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SOMAÍ Approach: Non-cannabinoids Study to Setting New Standards in Medical Cannabis

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Abstract:

Cannabis, renowned for its versatility in textiles and food,¹ has emerged as a prominent therapeutic resource. Extensive research focuses on unravelling the molecular composition of over 100 cannabinoids found in cannabis, exploring their interactions with the endocannabinoid system to develop innovative therapeutic approaches. The current era marks the golden age of cannabinoid research, as cannabis is considered a chemical "treasure trove" of novel compounds that can be studied and brought to the medical market². In addition to cannabinoids, the unique constituents of cannabis are increasingly acknowledged for their potential impact on its medicinal properties. These components possess inherent medicinal qualities and can synergistically interact with cannabinoids. At the forefront of research, SOMAÍ Pharmaceuticals is dedicated to establishing groundbreaking standards in therapeutic innovation. Our mission is to alleviate the burden of debilitating chronic conditions. We take pride in our commitment to utilizing the finest raw materials to formulate novel medications. By prioritizing high bioavailability and specifically targeting the endocannabinoid system, we strive to deliver effective relief for specific conditions. This study aimed to quantify well-known components such as phenolic content, flavonoids, waxes, and chlorophylls in both the raw and purified extracts of SOMAÍ. The goals were two-fold: to gain insights into the preservation of these components during the extraction and purification process; and to lay the foundation for future characterization studies. These characterizations will facilitate the examination of how these components impact the formulations developed by SOMAÍ.

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Biological Activity Screening of Plant Oils for Skincare Applications

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Abstract:

Essential and vegetable oils are both types of oils derived from plants, but they have distinct characteristics and uses. Essential oils are a precious source of secondary metabolites (mainly polyphenols, alkaloids and terpenes) potentially endowed with a plethora of biological activities. Vegetable oils, also known as plant oils, are lipidic extracts derived from plants that are commonly used for cooking, cosmetic formulations, and various industrial applications. The development of high-added-value products from the essential and vegetable oils industries can be considered a priority due to their broad range of bioactive compounds. Those bioactive compounds could be used for human consumption, medicinal uses and other health products applications, including cosmetics. The aim of this work was to explore the biological potential of commercially available oils. We studied plants that have been traditionally used due to their antimicrobial, anti-inflammatory and antioxidant activities. *Moringa oleifera* Lam. (Moringaceae family), *Lavandula angustifolia* and *Ocimum kilimandscharicum* Gürke (Lamiaceae family), *Spirostachys africana* Sond. (Euphorbiaceae family), *Chrysopogon zizanioides* and *Cymbopogon citratus* (DC.) Stapf (Poaceae family), *Corymbia citriodora* (Hook.) K.D.Hill & L.A.S.Johnson and *Eucalyptus globulus* (Myrtaceae family) were the species studied. The antiproliferative potential was evaluated against HaCaT and HFF-1 cells using the sulphorodamine B colourimetric assay. The antioxidant activity was assessed through DPPH and TBARS assays. The antimicrobial activity was tested against several bacterial and fungal strains using the broth microdilution method. Additionally, the anti-inflammatory capacity through the measurement of oils capacity to inhibit the formation of the nitric oxide in a murine macrophage cell line. Ongoing research is being conducted to further explore the therapeutic properties and potential health benefits of the eight oils extracted from plant materials, emphasizing their use and applications in promoting well-being.

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Exploring the Inhibitory Effects of Côa Valley Plant Extracts on Osteoclast Differentiation: Chemical Characterization and Cytotoxicity

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