



The Application of Genomics Methods for Crop Improvement

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Message from the Guest Editors

In the post genomic era, next-generation sequencing technologies have facilitated the availability of genomes and transcriptomes data that led to functional genomics studies in model and crop plants. The reference genome sequences have enabled the identification of important gene families and their comparative analysis across a spectra of plant species. Genomic approaches are complemented by transcriptomics and dominated by RNA-Seq in recent times, and it has provided information about the gene expression, novel transcripts, alternative splice variants, etc. In addition, molecular breeding methods and GWAS analysis have identified important stress tolerance and yield-related QTLs in crop plants. The recent upsurge of genome editing methods including CRISPR-Cas9 has revolutionized plant functional genomics around the world. This Special Issue invites the submission of original research and review articles providing insights and latest updates on the application and utilization of genomics-based approaches to improve plant adaptation and crop productivity.

Keywords

- genomics
- crop plants
- adaptation





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