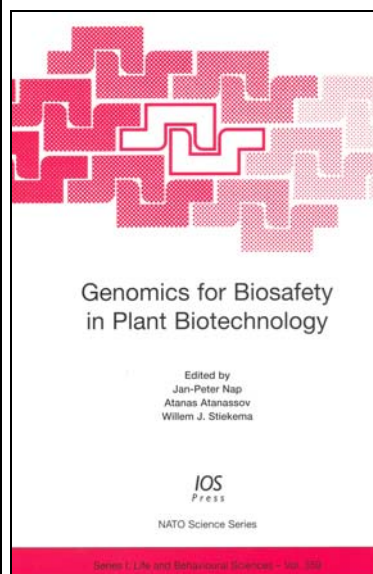


New IOS Publication



Genomics for Biosafety in Plant Biotechnology

Volume 359 NATO Science Series: Life and Behavioural Sciences

Edited by: Jan-Peter Nap, Atanas Atanassov and Willem J. Stiekema

August 2004, 256 pp., hardcover

ISBN: 1-58603-432-4

Price: US\$116 / €105 / £74

Currently, there is a clear gap between the issues of biosafety and its regulation on the one hand and the technological developments in genomics on the other. In plant biotechnology, research attention is rapidly shifting towards genomics and its 'omics' offspring. The various 'omics' approaches (transcriptomics, proteomics, etc.) will generate knowledge and technology applicable for the overall assessment of safety of the products made by breeding and biotechnology. Notably, the safety assessment of genetically modified (GM) crops is an issue. The purpose of this book is bridging the conceptual gap between biosafety and genomics. It discusses the use and need of plant genomics in biosafety and offers a wide variety of viewpoints, developments and issues to consider. Plant genomics could and should learn from all previous discussions on GM crops. A major issue still is to establish the limits of genomics in biosafety assessments. Does the technological feasibility that "everything" can be measured automatically imply that "everything" must be measured? Who will pay? This book will be of major interest to all researchers in academia, industry or agriculture with an interest in life sciences or social sciences, genomics and biosafety, as well as to graduate and (advanced) undergraduate students in topics as broad as plant biotechnology, genetics, food science, bioinformatics, philosophy, regulatory science and law. Moreover, the book should appeal to policy makers in governments, non-governmental organisations and other interest groups that are, or want to be, involved in shaping agriculture and food science for the future.

This book contains, among others, contributions by Klaus Ammann (CH), Yuri Gleba (DE/UA), Julian Kinderlerer (UK), Ruud de Maagd (NL), Tom Nickson (US), Montserrat Pagès (ES), Slavomir Rakouský (CZ), Stephen Rudd (FI), Lloyd Sumner (US) and Wolfram Weckwerth (DE).

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