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7.3 Identification of miRNAs7.4 Identification of miRNA targets; 7.5 MicroRNA-target mRNA pairs: missing links in multi-network models?; 8 Proteomics: Setting the Stage for Systems Biology; 8.1 Introduction: the need for proteomics in systems biology; 8.2 Determination of protein location in the cell; 8.3 Identification of different protein forms; 8.4 Quantitation; 8.5 Conclusion; 9 Metabolomics: Integrating the Metabolome and the Proteome for Systems Biology; 9.1 The molecular hierarchy in biochemical networks, the concept of systems biology and functional genomics in the post-genome era
9.2 Metabolomics and proteomics: post-genome disciplines intimately bound to mass spectrometric techniques

Sommario/riassunto

Plant Systems Biology is an excellent new addition to the increasingly well-known and respected Annual Plant Reviews. Split into two parts, this title offers the reader: A fundamental conceptual framework for Systems Biology including Network TheoryThe progress achieved for diverse model organisms: Prokaryotes, C. elegans and ArabidopsisThe diverse sources of "omic" information necessary for a systems understanding of plantsInsights into the software tools developed for systems biologyInteresting case studies regarding applications including nitrogen-use,