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A SYSTEMATIC REVIEW ON HERBAL HAIR WAX

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ABSTRACT

Herbal hair wax represents a natural and effective alternative to conventional chemical-based hair styling products, combining hair styling with therapeutic scalp and hair care benefits. This review explores the formulation and benefits of herbal hair wax prepared using key plant-based ingredients such as beeswax, shea butter, coconut oil, rosemary oil, olive oil, neem powder, and aloe vera. Each component contributes unique properties, such as providing hold and texture (beeswax), deep moisturization (shea butter and coconut oil), scalp stimulation (rosemary oil), antibacterial action (neem powder), and soothing hydration (aloe vera). Together, these ingredients offer multiple benefits including improved hair manageability, shine, reduced dandruff, enhanced scalp health, and support for natural hair growth. The review emphasizes the safety, efficacy, multifunctional use of herbal hair wax, making it suitable for daily application and a sustainable option for holistic hair care. This formulation serves as both a styling aid and a natural hair treatment,

ideal for individuals seeking chemical free hair grooming solution.

KEYWORDS: Herbal hair wax, ingredients, treatment.

INTRODUCTION TO HERBAL HAIR WAX

Herbal hair wax is a natural alternative to chemical-based styling products, formulated to nourish and style hair without causing damage. Unlike conventional waxes that often contain harsh chemicals, this herbal hair wax is made from a blend of nature-derived ingredients known for their healing and conditioning properties.^[1]

Herbal hair wax, formulated with natural ingredients such as beeswax, shea butter, coconut oil, olive oil, rosemary oil, neem powder, and aloe vera, serves as a multifunctional hair care and styling product. [2]

Unlike conventional chemical-based waxes, herbal hair wax offers dual benefits-styling hold and therapeutic care. It provides a strong yet flexible hold that helps shape and manage hair throughout the day while simultaneously nourishing the scalp and hair shaft. Regular use can result in softer, shinier, and more resilient hair due to the deep conditioning and moisture-retaining properties of the botanical oils and butters. In addition to improving texture and appearance, herbal hair wax can help prevent hair damage, reduce breakage, and protect against environmental stressors like sun and pollution. Its natural antimicrobial and anti-inflammatory properties, derived from ingredients like neem and aloe vera, also support scalp health by addressing dandruff, itchiness, and minor infections. As a result, herbal hair wax not only enhances the aesthetics of hairstyling but also promotes long-term hair and scalp wellness. Its gentle, chemical-free nature makes it ideal for daily use across all hair types, especially for individuals seeking a balance between natural styling and holistic hair care. [3,4,5]

This herbal formulation not only helps style hair effectively but also nourishes it from root to tip, making it a safe and holistic choice for maintaining hair health.^[6]

PREPARATION OF METHOD OF HAIR WAX

For the preparation of 50 grams of herbal hair wax Begin by measuring out 15 grams of beeswax, 10 grams of shea butter, and 8 grams of coconut oil. Place these ingredients in a double boiler or a heat-safe bowl set over a saucepan with simmering water. Gently heat the mixture, stirring continuously until the beeswax, shea butter, and coconut oil are fully melted and combined. Once melted, remove the mixture from heat and add 5 grams ms of olive oil, mixing well to ensure an even blend. Allow the mixture to cool slightly for a few minutes, ensuring it is warm but not hot. At this stage, add 2 grams of finely sifted neem powder and

stir thoroughly. Then, incorporate 5 grams of fresh aloe vera gel or pure aloe extract, mixing carefully to avoid any separation. Once the mixture is just warm (not hot), add 5 to 6 drops of rosemary essential oil and stir until well blended. Pour the finished mixture into a clean, dry 50-gram glass jar or tin. Allow it to cool and solidify at room temperature, which may take 2-3 hours, or refrigerate briefly to speed up the process. Once set, the herbal hair wax is ready for use. It can be applied by taking a small amount, warming it between the fingers, and styling the hair as desired. This wax provides natural hold while nourishing and protecting the hair.

THE KEY INGREDIENTS

Beeswax^[7]

Beeswax is one of the key ingredients used in both conventional and herbal hair wax formulations. It's a natural wax produced by honeybees (Apis mellifera) and is widely valued in hair care for its texturizing, moisturizing, and protective properties.

Family: Apidae

Genus: Apis

Species: Apis mellifera



It Provides hold, locks in moisture. Protects from environmental damage.

It also supports healthy scalp and reduces breakage. Moisture sealant. Anti-inflammatory and protects from pollutants

Shea Butter^[8]

Shea butter is a rich, creamy fat extracted from the nuts of the Vitellaria paradoxa tree, native to Africa. In hair wax formulations, it plays a vital role not just in texture and consistency but also in hair care.

Family: Sapotaceae

Genus: Vitellaria

Species: Vitellaria paradoxa



Key Constituent: Rich in oleic acid (monounsaturated fatty acid).

It is deep moisturizer and softener. Which are Rich in vitamins A, E, F; anti-inflammatory. Protects from UV and heat damage. Deep moisturizer and also have anti-inflammatory action.

Coconut Oil^[9]

Coconut oil is a key ingredient in herbal hair wax formulations due to its deep conditioning, antimicrobial, and strengthening properties. It plays both a functional and therapeutic role in the formulation.

Family: Arecaceae

Genus: Cocos

Species: Cocos nucifera



Key Constituent: Contains lauric acid

Reduces protein loss and promotes hair growth. Antibacterial and antifungal properties. It Prevents breakage and split ends. It is having antibacterial & antifungal activity.

Rosemary Oil.^[10]

Rosemary (Rosmarinus officinalis) essential oil is a powerful herbal ingredient often included in herbal hair wax formulations due to its scientifically supported hair and scalp benefits.

Family: Lamiaceae

Genus: Rosmarinus

Species: Salvia rosmarinus



Key Constituent: Contains 1,8-Cineole (Eucalyptol).

Stimulates blood circulation in scalp. It shows antimicrobial; supports hair growth. It delays premature greying. It has activity of scalp stimulant. It also shows antimicrobial activity, hair growth promoter and also delays premature greying.

Olive Oil^[11]

Olive oil is a nutrient-rich, plant-derived oil often used in herbal hair wax formulations. It contributes to both the styling texture and therapeutic value of the product, making it ideal for healthy, manageable hair.

Family: Oleaceae

Genus: Olea

Species: Olea europaea



Key Constituent: Contains oleuropein and Vitamin E.

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It moisturizes and strengthens hair. It has antioxidant and anti-inflammatory activity. It

Improves texture and reduces dandruff. It has antioxidant (Vitamin E), Anti-inflammatory,

Moisturizing activity. It also protects against damage in hair.

Neem Powder^[12]

Neem powder is a traditional Ayurvedic herbal powder derived from the dried leaves of the

neem tree (Azadirachta indica). In herbal hair wax, neem powder is incorporated for its scalp-

purifying, antimicrobial, and anti-dandruff properties, making it an excellent natural additive

for scalp and hair health.

Family: Meliaceae

Genus: Azadirachta

Species: Azadirachta indica



Key Constituent: azadirachtin.

It has antibacterial, antifungal, and anti-inflammatory activity. It fights against dandruff and

infections. It also helps in strengthens roots and controls oil. It has antibacterial, antifungal,

anti-lice and anti-inflammatory activity.

Aloe Vera^[13]

Aloe vera is a soothing, hydrating plant extract widely used in hair care formulations,

including herbal hair wax. It enhances scalp health, hydrates hair strands, and supports hair

growth, making it a therapeutic and functional ingredient.

Family: Asphodelaceae

Genus: Aloe

Species: Aloe vera



Key Constituent: Contains aloin, vitamins A, C, and E.

It has activity to hydrates and soothes scalp. It also promotes growth and reduces frizz. It repairs damage and strengthens hair. It has anti-inflammatory, antibacterial, Promotes hair growth and heals scalp.

USES OF HERBAL HAIR WAX

1. Hair Styling and Shaping^[14,15]

Herbal hair wax offers a natural and effective alternative to synthetic styling products. It provides a medium hold, allowing you to shape and style your hair while maintaining flexibility. Unlike gels or sprays, it does not make the hair stiff or crunchy.

Defines curls and waves: Helps accentuate natural curls or waves by giving them structure without weighing them down.

Tames flyaways and frizz: Especially useful in humid conditions, herbal wax smooths down stray hairs and frizz.

Adds texture: Ideal for those looking to add volume or texture to flat or limp hair, making it easier to create casual or structured styles.

Non-sticky and non-greasy: Thanks to natural oils and waxes like beeswax and coconut oil, it provides a clean finish without buildup.

2. Scalp and Hair Nourishment^[16,17]

Herbal hair wax does more than just style—it nourishes the scalp and hair strands with botanical ingredients rich in vitamins, fatty acids, and antioxidants.

Deep conditioning: Ingredients like shea butter and olive oil penetrate deep into the hair shaft, restoring moisture and preventing dryness.

Scalp hydration and care: Natural emollients help keep the scalp moisturized, reducing flakiness and tightness.

Protective barrier: Beeswax forms a light barrier on hair strands, helping retain moisture and shield from environmental damage.

Safe for daily use: Since it lacks harsh chemicals and alcohols, herbal wax can be used regularly without damaging hair or scalp.

3. Natural Shine Enhancer^[18,19,20]

Unlike synthetic waxes that often leave hair looking oily or sticky, herbal hair wax offers a subtle, natural-looking shine.

Reflects light: Oils such as coconut oil and olive oil give the hair a healthy glow by smoothing the cuticle layer, which reflects more light.

Restores dull hair: Regular use helps rejuvenate tired, dry, or damaged hair, improving its visual appeal.

4. Hair Growth Support^[21,22]

Herbal formulations often include ingredients that are known to stimulate hair follicles and improve blood circulation in the scalp.

Rosemary oil and neem are commonly included for their natural ability to improve hair density and growth.

Strengthens roots: Nutrients like vitamin E and essential fatty acids support the hair roots, reducing breakage and hair fall.

Reduces hair thinning: Continuous nourishment provided by herbal wax may reduce signs of thinning over time.

5. Anti-Dandruff and Scalp Soothing [20,21,22]

A major benefit of herbal hair wax is its ability to calm and balance the scalp, making it beneficial for those prone to dandruff or irritation.

Neem powder and aloe vera have natural anti-fungal and anti-inflammatory properties that help combat dandruff and scalp infections.

Soothes irritation: Aloe vera and essential oils soothe itching, redness, and dryness.

Improves scalp health: Regular application maintains a healthy scalp environment, which is critical for strong, vibrant hair.

Advantages Of Herbal Hair Wax^[23]

Herbal hair wax offers several notable advantages due to its use of natural and plant-based ingredients such as beeswax, coconut oil, shea butter, olive oil, neem, and aloe vera. These

ingredients nourish the scalp and hair while providing medium hold for styling, making herbal hair wax a healthier alternative to synthetic styling products. Unlike chemical-based waxes, herbal variants are free from parabens, sulfates, and artificial fragrances, thereby reducing the risk of irritation, allergic reactions, and long-term damage to hair. They also offer added benefits such as moisturizing dry hair, preventing dandruff, and strengthening the hair shaft. Many formulations are eco-friendly and biodegradable, appealing to environmentally conscious users. Herbal wax can be used daily, even on sensitive scalps, and is especially suitable for curly, dry, or frizzy hair types due to its conditioning properties.

Disadvantages Of Herbal Hair Wax^[24]

However, herbal hair wax also comes with certain disadvantages. Since it does not contain synthetic polymers, its holding power is often weaker compared to conventional waxes, making it less effective for extreme hairstyles or high-humidity conditions. Additionally, due to the absence of chemical preservatives, herbal waxes may have a shorter shelf life and could spoil if not stored properly. They are typically more expensive than regular hair wax because of the cost of natural ingredients and sustainable production methods. Also, the performance and consistency of herbal wax may vary from brand to brand, particularly in handmade or small-batch versions. Lastly, while it is suitable for most users, those seeking a very strong hold or particular styling effects may find herbal alternatives less effective.

CONCLUSION

Herbal hair wax offers a holistic approach to hair care by combining the styling benefits of conventional products with the therapeutic properties of natural ingredients. The formulation, rich in nourishing oils, plant extracts, and natural waxes, helps maintain healthy hair and scalp while avoiding the negative effects of synthetic chemicals. Regular use of herbal hair wax not only enhances hair texture and style but also promotes long-term hair health, making it a safer and more sustainable alternative in modern hair care practices.

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