



What have we learned from proteomics studies in plants?

What is the current status of plant proteomics with respect to technologies and achievements?

How do we design and conduct proteomics experiments?

Where will plant proteomics take us in the near future?

Plant Proteomics: Technologies, Strategies, and Applications answers these questions and more. Plant proteomics has great potential for improving yield and disease resistance as well as for developing species that better satisfy the requirements of human and animal nutrition. This reference provides a broad perspective on the state of plant proteomics and delineates exciting advances in the discipline. With contributions from leading researchers worldwide, it:

- Describes proteomics studies in *Arabidopsis*, rice, and legumes
- Includes information on using common technologies such as mass spectrometry and gel electrophoresis, and previews emerging technologies
- Discusses expression proteomics, functional proteomics, structural proteomics, bioinformatics, and systems biology
- Has chapters dealing with the specific proteomes of plant tissues, such as seed, root, anther, and leaf, all containing important organelles such as chloroplasts and mitochondria
- Provides guidelines for sample preparation
- Includes abbreviations, glossaries, and resources for further information

Focusing exclusively on plant proteomics, this is the premier reference for scientists conducting plant proteomics research and for students in plant sciences.

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