

1. Record Nr.	UNINA9910957130403321
Titolo	Field testing genetically modified organisms : framework for decisions / / Committee on Scientific Evaluation of the Introduction of Genetically Modified Microorganisms and Plants into the Environment, Board on Biology, Commission on Life Sciences, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1989
ISBN	9786610214488 9781280214486 1280214481 9780309564205 0309564204
Edizione	[1st ed.]
Descrizione fisica	1 online resource (184 pages) : illustrations
Altri autori (Persone)	BurrisRobert H <1914-> (Robert Harza)
Disciplina	660/.65
Soggetti	Microbial genetic engineering Biotechnology Genetic engineering Plant genetic engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Committee chairman: Robert H. Burris. Study funded by the Biotechnology Science Coordinating Committee composed of the Dept. of Agriculture, Environmental Protection Agency, Food and Drug Administration, National Institutes of Health and the National Science Foundation.
Nota di bibliografia	Bibliography: p. 143-163.
Nota di contenuto	1 Front Matter; 2 1 Executive Summary; 3 2 Introduction; 4 3 Past Experience with Genetic Modification of Plants and Their Introduction into the Environment; 5 4 Enhanced Weediness: A Major Environmental Issue; 6 5 Past Experience with the Introduction of Modified Plants: Molecular Genetic Techniques; 7 6 Conclusions and Recommendations: Plants; 8 7 Past Experience with the Introduction of Microorganisms into the Environment; 9 8 Properties of the Genetic Modification; 10 9 Phenotypic Properties of Source Microorganisms and Their Genetically Modified Derivatives; 11 10 Properties of the Environment Relevant to the Introduction of Genetically Modified Microorganisms; 12 11

Sommario/riassunto

Potential benefits from the use of genetically modified organisms--such as bacteria that biodegrade environmental pollutants--are enormous. To minimize the risks of releasing such organisms into the environment, regulators are working to develop rational safeguards. This volume provides a comprehensive examination of the issues surrounding testing these organisms in the laboratory or the field and a practical framework for making decisions about organism release. Beginning with a discussion of classical versus molecular techniques for genetic alteration, the volume is divided into major sections for plants and microorganisms and covers the characteristics of altered organisms, past experience with releases, and such specific issues as whether plant introductions could promote weediness. The executive summary presents major conclusions and outlines the recommended decision-making framework.