Special Issue

Genetics and Genomics of Plant Reproductive Systems

Message from the Guest Editor

Reproduction in plants is crucial not only for shaping genetic diversity within and maintaining genetic diversity between species, by promoting, limiting, or avoiding the exchange of genes and chromosomes between different genomes, but also for modeling the genetic structure of populations, hence contributing to the composition of individual genotypes within species and the organization of their genomes. Consequently, strategies for preserving plant germplasm resources, as well as methods and schemes for improving crop plant populations and breeding new varieties, depend on plant reproductive systems. Furthermore, comprehending the genetic and molecular bases of plant reproductive systems can also help to overcome the reproductive barriers that limit crop yield and quality in crop species and, in general, to understand the evolutionary dynamics, genetic structure, and diversity partitioning models of plant populations.

Guest Editor

Prof. Dr. Gianni Barcaccia

Laboratory of Genomics for Breeding, Department of Agronomy, Food, Natural Resources, Animals and Environment—DAFNAE, University of Padova, Campus of Agripolis—Legnaro, 35020 Padova, Italy

Deadline for manuscript submissions

closed (30 September 2025)



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/213608

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

mdpi.com/journal/plants





Plants

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 7.6 Indexed in PubMed



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)

