

## Special Issue

# Wheat Breeding, Genetics and Genomics

### Message from the Guest Editors

Wheat breeding has kept pace with population growth during last 50 years. However, an even greater rate of yield gain needs to be maintained to produce enough wheat for about 10 billion people by 2050. Wheat breeding does not only have to sustain the current yield gains but strive for yield breakthrough amid the threats posed by biotic and abiotic stresses along with climatic change. Recent advances in sequencing technologies have brought a remarkable transformation in the marker tool kit of wheat, resulting in the availability of millions of SNPs and presence-absence variations. Simultaneous advances in genomics technologies have led to an abundance of transcriptome data showing expressional variation in different tissues of wheat and in multiple germplasm sets. Individual genes and alleles can allow us to design ideotypes and breeding programs through optimized deployment of variation at known loci. In addition, efforts are required to devise a genome-based strategy to deploy favorable introgressions from synthetic and wild landraces wheats to enhance breeding value. The Special Issue proposes to identify wheat genetics and breeding imperatives to achieve the above goals.

### Guest Editors

Dr. Deepmala Sehgal

Syngenta, Jealott's Hill International Research Centre, Bracknell, Berkshire RG42 6EY, UK

Dr. Rajiv Sharma

International Maize and Wheat Improvement Center (CIMMYT), Kabul 1011, Afghanistan

Dr. Uttam Kumar

Borlaug Institute for South Asia, New Delhi, India

### Deadline for manuscript submissions

closed (25 November 2022)



## Crops

an Open Access Journal  
by MDPI

Impact Factor 1.9  
CiteScore 2.4



[mdpi.com/si/110411](https://mdpi.com/si/110411)

*Crops*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[crops@mdpi.com](mailto:crops@mdpi.com)

[mdpi.com/journal/](https://mdpi.com/journal/)

[crops](https://crops.mdpi.com)





# Crops

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 2.4



[mdpi.com/journal/  
crops](https://mdpi.com/journal/crops)



## About the Journal

### Message from the Editor-in-Chief

*Crops* (ISSN 2673-7655) is an international, peer-reviewed, open access journal. It publishes original articles, critical reviews, and short communications in every aspect of crop science. The journal invites contributions concerning production, improvement and utilization of all plants that are grown as crops including grains, oilseeds, forages, vegetables, fruits, nuts, and those grown for industrial uses. Our aim is to publish timely experimental and theoretical research results in a rapid and readily accessible manner. Every published article is made immediately available worldwide with free and unlimited access to everyone. If you want your work to reach a global audience of crop scientists, we invite you to submit a paper *Crops*, the international journal of crop science.

---

### Editor-in-Chief

Prof. Dr. Yinglong Chen  
School of Agriculture and Environment, The University of Western  
Australia, Perth, WA 6009, Australia

---

### Author Benefits

#### Open Access:

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

#### Journal Rank:

JCR - Q2 (Agronomy) / CiteScore - Q2 (Agronomy and Crop Science)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23.5 days after submission; acceptance to publication is undertaken in 6.8 days (median values for papers published in this journal in the first half of 2025).