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Comparison of Characteristics of Different Varieties of Olive and Wild Olive

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Wild olive oil (WOo) is derived from natural wild olives. WOo has received increasing attention in the last decade, in response to the growing consumer demand for high-quality foods, which can also provide health benefits. This study provides a comprehensive review of the available studies on the chemical composition of WOo produced in different geographical areas. The composition of WOo is characterized by the presence of acylglycerols (mainly triacylglycerols), bio phenols, sterols, tocopherols, pigments and triterpene alcohols. Many of these compounds show significant variations depending on the wild olive subspecies and the specific ecological production sites. In addition, the presence of phenolic and volatile fractions may contribute to the fruity, bitter and spicy flavor notes of WOo. The concentration of several compounds (e.g. phenols) is comparable to that found in olive oils from cultivated cultivars, while sterol levels consistently exceed the international standard of 1000 mg/kg for all olive oils (extra virgin, virgin and refined). Both the qualitative and quantitative characteristics of WOo chemical profile highlight its potential as a viable alternative for edible oils.

Keywords: Wild olive oil (WOo); bioactive compounds; bio phenols.