Special Issue

Cryopreservation, In Vitro, and Seed Banking Technologies for Plant Biodiversity Conservation

Message from the Guest Editors

Plant conservation is one of the most significant challenges facing the modern world. It requires both scientific knowledge and long-term commitment to ensure the survival of diverse plant species for future generations. The growing number of wild species in need of protection is amplified by a variety of genotypes created throughout human history for food production, medicine, construction, industry, and recreation. Ex situ conservation, which involves preserving seeds, pollen, embryos, microclones, and DNA samples, as well as cryopreservation, significantly enhances conventional conservation efforts by expanding and diversifying storage conditions and technologies for preserving plant biodiversity more effectively and for the long term. This Special Issue invites scientists, genebank specialists, policymakers, and biotechnologists from around the world to explore recent advances in longterm plant conservation, highlight ongoing challenges, and prognosticate new challenges, as well as suggest strategic directions and potential ways to address them effectively. We welcome research papers and reviews that touch on all aspects of ex situ conservation of plant biodiversity.

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Deadline for manuscript submissions

30 April 2026



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/251432

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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, 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.

Editor-in-Chief

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