

Special Issue

Tree Genetics: Molecular and Functional Characterization of Genes

Message from the Guest Editors

Forests are subjected to natural and man-induced disturbances: understanding the genetic and molecular basis of tree physiology as well as the response to abiotic and biotic stimuli is fundamental to elucidate adaptation processes and ecosystem level plant-to-plant and plant-microbe interactions. The growing availability of genome resources and high throughput molecular techniques and bioinformatic approaches enables us to unravel the mechanism of tree functionality within the environment at an unprecedented level of depth and complexity. Furthermore, fine scale knowledge of tree genomics and gene function lays the foundation for the improvement of economically relevant species using genetic engineering approaches such as transformation or cutting-edge technologies as CRISPR/Cas9 gene editing. This Special Issue of *Forests* intends to present research, review and opinion papers expanding the current knowledge and highlighting the next challenges of functional genomics to increase forest yield, as well as in all aspects of tree biology, including, but not limited to, phenology, wood formation, abiotic stress response, plant-pathogen and plant-microbe interactions.

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Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

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