Record Nr. UNINA9910784945303321 Application of uncertainty analysis to ecological risk of pesticides // **Titolo** editors, William J. Warren-Hicks, Andy Hart Pubbl/distr/stampa Boca Raton:,: CRC Press,, 2010 **ISBN** 0-429-13064-3 1-138-11481-2 1-4398-0735-3 Descrizione fisica 1 online resource (230 p.) Altri autori (Persone) Warren-HicksWilliam J HartAndy <1956-> Disciplina 577.27/9015118 Soggetti Pesticides - Environmental aspects - Mathematical models Ecological risk assessment **Probabilities** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front cover; SETAC Publications; Contents; List of Figures; List of Tables; Foreword; Acknowledgments; About the Editors; Workshop Participants and Contributing Authors; Chapter 1. Introduction and Objectives; Chapter 2. Problem Formulation for Probabilistic Ecological Risk Assessments; Chapter 3. Issues Underlying the Selection of Distributions; Chapter 4. Monte Carlo, Bayesian Monte Carlo, and First-Order Error Analysis; Chapter 5. The Bayesian Vantage for Dealing with Uncertainty; Chapter 6. Bounding Uncertainty Analyses Chapter 7. Uncertainty Analysis Using Classical and Bayesian Hierarchical ModelsChapter 8. Interpreting and Communicating Risk and Uncertainty for Decision Making; Chapter 9. How to Detect and Avoid Pitfalls, Traps, and Swindles; Chapter 10. Conclusions; Glossary; Index; Back cover While current methods used in ecological risk assessments for Sommario/riassunto pesticides are largely deterministic, probabilistic methods that aim to quantify variability and uncertainty in exposure and effects are

attracting growing interest from industries and governments.

Probabilistic methods offer more realistic and meaningful estimates of

risk and hence, potentially, a better basis for decision-making. Application of Uncertainty Analysis to Ecological Risks of Pesticides examines the applicability of probabilistic methods for ecological risk assessment for pesticides and explores the