

Special Issue

Applications and Challenges of ‘Omics’ Technologies for Generation of Climate-Resilient Crop Varieties

Message from the Guest Editors

‘Omics’ include a suite of technologies, viz. genomics, transcriptomics, metabolomics, proteomics and phenomics, the application of which is bringing about a revolution in crop and agricultural sciences. Omics technologies are leading to significant advances in our understanding of biological mechanisms underpinning stress tolerance and resilience in many crops. We aim to have a compilation of research articles where ‘omics’ technologies have been utilized to further deepen our understanding of the biological mechanisms underpinning stress resilience or for the genetic improvement of an important agronomic trait in crops. Review articles are also welcomed, highlighting the applications, challenges, and future perspectives of ‘omics’ technologies for crop improvement.

Guest Editors

Dr. Deepmala Sehgal

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

Dr. Prashant Vikram

Crop Diversification and Genetics, International Center for Biosaline Agriculture. UAE P.O. Box 14660, Al Ruwayyah 2, Academic City, Dubai, United Arab Emirates

Deadline for manuscript submissions

closed (30 April 2022)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/92906

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)