen phase may cause hair weaker and thinner in further cycle. To avoid this specific nutrient in diet should be maintained for healthier hairs. Types of hair loss known are Androgenetic or Androgenic alopecia (baldness), Alopecia areata, Telogen effluvium, chemotherapy induced alopecia

NS Yamani. et al., (2018)

Polyherbal hair oil: India has variety of medicinal herbs with various cosmetics and healing properties. The herbal constituent chosen for formulating hair oil were have reported to have antidandruff property, hair thickening and hair fall controlling properties which when used together show synergistic activity and maintain hair health.

T. Usha Kiran Reddy. Et al., (2017)

Coconut oil is extracted from kernel or meat of matured coconut harvested from coconut palm. In wet process coconut oil is made first and then oil is extracted form milk. Methods used for preparation of herbal hair tonic is cloth method, paste method, direct boiling method. Evaluation of herbal hair oil was done by 1) physical evaluation: specific gravity, Ph 2) chemical evaluation: acid value, saponification value 3) biological evaluation: primary skin evaluation tests.

Md Shahinoor Rahaman Dulal. Et al., (2014)

Methods of finding out how herbal hair oil is advantageous over plain coconut hair oil. The three phases studied to prepare hair tonic are the anagen, catagen, telogen. Selection of volunteer candidate selection and boiling method was implied to produce coconut oil. This hair is applied on hairs with help of cotton and left for period of 34 hrs to seek good results, applying it two times a week will give good results.

K.D. Mali et al., (2017)

Herbal preparations are ancient methodology because its origin is found in holy vedas and unani scriptures. Herbal cosmetics are formulated by combination of active bioactive ingredients of pharmaceuticals. Neem, Amla, Bramhi,



Shankpusphi, Kapur, Pudina are grinded and boiled with til oil, boiled mixture is filtered and volume is made with coconut oil. Acid value, saponification value, Ph, sensitivity tests, skin irritation tests are done for evaluation of prepared herbal hair oil.

Kolhe Shilpa et al., (2019)

Polyherbal hair oil was prepared from coconut oil as a base with amla, neem, hibiscus, shikhakai, maka flowers, bramhi, castor oil, etc all herbal drugs were dried and mixed with coconut oil and boiled for half hour and filtered with muslin cloth and evaluation tests were performed for prepared herbal hair oil.

Sapna Gautam et al., (2011)

Work was aimed to formulate herbal oil for general purpose using various herbs and evaluated for saponification value, Ph, viscosity was determined and reported. This oil will help sebaceous gland to regrow hair and maintain their good condition. Natural herbs like barmhi, shikhakai, shnakhapushpi, bhringaraj, nirgundi, shatavari, amla, neem are following herbs used for hair oil preparation.

Rahathunnisa begum et al., (2019)

Hair oils are hair care formulation applied for cure of hair disorders such as baldness, graying of hair, hair loss, drying of hairs, alopecia. A plethora of herbs have been employed for hair treatment. Aloe vera, hibiscus, tulsi, methi, coconut oil, almond oil, Jasmin flowers were used and grinded boiled with coconut oil as a base and filtered through muslin cloth. Evaluation test was performed for prepared herbal hair oil.

Pushpendra Kumar Jain et al., (2016)

Hair loss or alopecia is common patient complaint and source of significant physical and psychological distress. Androgen are considered to be one of the most important causes of alopecia apart from variety of other factors. Emblica officinalis, bacopa monnieri, Cyperus rotundus herb were used for hair oil formulation......

Pooja S. Banerjee et al., (2009)

Hair oil are used for baldness or hair ailment, aggression of hair. They promote luxurious growth of hairs and are used as hair tonic. Hair oils are basically extract of herbs in base. Synthetic drug minoxidil is a potent vasodilator appears safe for long term use. Major steps for herbal oil preparation are paste method, cloth method, and direct boiling method and second main step is evaluation of hair oil and final step is determination of therapeutic efficacy.

Ashwini V. Jadhav et al., (2018)

Herbal cosmetics contain variety of botanical sources which influence functions of skin and provide nutrients necessary for healthy skin and hairs. They are used like anti-inflammatory, antiseptic, antioxidant, and antimicrobial. They have efficacy and intrinsic acceptability due to regular use in daily life and avoid adverse side effects with are commonly seen in synthetic products. Hair structure contains of layers as medulla, cortex, cuticle.

AIM: TO FORMULATE AND EVALUATE HERBAL HAIR OIL FOR HEALTHIER HAIR

OBJECTIVE OF STUDY:

- To formulate a hair oil for healthier hair with antioxidant, antidandruff and hair thickening properties.
- To formulate hair oil preparation to regrow lost hairs, reduce hair fall, make hairs thick, shinny, bulky, reduce drying of hair and give all nutrient sebaceous gland requires for hair growth.

MATERIAL

Coconut oil -

- Coconut oil used here is marketed product of Parachute brand. 100% pure coconut oil.
- It has total 100g of fat and 91g of saturated fatty acid.
- It has freezing point below 25 degrees.
- It has ingredient coconut oil. Anti-bacterial,



 Antifungal properties, Reduces inflammation, Moisturizes dry scalp, Promote wound healing.

Olive Oil

Antioxidant, Anti-inflammatory Vitamin E, Other essential conducive to hair growth

Almond oil -

- Almond oil used here is marketed product of New Dabur almond hair oil. Enriched
- with soya protein and vitamin E for damage free hair.

Ingredients:

- Mineral oil 77%, vegetable oil 21%, soya protein ester, vitamin E acetate, avobenzone.
- Rich in Vitamin E,
- Source of magnesium, phosphorous and copper, Anti-inflammatory

Onion

- Bulb onion,
- Amaryllidaceae family,
- Rich in sulfur, prevent breakage, split ends, Thickens hair

Fenugreek -

- Greek clover Fabaceae family
- Anti-bacterial, fights dandruff

Curry leaves

- Sweet neem
- Rutaceae family
- Rich Antioxidant and proteins

Rose Petals

- Antioxidant, polyphenols
- To mask odor and taste



METHOD OF PREPARATION -

- Collection of herbs required for hair oil preparation.
- Herbs are as follows –fenugreek, onion, curry leaves, rose petals, coconut oil, olive oil, almond oil.

Quantity of herbs taken -

Sr. No.	Herb	Quantity
1	Coconut oil	100ml
2	Almond oil	10ml
3	Olive oil	5ml
4	Curry leaves	5gm
5	Fenugreek	10gm
6	Onion	10gm
7	Rose petals	10gm
8	Banyan tree root cap	5gm
9	Vit E	2ml

- Take above herbs in given quantity.
- In a beaker pour 100ml of coconut oil and heat on heating mental.
- Add the prepared mixture of all herbs in coconut oil.
- Boil the contents in coconut oil on heating mental for 15 min.
- Add olive oil and almond oil while boiling of herbs.
- During this process all the essential constituents of herbs get extracted form it.
- Direct boiling method is done here for extraction purpose.
- After 15min color of oil changes let this mixture cool.
- Filter the oil with the help of muslin cloth and collect the filtered oil.
- The desired herbal hair oil is obtained through direct boiling method.
- Further evaluation parameters should be checked.





EVALUATION PARAMETERS –

- 1. Color yellowish brown
- 2. Odor aromatic
- 3. Sensitivity test non sensitive
- 4. Skin irritation test non irritant



RESULT -

The prepared hair oil formulation is yellowish brown in color with pH in accordance with human skin neutral to slightly acidic.

CONCUSION -

This Research Aims to Formulate Hair Oil That Will Provide Sebaceous Gland All Nutrients That Are Required for Health Hair Growth Due to Which Regrowing of Hairs Will Increase and All Hair Related Problems Will Get Reduced. This Hair Oil Stop Drying of Scalp & Hairs and

Improve Its Condition, It Will Provide Moisture to Scalp, Make Hair Thicker & Healthier, Bring Shine and Glossy Appearance. Problems Like Alopecia, Baldness, Hair Problems Caused Due to Mental Stress and Work Load, All Such Issues That Affect Hair Growth Will Be Reduced by This Hair Oil.



REFERENCES

- K. Sudhir kumar, S. Gomathi, S Sitaram Swamay, International journal of advance research in medical & pharmaceutical sciences, volume 1, 2016
- 2. Mahavir chhajed, Pritesh paliwal, sumit Dwivedi, International journal of pharmacy and life sciences, volume 11, 2020.
- 3. NS Yamani, Sudha, Jyotsna, K Pratyusha, Kartheeka, Journal of pharmacogoncy and phytochemistry, pg 3254, 2018
- 4. T. Usha Kiran Reddy, G.Sindhu, S. Rajesh, B. Aruna, K. S. Sandhya Rani, Indo American journal of pharmaceutical sciences, pg 1540, 2017
- Md shahinoor rahaman dulal, hasib shaikh, mohammad abu taher, mohammad Sayeed ur rehaman, zakia rahaman, M.A. malek, international journal of pharmaceuticals



- sciences and research, volume 5, pg 1801, 2014
- K. D. Mali, R. M. Shroff, S. D. Chaudhari, S.
 S. Bacchav, Indo American journal of pharmaceutical research, pg 8041, 2017
- 7. Kolhe Shilpa, indore pranaya, shewale Shweta, pol akshata, hanmante leena, journal of drug delivery and therapeutics, pg 387, 2019
- 8. Sapna gupta, Sumeet Dwivedi, kushagra Dubey, Hemant joshi, Formulation and evaluation of herbal hair oil.
- 9. Rahathunnisa begum, afzalunnisa begaum, preparation and evaluation of herbal hair oil, volume 6

- 10. Pushpendra kumar jain, debajyoti das, Puneet jain, Internation journal of pharmatech research, volume 9
- 11. Pooja S Banerjee, megha sharma, rajesh kumar neema, journal of chemical and pharmaceutical research, 2009
- 12. Ashiwni p Jadhav, Deepak morale, Abhijeet daundekar, Nikhil Bhujbal, Dr Sandeep kshirsagar.

HOW TO CITE: Pravin D. Chand, Prachi P. Udhapurkar, Vitthal R. Muley, To Formulate And Evaluate Herbal Hair Oil For Healthier Hair, Int. J. of Pharm. Sci., 2024, Vol 2, Issue 7, 418-423. https://doi.org/10.5281/zenodo.12673214