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| 1. Record Nr.           | UNINA9910143294703321   |
| Titolo                  | Plant proteomics [[electronic resource] /] / edited by Christine Finnie   |
| Pubbl/distr/stampa      | Oxford, UK ; ; Ames, Iowa, : Blackwell Pub., 2006   |
| ISBN                    | 1-280-74882-6<br>9786610748822<br>0-470-76427-9<br>0-470-98887-8<br>1-4051-7307-6   |
| Descrizione fisica      | 1 online resource (276 p.)  |
| Collana                 | Annual plant reviews ; ; v. 28  |
| Classificazione         | 42.42   |
| Altri autori (Persone)  | FinnieChristine   |
| Disciplina              | 572.62<br>572/.62<br>580.5  |
| Soggetti                | Plant proteins<br>Plant proteomics<br>Electronic books.   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Plant Proteomics; Contents; Preface; Contributors; 1 Plant proteomics: challenges and resources; 1.1 Introduction; 1.2 Challenges; 1.2.1 Sample extraction; 1.2.1.1 Two-dimensional gel electrophoresis; 1.2.1.2 Direct MS analysis of samples; 1.2.2 Sample preparation and arraying; 1.2.2.1 Two-dimensional gel electrophoresis; 1.2.2.2 One-dimensional gel electrophoresis; 1.2.2.3 Blue-native gel electrophoresis; 1.2.2.4 Direct analysis of samples by MS; 1.2.3 Mass spectrometry (MALDI and ESI); 1.2.3.1 MALDI; 1.2.3.2 ESI; 1.2.4 Analysis depth; 1.2.5 Data analysis; 1.2.5.1 Peptide mass fingerprints 1.2.5.2 Peptide fragmentation data (MS/MS)1.2.5.3 Analysis options; 1.2.6 Quantitation; 1.2.6.1 Gel stains; 1.2.6.2 Chemical labelling of sample; 1.2.7 Modifications; 1.2.8 Data; 1.3 Resources; 1.3.1 Proteomic databases; 1.3.2 Online proteomic tools and resources; 1.4 Future; 2 Proteomic analysis of post-translational modifications by mass spectrometry; 2.1 Summary; 2.2 Introduction; 2.3 Considerations for |

the experimental design of PTM analysis by proteomics; 2.4 Analysis of PTMs by proteomic approaches; 2.4.1 Phosphorylation; 2.4.2 Protein glycosylation; 2.4.3 GPI-AP; 2.4.4 Farnesylation  
2.4.5 N-terminally modified proteins  
2.5 Conclusions and perspectives;  
3 Strategies for the investigation of protein-protein interactions in plants; 3.1 Summary; 3.2 Introduction; 3.3 Biochemical procedures to characterize protein-protein interactions; 3.3.1 Chromatographic purifications; 3.3.2 Sucrose gradient ultrafiltration; 3.3.3 Native gel electrophoresis; 3.3.4 Immunoprecipitations; 3.4 Genetic procedures to characterize protein-protein interactions; 3.4.1 Yeast two-hybrid system; 3.4.2 Yeast three-hybrid system; 3.4.3 Yeast one-hybrid system  
3.4.4 Limitations of yeast two-hybrid systems  
3.4.5 Split-ubiquitin system; 3.4.6 Bimolecular fluorescence complementation (BiFC); 3.4.7 Forster resonance energy transfer (FRET); 3.4.8 Tagging technologies for the purification of protein complexes; 3.5 Cytological procedures to characterize protein-protein interactions; 3.6 Outlook; 4 Proteomics of disulphide and cysteine oxidoreduction; 4.1 Introduction; 4.2 Control of cellular redox status; 4.2.1 Sequence and structural features of proteins catalysing cysteine redox modifications; 4.2.2 Catalytic mechanisms of Trxs and Grxs  
4.3 Proteomics techniques for analysis of cysteine modifications  
4.3.1 Reagents for cysteine labelling; 4.3.2 Disulphide mapping; 4.3.3 S-glutathionylation; 4.3.4 Cysteine SOH, SO<sub>2</sub>H and SO<sub>3</sub>H; 4.3.5 Trxs and disulphide reduction; 4.3.6 S-nitrosylation; 4.4 Conclusions and perspectives; 5 Structural proteomics; 5.1 Introduction; 5.2 Project data handling: Sesame; 5.3 ORF cloning; 5.4 E. coli cell-based protein production pipeline; 5.4.1 Large-scale protein production and labeling; 5.4.2 Protein purification; 5.5 Wheat germ cell-free protein production  
5.6 Mass spectrometry of purified proteins for quality assurance and analysis

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### Sommario/riassunto

The proteome comprises all protein species resulting from gene expression in a cell, organelle, tissue or organism. By definition, proteomics aims to identify and characterise the expression pattern, cellular location, activity, regulation, post-translational modifications, molecular interactions, three dimensional structures and functions of each protein in a biological system. In plant science, the number of proteome studies is rapidly expanding after the completion of the Arabidopsis thaliana genome sequence, and proteome analyses of other important or emerging model systems and crop

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| 2. Record Nr.           | UNINA9910133002203321  |
| Titolo                  | Donne in viaggio : viaggio religioso, politico, metaforico // a cura di Maria Luisa Silvestre, Adriana Valerio |
| Pubbl/distr/stampa      | Roma [etc.], : GLF editori Laterza, 1999   |
| ISBN                    | 88-420-5799-1  |
| Descrizione fisica      | xi, 266 p. : ill. ; ; 21 cm  |
| Collana                 | Percorsi ; ; 4   |
| Altri autori (Persone)  | SilvestreMaria Luisa <1951-><br>ValerioAdriana <1952->   |
| Disciplina              | 910<br>305<br>938<br>909<br>270<br>809<br>320<br>248   |
| Lingua di pubblicazione | Italiano   |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Collected essays.  |
| Nota di bibliografia    | Includes bibliographical references.   |