Special Issue

In Vitro Propagation and Cryopreservation of Plants

Message from the Guest Editor

Call upon the importance of plant biodiversity for humankind and their threatening level. Cryopreservation, the storing of biological samples in liquid nitrogen (LN), can offer valuable options for non-orthodox seeds, vegetatively propagated species, and cell cultures. In vitro propagation is also helpful for preparing plant materials for cryopreservation, especially threatened wild species. Moreover, as is common sense among cryobiologists, the success of cryopreservation depends on the vigor of plant materials provided by the in vitro culture and the regrowth protocol. In the era of cryobanking germplasm collections of food and agriculture, we still need to develop cryo-biotechnology through principle studies, systematic approaches, and practical applications. Since cryopreservation is a multidisciplinary process, approaches for tuning the whole process or focusing on specific stages, i.e., plant material preparation, pre-LN, cooling/rewarming and unloading, post-LN regrowth, etc., are welcome. This Special Issue of *Plants* will highlight all aspects of in vitro propagation and cryopreservation technologies to solve plant conservation problems.

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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.

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