Special Issue

Cell Biology of Drought and Heat Stress Responses in Plants

Message from the Guest Editor

Recent examples of extreme weather patterns demonstrated devastating effects of high temperatures on ecosystems at all levels with an especially damaging impact on plant health. Drought exacerbates the detrimental impact of the heat waves by compromising plant temperature control mechanisms. It has been shown that while drought alone results in 19-50% yield losses, depending on geographical location, a combination of heat and drought can cause complete yield losses or devalue the produce. Understanding changes in cellular dynamics under heat and drought is essential for our perception of stress factors, integration of this information with other environmental and developmental cues, and mounting short- and long-term responses on the cellular level. We anticipate this Special Issue will contribute to advancing our understanding of the molecular and cellular mechanism of drought and heat responses, serving as a useful resource for the scientific community, industry, and readers interested in the development of strategies and tools for improving plant resiliency.

Guest Editor

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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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