Special Issue

Omics-Driven Perspectives on the Regulation of Growth, Development and Quality in Horticultural Crops

Message from the Guest Editor

To meet growing global demands and improve quality, accelerating the genetic improvement of these crops is essential. Achieving this goal requires a deep, mechanistic understanding of the molecular networks that govern their key life processes such as growth, development, and the formation of critical quality traits. Recently, the rapid development of high-throughput sequencing and advanced omics technologies has fundamentally transformed plant biology. These omics-driven strategies allow us to move beyond single-gene studies, a comprehensive exploration of regulatory networks that connect genotype to phenotype and elucidate the genetic basis for vital traits such as yield, flowering time, fruit ripening, and nutritional value. The purpose of this Special Issue, aims to present cutting-edge research applying these powerful, data-driven approaches. We welcome innovative articles that use omics and computational tools to provide novel insights into the biology of any fruit, vegetable, or ornamental species. This collection will highlight the latest advances that facilitate the sustainable production and improvement of these vital plants.

Guest Editor

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Message from the Editor-in-Chief

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

Prof. Dr. Luigi De Bellis
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