

Research in plant biology has been revolutionized in the last decade by the development of genomic approaches. *Functional Plant Genomics* provides an up-to-date presentation of the concept and methods commonly used in plant genomics, which include genome sequencing, *in silico* sequence analysis, transcriptomics, proteomics, metabolomics, imaging of gene expression, gene transfer and mutant libraries. Plant genomics has been able to develop because of the choice of model plants, each of which has their own particular properties. It is for this reason that a specific section of the book is dedicated to some of the major model plants, including *Arabidopsis thaliana*, *Medicago truncatula*, rice, tomato, grapevine, etc. The potential links between plant genomics and molecular breeding are illustrated in the book through chapters dealing with genetic and physical mapping, positional cloning, and characterization and manipulation of key important genes. Highlights include the development of molecular markers, and transposable elements. A special emphasis concerns analysis of plant diversity and its relationship with the cloning of genes of interest, including QTLs.

*Functional Plant Genomics* comprises of 32 chapters and an important glossary contributed by expert scientists in the field, from French and West European plant science laboratories. The book provides an overview of some of the major aspects of plant genomics, both for established plant biologists who wish to understand this rapidly developing area of research, as well as for scientists early in their careers. This book will also be useful for graduate students, and for people who are interested in the improvement of crop species by genomics based methods.



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