



## Proteomics Technologies in Crop Improvement toward Sustainable Agriculture

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### Message from the Guest Editors

Background & history of this topic: The need for the sustainable production food and responding to a changing climate are driving advances in modern crop breeding programs. Crop domestication has always relied on traditional phenotypic selection to obtain dominant traits, but genomic interventions could accelerate advances in crop improvement. However, linking phenotypes to genotypes remains a significant challenge in the improvement of modern crops. Proteins execute direct biological functions, which require precise localization, the formation of complex high-level structures, post-translational modifications, and interaction with other proteins, which cannot be revealed by gene- and transcription-based studies. Therefore, proteomics plays an important role in deciphering functional mechanisms and enables us to enhance crops.

This Special Issue intends to provide novel insights into the application of proteomics technologies in crop improvement toward sustainable agriculture, including multi-omics integration analysis and related research on post-translational proteome modification, and also the exploration of new technologies for proteomics research.





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