Special Issue

Advances and Applications of Genome Editing in Plants

Message from the Guest Editors

The rapid development of genome editing technology has provided revolutionary molecular manipulation tools for plant breeding. A variety of gene editing tools with broad and precise editing ranges, such as different CRISPR systems, base editors, and prime editors, are emerging. However, currently, relatively complete gene editing systems have been established in only a few monocot crops, while related tools available for dicot plants like cotton and soybean are still very limited. We invite researchers to submit original research articles and reviews on topics including, but not limited to, the following:

- The development of genome editing systems in plants, aiming to improve editing efficiency, enhance precision, facilitate multi-gene editing, and enable the precise insertion of large DNA fragments
- The performance of genome editing systems in various plants, particularly dicotyledonous plants and polyploid crops
- The development of efficient gene editing component delivery systems that are genotype-independent
- The creation of new germplasms using genome editing technology
- Innovations in breeding techniques utilizing genome editing technology

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)



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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

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