

## Special Issue

# Genetic Diversity and Molecular Marker Development for Cotton Breeding and Crop Improvement

### Message from the Guest Editors

Tetraploid Upland cotton (*Gossypium hirsutum*) is the world's most important fiber crop, is grown in more than 80 countries, and provides 35% of the total fiber used worldwide. The low level of genetic variation within Upland cotton has hampered progress in breeding, although high genetic diversity exists within the cotton genus, it consisting of 48 diploid and 7 tetraploid species. There have been extensive genetic and breeding activities to introduce desirable genes from diploid and other tetraploid species into Upland cotton through interspecific crossing and backcrossing. However, introgression breeding is a long-term task and requires a better understanding of the genetic differences between Upland cotton and other species. This Special Issue aims to publish research and review papers dealing with all aspects of the study of the genetic diversity of cotton at the morphological, physiological, genetic, and molecular levels. That is, towards the improvement of cotton in terms of yield, fiber quality, seed quality, and abiotic and biotic stress tolerance/resistance. Manuscripts in relevant areas from other crop species are also welcome.

### Guest Editors

Prof. Dr. Jinfa Zhang

Department of Plant and Environmental Sciences, New Mexico State University, Las Cruces, NM 88003, USA

Dr. Yi Zhu

BASF, 8850 59th Ave NE, Salem, OR 97305, USA

### Deadline for manuscript submissions

31 October 2025



## Plants

an Open Access Journal  
by MDPI

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/230631](https://mdpi.com/si/230631)

*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)