

Special Issue

Molecular Marker Technology for Crop Breeding Improvement

Message from the Guest Editors

We welcome original research articles, reviews, and methodological studies that focus on molecular tools and genetic approaches designed to improve crop performance, resilience, and productivity. This Special Issue aims to:

- Explore advancements in marker-assisted selection and genomic selection;
- Investigate the genetic basis of agronomically important traits through QTL mapping and genome-wide association studies (GWAS);
- Highlight the importance of germplasm characterization in plant breeding;
- Discuss innovations in genetic mapping and molecular characterization of plant species;
- Address emerging challenges and future directions in plant molecular breeding.

Potential topics for this Special Issue include, but are not limited to, the following:

- Marker-assisted selection (MAS) in breeding programs;
- Germplasm characterization and utilization for genetic conservation;
- The genetic mapping and identification of key genomic regions controlling desirable traits;
- QTL mapping and its role in deciphering complex traits;
- The application of GWAS in identifying functional markers;
- Gene editing technologies (CRISPR, TALEN, etc.) in molecular breeding.

Guest Editors

Dr. Ioana Virginia Berindean

Department of Genetics, Faculty of Agriculture, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, 3-5 Mănăstur St., 400372 Cluj-Napoca, Romania

Dr. Katalin Szabo

Institute of Life Sciences, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Calea Mănăstur 3-5, 400372 Cluj-Napoca, Romania

Deadline for manuscript submissions



Crops

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 2.4



mdpi.com/si/246296

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

mdpi.com/journal/

[crops](https://crops.mdpi.com)





Crops

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 2.4



[mdpi.com/journal/
crops](https://mdpi.com/journal/crops)



About the Journal

Message from the Editor-in-Chief

Crops (ISSN 2673-7655) is an international, peer-reviewed, open access journal. It publishes original articles, critical reviews, and short communications in every aspect of crop science. The journal invites contributions concerning production, improvement and utilization of all plants that are grown as crops including grains, oilseeds, forages, vegetables, fruits, nuts, and those grown for industrial uses. Our aim is to publish timely experimental and theoretical research results in a rapid and readily accessible manner. Every published article is made immediately available worldwide with free and unlimited access to everyone. If you want your work to reach a global audience of crop scientists, we invite you to submit a paper *Crops*, the international journal of crop science.

Editor-in-Chief

Prof. Dr. Yinglong Chen
School of Agriculture and Environment, The University of Western
Australia, Perth, WA 6009, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

Journal Rank:

JCR - Q2 (Agronomy) / CiteScore - Q2 (Agronomy and Crop Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23.5 days after submission; acceptance to publication is undertaken in 6.8 days (median values for papers published in this journal in the first half of 2025).