

Formulation and Evaluation of Herbal Shampoo

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Abstract: The main object of this present study is to prepare to an evaluate an herbal shampoo and determine physicochemical function of that emphasizes on safety efficacy and quality of the product herbal shampoo is the natural hair care product which is used to remove grease, dirt, dandruff and promote hair growth, strengthness and darkness to the hair, relive migrain pain, increases the blood circulation to the head, herbal shampoo local market in liquid form or gel the advantage of herbal cosmetics is their non-toxic in nature

Keywords: Cosmetic, Herbal shampoo



I. INTRODUCTION

Herbal Shampoo is a liquid or semi-solid preparation with the use of traditional ayurvedic herbs which is used for cleaning the hair , removal of oils, dandruff, dirt and environmental pollution. They are basically water based products containing mainly surfactants.

Importance of this formulation.








- The selection of active ingredients for herbal shampoo is often based on the ability of the ingredient to prevent hair damage as well as to improve the quality of the Hair and for cleansing, nourishing, and protecting the hair skin.
- It protect the scalp .
- These all ingredients are herbal.
- It produces a good amount of foam

Table 1: Ingredients used in formulation

Sr. No	Ingredients	Biological source	Family	Uses	Images
1	Gomutra	<i>Gomutra</i>	<i>Cow's urine</i>	Gomutra- It is antifungal and antibacterial, control dandruff and scalp infections. Its antioxidant properties reduce hair loss.	
2	Neem	<i>Azardicta indica</i>	<i>Miliaceae</i>	-Neem strengthens the hair follicles and aids in the growth of hair. Neem leaves have high fatty acid content and are used to cure scalp problems in various ways. - It is added as preservative purpose.	



3	Indian gooseberry	<i>Phyllanthus emblica</i>	<i>Phyllanthaceae</i>	- It also stimulates hair growth it has high iron and carotene content, it helps in making shiner, strengthen and straighten hairs...	
4	Lemon	<i>Citrus limon</i>	<i>Rutaceae</i>	Lemon -The high content of vitamin C in lemons boost collagen production, which in turn Stimulates hair growth. It is Acidic in nature, lemon clears the scalp and it is also act as preservative.	
5	Arbian jasmine	<i>Jasminum sambac</i>	<i>Oleaceae</i>	Arbian jasmine - it is a flavouring agent, can be used as a natural conditioner, The juice helps to treat chronic scalp infections and combats chronic dandruff.	
6	Holy basil	<i>Ocimum tenuiflorum</i>	<i>Lamiaceae</i>	Holy basil-basil benefits hair by controlling four types of fungal strains that may cause basil benefits hair by rejuvenating the hair follicles and strengthening the roots.	
7	Rose	<i>Rosa</i>	<i>Rosaceae</i>	- Rose water is a mild astringent which may help to reduce oiliness and dandruff. beneficial for certain scalp conditions, like psoriasis and eczema.	

8	Beetroot	<i>Beta vulgaris</i>	<i>Amaranthaceae</i>	Beetroot - beetroot juice increases blood circulation and open the pores. The juice enriches hair follicles and keeps them strong hence reducing hair fall.- helps repair limp hair and reduces the chances of breakage.	 
9	Aloevera	<i>Aloe barbadensis miller</i>	<i>Liliaceae</i>	Aloevera -Controls greasy hair. Aloe vera has enzymes that break down fats and so strips your hair of any extra oil (sebum). And it is a also a good foaming agent...	 
10	Gum	<i>Acacia gum</i>	<i>Fabaceae</i>	Acacia gum- Acacia gums act as stabilizers, film formers, thickening agent, flocculants and emulsifiers.	 
11	Coconut	<i>Cocos nucifera</i>	<i>Arecaceae</i>	Coconut - it nourishes the hairs, coconut juice might make your hair look shinier, stronger, and longer.	

Objectives:

- The herbal shampoo used to remove grease, dirt, dandruff and promote hair growth.
- It helps in strengthening and darkening of hair.
- Relieve migrain pain.
- Increases blood circulation to the head.
- Protects the scalp

Preparation

Figure 1: Formulation of Herbal Shampoo

Sr. No.	Ingredients	Part of plant used	Quantity (100 ml)
1	Gomutra	Urine	10ml
2	Neem	Neem leaves	3ml
3	Indian gooseberry	Fruits	2ml
4	Lemon	Fruits	2ml
5	Arbian jasmine	Flowers	2ml
6	Holy basil	Holy basil leaves	2ml
7	Rose	Flowers	2ml
8	Beetroot	Beetroot Fruits	2ml
9	Aloevera	Aloevera Leaves	7ml
10	Gum	Acacia gum	3ml
11	Coconut	Fruits	2ml

Figure 1: Formulation of Herbal Shampoo

Table 2: Formula of herbal shampoo

Ingredients:* The herbal ingredients are used for preparation of herbal shampoo.

- Gomutra
- Neem (Azardicta indica)
- Indian gooseberry (phyllanthus emblica)
- Lemon (citrus Limon)
- Arabian jasmine (Jasmimum sambac)
- Holy basil (ocimum tenuriflorum)
- Rose (Rosa rubiginosa)
- Beetroot (Beta vulgaris)
- Aloevera (Aloe barbadensis miller)
- Acacia Gum (Commiphora)
- Coconut (Cocos nucifera)

Preparation method of herbal shampoo:
The following steps are used as follows-

1. Collection
2. Extraction
3. Purification
4. Mixing

Collection - we have collected all the raw ingredients from the surrounding environment

Extraction - in this process extracted all the ingredients and converted them into liquenvironment

Purification - in purification method filtrate all the solutions and the weighted all the ingredients according to the formula.

Mixing- in mixing mixed all of them with continues constant stirring mixed acacia gum as thickening agent to make it as semisolid in nature , added beetroot as coloring agent and then lastly added Arabian jasmine juice as flavouring agent

Evaluation test herbal shampoo :

Determine the pH : The pH of shampoo solution in distilled water was determined at room temperature by using pH meter and the pH is 4

Skin test - This test is performed on human skin and scalp of human volunteers and checks whether it shows irritation Or not.

Stability test -Stability and acceptability of organoleptic properties (odour and color) of formulations during the storage period of 2 months indicated that they arechemically and physically

Foaming ability -Foaming ability was determined by using cylinder shake method

Taken 50 ml of the 1%formulated shampoo solution was placed into a 250 ml graduated cylinder and covered with one hand and shaken 10 times

Foam stability -- the foam volume is recorded for 50 ml

Table 3: Result and Discussion

Sr. No.	Evaluation tests	Results obtained
1	Physical appearance	Dark brown, good foaming
2	PH	4
3	Percent of solids contents	3.8%
4	Rheological evaluations	1.84 cps
5	Dirt dispersion	Light
6	Skin sensitization	No irritation on skin
7	Stability test	Stable after two months
8	Foaming ability andFoaming stability	50 ml
9	Nature of hair after washes	Soft manageable

II. DISCUSSION

The herbal shampoo preparation was formulated based upon traditional knowledge and emphasis was to formulate a stable and functionally effective. The formulated shampoos were not only safer than the chemical conditioning agents, but also greatly reduce the hair loos during combing as well as strengthen the hair growth

III. RESULT

The ingredients used in making this shampoo are herbal , which makes it safe for hair washing and stop the hair losses.

IV. CONCLUSION

This formulated herbal shampoo reduces hair loss and promote hair growth and strength of hair and gives darkness to hair.

REFERENCES

- [1]. N. Kaila, Textbook of industrial Pharmacognosy, CBS publishers and distributors, New Delhi :268.
- [2]. M. Mithal and R. N. Saha, Handbook of cosmetics,first edition, Vallabh Prakashan 2003: 110,110-121.
- [3]. K. Kokate, A. P. Purohit, S. B. Gokhle, Pharmacognosy, Morality Prakashan, 49th edition : 8.17-8.19,9.9-9.15, 9.100-9.101, 10.4-10.5, 14.91-14.94,19.2-19.4.
- [4]. R. Mainkar and C. I. Jolly, Formulation of naturalshampoo, International Journal ofcosmetics science,2001, 23: 59