Special Issue

Genetic and Breeding Improvement of Horticultural Crops

Message from the Guest Editors

Horticultural crops represent an essential group. Despite their importance, significant variation exists in yield, quality, and stress resilience among different species and cultivars. These differences arise from diverse genetic backgrounds, environmental conditions, and cultivation practices. Such variability emphasizes the need to strengthen genomic research and breeding innovation to accelerate the improvement of horticultural crops. This Special Issue aims to showcase cutting-edge studies, approaches, and technologies that deepen our understanding of horticultural crop genetics, their evolution, and functional biology. Topics of interest include, but are not limited to, the following: chloroplast, mitochondrial, and nuclear genome analyses; gene family evolution and functional diversification; gene function studies using multi-omics and genome editing; molecular mechanisms underlying development, metabolism, and stress adaptation; and advanced breeding strategies such as molecular breeding, marker-assisted selection, and genomic selection for the creation of high-yielding, high-quality, and stress-tolerant horticultural cultivars.

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Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

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