

## Special Issue

# Molecular Mechanism of Secondary Metabolic Pathways in Forest Trees

### Message from the Guest Editors

Over the years, secondary compounds have been known to be associated with many photochemical processes in forest plants, such as improving the resistance of conifer xylem to insects and fungi, mediating plant responses to biotic or abiotic environmental stresses, and contributing to fruits' flavor and flower colors. The production and distribution of secondary metabolites are usually specific to plant species, organs, tissues, and growth stages. In many forest trees, the biosynthetic pathways of secondary metabolites are complex and diverse, and the discovery of regulatory genes and enzymes involved in the accumulation of their secondary metabolites is still very limited. Research on improving important biological traits of forest trees through genetic improvement is lagging behind. Therefore, this Special Issue plans to provide an overview of the most recent advances in the discovery and characterization of secondary metabolic pathways in forest trees. This Special Issue is aimed at providing selected contributions on advances in the synthesis, characterization, and applications of secondary metabolites in different forest trees.

### Guest Editors

Prof. Dr. Feng Xu

College of Horticulture and Gardening, Yangtze University, Jingzhou 434025, China

Dr. Yuhua Wang

College of Horticulture, Nanjing Agricultural University, Nanjing 210095, China

Dr. Wanfeng Li

Chinese Academy of Forestry, Beijing 100091, China

### Deadline for manuscript submissions

closed (30 September 2023)



## Forests

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.6



[mdpi.com/si/115424](https://mdpi.com/si/115424)

*Forests*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[forests@mdpi.com](mailto:forests@mdpi.com)

[mdpi.com/journal/  
forests](https://mdpi.com/journal/forests)





# Forests

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.6



[mdpi.com/journal/  
forests](https://mdpi.com/journal/forests)



## About the Journal

### Message from the Editor-in-Chief

*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.

---

### 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).