

Formulation and Evaluation of Polyherbal Hair Oil

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Abstract: *The concept of beauty and cosmetics is as ancient as mankind and civilization. So, they use various beauty products that have herbs to look charming and young. 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 present work was aimed to formulate herbal oil for general purpose (application in hairs) using various herbs. The formulated hair oil contain different herbal plants which are traditionally utilized for hair growth plants used are Triphala, Nirgudi, Licorice, Jatamansi, Aloe vera, Shatavari, til oil and coconut oil. The formulated herbal oil was evaluated and various parameters such as viscosity, saponification value, pH etc.*

Keywords: Cosmetics, Herbs, Herbal hair oil, Evaluation.

1. Introduction

Hair has a several useful function in the animal world. It forms a protective cushion around the head & other delicate parts of the body. Hair oil are formulated to give the hair good shine & gloss. This is achieved by applying a thin continuous film of an oily material on the hair surface without causing stickiness. They are mainly oils of low viscosity. Many herbs are used in hair oil are Triphala, Aloe vera, Licorice, Shatavari, Shankpuspi, Ashwagandha, Nirgudi, etc

Hair oil has more preferred as they promote hair growth, improve elegance of hair & prevent hair fall. Herbal cosmetics have growing demand in the world market and are in an invaluable gift of nature. There are a wide range of






herbal cosmetics products to satisfy beauty regime. Adding herb in the cosmetics is very safe for our skin. Herbal hair oil is not only moisturizes scalp but also reverse dry scalp and hair condition. It provides numerous









essential nutrients required to maintain normal functions of sebaceous gland and promote natural hair growth. Keeping this point in consideration the present work was undertaken.

Objectives

- 1) To formulate polyherbal hair oil by using herbs such as Triphala, Licorice, Aloe vera, Shankpushpi, Ashwagandha, Bhringaraj, Jatamansi, Nirgundi, Shatavari, Lavender and Pudina etc.
- 2) Evaluation of polyherbal hair oil test such as pH, Saponification value, Viscosity, Specific gravity etc.

Drug and Excipient Profile

Sr.no.	Name of Drug	Figure	Uses
1	Triphala		Hair growth, fights against heart Disease, reduces blood sugar, high in digestive fiber, boosts immunity etc.
2	Nirgudi		Flavouring agent, anti-asthma, Good muscle relaxant etc.
3	Licorice		Good for the scalp: known for its hydrating properties, a tea made from licorice root had been used by ancient Greeks to keep the scalp moisturized, helps with hair growth, prevents premature baldness, effective hair treatment etc.
4	Jatamansi		Growth of hair, it is beneficial for smooth, silky and healthy hair etc.
5	Aloe Vera		Antimicrobial agent, scalp reducing, hair conditioner etc.

6	Bhringraj		It activates the hair follicles, resulting in increase in hair growth etc.
7	Lavender oil		It helps promote hair growth, it has a calming effect and divine fragrance etc.
8	Shatavari		Hair growth, it helps to produce breast milk in new mothers.
9	Shankpuspi		Nervine tonic, improves memory intellect, brain tonic etc.
10	Ashwagandha		Hair growth, Anti-cancer, reduce blood sugar level etc
11	Til Oil		It helps in treats premature graying of hair, Rheumatoid Arthritis, lowers blood pressure, vehicle etc.
12	Coconut Oil		Vehicle, relieve Skin Irritation etc.
13	Pudina		Flavouring agent etc

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 Triphala, Nirgudi, Bringaraj, Jatamansi, Aloe Vera, Licorice, Bhringraj, Lavender, Shankpusphi, Ashwagandha, 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 flavoring agent was added to the oil and it was placed in bottle.



Figure: Formulation of Hair oil

Table: Ingredients used in formulation of herbal hair oil

Sr.no	Ingredients	Quantity(gm)
1	Triphala	85
2	Nirgudi	2
3	Licorice	10
4	Jatamansi	3
5	Aloe Vera	2.5
6	Bringraj	3
7	Lavender	2
8	Shatavari	2.5
9	Shankpuspi	3.5
10	Ashwagandha	7
11	Kapur	1
12	Pudina	1
13	Til oil	63
14	Coconut oil	37

Evaluation of Polyherbal 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 4-5 min.

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)

2. Result

- Herbal shampoo was formulated using simple mixing process.
- Herbal hair oil was formulated by adding the required amount of herbal ingredients as a given in formulation (table no.1).

Sr. No.	Evaluation Parameter	Observations
I.	Specific gravity	1.090
II.	Viscosity	0.90
III.	Saponification value	105.18
IV.	pH	Neutral
V.	Sensitivity test	No irritation
VI.	Irritation test	No irritation

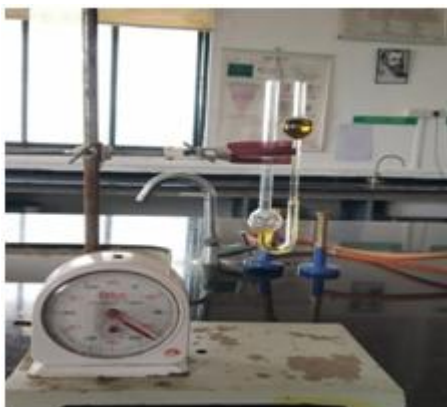


Figure: Ostwald Viscometer

(The viscosity was measured by using this instrument i.e Ostwald viscometer)

3. Conclusion

- The main aim was to formulated polyherbal hair oil, will improve and strengthen the hair by proper nourishment and other problems like dryness .
- It was concluded that the herbal hair oil containing ingredients such as Triphala, Licorice, Aloe vera, Shankpushpi, Ashwagandha, Bhringaraj, Jatamansi, Nirgundi, Shatavari, Lavender and Pudina etc .
- This polyherbal hair oil was prepared by grinded in the mixture and mixed in 63% of til oil. The above content was boiled for 15 min. and was filtered through muslin cloth.
- Aloe vera gives reducing dandruff. The prepared herbal hair oil was evaluated by using evaluation test which shows satisfactory results .
- It was concluded that formulated Polyherbal Hair Oil having good hair nourishing property.

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