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Poplar Responses to Environmental Stresses

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Message from the Guest Editors

Poplar is a fast-growing, high-yielding forest tree species and is cultivated as an important source of lignocellulosic feedstocks. Poplar is exposed to environmental stresses and climate change. The effects of climate change are expected to enhance plant vulnerability to stress damages and diseases, reducing plant health and productivity and causing economic losses. For these reasons, forest breeding should be aimed at developing strategies to ameliorate plant resilience, resistance, and productivity, fostering a biobased economy. The identification of the genetic and metabolic factors that underlie poplar response to environmental stresses is pivotal in order to acquire knowledge underpinning the innovation capabilities of breeders to cope with challenges. The availability of a decoded poplar genome and the high-throughput sequencing, genotyping, and phenotyping make it possible to apply cutting-edge technologies to dissect the response of poplar to environmental stresses. This Special Issue will cover genomic and phenomic research applications, with the aim of presenting the latest findings related to the molecular mechanisms of poplar response to environmental stresses.



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Special Issue



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Message from the Editor-in-Chief

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