

# Plant Biotechnology

Current and Future Applications of Genetically Modified Crops

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Genetic modification (GM), a technique of inserting a single gene or small group of genes into the DNA of an organism artificially, has become an established technique in plant breeding around the world. GM crops are a controversial subject with the public worried about issues such as the inadvertent synthesis of antigens, and the risk of gene flow between GM and non-GM crops or wild relatives. Governments have responded to public concern by introducing regulations to control GM crop production and use.

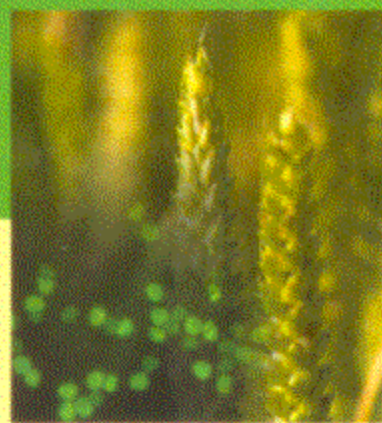
*Plant Biotechnology: Current and Future Applications of Genetically Modified Crops* covers in detail the development, use and regulation of GM crops. Split into three sections, Part 1 introduces GM crops and describes the GM crops that are used commercially. Part 2 looks at new developments and methodologies in areas including potential applications of GM crops for the production of vaccines, enhanced nutritional value of GM food, and engineering resistance to fungal pathogens. Part 3 concludes by considering the key issues of safety and legislation, including allergenicity, environmental impacts, risk assessment and labelling.

## KEY FEATURES

- Covers the topic in depth and addresses key subject areas.
- Takes a broad view of the current situation in different countries.
- Examines the commercial application of plant biotechnology in the USA and China.
- Covers two major areas of public concern: allergenicity and gene flow.
- Covers new developments in plant research, safety and legislation aspects.

This book is essential reading for postgraduates and researchers in plant biotechnology and related sciences in departments of plant science, biotechnology, bioscience, environmental science, food biosciences and chemistry. It will also be of interest for professionals working in the plant biotechnology industry or government professionals working in environmental policy.

Image of segregating pollen by Julia Goodwin, Rothamsted Research



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