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-toplant 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.

Guest Editors

Dr. Giovanni Emiliani

Institute for Sustainable Plant Protection (IPSP), SS Sesto Fiorentino, National Research Council (CNR), Via Madonna del Piano 10, 50019 Sesto Fiorentino, Italy

Dr. Alessio Giovannelli

Research Institute on Terrestrial Ecosystems (IRET), National Research Council (CNR), 50019 Sesto Fiorentino, FI, Italy

Deadline for manuscript submissions

closed (30 April 2022)



Forests

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



mdpi.com/si/83901

Forests Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 forests@mdpi.com

mdpi.com/journal/

forests





Forests

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



forests



About the Journal

Message from the Editor-in-Chief

Forests (ISSN 1999-4907) is an international and crossdisciplinary, 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.

Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

Journal Rank:

JCR - Q2 (Forestry) / CiteScore - Q1 (Forestry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.1 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).