Special Issue

Cellular and Molecular Mechanisms of Abiotic Stress Tolerance in Plants

Message from the Guest Editors

The ability of plants to withstand abiotic stresses such as drought, salinity, extreme temperatures, and heavy metals are basically linked specifically with the cellular and molecular mechanisms. Understanding these mechanisms is crucial for developing stress resilient crop varieties that can thrive in challenging environmental conditions. This Special Issue seeks contributions that explore the unique molecular, genetic, and cellular traits that underlie plant tolerance to various abiotic stresses. We invite original research and review articles that address gene expression profiles, signal transduction pathways, and cellular adaptations that confer stress resistance. Additionally, studies examining the impact of multifactorial stress combination on plant physiology and yield are invited. By highlighting these mechanisms, this issue aims to provide insights that inform breeding strategies and enhance global food security in the face of climate change.

Guest Editors

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Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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