



New Advance on Functional Genomics and Genome Editing in Plant

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Message from the Guest Editors

Exponential growth in whole-genome sequence data availability in plants, including model and fruit crops, has accelerated functional genomic research. The genome-wide analysis of several important genes and transcription factors at the DNA, RNA, and protein levels conclude a few important genes for trait improvements. The potential genes, promoter, long noncoding, and miRNA need to validate their functional role. For this, various genetic engineering tools, such as overexpression and RNAi, and genome editing tools, such as ZNF, TALENS, and CRISPR/Cas, have been utilized in various plants. However, the development of CRISPR/Cas technology and its variants has become a powerful, efficient, and versatile tool for gene editing, transcriptional activation, suppression, etc. Functional genomics and genome editing technology is widely used in various plants to improve key traits in plant systems, such as high levels of desirable secondary metabolites, higher yield, disease resistance, good storage stability, improved nutritional and medicinal value. In the present Special Issue, reviews and research articles related to functional genomics and genome editing in plants are welcomed.





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Message from the Editor-in-Chief

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