

Contents

Preface	xi
----------------------	-----------

INTRODUCTION

1. A Harvest of Questions: Chemicals and the Food Chain	3
Edward A. Malloy, Willa Y. Garner, Frank E. Young, Charles E. Hess, Victor Kimm, and Leo Bontempo	

PESTICIDE USE: WHERE AND WHY

2. Use of Pesticides in the United States	24
Leonard P. Gianessi	
3. Some Economic and Social Aspects of Pesticide Use	31
Allen L. Jennings	
4. Pesticide Impact Assessment Program Activities in the United States	38
Acie C. Waldron	
5. The Farmer's Stake in Food Safety	47
J. L. Adams	
6. Consumer Attitudes Toward the Use of Pesticides and Food Safety	50
Carol D. Scroggins	

ALTERNATIVE AGRICULTURE PRODUCTION

7. Pesticide-Free Tree Fruit Crops: Can We Meet Consumer Demands?	58
Patrick W. Weddle	
8. Integrated Pest Management in the Southwest	68
Ray Frisbie and Jude Magaro	

EXPOSURE ASSESSMENT: ANALYTICAL METHODS

9. The Office of Technology Assessment Report on Pesticide Residue Methodology for Foods.....	78
H. Anson Moye	
10. Development of Highly Specific Antibodies to Alachlor by Use of a Carboxy–Alachlor Protein Conjugate	87
C. Ray Sharp, Paul C. C. Feng, Susan R. Horton, and Eugene W. Logusch	
11. Pesticide Metabolites in Food.....	96
Larry G. Ballantine and Bruce J. Simoneaux	
12. Pesticide Residue Method Development and Validation at the Food and Drug Administration	105
Marion Clower, Jr.	
13. Validation of Pesticide Residue Methods in Support of Registration: Aspects of the Environmental Protection Agency’s Laboratory Program.....	114
Warren R. Bontoyan	
14. New Trends in Analytical Methods for Pesticide Residues in Foods	125
James N. Seiber	

EXPOSURE ASSESSMENT: RESIDUE LEVELS IN FOOD

15. What We Know, Don’t Know, and Need to Know about Pesticide Residues in Food.....	140
Charles M. Benbrook	
16. FOODCONTAM: A State Data Resource on Toxic Chemicals in Foods	151
James P. Minyard, Jr., and W. Edward Roberts	
17. The Food and Drug Administration Program on Pesticide Residues in Food.....	162
Pasquale Lombardo and Norma J. Yess	
18. The Public Residue Database.....	170
Lawrie Mott	

19. The Effect of Processing on Residues in Foods: The Food Processing Industry's Residue Database	175
Henry B. Chin	
20. Average Residues vs. Tolerances: An Overview of Industry Studies.....	182
John F. McCarthy	
21. Estimation of Dietary Exposure to Pesticides Using the Dietary Risk Evaluation System.....	192
J. Robert Tomerlin and Reto Engler	
22. Tracking the Fate of Residues from the Farm Gate to the Table: A Case Study.....	202
Gary L. Eilrich	

RISK ASSESSMENT

23. U.S. Environmental Protection Agency Processes for Consensus Building for Hazard Identification.....	214
R. S. Schoeny	
24. Food Safety Assessment for Various Classes of Carcinogens	221
T. W. Fuhremann	
25. Comparison of Conventional Risk Assessment with Cancer Risk Assessment.....	226
Reto Engler and Richard Levy	
26. Conducting Risk Assessments for Preschoolers' Dietary Exposure to Pesticides	235
Robin M. Whyatt and William J. Nicholson	
27. Statistical Issues in Food Safety Assessment.....	247
Kenny S. Crump	

RISK MANAGEMENT

28. Why Isn't the Environmental Protection Agency Reducing Pesticide Risks?.....	258
Janet S. Hathaway	
29. The Need for Common Goals in Pesticide Management That Reflect the Consumers' General Interest	262
John A. Moore	

30. Risk Management in the Absence of Credible Risk Assessment..	267
Perry J. Gehring	
31. When Pesticides Go Public: Regulating Pesticides by Media after Alar	277
Kenneth W. Weinstein	

LEGISLATIVE AND REGULATORY ISSUES

32. The Role of the Environmental Protection Agency in Assuring a Safe Food Supply	286
Charles L. Trichilo and Richard D. Schmitt	
33. Evolving Food Safety	297
Fred R. Shank, Karen L. Carson, and Crystal A. Willis	
34. Pesticides from a Regulatory Perspective	308
Lester M. Crawford and Danielle M. Schor	
35. State Pesticide Regulatory Programs and the Food Safety Controversy	313
James W. Wells and W. George Fong	
36. Food Safety and the Federal Insecticide, Fungicide, and Rodenticide Act.....	324
William A. Stiles, Jr.	

PERSPECTIVES FROM THE MEDIA

37. Communication of Risk to the Public: A Panel Discussion	336
Cristine Russell, Mary Hager, Daniel Puzo	
Author Index	349
Affiliation Index	349
Subject Index.....	350