



# FORMULATION AND EVALUATION OF HAIR SERUM

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## ABSTRACT

Rosemary hair serum is a popular hair care product that promotes hair growth, improves density, and controls hair fall. Rosemary serum helps stimulate hair growth by improving blood flow to the scalp and reducing dandruff and other scalp issues. Rosemary hair serum is a natural hair care product formulated to promote hair health and vitality. It is known for stimulating properties that can help improve circulation to the scalp, strengthen hair follicles, and promote hair growth.

## INTRODUCTION

Rosemary hair serum is a natural hair care product which prepared to promote hair growth by preventing hair fall. Rosemary is known for their special properties which help to improve circulation to scalp, strengthen hair follicle and promote hair growth. Daily application of rosemary serum help to nourishment of scalp by penetrates into Scalp and provide nourishment to hair follicles and stimulate circulation which gives healthy and shining hairs. Rosemary shows antimicrobial property, which helps to reduce dandruff & built healthy scalp. Rosemary contains anti-inflammatory property which reduce irritation simply apply small amount to dry hair and massage gently it works wonderfully.

## LITERATURE REVIEW

1. Formulation and Evaluation of Herbal Hair Serum Shivshankar jaganath shinde, Kute.C.G. and Dr. Prachi Udupurkar. Kishori College of Pharmacy, Beed Dr. Babasaheb Ambedkar Technological University, Lonere. The main objective of the present work is to develop an herbal hair serum for general purpose (daily use) using various herbs with this evaluate the characteristics of cosmetic serum and to identify the best formulation of due to extreme anxiety and pressure, from tradition to traditional and remedial mending to the use of minoxidil and finasteride.

2. Formulation, Development and Evaluation of Herbal Hair Serum: A Classical Approach to Enhance Hair Quality. Rohan R. Vakhariya\*, Srushti A. Oza, Chaitanya S. Bhingardev, Smita J. Patil, Sofiya F. Mujawar, Dr. S. K. Mohite.

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## NEED & OBJECTIVES

The need and objective of Rosemary Hair Serum are: -

NEED:

1. Natural Ingredients: To utilize natural ingredients. known for their strengthening and smoothing properties, catering to consumers seeking natural and eco-friendly options.
2. Promote Hair Growth: Rosemary contains properties that stimulate hair follicles and promote hair growth.

3. Versatility: To be suitable for various hair types, including curly, wavy, or frizzy hair, offering versatility and broad appeal.

**OBJECTIVES:**

1. Sustainability: Aligning with the growing trend towards sustainability and eco-friendliness by utilizing natural, renewable ingredients and minimizing environmental impact compared to traditional chemical-based products.
2. Manageability: Enhancing the manageability of curly or wavy hair by temporarily relaxing the natural texture, making it easier to style and maintain desired looks.
3. Frizz Control: To tame frizz and flyaways, leaving the hair smooth, sleek, and manageable.

**INGREDIENT LIST**

Sr No.	Name	Ingredient	Use
1	Dried Rosemary Leaves		Antioxidant
2	Fenugreek seeds		Conditioning of Hair Provide Hydration to the scalp
3	Vitamin E capsule		Smoothens hair, Preservative
4	Distilled water		Vehicle

Sr No.	Ingredient	Category	Quantity
1	Dried Rosemary Leaves	Antioxidant	5gm
2	Fenugreek Seeds	Conditioning of Hair Provide Hydration to the scalp	1gm
3	Vitamin E capsule	Smoothens hair, Preservative	1ml
4	Distilled Water	Vehicle	100ml

## FORMULATION PROCESS

### Step 1: Weighing of ingredients.

- Weigh accurately dried rosemary leaves 5 gm & fenugreek seeds 1 gm.

### Step 2: Soaking of ingredient into distilled water.

- Take a beaker, then add 100ml distilled water and then add dried rosemary leaves and fenugreek seeds into the beaker.
- Soak this mixture for 5-7 mins.

### Step 3: Boiling of soaked mixture.

- Boil soaked mixture for 15-20 mins until it turns into Pale yellow color.
- For boiling, if burner is used then use low flame

### Step 4: Filtering & Storing.

- Cool & filter the mixture.
- Add Vitamin E capsule & store it in a suitable container.

## EVALUATION OF ROSEMARY HAIR SERUM

There are number of quality control tests are performed to evaluate Rosemary Hair Serum areas follows: □

1. Physical Appearance: The physical appearance, colour, and feel of the prepared herbal hair serum are visually tested.
2. Homogeneity: All the developed serums were tested for homogeneity by visual inspection for appearance and presence of any lumps, flocculates or aggregates. The homogeneity was found to be good for all formulations.
3. pH Test: The pH of Rosemary Hair Serum is ranged between 5 to 6 that suits the hair.
4. Irritancy test: The most common problems observed with fragrance ingredients, either through use of a hair serum or a fragranced consumer product, are skin allergies and skin irritations. Many people complain about intolerance or rashes to scalp due to serum.
5. Microbial Contamination: Change in colour or odour of the serum and any type of lumps are formed in the serum are checked after 7 days of the preparation.

## RESULT & DISCUSSION

Sr No.	Test	Result
1	Physical Appearance	
	Colour	Pale Yellow
	Odour	Lavender type
	Texture	Liquidy
	State	Liquid
2	Homogeneity	Fine
3	pH Test	5-6
4	Irritancy Test	Non irritant
5	Microbial Contamination	No Microbial Contamination

## SUMMARY & CONCLUSION

### Summary:

The rosemary serum provides therapeutic as well as hair growth benefits to hair and scalp. It's anti-inflammatory, antimicrobial property's protect scalp, enhance hair growth and provide essential nutrition's with aromatic fragrance of the serum.

### Conclusion:

This study has determined that various polyherbal ingredients including dried rosemary leaves, fenugreek seeds, vitamin E capsule, were combined in different formulations to provide multiple benefits for the scalp and hair. These benefits include antimicrobial properties, reduction of hair loss, promotion of hair growth and follicle health, prevention of hair loss, and protection against scalp damage. The main goal of this study was to create an herbal hair serum that addresses various scalp and hair follicle issues. This serum is designed to stimulate hair growth, promote healthy hair follicles, and combat bacterial and fungal infections.

## REFERENCES

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