

Formulation evaluation of herbal hair oil using nigela sativa seeds, bhringraj, ginger, roasted coconut oil. (Taila) By Traditional Maceration-Decoction Methods

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Abstract:

The use of herbs has been deep-rooted in Indian culture. As compared to today's 21st century living, a lifestyle has become very rushed. The use and implementation of herbal personal care products is widely increased due to pollution and the harshness of chemicals. Now it has become necessary to spread awareness of herbs and innovate such formulations which provide safe and effective alternatives for personal care and hygiene. As hair is an important part of the human body, it not only acts as a guard to protect the skin from UV rays, but also enhances the grooming and personality of males and females, but often, hair is getting damaged, losing its nutrients' day by day.. The present formulation aims to deliver compressive resolution to these hair-related issues by using proven herbs in this formulation.

1. Introduction

The use of herbs has been deep-rooted in Indian culture. As compared to today's 21st century living, a lifestyle has become very rushed. The use and implementation of herbal personal care products is widely increased due to pollution and the harshness of chemicals. Now it has become necessary to spread awareness of herbs and innovate such formulations which provide safe and effective alternatives for personal care and hygiene. As hair is an important part of the human body, it not only acts as a guard to protect the skin from UV rays, but also enhances the grooming and personality of males and females, but often, hair is getting damaged, losing its nutrients' day by day.. The present formulation aims to deliver compressive resolution to these hair-related issues by using proven herbs in this formulation.

2. Ingredients, And Methods

The formulation of herbal hair oil consists of ingredients like nigela Sativa seeds, fenugreek seeds, terminalia bellirica dry fruit, and coconut oil table-I. The ingredients are rinsed with fresh water and dried to remove surface impurities. And converted to crud formation.

TABLE I
INGREDIENTS FOR FORMULATION OF HERBAL HAIR OIL

Sr. No.	Ingredients	Quantity (%)
1	Nigela Sativa Seeds	10 %
2	Cinnamomum tamala	05%
3	Basil	05%
4	Bhringraj	07%
5	Ginger	03%
6	Roasted coconut oil	70%

3. Method of Formulation herbal hair oil

The method used for the formulation of herbal hair oil is the traditional maceration and decoction method.

Preparation of ingredients

The ingredients like Nigela sativa seeds, Cinnamomum tamala, Basil, Bhringraj, Ginger and coconut oil. The ingredients are rinsed with fresh water and dried to remove surface impurities. And converted to crud formation. Shown in Fig. 1

Fig. 1



A. *Maceration*

Above Fig.1: Ingredient crude passed through a maceration process to collect extracts of crude ingredients, as follows.

For that crude ingredients are each mixed together to form 30% crude, which is then transferred to 70% Coconut Oil (Base). And subjected to maceration for at least 12 hrs at room temperature. After that, the yield (the amount of final products) is filtered properly to separate Residue and filtrate as shown in Fig.2 & Fig.3 and 4



Fig 2,3,4

B. *Decoction*

Decoction is the traditional process through which the final formulation is derived as herbal hair oil. In this process, filtrate collected from the maceration process are subjected to heat up to 40 degrees, then cooled for up to 6 hrs to get the final formulation filtered properly. Formulated herbal hair oil was then carried out for analytical evaluation. Shown in Fig. 5,6



Fig 5,6

4. EVALUATION

Evaluation is the main part of any formulation which indicates whether the final formulation complies with standard specifications. In this final product is carried out some analytical tests for various parameters like color, odor, impurities, grittiness, pH, specific gravity, acid value, viscosity, skin irritation etc.

The final product is analytically examined to get and conclude does the product perform as expected? After examination, we observed healthy value which will fulfill product's performance as summarized in table-II below.

Table-II

Sr. No.	Parameters	Units	Calculated Values
1	Colour	-	Yellowish Brown
2	Odour	-	Characteristics
3	Grittiness	-	Absent
4	Sediments	%	00.03
5	pH	-	06.04
6	Specific Gravity 30°C	g/cm³	0.9073
7	Viscosity at 30°C	cSt	30.68
8	Acid Value	Mg KOH/g	01.44
9	Skin Irritation	-	0

5. RESULTS

All parameters of the formulated herbal hair oil are under the normal range means the final product will help to perform as expected in various hair-related problems; defiantly it will be a breakthrough innovation for hair issues.

Benefits of Invention:

1. Helps to reduce hair loss.
2. Helps to increase blood circulation to the scalp by providing proper nutrients to the scalps.
3. Effectively helps to reduce dandruff by maintaining hair pH levels

6. CONCLUSION

The ingredients and methods used for this herbal hair oil formulation are designed very uniquely by combining two traditional methods together that are maceration and decoction and the produced outcome is very fair and beneficial.

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