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## DNA Damage and Repair Response in Plants

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (1 April 2024)**

### Message from the Guest Editor

Dear Colleagues,

All living organisms must maintain genome integrity for survival. Several cellular activities, including DNA replication/transcription or other metabolic reactions, may cause DNA damage. Exogenous and endogenous DNA damages reduce the genome's stability, impair development, and lower crop yield. Developing efficient mechanisms to maintain genome integrity is crucial for all organisms, including plants. An important mechanism contributing to genome stability is the DNA Damage Response, which activates DNA repair pathways and, in proliferating cells, stops cell division until DNA repair is complete. There has been considerable research into how DNA damage occurs, and it is repaired in bacteria, fungi, mammalian, and plant models. However, many elements of DNA damage and repair, especially in meristem or germline cells, remain undiscovered in plants. A better understanding of plants' DNA damage and repair processes will help accelerate traditional and targeted strategies for crop genome engineering. For this Special Issue of *Plants*, we invite articles to expand our current understanding of the DNA damage and repair mechanism in plant cells.



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**Special** Issue



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## Editor-in-Chief

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## Message from the Editor-in-Chief

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