An excellent new addition to the increasingly well-known and respected Annual Plant Reviews. This volume captures the cutting edge of systems biology research and aims to be an introductory material for undergraduate and graduate students as well as plant and agricultural scientists, molecular biologists, geneticists and microbiologists.

Split into two parts, this title offers the reader:

* A fundamental conceptual framework for Systems Biology including Network Theory
* The progress achieved for diverse model organisms: Prokaryotes, C. elegans and Arabidopsis
* The diverse sources of "omic" information necessary for a systems understanding of plants
* Insights into the software tools developed for systems biology
* Interesting case studies regarding applications including nitrogen-use, flowering-time and root development
* Ecological and evolutionary considerations regarding living systems

It also serves as a foundation in the biological aspects of the field for interested computer scientists. Libraries in all universities and research establishments where biological and agricultural sciences are studied and taught and integrated with computer sciences should have copies of this important volume on their shelves.