

# Special Issue

## New Insights into Breeding and Genetic Improvement of Fruit Crops

### Message from the Guest Editors

Fruit tree breeding and genetic improvements are critical for enhancing the yield, quality, and stress resistance to meet the growing demands of sustainable horticulture. With advances in molecular biology, genomics, and biotechnology, modern breeding strategies such as marker-assisted selection, genome editing, polyploidy breeding, and functional genomics have significantly accelerated the development of improved cultivars. This Special Issue aims to highlight the latest research on innovative breeding approaches, genetic diversity, and germplasm enhancement. We welcome studies exploring molecular mechanisms underlying key agronomic traits, strategies for improving fruit quality and stress tolerance, and the integration of multi-omics technologies in breeding programs. Research focusing on novel genetic and biotechnological tools, as well as their practical applications in fruit tree breeding, is particularly encouraged. We invite original research articles and reviews that provide new insights into the genetic basis of fruit tree traits and contribute to the advancement of efficient and sustainable breeding strategies for the future of horticultural science.

### Guest Editors

Prof. Dr. Xiaobiao Xu

Prof. Dr. Yuepeng Han

Dr. Songtao Jiu

Dr. Guanglian Liao

Dr. Dongfeng Jia

### Deadline for manuscript submissions

15 March 2026



# Horticulturae

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Luigi De Bellis  
Department of Biological and Environmental Sciences and  
Technologies (DiSTeBA), Salento University, Lecce, Italy

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