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Tree Responses to Carbon Dioxide, Heat and Drought: Future Growth Conditions

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Message from the Guest Editors

Climatic changes associated with the rising atmospheric concentration of carbon dioxide ([CO₂]) are predicted to increase the frequency of extreme climatic events. Drought events are considered likely to increase in frequency, duration, and severity in many parts of the world. Many of these drought events will be accompanied by heatwaves—transient increases in temperature above mean levels. These abiotic stresses will have direct effects on plant physiology, and therefore severe implications for the maintenance of biodiversity and ecosystem service in natural and urban forests. Analysis of the response of natural and urban forests to abiotic stresses in isolation and combination is fundamental to our understanding of the impacts and mitigation of climate change.

This Special Issue will focus on the impact of temperature, water availability, atmospheric (CO₂) and pollution on the morphological and physiological characteristics of urban trees. A special focus will be given to the role of heat stress on forests.



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Special Issue



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Message from the Editorial Board

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