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Responses of Extreme Environment Plants to Abiotic Stress

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Message from the Guest Editors

Dear Colleagues,

Extremophytes are plants capable of inhabiting environments characterized by harsh abiotic conditions that limit the fundamental metabolic and physiological processes. Thus, one of the most interesting aspects to study extremophile plants is the possibility to identify key traits and genes for plant adaptation to unfavorable climatic conditions, which may result in a potential tool for developing novel stress-resistant genotypes. Additionally, most extremophile environments have been identified as areas strongly affected by climate change (Antarctica, Arctic, high mountains), which further increases the interest in studying these singular species and further complicates their responses against abiotic stress. Therefore, the aim of this Special Issue is to consolidate a set of articles which examine the physiological, molecular, and biochemical mechanisms behind the singularity of extremophile plant species in terms of adaptation/acclimation to harsh environments as reservoirs of stress resistance mechanisms and the challenges they face in dealing with the current scenario of climate change.

Deadline for manuscript submissions:

closed (20 November 2024)



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Special Issue



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Message from the Editor-in-Chief

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