Special Issue

Adaptive Physiology of Forest Plants: Mechanisms, Strategies, and Responses to Environmental Challenges

Message from the Guest Editors

Forest ecosystems are dynamic environments where plants constantly face a multitude of abiotic and biotic stressors, including drought, extreme temperatures. nutrient limitations, pests, and diseases. These challenges are further exacerbated by the increasing impacts of climate change, leading to shifts in forest composition and function. To survive and thrive under such conditions, forest plants exhibit a remarkable range in adaptive physiological mechanisms and strategies. This Special Issue, titled "Adaptive Physiology of Forest Plants: Mechanisms, Strategies, and Responses to Environmental Challenges", aims to explore the diverse physiological and molecular pathways that enable plants to cope with environmental constraints. By addressing key questions on stress tolerance, resource acquisition, and ecosystem resilience, this Special Issue seeks to contribute to our understanding of plant adaptation and its implications for forest conservation and management in the face of global change.

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