

Special Issue

Research on Genetic Breeding and Biotechnology of Forest Trees

Message from the Guest Editors

Forest trees play a crucial role in maintaining global ecological balance by contributing to carbon neutrality, preserving biodiversity, and providing raw materials for industry. The purpose of genetic breeding of forest trees is to develop superior varieties with higher yields, better quality, enhanced disease resistance, and improved adaptability to environmental changes, enabling forests to yield higher returns under the same management levels. However, due to the long growth and reproduction cycles of trees, the level of genetic improvement and utilization remains relatively low. Biotechnology offers powerful tools to accelerate the breeding process and introduce complex traits that are difficult to achieve through traditional breeding methods. By leveraging modern biotechnologies in conjunction with conventional breeding techniques, it is possible to shorten breeding cycles and accelerate the process of creating new varieties. This Special Issue will focus on the latest advancements and future directions of biotechnological applications in forest tree genetic breeding, including molecular marker technology, cell engineering technology, and gene engineering technology.

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Deadline for manuscript submissions

closed (30 April 2026)



Plants

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Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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