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OMICs, Epigenetics and Genome Editing Techniques for Food and Nutritional Security

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Message from the Collection Editors

The adequate supply of food providing calories and nutrients is essential for human survival. Plant breeding and other agricultural technologies have contributed considerably to hunger reduction. However, crop improvement through the conventional breeding approaches is time-consuming and lacks in ability to deal with the global food requirements. Therefore, current research efforts in crop improvement target the use of OMIC technologies (e.g., genomics, phenomics, proteomics, etc.) to improve the efficiency and accuracy of conventional breeding. Moreover, the exploitation of the advantages of the high-throughput techniques could have a positive impact on genetic improvement of crops based on OMIC-assisted breeding.

Therefore, in this Special Issue, we will publish reviews and original research papers that advance our understanding of novel plant breeding techniques that can help to accelerate the breeding programs with high efficiency and reliability. The scientific information on OMICs, Epigenetics and Genome Editing Techniques can help to unearth the underlying biological mechanism in plants, which is key to ensure food and nutritional security worldwide.

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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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