



A Review on Formulation and Evaluation of Herbal Shampoo

¹Miss. Priyanka Iranna Raichurkar, ²Mr. Pawar R. K.

¹Student, L.N.B.C. Institute of Pharmacy, Satara

²Asst. Prof. L.N.B.C. Institute of Pharmacy, Satara

ABSTRACT:

The study aimed to formulate a pure herbal shampoo and to evaluate and compare its physicochemical properties with the marketed synthetic and herbal shampoo. The herbal shampoo was formulated by adding the extracts of Alovera gel, Orange peel powder, Nagarmotha Reetha, in different properties to 10% sodium lauryl sulphate solution. Small amount of methyl paraben was added as a preservative. Several tests such as visual inspection, foam volume and stability, detergency etc, were performed to determine the physicochemical properties of both prepared and marketed shampoos. The formulated herbal shampoo was clear and appealing. It showed good cleansing and detergency, small bubble size and good foam stability after 5min. However, further research and development is required to improve its quality and safety.

Objectives

- To formulate herbal shampoo containing natural ingredient .
- To perform and evaluate characterization of herbal ingredient.

Introduction

Shampoos are probably the most widely used cosmetic Products for cleansing hairs and scalp in our daily life. A shampoo is basically a solution of a detergent containing suitable additives for other benefits such as hair conditioning, enhancement, Lubrication, medication etc. Now-a-days many synthetic, herbal, medicated and non medicated shampoos are available in the market but popularity of herbal shampoo among consumers is on rise because of these products being of natural origin are safe and free from side effects.

Synthetic surfactants are added to shampoo primarily for the foaming and cleansing action but their regular use leads to dryness of hairs, hair loss, irritation to scalp and eyes. Herbal formulations are considered as alternative synthetic shampoo but formulating cosmetics using completely natural raw material is a difficult task. There are large numbers of medicinal plants, which are reported to have beneficial effects on hair and are commonly used in formulation of shampoo.

These plant products may be used in their powdered form, crude form, purified extracts, or derivative form. It is extremely difficult to prepare a herbal shampoo using a single natural material that would be safer than the synthetic ones, and at the same time would compete favorably with its foaming, detergency and solid content. We therefore considered to formulate a pure herbal shampoo using traditionally and commonly used plant materials for hair washing in India and gulf region especially in Oman.

They are also known to produce beneficial effects on skin and other organ systems. Amla fruit is rich in vitamin C and is employed in hair preparations as antidandruff agent, hair growth promoter and to strengthen hairs. It is reported to contain saponin glycosides that help in removing excess sebum without causing adverse reactions. Saponin also exhibit antibacterial and antifungal activities that make them important ingredients of cosmetic applications. This study was designed to formulate a herbal shampoo and to evaluate & compare its physicochemical properties with the marketed synthetic and herbal shampoo in search of a safe and effective cosmetic product.

Literature Review::

Shah A Khan et al(2014) Was prepared and comparison herbal shampoo with commercial shampoos. The study aimed to formulate a pure herbal shampoo and to evaluate and compare its physicochemical properties with the marketed synthetic and herbal shampoos. The herbal shampoo was formulated by adding the extracts of Acacia concinna, Sapindus mukorossi, Phyllanthus emblica, Ziziphus spina-christi and Citrus aurantifolia in different proportions to 10% aqueous gelatin solution. Small amount of methyl paraben was added as a preservative and pH was adjusted with citric acid. Several tests such as visual inspection, pH, wetting time, % of solid contents, foam volume and stability, surface tension, detergency, dirt dispersion etc, were performed

to determine the physicochemical properties of both prepared and marketed shampoos. The formulated herbal shampoo was also evaluated for conditioning performance by administering a blind test to 20 student volunteers

Jaya Preethi p. et al:(2013) Was studied Herbal Shampoo and Its Evaluation Shampooing is the most common form of hair treatment. Shampoos are primarily been products aimed at cleansing the hair and scalp. In the present scenario, it seems improbable that herbal shampoo, although better in performance and safer than the synthetic ones, will be popular with the consumers. A more radical approach in popularizing herbal shampoo would be to change the consumers' expectations from a shampoo, with emphasis on safety and efficacy. The present paper emphasizes on composition, types, methods of evaluation, also a brief review on herbal shampoo formulations.

Prabhat Dessai et al:(2016) Was prepared of herbal shampoo formulations and to compare formulated shampoo with marketed shampoos, Shampooing is the most common form of hair treatment. Shampoos are primarily been products aimed at cleansing the hair and scalp. In the present scenario, it seems improbable that herbal shampoo, although better in performance and safer than the synthetic ones, will be popular with the consumers. A more radical approach in popularizing herbal shampoo would be to change the consumer expectations from a shampoo, with emphasis on safety and efficacy. We have evaluated and compared the herbal shampoo which was formulated in previous study, with two marketed shampoos. The findings of this investigation reveal that synthetic preservatives have sometimes been the cause of adverse effects among consumers.

Swarnlata Saraf et al: (2011) was formulated and evaluated of Herbal Shampoo Containing Extract of *Allium sativum*. *Allium sativum*, family Alliaceae possess antioxidant, antimicrobial, antitumor, antimutagenic, antiinflammatory, antiviral and antiulcer properties. The aim of this study was to take the benefit of the nature of *A. sativum* extract and prepare shampoo incorporating in the herbal constituent base and evaluate this natural herbal shampoo. The herbal shampoo formulations comprising of aqueous extract of *Allium sativum* (5% to 30% w/w), coconut oil, castor oil, olive oil, fragrance were prepared and evaluated for physicochemical parameters and the results showed the production of stable herbal shampoos.

Content:

Shampoo:

A shampoo is a preparation of a surfactant (i.e. surface active material) in a suitable form – liquid, solid or powder which when used under the specified conditions will remove surface grease, dirt, and skin debris from the hair shaft and scalp without adversely affecting the user

Types of Shampoo:

- Liquid shampoo
- Solid cream shampoo
- Jelly shampoo
- Powder shampoo
- Lotion shampoo
- Aerosol foam shampoo
- Specialized shampoo.
- Conditioning shampoo
- Antidandruff shampoo
- Baby shampoo Two layer shampoo

Ideal Shampoo characters:

The dust and excessive schum should be removed completely and properly.

- Hair should be washed thoroughly.
- Should generate a significant amount of foam
- Rinsing with water should make it simple to eliminate the shampoo.
- Should leave the hair manageable, soft, shiny, and non-dry.
- Should give the hair a pleasing smell.
- Shouldn't dry out and chap the hand.

- There shouldn't be any negative effects like skin or eye irritation.(1)

Problem Related to hair:

- Dandruff
- Dry hair
- Hair loss
- Heat damage
- Color damage
- Grey hair (2)

Advantages Of shampoo:

- Shampoo keeps hair silky and smooth.
- Keeps dirt, dust, oil and pollutants away.
- Shampoo is easy to rinse.
- There is minimum skin and eye irritation.
- Is less toxic.
- It is slightly acidic.
- Causes less damage to hair.
- Repairs damaged hair.(3)

Herbal Plant Used in Shampoo:

CURRY LEAF



(5) (Fig.1)

Murraya koenigii, also known as *Bergera koenigii*, is a tropical to subtropical tree that is a member of the Rutaceae family and is indigenous to Asia. Although *M. koenigii* belongs to a different family than neem, *Azadirachta indica*, which is in the adjacent family Meliaceae, the plant is also occasionally referred to as sweet neem.

Scientific name: *Murraya koenigii*

Family: Rutaceae **Order:** Sapindales **Kingdom:** Plantae

Uses:

- The curry leaves' antioxidants aid in hydrating the scalp and removing damaged hair follicles. Curry leaves' nutritional value is crucial for maintaining general health, including benefits for hair.
- Curry leaves aid in removing this accumulation, leaving your scalp and hair feeling clean and fresh.
- It promotes the growth of new hair and strengthens and nourishes existing hair.(4)

Conclusion:

The use of herbal products by consumers has significantly increased over the past several years, according to a study of worldwide hair care industry trends. UV rays and the use of harsh chemical treatments for hair style are two elements that have an immediate and long-term influence on hair. to solve these issues. The current study is the best effort made to create a herbal shampoo that will not only protect hair but also add conditioning, lustre, and manageability. The focus of the current study is on the potential of herbal extracts for cosmetic applications. Thus, we draw the conclusion that the composition of herbal shampoo is effective for a long period of time while remaining healthy, dandruff-free, and without causing irritation. It also has less negative effects and a greater conditioning effect. Despite being more effective and secure than synthetic shampoos, it currently seems that herbal shampoo will gain popularity among consumers.