

Formulation and evaluation of Herbal Hair Oil

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Abstract: Pharmacognosy is that the branch of pharmacy that deals with herbs. For making ready and producing myriads of medicines, these healthful plants are utilised. principally these herbs are used for preparation of cosmetics, colouring agent and change of state of body. The aim of study involves preparation and analysis of seasoning toiletries by mistreatment contemporary a part of numerous plant. The formulation consists of herbs like bulb of onion plant, seeds of *trigonellafoenum-graecum* and *Nigella sativa*, fruit of *Phyllanthus emblica* and melon vine, leaves of genus *Brassica oleracea*, stalk of *Zingiberofficinale*. The evaluation of developed toiletries are meted out by numerous parameter like organoleptic characters, phytochemical screening, physical options as consistency, pH, acid value, chemical reaction price ratio, relative density. lastly, the ready seasoning toiletries is used to push hair growth, for supplementation of vitamins and minerals, preventing dandruff.

Keyword: Herbal Hair oil, Herbal oil, Cosmetic, Stability studies, Evaluation.

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I. Introduction:

The Conception of beauty Cosmetics is as ancient as mankind and Civilization. The Indian Herbal products are most popular world wise; Herbal hair oils are natural all products with essential Properties. It is mainly Problem like treat the hair thinning of hair & dry or flaky scalp. These oil promote Hair growth, improve in the circulation of blood scalp & prevent dandruff Hair dyes hair oil, creams are also popular product in female Or are also of used in male. The terms Ayurveda Consist two Sanskrit words ayur of means life and Veda means Knowledge or science. Ayurveda mostly used herbal medicine, herbs can be integral Part of health care system .Herbal Hair oil are different problem arises with in Cosmetic or dandruff hair loss, dry hair, spit ends.. frizzy hair, dull hair ,color damage of hair etc. The hair protected of different Condition they can available is market many Cosmetics like Hair Shampoo, hair dyes, hair Serums, hair gels, hair conditioner.

Aim: The Formulate and evaluate the herbal hair oil.

Objective:

- 1) To Supplement the hair with vital nutrients such as vitamins and minerals.
- 2) To remove the dandruff and dull hair.
- 3) To improve the smoothness required for silky and attractive hair.
- 4) To natural hair growths
- 5) To prevent hair from damage and loss caused by pollution.

Experimental section:

Plant materials:

The preparation of herbal hair oil is prevented plant used for *allium cepa*, *hibiscus*, *Tulsi*, *trigonellafoenum-graecum*, coconut oil

Allium cepa:

The *allium cepa* also known as purple or blue onion and also bulb onion. It is also vegetable that is most that widely cultivated species of the genus *allium* belonging to family *amaryllidaceae*. The onion mostly used of part is bulb which contain which benefit of sulfur. Sulfur is mostly regenerated for root. Sulfur is remove is white hair fall and protective for black shining. It is anti inflammatory properties the is trafered of potassium salt and flevonoid . onion is mostly protective of small vessel is system of cardiac _circulatory. It prevents reduce blood cholesterol and thrombosis.



Hibiscus:

Hibiscus also known as hibiscus sabdariffa or Roselle . Hibiscus aids hair growth from dormant hair follicles helping cover bald patches and also combats dryness and dandruff. Hibiscus in mostly improve blackish colour in hair. Benefit of hibiscus is keep your scalp moisturized in any style , protects your hair from regular wear and tear. It is flower hair care.



Tulsi:

It is also known as sacred basil or holy basil and basil belonging to family lamiaceae. Tulsi is a coagent remove for loss . It is prepsented as an essential ingredient. The herb works by strengthening the hair roots , there curbing hair fall, prevent bacterial and fungal infection.



Trigonellafoeum-graecum:

Trigonellafoeum-graecum linne commonly known as Fenugreek belonging to family fabaceae. It is a herb with medicinal and nutraceuticals values which has been used in ancient times in India.



Coconut oil:

Coconut oil can improve the health and condition of your hair. It works by helping prevent protein loss in your hair. It is beneficial to apply it to hair both before and after washing it. Coconut oil is on extremely versatile health and beauty products.



II. Material And Methods:

The herbal hair oil was prepared by collecting and using various plant material. These are bulb of allium cepa, Hibiscus, Tulsi, trigonellafoeum-graecum. All were collected from agricultural fields. The oils used for herbal hair oil were coconut oil . This oil was purchased by medical store.

Solvent and chemical:

Chemical are used were ascorbic acid, potassium chloride, sodium nitroprusside, sodium hydroxide, sodium bicarbonate, ferrous sulphate.

Solvent used were sulphuric acid, ethanol, hydrochloric acid, water, phenolphthalein indicator.

Formula:-

| Ingradient | Quantity |
|-----------------|----------|
| Allium cepa | 6% |
| Tulsi | 2% |
| Trigonellafoeum | 4% |
| Hibiscus | 8% |
| Coconut oil | 50% |

Procedure:-

Herbal hair oil was prepared by boiling all the prescribed herb according to the formula. This process ensures adsorption of the active therapeutic properties of the ingredients used.

Methods of preparation:

- 1) The fresh herbs are collect and weighed by using weighing balance
- 2) The oil and herbs are mixed together in a vessel.
- 3) The mixture is the allowed to boil on low flame with continuous stirring.
- 4) At this step moisture of the medicinal plant commencer to evaporate so it is ogitatedf frequently to and carefully to ensure that the mixture does not stial at the bottom of vessel.
- 5) The herbs are taken out from time to time to know the condition and stage of mixture of oil.
- 6) As further heating to the content, the oils start to form a froth.
- 7) In the next step, the mixture is filtered through muslin cloth.
- 8) The collected strain is final herbal hair oil product.

Evaluation of herbal hair oil preparation:

The prepared herbal hair oil was subjected to phytochemical screening, general characteristics, physical and biological evaluation.

Phytochemical screening of herbal hair oil preparation:

The herbal hair oil was prepared to qualitative chemical analysis for identification of various plant chief constituent like sulphur, ascorbic acid and saponins by using different methods.

1)Ascorbic acid test:

Dilute 1ml of 2 percent w/v solution with 5ml of water and add 1 drop of freshly prepared 5 percent w/v solution ofsodium nitroprusside and 2ml of hydrochloric acid dropwise, stir and note the observation.

2)Sulphur test

Spray or place a drop of hydrogen peroxide on the test paper. The paper change it colourto brown when exposed to fumes.

3)Saponintest:

Oil mixed with water in a test tube shaken to a stable froth.

General characteristics:

The general character like colour and was evaluated manually.

Physical evaluation:

The physical evaluation parameters were determined are specific gravity, pH, viscosity, refractive index, acid value and saponification value.

Anti-microbial evaluation cup plate method:

Diffusion dependent antimicrobial activity of the herbal hair oil was studied by the zone of inhibition method. The zone of inhibition was measured.

Antioxidant activity:

1) DPPH radical scavenging test:

1 ml of oil solution (20, 30, 40,50, and 60ug/ml in acetone) was added to 1ml of DPPH solution (0.2mM in acetone). After a 30 min of reaction at room temperature, the absorbicof the solution was measured at 517nm.

The antioxidant activity of the oil is measured against ascorbic acid as standard.

2) Primary skin irritation test:

The prepared formulation was assessed for primary skin irritation and on our forearm, little amount was applied on the test site. The test site was observed for erythema and edema for 3 to 4 hrs.

3) Stability studies:

Prepared herbal hair oil was observed for stability condition. The herbal hair oil was kept aside and observed for 1,2,4 and 6 month interval. In addition, saponification value and acid value was measured after a specific period of time for stability purpose.

III. Results:

Herbal hair oil provides numerous essential nutrients required to maintain normal function of sebaceous glands and promote natural hair growth. The utilization of herbal cosmetics enhanced many hygiene and health care system. It is one of the most well recognized hair treatment. Herbal hair oil not only moisturizes scalp but also reverses dry hair condition. The various parameters like sensitivity test, viscosity, pH, irritation test, grittiness test, saponification value and acid value of herbal hair oil was evaluated.

Phytochemical Evaluation of Herbal Hair oil:

| Test | Observation | Results |
|--------------------|----------------------------|----------|
| Ascorbic acid Test | Yellow colour turn to Blue | Present. |
| Sulphur Test | Brown | Present. |
| Saponin Test | Foam gets appeared | Present. |

Physical Evaluation :-

| Parameters | Results |
|----------------------|-----------------|
| Colour | Yellowish brown |
| Odour | Aromatic |
| Specific gravity | 0.9431 |
| pH | 5.67 |
| Viscosity | 0.97 |
| Acid value | 2.58 |
| Saponification value | 197.04 |
| Refractive index | 1.530 |
| Skin irritation | No irritation |

IV. Conclusion :

Overall the formulated herbal oil provides many nourishing value to hair such as vitamin, minerals and essential oil. The hair oil is medicinally important in treatment of various other disease. The finished product is within the limits. In conclusion oil is beneficial to prevent hair damage and loss caused by pollution and dull hair.

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