



Advances in Plant Breeding

Collection Editors:

Prof. Dr. Radu E. Sestras

Prof. Dr. Jaime Prohens

Prof. Dr. Adriana F. Sestras

Prof. Dr. Mariola Plazas

Message from the Collection Editors

Along with classical breeding objectives and achievements, aimed at satisfying the current requirements of producers and farmers, traders, industry, market, and consumers or users, in this Special Issue we expect contributions about the use and application of innovative modern methodologies in plant breeding for the development of new crop varieties for current and future agriculture. This includes the development of varieties for suboptimal cultivation conditions to achieve sustainable agricultural production and increased food quality and security, but also to supply the raw materials for innovative industrial products and the living needs of mankind.

Keywords:

- conventional plant breeding
- objectives and methods of plant breeding
- genetic resources in plant breeding
- abiotic and biotic stress traits
- breeding for quality
- achievements and perspectives in plant breeding
- broadening the genetic base of crops
- conservation and use of genetic resources
- gene background
- hybridization
- polyploidy
- mutations
- inbreeding and heterosis
- biotechnology and molecular tools in plant breeding





plants



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando

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

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.

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)

Contact Us

Plants Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)