
HERBS IN LIP CARE; A REVIEW OF THEIR BENEFITS AND APPLICATIONS

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ABSTRACT

Due to their varied phytochemical makeup and possible cosmetic advantages, herbal compounds have drawn more attention in lip-care formulations. The development of various lip-care products can benefit from the moisturizing, antioxidant, calming, anti-inflammatory, antibacterial, and natural colouring qualities of various herbs and plant-derived compounds. The significance of herbal substances in lip care, their key characteristics, and their uses in different formulations are all outlined in this paper. It also covers the benefits and drawbacks of using herbal compounds, such as stability issues, standardization issues, and variations in phytochemical makeup. Additionally highlighted are recent advancements and potential future improvements in the application of sophisticated delivery technologies and enhanced scientific assessment of herbal compounds. All things considered, herbal substances are promising components for the creation of multipurpose, organically produced lip care solutions.

KEYWORDS: Herbal ingredients, lip care, phytochemicals, herbal cosmetics, moisturization, antioxidants.

INTRODUCTION

The thin stratum corneum (SC) and conspicuous lack of perspiration and sebaceous glands make the skin of the lips anatomically distinct. Because of their structure, the lips are more vulnerable to secondary infections, chapping, fissuring, and dehydration. For lip care to be

effective, topical occlusive and emollient formulas are essential. There is increased interest in replacing conventional petrochemical occlusives with plant-derived alternatives because to customer preferences for "clean" and natural-based cosmetics. These botanical components include medicinal antioxidants, vital vitamins, and fatty acids in addition to barrier protection. ⁽¹⁾

In order to protect against pathogens, environmental stresses, and moisture loss—all of which are vital for preserving hydration and averting damage—the lip barrier must remain intact. While maintaining the functional and aesthetic integrity required for speaking and eating, a well-maintained lip barrier helps prevent sensitivity and ailments like cheilitis. The labial, vermillion, and oral mucosa are the three separate zones that make up the lip. The vermillion, which divides the oral mucosa from the surrounding skin, is subject to a lot of environmental influences and ages. As people age, their lips lose colour, becoming thinner and drier, and develop deeper vertical creases. As a result, they are often the focus of medicinal and cosmetic procedures. Dryness, chapping, and hyperpigmentation are common problems. Lip skin's decreased ability to retain water causes dryness and chapping, whereas oxidative species and inflammation lead to hyperpigmentation. The rising desire for natural remedies with emollient, anti-inflammatory, and antioxidant qualities is reflected in the expanding market for herbal lip care products. ⁽²⁾

CURRENT LIP-CARE FORMULATIONS AND THEIR LIMITATIONS

Lip balms, lip glosses, and lip rouges (lipsticks) are just a few examples of the many products that fall under the category of lip care cosmetics. Each category has a certain function, meeting the varied demands and inclinations of customers. Lip balms, often called lip salves or lip conditioners, are designed to protect and moisturize the sensitive lip area. These products are intended to ease the discomfort of dry, chapped, or cracked lips, which can be brought on by environmental elements like wind, cold weather, and sun exposure. Conversely, the main purpose of lip glosses is to give the lips a glossy, shimmering appearance.

Perhaps the most recognizable and well-known lip care products are lip rouges, also referred to as lipsticks. These products are designed to give lips strong, long-lasting colour that improves their overall appearance and shape. People can express their particular style and inventiveness with lip rouges, which come in a wide range of colours from traditional reds and pinks to bold and daring hues. The waxes, oils, butters, and emollients used in these products are usually carefully chosen to provide the required texture, consistency, and

functionality. Natural components like coconut oil, shea butter, and beeswax are frequently used to improve the whole lip care experience and offer sustenance.⁽³⁾

Synthetic compounds including petroleum jelly, artificial colorants, synthetic scents, parabens, and preservatives are commonly used in conventional lip formulations. Long-term use of these materials may cause irritation, allergic reactions, lip sensitization, and consumer worries about safety, even though they may offer instant moisturization and enhanced product stability. As a result, there is growing interest in substituting organically derived substances with moisturizing, antioxidant, antibacterial, and therapeutic qualities with synthetic ones.⁽⁴⁾

IMPORTANCE OF HERBS IN LIP CARE

Because they are manufactured with natural substances and typically have fewer negative effects on human health, herbal goods are thought to be safer than synthetic ones. Herbal preparations, including herbal tablets, tonics, shampoos, pastes, cosmetics, and lipsticks, have grown in popularity among consumers in recent years. Because they think natural chemicals are safer and better for the body, many people favour herbal treatments and cosmetics. Additionally, individuals are turning to natural alternatives due to the growing negative impacts of synthetic items.⁽⁵⁾

Moisturizing and emollient properties: Because they have occlusive and emollient properties, herbal ingredients—especially plant-derived oils, butters, and waxes—can help improve the condition and suppleness of the lips. Butters like shea and cocoa butter, as well as oils like coconut, almond, and jojoba oil, can help keep the surface of the lips smooth and minimize moisture loss. Additional conditioning and moisturizing advantages could be obtained from aloe vera and other botanical preparations. In order to promote lip hydration, herbal substances can be added to a variety of lip-care products, including lip balms, lip oils, creams, and masks.⁽¹⁾

Antioxidant properties: Polyphenols, flavonoids, catechins, and other phytochemicals are among the naturally occurring antioxidant compounds found in herbs. These substances might aid in preventing oxidative stress brought on by environmental variables. The antioxidant qualities of botanical substances like green tea and turmeric have been studied; as a result, they can provide lip-care formulations with extra functional benefits. Products may benefit from the addition of herbal substances that are high in antioxidants.^(1,6)

Anti-inflammatory and soothing properties: Environmental exposure, dehydration, and other conditions can cause the lips to become sensitive, dry, or inflamed. Compounds with calming and anti-inflammatory qualities found in some herbal substances may assist support

sore or inflamed lips. Botanicals that have been studied for their calming and anti-inflammatory properties include aloe vera and turmeric. Therefore, these compounds might be helpful in lip-care products that aim to offer comfort and conditioning in addition to moisturizing. ^(1,6)

Antimicrobial properties: Phytochemicals with antibacterial properties can be found in some therapeutic plants. Because damaged or cracked lips may be more vulnerable to microbial contamination, this characteristic may be pertinent to lip care. Herbal lip care products have included ingredients like neem and compounds derived from coconuts that have been studied for their antibacterial properties. However, the antibacterial activity of an isolated plant extract should not be taken as a guaranty that the final cosmetic product will be preserved; when appropriate, microbiological testing and preservative are still required. ⁽⁶⁾

Wound-healing and barrier-supporting properties: Lip surface damage and cracking can be caused by dryness and repeated exposure to the environment. The potential of several herbal compounds to promote tissue repair and preserve the skin barrier has been studied. For instance, the moisturizing and wound-healing qualities of aloe vera are mentioned in herbal lip care literature. Because of these characteristics, several botanicals may be helpful in products intended for dry, rough, or damaged lips. ⁽⁶⁾

Pigmentation and natural colouring benefits: Both natural colour and lip pigmentation can benefit from certain herbal substances. Because its components, such as glabridin and other flavonoids, have been studied for its effects on tyrosinase activity and melanogenesis, licorice is particularly interesting. Antioxidant chemicals and natural colour can be obtained from other plant sources that contain anthocyanins or betalains. As a result, some herbs may offer both practical and cosmetic advantages in lip care products. ^(6,7)

IMPORTANT HERBS USED IN LIP CARE

Because of their varied phytochemical composition and biological activities, a number of medicinal and aromatic plants have been studied for their potential use in lip-care formulations. Aloe vera is prized for its calming and moisturizing qualities and is frequently added to formulations meant for dry or irritated lips. Licorice, which contains bioactive components like glabridin and glycyrrhizin, has been studied for its antioxidant, anti-inflammatory, and melanogenesis-related properties. Notable sources of antioxidant chemicals include green tea, which contains catechins, and turmeric, which is high in curcuminoids. Because of their calming and anti-inflammatory qualities, calendula and chamomile have long been utilized. While beet is a source of betalain pigments, which can

offer both natural coloring and antioxidant potential, hibiscus contains anthocyanins and other polyphenols that may offer antioxidant activity and natural color. These qualities make these botanical substances attractive options for use in various lip care products. ^(1,7,8)

TABLE NO 1. PROPERTIES OF IMPORTANT HERBAL INGREDIENTS

Herbal ingredients	Major phytoconstituents	Relevant properties
Aloe vera	Polysaccharides	Moisturizing, soothing
Liquorice	Glabridin, glycyrrhizin	Antioxidant, pigmentation-related
Turmeric	Curcuminoids	Antioxidant, anti-inflammatory
Green tea	Catechins	Antioxidant
Hibiscus	Anthocyanins	Antioxidant, natural colour
Beetroot	Betalains	Natural colour, antioxidant

ADVANTAGES AND LIMITATIONS OF HERBAL LIP CARE FORMULATIONS



FIG NO 1: SELECTED HERBAL INGREDIENTS USED IN LIP CARE.

Advantages

- Multifunctional activity: Depending on their phytochemical makeup, herbal substances may have anti-inflammatory, calming, moisturizing, antioxidant, and colouring properties.
- Consumer preference: Due to consumer interest in naturally sourced substances, plant-derived compounds are being investigated more and more in cosmetic formulations. ⁽⁶⁾
- Natural source of bioactive compounds: Flavonoids, polyphenols, terpenoids, and other phytochemicals found in herbs can enhance the functional qualities of lip care products. ^(6,9)

- Potential for natural colouring: Anthocyanins and betalains, two natural pigments found in some botanical materials, can be used in coloured lip care products. ⁽¹⁰⁾

Limitations

- The difficulty of standardizing herbal ingredients.
- The possibility of contamination.
- Clinical research is restricted.
- Stability problems during storage.
- Allergic reactions may occur in sensitive individuals.
- Appropriate quality control and scientific validation are necessary to improve the safety and effectiveness of herbal compositions. ⁽⁶⁾

FUTURE PERSPECTIVES

- Development of innovative delivery systems: The inclusion, stability, and distribution of herbal bioactive ingredients in lip-care formulations may be enhanced by nanotechnology and other modern delivery techniques.
- Long-lasting moisturization: Prolonged hydration and enhanced lip barrier protection may be the main goals of future formulations.
- Clinical examination of herbal compounds: To determine the safety, effectiveness, and long-term advantages of herbal substances in lip-care products, more carefully planned clinical trials are required.
- Customized herbal lip care products: Creating formulations based on specific lip diseases and cosmetic needs may offer more focused advantages.
- Commercialization of herbal lip care products: The creation and marketing of cutting-edge herbal lip care products may be aided by growing customer interest in natural cosmetics.

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CONCLUSION

Because of their many biological and cosmetic qualities, such as moisturizing, antioxidant, calming, and natural colouring activities, herbal substances hold great promise for lip care. Incorporating them into various lip-care formulas can address the increasing demand for naturally produced cosmetics while offering multipurpose advantages. However, proper scientific review is required to resolve issues with herbal ingredient standardization, stability, safety, and uniformity. The effectiveness, stability, and prospective uses of herbal substances

in lip care may be further enhanced by ongoing research and the use of cutting-edge formulation and delivery technology.

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