

Special Issue

Poplar Responses to Environmental Stresses

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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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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