

## Special Issue

# Wheat Crop Improvement (by Transgenic and Conventional Breeding Methods)

### Message from the Guest Editors

Bread wheat (*Triticum aestivum*), one of the big three globally important crops, accounts for 20% of the calories consumed by humans. Of the world's 7.8 billion people, 35% depend on this staple crop for survival. Therefore, improving both the yields and quality of wheat produced globally is more important than ever. Advances in sequencing technology over the past 10 years have not only provided invaluable insights into the wheat genome but have also allowed a better understanding of the mechanisms underlying important agronomic traits and how they can be improved. Ancient cultivars carrying important traits such as disease and pest resistance have also helped to improve wheat quality. Use of transgenics or genome editing technologies in understanding gene functionality still plays a crucial role in wheat crop improvement and should always complement conventional breeding methods. I hope that this Special Issue will not only reflect the many aspects of research that are continuing our mission to improve wheat quality but also celebrate the many multi-faceted approaches to achieving this ultimate goal.

### Guest Editors

Dr. Mark D. Wilkinson

Rothamsted Research, Harpenden AL5 2JQ, UK

Dr. Ondrej Kosik

Rothamsted Research and Ryeharvest Ltd., Harpenden, UK

### Deadline for manuscript submissions

closed (31 August 2023)



## Plants

an Open Access Journal  
by MDPI

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/46794](https://mdpi.com/si/46794)

*Plants*

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

[plants@mdpi.com](mailto:plants@mdpi.com)

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





# Plants

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



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



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Dilantha Fernando

Department of Plant Science, University of Manitoba, Winnipeg, MB  
R3T 2N2, Canada

---

### 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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)