Special Issue

Advances in Tree Germplasm Innovation and High-Efficiency Propagation

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.

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