







Special Issue Reprint

Plant Genetic Resources In Vitro Culture: Present Situation and Prospects for Propagation, Conservation and Sustainable Use

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Plant genetic resources comprise a wide range of plant species, such as herbs, shrubs, and trees, that are of great importance forensuring food, nutrition, and health security. Biotic or abiotic stresses, human activities, and climate change have long threatened the biodiversity in their natural habitat, causing an exponential loss in plant germplasm throughout the world. Thus, there is an urgent need to slow down genetic erosion and support their conservation and sustainable utilization. Advances in biotechnology can generate new opportunities for the rational use and regeneration of valuable plant material by adopting techniques such as in vitro culture and in vitro conservation. The current reprint, "Plant Genetic Resources In Vitro Culture: Present Situation and Prospects for Propagation, Conservation and Sustainable Use", discusses novel approaches toin vitro culture that can positively influence the use of plant genetic resources for biomass or secondary metabolites production, as well as efficient in vitro storage methods and cryopreservation technologies applied to ensure a sustainable supply of high-quality plants as raw materials for different uses.





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