



Advances in Tree Germplasm Innovation and High-Efficiency Propagation

Guest Editors:

Prof. Dr. Ling Yang

School of Forestry, Northeast Forestry University, Harbin, China

**Prof. Dr. Iraida Nikolaevna
Tret'yakova**

V.N. Sukachev Institute of Forest,
Federal Research Center
"Krasnoyarsk Science Center",
Siberian Branch of RAS,
Krasnoyarsk, Russia

Deadline for manuscript
submissions:

closed (20 December 2023)

Message from the Guest Editors

Tree germplasm innovation and high-efficiency propagation are closely related to human living conditions and economic interests. The long breeding cycle and shortage of germplasm resources are the main factors limiting tree germplasm innovation. CRISPR/Cas9 technology provides an opportunity for genetic improvement. Somatic embryogenesis technology is not only an important transformation system of genetic engineering but can also enable the excellent genotypes of trees to reach the level of commercial production. Cryopreservation can preserve germplasm resources stably for a long time. Cutting, grafting, and seedling nursing with equipment reduce the cost of propagation and cultivation of excellent genotypes of trees. This Special Issue is planned to give an overview of the most recent advances in the field of tree germplasm innovation and high-efficiency propagation, potential topics include but are not limited to:

- Micropropagation;
- Genome breeding;
- Protoplast fusion;
- Haploid generation;
- Cryopreservation of germplasm;
- Sexual reproduction (seed development, seed germination, embryology);
- Seedling nursing with equipment;
- Multi-varietal forestry, MVF.





forests



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Cate Macinnis-Ng

Department of Biological Sciences, Faculty of Science, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

Message from the Editorial Board

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

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

Journal Rank: JCR - Q1 (Forestry) / CiteScore - Q1 (Forestry)

Contact Us

Forests Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/forests
forests@mdpi.com
X@Forests_MDPI