

Special Issue

Recent Advances in Crop Genetics and Breeding

Message from the Guest Editors

Global climate change and unfavorable abiotic and biotic stresses are limiting agricultural productivity, intensifying the challenges encountered by crop scientists in meeting the rising global food supply demand. As such, there is an urgent need to produce better crop varieties by efficiently using genetic resources and molecular tools. Precise target genome modification, the absence of foreign DNA in genome-edited plants, and the faster and cheaper method of genome modification are remarkable features of the current genome-editing technology that have resulted in its widespread application in crop breeding over less than a decade. This Special Issue will focus on recent advances in crop genetics and breeding, inviting researchers to contribute original research papers and reviews on themes including, but not limited to, the following:

- Identification and functional analysis of QTL and genes for crop improvement;
- Candidate gene and favorable allele identification for yield and biotic and abiotic stress tolerance;
- Favorable haplotype-based molecular breeding;
- Novel breeding techniques in crops, such as targeted mutagenesis, genome editing, etc.;
- Genomic selection.

Guest Editors

Dr. Tianxiao Chen

Dr. Xiangjin Wei

Dr. Baohua Feng

Dr. Long Chen

Deadline for manuscript submissions

31 August 2025



Life

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 4.3
Indexed in PubMed



mdpi.com/si/214062

Life
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

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





Life

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 4.3
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

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, CAPIus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)