

Special Issue

Phytochemistry, Functional and Nutraceutical Attributes of Grapes in Relationship with the Grapevine Cultivation Practice

Message from the Guest Editor

Grapes, an ancient fruit in the berry category, are renowned for their exceptional nutritional value. Enriched with phytochemicals such as polyphenols, flavonoids, phenolic acids, and anthocyanins, grapes possess a unique flavor and provide countless health benefits. These phytochemicals play a pivotal role in maintaining human health, especially their antioxidant properties, which help neutralize harmful free radicals within the body, safeguarding cells from oxidative stress and potential damage. The fascinating phytochemical profile and, by consequence, the functional and nutraceutical attributes of grapes are intricately linked to cultivation practices. Soils with a balance of nutrients can promote the development of flavonoids and anthocyanins, elevating the phytochemical content of grapes. Additionally, pruning techniques maximize sunlight exposure, further enhancing flavonoid production. Understanding the relationship between grape phytochemistry and bioactive properties on the one hand and cultivation methods on the other hand is essential for optimizing viticulture practices and developing grapes with optimal quality and health benefits.

Guest Editor

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