

Special Issue

Advances in Utilization, Conservation, and Breeding of Crop Genetic Resources Using Omics Technologies

Message from the Guest Editor

Crop Genetic Resources (CGR), the cornerstone of agriculture and breeding, efficiently support food and feed production and safety. They encompass domesticated plant species, including landraces and modern cultivars, obsolete varieties, as well as crop wild relatives. With the advent of -omics technologies, the utilization of CGR has advanced rapidly, providing new opportunities for the efficient and scrupulous characterization of vital traits, conservation, and breeding. The precise high-throughput systems of -omics, encompassing multi-level innovative technologies, provide an armory of analytical tools for meticulous exploration at the cellular, tissue, and organism levels of a plant genotype and a crop. The current Special Issue provides a platform to present research results related to all applications of advanced -omics technologies of CGR, including genomics, metagenomics, metabolomics, nutrigenomics, and phenomics tools related to conservation and utilization, as well as crop improvement and breeding, and presents current trends and future prospects for progress in crop science and horticulture.

Guest Editor

Dr. Photini V. Mylona

HAO-DEMETER, Institute of Plant Breeding & Genetic Resources, 570
01 Thessaloniki, Greece

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Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

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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

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB
R3T 2N2, Canada

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