



## The Application of Genomics Methods for Crop Improvement

Guest Editors:

### Dr. Amarjeet Singh

National Institute of Plant  
Genome Research, New Delhi,  
India

### Dr. Peiguo Yuan

Department of Plant Pathology  
and Microbiology, Texas A&M  
University, College Station, TX,  
USA

Deadline for manuscript  
submissions:

**closed (31 October 2023)**

### 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





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture,  
Water and Environment  
Research, Charles Sturt  
University, Wagga Wagga, NSW  
2678, Australia

## Message from the Editor-in-Chief

*Agronomy* draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. *Agronomy* is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), GEOBASE, PubAg, AGRIS, and other databases.

**Journal Rank:** JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)

## Contact Us

---

*Agronomy* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/agronomy  
agronomy@mdpi.com  
X@Agronomy\_Mdpi