



A REVIEW ON POLY HERBAL HAIR SERUM

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Abstract

Hair is an essential part of a person's identity, and we use a variety of beauty products to care for it. Herbal formulations have always have good activity and little or no side effects over synthetic ones. This study aim to demonstrate the effectiveness of a polyherbal hair serum for the treatment of common hair problems such as baldness, alopecia, hair loss, gray hair, dryness, and the most common dandruff. Cosmetics are being used on an extensive basis for their various uses in day-to-day life. Mankind uses various items to enhance beauty and elegance in order to appear young and charming. Hair root activation is essential to promote hair growth and prevention of hair loss. Because of their smaller side effect and a high effective safety record, ordinary people still use herbal dyes. The purpose of this study was to use different sauces to make herbal hair serum for general use (hair operation). the formulated oil was analyzed for its organoleptic properties, acid value, saponification value, viscosity, ph, etc. All the criteria were found to be correct and within the accepted guidelines.

Introduction

Herbal cosmetics are products that are made from a variety of permissible cosmetic substances to form the base on which one or more herbal ingredients are used to provide defined cosmetic benefits. the term cosmetic comes from the greek word cosmeticos, which means to have the ability, arrange, and skill in decorating. Herbal cosmetics are products that are made from a variety of permissible cosmetic ingredients to serve as the basis on which one or more herbal ingredients are used to achieve specified cosmetic benefits. Cosmetics were first associated with hunting, war, religion, and magic, and later with medicine.[1]skin lightening products make up a significant segment of cosmetics worldwide, and they carry with them the promise of flawless skin free of agespots, blemishes, and scars. The demand for "skin fairness products" is rooted in the desire to eliminate localized hyperpigmentation as well as to lighten the overall skin tone. Herbal cosmetics are products that contain compounds that can be used to create drugs that are made from various permissible cosmetic ingredients, forming the basis on which one or two significant improve difficult-to-treat diseases, such as herbal ingredients, are used to treat defined cancer. No matter what age, serums, or concentrates, can be used.[2]In the sudden rise in population materials than creams, biologically active factors, as well as plant-derived compounds, have also been about enumerating more of biologically active factors in the rise of population materials, which has resulted in faster and more demanding demands and an increase in the number of herbal drugs that are effective at addressing beauty problems.[3] They may result in the production of as well as a reduction in the use of allopathic serum. A healthy head of hair is described as having shine, being silky, long, satiny, pleasant, having a tonne of volume, and showing no signs of thinning at the top or dandruff.[4] The hair care industry has provided us with a variety of ways to achieve this, including ones that strengthen, modernize, and support our hairs. Hair care products have additional benefits such as improving hair quality, making it easier to maintain, or repairing damage.[5] There are also excellent products for the treatment of certain hair conditions, such as dandruff. Hair has an aesthetic function in humans, which affects how we look. It now has societal, sexual, and psychological implications. If a person's hair pattern changes, such as becoming bald or having more or different types of hair, their confidence could suffer.[6]Citrus sinensis, also known as orange peel, has been shown to have a beneficial effect on hair. When used sparingly, these peels can make hair smoother and shinier. Since they are bursting

with antioxidants, they help to reduce the harm caused by pollutants. The rise in the cost of living has resulted in a rise in the demand for cosmetics.[7] As more people want to remain young and attractive, the importance of cosmetics has increased. Cosmeceuticals refer to the merger of the cosmetics industry with the pharmaceutical industry.[8] Cosmetics firms make cosmetics, while pharmaceutical ones make pharmaceuticals. Cosmeceuticals are skincare products that combine cosmetics and drugs. Serum is one of the cosmetic products with a high amount of active ingredient in their formulation for providing essential nutrition to the deeper skin layer and a non-greasy finish product that is suitable for skin.[9]

Herbs beneficial for hair

Aloevera (*Aloe barbadensis miller*)

When it comes to hair care and skin care, aloe vera gel is a boon. A healthy and balanced pH is essential for healthy hair growth. Aloe vera gel comes into play here. It also acts as a natural conditioner and prevents hair loss. Simply apply it to your scalp and hair, and let the gel work its magic on your scalp and hair for complete nourishment.[10]



Figure1. Aloevera

Rosemary (*Rosemarinus officinalis*)

This is one of the most popular herbs for hair growth. Rosemary oil is mainly an essential oil that can be mixed with any other carrier oil, such as olive oil or coconut oil jojoba oil. It has a variety of benefits and also helps in preventing grey hair. Rosemary oil can soothe the scalp and alleviate conditions such as dandruff. It opens the way to healthy development of hair.[11]



Figure 2.Rosemary

Lavander (*Lavandula angustifolia*)

These stunning velvet-pink flowers are just stunning. Lavender is also effective at calming the scalp and preventing any fungal or bacterial infection. Lavender essential oils are readily available and can be used with a carrier oil of your choice, such as coconut, olive, or any other. Tea ingestion is another way lavender can help you out. Lavender tea consumption is beneficial to hair and health in general.[12]



Figure.3 Lavendar

Gooseberry (Phyllanthus emblica)

This is again a herb rich in antioxidants that promote hair growth and strengthen hair enough to prevent breakage and fall. This is an ayurvedic herb.[13]



Figure.4 Gooseberry (Amla)

Hibiscus (Hibiscus rosa-sinensis)

It is also known as hibiscus rosa sinensis and is edible in appearance. Chinese hibiscus tea is actually very good for hair and is also effective at stimulating hair follicles for better growth. It even increases the follicle size.[14]



Figure.5 Hibiscus

Brahmi (Bacopa monnieri)

This one is a very popular herb for hair growth. Brahmi is also known as bacopa monnieri and is used in a variety of hair supplements and treatments. Brahmi is also beneficial when used in conjunction with other hair growth herbs, as shown by coat buttons. It is the source of alkaloids that are known to be the active proteins that aid in hair growth.[15]



Figure.6 Brahmi

Jatamansi (Nardostachys jatamansi)

Rhizomes aid in hair growth, and jatamansi is a rich source of these. It speeds up hair growth. It is also believed to be helpful in ensuring that hair grows naturally after chemotherapy sessions.[16]



Figure.7 Jatamansi

Zinger (Zingiber officinale)

Ginger juice for hair has a major benefit in preventing seborrhoeic dermatitis, also known as dandruff. Dandruff is caused by a yeast infection called malassezia, which causes itchy flakes and redness on the scalp. Antifungal agents, on the other hand, can help curb its growth. Ginger has a potent antifungal effect on your hair, according to studies. it can help reduce dandruff. Gingerol, the most abundantly found active ingredient in the ginger rhizome, is responsible for its antimicrobial properties. ginger for hair also has an anti-inflammatory effect, which means it reduces inflammation and relieves dandruff-related pain.[17]



Figure. 8 Ginger

Flax (Linum usitatissimum)

Linum usitatissimum seed oil is an amber-coloured oil extracted from the seeds of the linseed/flax plant (linum usitatissimum). In some of our hair care products, we use this ingredient as an emollient, resulting in smooth and

healthy hair. *Linum usitatissimum* seed oil, also known as flaxseed oil, is a seed oil that is extracted from *linum usitatissimum* seed oil. This well-known super ingredient contains essential fatty acids as well as unsaturated fatty acids, which will help soften your hair and give it a beautiful shine. Flaxseed oil's omega-3 fatty acids can also help to strengthen your hair.[18]



Figure.9 Flax Seed

***Nigella saliva* (Black cumin)**

These black cumin seeds are scientifically called *nigella sativa* and are known to contain nutrients that stimulate hair follicles. Stress, pollution, and age can contribute to hair loss, so it's a good idea to be proactive if you want to prevent hair loss. Black seed oil mixed with coconut oil enhanced hair growth, according to one study, and a second white paper found that hair fallout was reduced by 76% when subjects used a hair oil containing *nigella sativa*. [19]



Figure.10 Black Cumin Seed

fenugreek (*Trigonella Foenum-graceum*)

Fenugreek seeds are a rich source of iron and protein, two essential nutrients for hair growth. They also contain a unique group of plant compounds, including flavonoids and saponins. Due to their anti-fungal and anti-inflammatory properties, these compounds are thought to stimulate hair growth. Fenugreek can slow down DHT ability to attach to your hair follicles. A human oil supplemented with fenugreek seed extract has also shown that it can improve hair thickness and growth. It is a great source of protein and amino acids, which help repair hair shaft damage caused by dehydration, heat styling, chemicals, sun damage, or color treatments. It increases cuticle integration in your hair shaft, resulting in thicker hair growth. [20]



Figure. Fenugreek (Methi) Seed

Benefits of hair herbal serum

Before you finalize the product, it is important to know the benefits. A hair serum has mainly the following benefits:

1. Multi purpose

A hair serum can solve a variety of hair problems, not just one. It is also known as a one-stop solution to all your hair problems. A bad hair day is turned into a good hair day with hair serum. Your hair will feel and look different after just a few drops.[21]

2. Protect hair

Hair serum adheres to hair strands. It also acts as an excellent shield against heat, sun damage, dirt, pollen, and pollution. It helps keep your hair from getting ruined. For this reason, it is recommended that you use a heat-protecting cream before using hot styling creams.[22]

3. Shine to the hair

the hair serum's layer acts as a light reflector, making it easier to see your hair. Hair serums contain amino acids that protect colored and chemically treated hair.[23]

4. Prevents hair loss from breakage

When our hair becomes a tangled mess, we lose a lot of hair strands as a result of the wear and tear that goes into detangling. Hair serum acts as a lubricant for such hair and makes detangling simple. And the result is less hair fall.[24]

5. Good for dry hair

Hair serum are beneficial for dry and frizzy hair. hair serums keep moisture and make hair smooth and shiny.[25]

6. Nourishment of hair

Hair serums fill the follicular gaps and revitalize brittle and damaged hair. Hair serum makes hair more manageable, making it easier to style them. Time, effort, and patience are all needed. Everything has been saved.[26]

Advantages of hair serum

- Hair serums can effectively soften, smoothen, and make your hair silky.
- it shields the hair from environmental aggressors.
- act as both a pre styling treatment and a finishing product.
- it can be used after and before heat styling. reduces frizz.
- Prevent frizz. if your hair is weak and damaged.
- improves smoothness.
- hair serum's anti-frizz properties also improve the appearance of hair serum.
- hair serum also reduces tangles and improves shine.
- to improve the straightness and curls.
- it protects against damaged.

Disadvantages of hair serum

- Regular use and over application can cause the hair to become dry and brittle.
- the serum on the scalp can cause inflammation, irritation and allergy.
- silicones in the hair serum can be harmful to the long hair. It can breakage of hair.
- scalp application should be avoided as it could make it oily or result in inflammation.

Application of herbal hair serum

- Hydrates and nourishes the hair
- they help to keep hair shiny, smoothens and strengthens hair
- they prevent free radical damage in hair
- they prevent hair loss, and scalp infections
- medicated serums have antimicrobial properties.
- they can be used as a hair growth booster and reduce hair loss.

Evaluation parameter of herbal hair serum

Physical Appearance

The physical appearance like colour and odour are visually tested of the prepared herbal hair serum.

Homogeneity Test

Homogeneity of herbal serum are tested by visual examination. for the homogeneity test prepared serum is transferred in airtight glass container and check under the light and check the appearance of particles in serum.

pH Test

the pH check by the digital pH meter and pH paper of polyherbal hair serum.

Viscosity

Viscosity of polyherbal hair serum check by the viscometer in a different –different rpm. for it the hair serum keep in beaker and check by viscometer.

Spreadability

Spreadability was measured by the place the formulation between to slides and keep a suitable weight above of plate and measured the spreadability.

Conclusion

This study conclude polyherbsl extracts such as hibiscus rosa sinensis, withaniasomnifera, eclipta alba, olea europea, and nigella sativa were used in a variety of compositions to have multipurpose effects on scalp and hair, such as antimicrobial, reduce hair loss, increased hair growth and follicles, reduce hair loss, prevent hair loss, and scalp damage. The aim and objective of present work was to formulation of herbal hair serum for treat several scalp and hair follicle related problems. It should be stimulate hair growth, hair follicle stimulations and it can able to act against bacterial and fungal related disease. So, our research study completely focused on selections of pharmacologically potent herbal drug, it should be control hair fall and scalp related microbial diseases. The plants are more potent healers because they promote the repair mechanism in the natural way. The knowledge and experience of usage of herbs are being blend with advanced cosmetic technology to develop a safe and effective product.

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