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Drought and Heat Stress Signalling Responses in Plants

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Deadline for manuscript
submissions:

closed (30 September 2022)

Message from the Guest Editor

Dear Colleagues,

The heat waves of summer 2021 demonstrated the devastating effects of high temperatures on ecosystems at all levels, with especially damaging impacts on plant health. Drought further exacerbates the detrimental effects of heat waves by compromising plant adaptation mechanisms. It has been shown that while drought alone results in 19–50% yield losses, depending on geographical location, the combination of heat and drought can cause complete yield losses or devalue the produce. Considering the rise of annual average temperature and increasing demand for water resources from the growing population, the combination of drought and heat poses an existential threat to our lives. Hence, it is imperative to combine efforts in dissecting mechanisms of plant responses to these stresses on all levels. We anticipate this Issue will provide novel insights into molecular and cellular mechanisms of drought and heat responses, serving as a useful resource for the scientific community, industry, and everybody who cares about developing strategies and tools for improving plant resiliency.



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Special Issue



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