

Olive leaf's: Exploring the Therapeutic of Olive Leaves (*Olea Europaea*)

Manon Pilon

Part of Cosmetics Alliance Canada American Academy of Aesthetic Medicine and University Of Quebec at Chicoutimi Laval University, Canada

ABSTRACT

Olive (*Olea europaea*) leaves have been recognized for their medicinal properties for centuries. This review aims to provide a comprehensive overview of the therapeutic potential of olive leaves, including their bioactive compounds, pharmacological activities, and potential applications in various health conditions.

*Corresponding author

Manon Pilon, Part of Cosmetics Alliance Canada American Academy of Aesthetic Medicine and University Of Quebec At Chicoutimi Laval University, Canada.

Received: June 13, 2023; **Accepted:** June 15, 2023; **Published:** June 20, 2023

Keywords: Olive Leaves, *Olea Europaea*, Bioactive Compounds, Pharmacological Activities, Therapeutic Potential

Introduction

Olive trees have been cultivated since ancient times, primarily for their fruits and oil. However, recent scientific investigations have revealed the therapeutic potential of olive leaves, which contain a wide array of bioactive compounds such as phenolic compounds, secoiridoids, flavonoids, and triterpenes. These compounds have been associated with numerous health benefits, including antioxidant, anti-inflammatory, antimicrobial, anticancer, cardioprotective, and neuroprotective activities.

Methods

A systematic literature search was conducted using various databases, including PubMed, Scopus, and Google Scholar. Relevant articles published in English up to September 2021 were included. The keywords used for the search included "olive leaves", "*Olea europaea* leaves", "olive leaf extract", "bioactive compounds", "pharmacological activities," and "therapeutic potential."

Bioactive Compounds in Olive Leaves

Olive leaves contain several bioactive compounds, with hydroxytyrosol and its derivatives, oleuropein, and verbascoside being the most abundant and well-studied. These compounds possess potent antioxidant properties and contribute to the overall health benefits of olive leaves.

Pharmacological Activities

1. **Antioxidant Activity:** Olive leaves exhibit strong antioxidant activity, protecting against oxidative stress-related damage and chronic diseases such as cardiovascular disorders, neurodegenerative diseases, and cancer.
2. **Anti-inflammatory Activity:** The bioactive compounds in

olive leaves possess anti-inflammatory effects by modulating various inflammatory pathways and reducing the production of pro-inflammatory mediators.

3. **Antimicrobial Activity:** Olive leaf extracts have demonstrated broad-spectrum antimicrobial activity against bacteria, fungi, and viruses, suggesting their potential as natural antimicrobial agents.
4. **Anticancer Activity:** Olive leaf extracts have shown promising anticancer effects by inhibiting cancer cell proliferation, inducing apoptosis, and suppressing tumor growth.
5. **Cardioprotective Activity:** Olive leaves have been reported to exert cardioprotective effects by improving cardiovascular health parameters, reducing blood pressure, and preventing the development of atherosclerosis.
6. **Neuroprotective Activity:** Olive leaf extracts have shown neuroprotective effects in various preclinical models of neurodegenerative diseases, suggesting their potential for the prevention and treatment of conditions like Alzheimer's and Parkinson's diseases.

Potential Applications

Based on the extensive range of pharmacological activities, olive leaves and their extracts hold promise for the development of therapeutic interventions in various health conditions, including cardiovascular diseases, neurodegenerative disorders, cancer, microbial infections, and inflammation-related disorders.

Conclusion

Olive leaves are a rich source of bioactive compounds with diverse pharmacological activities. The accumulating evidence supports their potential therapeutic applications in the prevention and treatment of various diseases. Further research is warranted to elucidate the mechanisms of action, optimize extraction methods, and conduct clinical trials to establish their safety and efficacy in humans. Olive leaf-based interventions may open new avenues

for the development of natural and complementary medicine.

We Use the Application of Olive Leafs in Skin Care and This Is What We Found

1. **Antioxidant Protection:** Olive leaves are rich in antioxidants, including phenolic compounds such as hydroxytyrosol and oleuropein. These antioxidants help protect the skin against oxidative stress caused by free radicals, environmental pollutants, and UV radiation. They can neutralize free radicals and minimize the damage they cause, thereby supporting the skin's overall health and preventing premature aging.
2. **Anti-Inflammatory Effects:** Olive leaf extracts possess anti-inflammatory properties that can benefit various skin conditions. They help soothe and calm irritated skin, reduce redness, and alleviate symptoms associated with inflammatory skin conditions like acne, eczema, and rosacea. The anti-inflammatory effects of olive leaves can promote a more balanced and even-toned complexion.
3. **Moisturization and Hydration:** Olive leaves contain moisturizing compounds that help hydrate the skin and prevent moisture loss. The leaves' natural oils and extracts can improve the skin's barrier function, enhance its ability to retain moisture, and contribute to a softer, smoother, and more supple complexion. This makes olive leaf-based skincare products beneficial for dry and dehydrated skin.
4. **Anti-Aging Properties:** The antioxidants found in olive

leaves play a vital role in combating signs of aging. They help neutralize free radicals that contribute to the breakdown of collagen and elastin fibers, which are responsible for the skin's firmness and elasticity. By protecting these structural components, olive leaf extracts can help reduce the appearance of fine lines, wrinkles, and sagging skin, promoting a more youthful and rejuvenated appearance.

5. **Skin Brightening and Even-Toning:** Certain compounds in olive leaves, such as hydroxytyrosol, have been found to inhibit the production of melanin, the pigment responsible for dark spots and uneven skin tone. Regular use of olive leaf-based skincare products can help fade hyperpigmentation, brighten the complexion, and promote a more even skin tone.
6. **Antibacterial and Antifungal Properties:** Olive leaves contain antimicrobial compounds that can help combat bacteria and fungi on the skin's surface. This can be beneficial for individuals with acne-prone or blemish-prone skin, as well as those susceptible to skin infections. Olive leaf extracts can help cleanse the skin, reduce the proliferation of harmful microorganisms, and support a healthier skin microbiome.

It is important to note that while olive leaf-based skincare products may offer potential benefits, individual results may vary. It is always advisable to perform a patch test before using any new skincare product and consult with a dermatologist or skincare professional for personalized advice.

Copyright: ©2023 Manon Pilon. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.