

Special Issue

Advances in Genomics, Genetic Diversity and Breeding Strategies of Grapevine

Message from the Guest Editors

Grapevine (*Vitis vinifera*) is one of the oldest and most economically important fruit crops worldwide. Due to the increasing effects of climate change, viticulture is increasingly threatened, with the constant risk of compromising both grape yield and quality. In addition to rising temperatures, drought, and limited water availability, growing pressure from disease underscores the urgent need for innovative strategies to ensure resilience and sustainability in grapevine cultivation. Conventional breeding has made significant strides, including the development of grapevine varieties resistant to fungal pathogens, but this approach is often time-consuming. To date, molecular biology techniques, such as marker-assisted selection, genome editing, and multi-omics analyses, provide advanced tools to obtain improved cultivars capable of withstanding environmental stresses and diseases. Furthermore, delving deeper into the genetic variability of existing cultivars, primarily indigenous, minor, or rediscovered, can reveal resilience traits valuable for breeding and adaptation programs.

Guest Editors

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Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

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