

## Special Issue

# Genetics, Profiling and Breeding of Triticale

### Message from the Guest Editor

Triticale (x *Triticosecale* Wittmack) is a synthetic hybrid derived by crossing between wheat (*Triticum aestivum* L., AABBDD) and rye (*Secale cereale* L., RR). Presently cultivated hexaploid (AABBRR) triticale is well-adapted to the adverse environmental conditions of high elevation, acid soil, salinity and aluminum toxicity, low temperature, drought, and waterlogged soils. The challenge for triticale breeding is various types of abiotic and biotic stresses, primarily common drought and new races of pathogens. Therefore, it is essential to find tolerant genotypes and dissect the mechanisms of tolerance in order to introduce the trait into the wide range of new cultivars. The employment of modern molecular techniques can provide information as to which biochemical, physiological, or anatomical features could serve as a cogent and easily measurable marker for the selection of the tolerant genotypes. Tolerance is usually a complex quantitative trait, which is likely dependent on many genes and influenced by environmental factors. The advancement of genetic maps and QTL regions could serve in the MAS and breeding of new varieties.

### Guest Editor

Dr. Gabriela Gołbiewska

Pedagogical University of Krakow, Institute of Biology, Chair of Genetics, ul. Podchorążych 2, 30-084 Kraków, Poland

### Deadline for manuscript submissions

closed (31 January 2023)



## Plants

an Open Access Journal  
by MDPI

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/69084](https://mdpi.com/si/69084)

*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)