

Formulation and Evaluation of Herbal Hair Oil

Siddhi Jadhav, Sushama Patil, Ms. Avani K Shewale, Ms. Ashwini S. Jadhav
Research scholar, Assistant Professor

Rajarambapu College of Pharmacy, Kasegaon. Dis - Sangli, Maharashtra, India 415 404

Abstract: Hair fall is a very common phenomenon and a matter of concern within whatever young or aged. Herbal formulations always have attracted considerable attention because of their good activity and comparatively lesser or nil side effects with synthetic drugs. The synthetic drug has some side effects like local irritation, itching and burning sensation. Herbal cosmetics are now-a-days widely used by the common people because of concept of fewer side effects and with a better safety and security profile. The objective of present study involves preparation of Curry leaves, Banyan tree roots, Fenugreek seeds, Camphor, Pudina leaves, Coconut oil and its evaluation for increase in hair growth activity and physical parameter were also evaluated like viscosity, refractive index, specific gravity, pH, Wash ability etc. and were compared with some synthetic marketed formulations. To find out the efficacy of test herbal hair oil over simple Coconut Oil (purified) to reduce the hair falls.

Keywords:- Herbs, cosmetics, Curry leaves, hair growth.

I. INTRODUCTION

A. Hair

Hair is an important part of human body. The problems associated with it includes hair loss, unruly hair, lack of hair volume, conditioning, immature graying, dandruff, thinning of hair, dullness etc. Hair can vary in shape, length, diameter, texture, and color. The cross section of the hair could also be circular, triangular, irregular, or flattened, influencing the curl of the hair. All mammals have hair. Its main purpose is to regulate body temperature. It is also wants to decrease friction, to guard against sunlight, and to act as a way organ. Hair is crowning glory of a person that plays an important role in the life of human being. For the scalp, hairs were known as protective covering in ancient times. From the color, type and amount of hair, one can be judged as from which society he/she belongs. Hairs also help in bringing the confidence and pride in a person, no matter of which genders the person belong. It always had been the dream of a person to have black, healthy, shiny and good quality hair. No matter they are long or short and to keep and maintain them are amongst the priority of all the people. (1, 2, 3, 11)

B. Hair Oil

Hair oil is hair care product. Hair care products are defined as the formulations which are used for the purpose of cleansing, modifying the hair texture, providing nourishment to the hair and maintaining the healthy appearance of hair.^[4] Hair oil are hair care formulation applied to the hair for the treatment of hair disorder such as baldness, graying of hair, hair fall, dry hair and also helps in providing nourishment to hair.^[5] Herbal cosmetics are high

in demand due to increasing interest of mankind towards them also herbal cosmetics are more effective with negligible side effects and ingredients are easily available.^[6] Herbal hair oil is an essential part of herbal cosmetics. Herbal hair oil is more preferred and used in many aliments of hair.^[7] They not only promote hair growth but also provide necessary moisture to the scalp rendering in beautiful hair.^[8] Herbal oil which contain herbal drugs are known as hair tonic.^[8] Herbal hair oil provides a number of essential nutrient which are important to maintain the normal function of sebaceous gland and promote natural growth of hair.^[9] These are one of the most well recognized product for the treatment of hair.^[10] The use of hair oil is increasing everyday in line with the improvement in standard of living of people To give natural flavors and colors to hair oil the herbal essences and perfumes are added.

II. COLLECTION OF PLANT MATERIALS

The herbal hair oil was prepared by collecting various plant materials like Curry leaves, Banyan tree root, Fenugreek seeds, Pudina leaves, Camphor.

A. Curry leaves:



Fig. 1: Curry Leaves

- **Biological source** – dried leaves of *Murrayakoenigii*
- **Family** – Rutaceae
- **Use** - curry leaves prevent hair fall, they contain antioxidant properties and iron that help strengthen the hair roots and shafts and also it prevent premature graying of hairs.

B. *Banyan tree roots:*

Fig. 2: Banyan tree roots:

- **Biological source** – dried roots of *Ficus benghalensis*
- **Family** – Moraceae
- **Use**- It is used with coconut oil gives a new strong hair, prevent hair breakage problems and stop hair loss.

C. *Fenugreek seeds :*

Fig. 3: Fenugreek Seeds

- **Biological source**- dried ripe seeds of *trigonellafoenum – graecum*.
- **Family** – Fabaceae
- **Use** – it is a natural home remedy for thinning hair and other related conditions such as dandruff or a dry, itchy scalp.

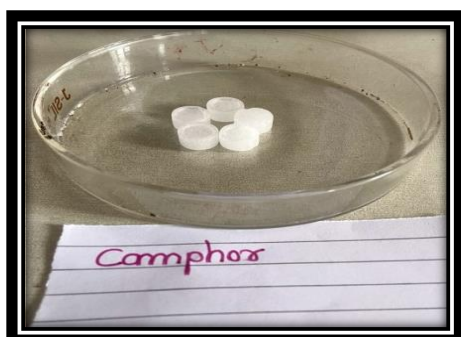
D. *Camphor :*

Fig. 4: Camphor

- **Biological source** – It is obtained through distillation of the wood from the camphor laurel tree (*Cinnamomum camphora*).
- **Family** – Laurels
- **Use** – It increases the hair growth, Camphor acts as a scalp detoxifier, it decongests the hair scalp and increases blood flow naturally.

E. *Pudina Leaves –*

Fig. 5: Pudina Leaves

- **Biological source** – It is obtained from dried leaves and flowering tops of *Mentha spicata Linn.*
- **Family** – Labiatae
- **Use** – The potent antimicrobial and antifungal properties of mint leaves aids to ward off dandruff, head lice and treat other scalp issues.

F. *Coconut Oil*

Fig. 6: Coconut Oil

- **Biological source** – Coconut oil is the oil expressed from the dried solid part of endosperm of coconut, *Cocos nucifera Linn.*
- **Family** – Palmae
- **Use** – Coconut oil provides a natural shine, combats dandruff, promotes faster hair growth and works as well for deep conditioning.

III. FORMULATION OF HERBAL HAIR OIL



Fig. 7: Herbal Hair Oil

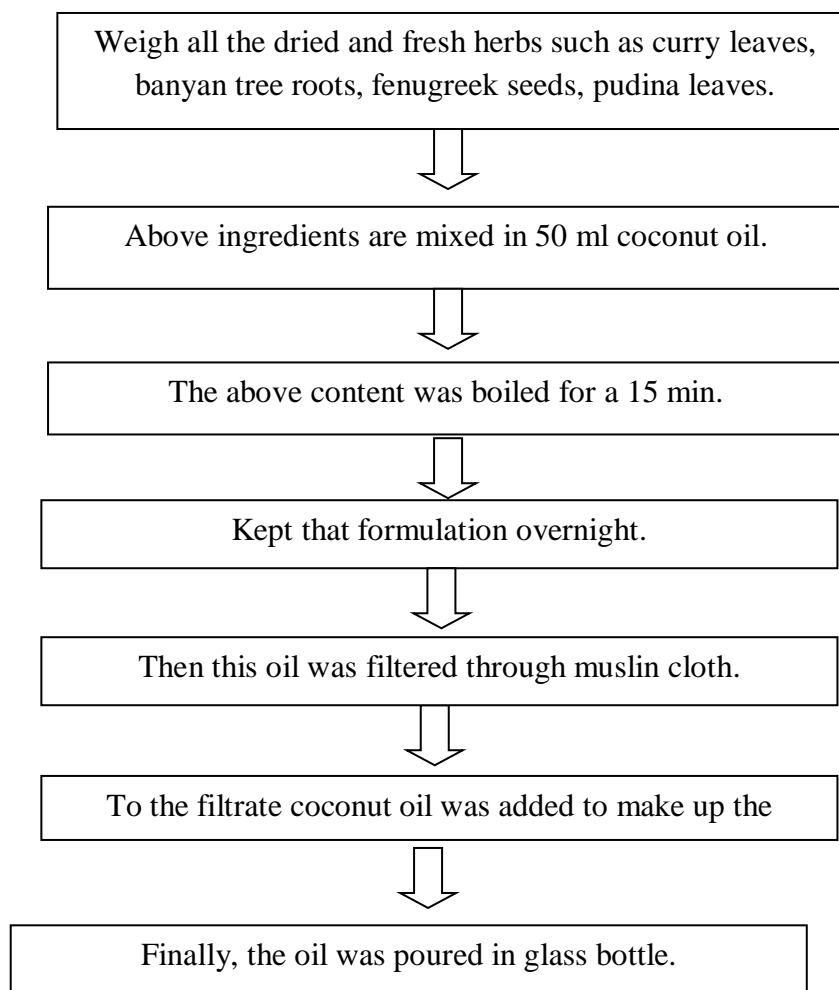
Sr.no	Ingredients	Quantity
1.	Curry leaves	20%
2.	Banyan tree roots	10%
3.	Fenugreek seeds	6%
4.	Camphor	4%
5.	Pudina leaves	10%
6.	Coconut oil	50 %

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



Fig. 8: Preparation of the formulation

IV. PROCEDURE



Sr.no	Parameter	Observation
1.	Colour	Yellowish
2.	Odour	Pleasant
3.	Irritation test	No
4.	pH	5 to 6

Table 2: Evolution parameters

V. EVOLUTION TESTS

This prepared hair oil have to be evaluated by some tests for check its quality.

- **Sensitivity Test** – This test is performed by two volunteers by applying on skin and kept it for 30 min.
- **Organoleptic Property** – Colour, odour, and skin irritation was determined manually. Oil was applied on hand exposed to sunlight for five minutes to check for any irritation over skin.
- **pH** – pH of the herbal oil was detected using ph meter.
- **Viscosity** – viscosity was determined by using Ostwald's viscometer.
- **Wash ability** – After applying herbal oil to the hair, it was washed with tap water.

VI. CONCLUSION

All the parameters showed that they are within the acceptable limits and since all the ingredients added have no side effects and positive benefits, the oil will help for improve hair growth and also works as anti dandruff and results in shiny looking hairs as compared to marketed formulations.

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