

Contents of the Handbook

Volume 1

1 Dose, Time, and Other Factors Influencing Toxicity <i>Karl K. Rozman, John Doull, and Wayland J. Hayes, Jr.</i>	1	17 Modeling Dietary Exposure with Special Sections on Modeling Aggregate and Cumulative Exposure <i>Barbara J. Petersen, Susan H. Youngren, and Cassi L. Walls</i>	443
2 Chemistry of Pesticides <i>Jack R. Plimmer</i>	95	18 Greenhouse and Mushroom House Exposure <i>Joop J. van Hemmen, Derk H. Brouwer; and Johan S. de Cock</i>	457
3 Pest Control Agents from Natural Products <i>István Ujváry</i>	109	19 Coping with Aggregate Pesticide Exposure Assessment: An Integration Approach <i>Michael H. Dong and John H. Ross</i>	479
4 Public Health Pesticides <i>Robert J. Novak and Richard L. Lampman</i>	181	20 Occupational Exposure Data Bases/Models for Pesticides <i>Gary K. Whitmyre, John H. Ross, and Curt Lunchick</i>	493
5 Lawn and Turf: Management and Environmental Issues of Turfgrass Pesticides <i>J. M. Clark and M. P. Kenna</i>	203	21 Factors That Affect Pesticide Metabolism and Toxicity <i>Ernest Hodgson</i>	507
6 Insecticides and Their Use in Urban Structural Pest Control <i>Michael K. Rust</i>	243	22 Pesticide Disposition: Dermal Absorption <i>Ronald E. Baynes and Jim E. Riviere</i>	515
7 Vertebrate Pest Control Chemicals and Their Use in Urban and Rural Environments <i>Rex E. Marsh</i>	251	23 Metabolism of Pesticides <i>Ernest Hodgson and Patricia E. Levi</i>	531
8 Pesticide Use in Veterinary Medicine <i>Frederick W. Oehme and Shajan Mannala</i>	263	24 Absorption, Distribution, and Pharmacokinetics <i>Kelly J. Dix</i>	563
9 Pesticide Use Practices in Integrated Pest Management <i>Frank G. Zalom</i>	275	25 Pesticide Excretion <i>Ernest Hodgson</i>	583
10 Toxicity Testing <i>Donald J. Ecobichon</i>	285	26 Diagnosis and Treatment of Poisoning Due to Pesticides <i>Wayne R. Snodgrass</i>	589
11 Regulatory Evaluation of the Skin Effects of Pesticides <i>Michael O'Malley</i>	299	27 Surveillance of Pesticide-Related Illness and Injury in Humans <i>Geoffrey M. Culvert, Wayne T. Sanderson, Margot Barnett, Jerome M. Blondell, and Louise N. Mehler</i>	603
12 Neurophysiological Effects of Insecticides <i>Toshio Narahashi</i>	335	28 Environmental Transport and Fate <i>James N. Seiber</i>	643
13 Ecotoxicological Risk Assessment of Pesticides in the Environment <i>Keith R. Solomon</i>	353	29 Hydrophobicity as a Key Physicochemical Parameter of Environmental Toxicology of Pesticides <i>Toshio Fujita, Keiichiro Nishimura, Chiyozo Takayama, Masanori Yoshida, and Matazaemon Uchida</i>	649
14 Developmental and Reproductive Toxicology of Pesticides <i>Poorni Iyer</i>	375	30 Modern Approaches to Analysis of Pesticide Residues in Foods and the Environment <i>Luis O. Ruzo and Thomas Class</i>	671
15 Worker Exposure: Methods and Techniques <i>Graham Chester</i>	425		
16 Residential Exposure Assessment: An Overview <i>Jeffrey H. Driver, John H. Ross, Muhilan D. Pandian, Jeffrey B. Evans, and Gary K. Whitmyre</i>	435		

31 Risk Assessment and Risk Management: The Regulatory Process <i>Penelope A. Fenner-Crisp</i>	681	51 Clinical Toxicology of Anticholinesterase Agents in Humans <i>Marcello Lotti</i>	1043
32 Risk Assessment for Acute Exposure to Pesticides <i>Roger C. Cochran</i>	691	52 Carbamate Insecticides <i>Donald J. Ecobichon</i>	1087
33 Risk Assessment for Chronic Exposure to Pesticides: The Triazine Herbicide Cyanazine <i>Derek W. Gammon and K. E Pfeifer</i>	707	53 Aldicarb: Current Science-Based Approaches in Risk Assessment <i>Abraham J. Tobia, Pierre-Gerard Pontal, Peter McCahon, Neil G. Carmichael, Joseph I? Rieth, and Rick Williams</i>	1107
34 Pesticides as Endocrine-Disrupting Chemicals <i>Robert J. Kavlock</i>	727	54 Imidacloprid: A Neonicotinoid Insecticide <i>Larry I? Sheets</i>	1123
35 Genetic Toxicity of Pesticides <i>David A. Eastmond and Sharada Balakrishnan</i>	747	55 Interactions with the γ -Aminobutyric Acid A Receptor: Polychlorocycloalkanes and Recent Congeners <i>Gerald T. Brooks</i>	1131
36 Immunotoxicity of Pesticides <i>Kathleen E. Rodgers</i>	769	56 The avermectins: Insecticidal and Antiparasitic Agents <i>Jim Stevens and Charles B. Breckenridge</i>	1157
37 Sensitive Population Groups <i>Richard J. Jackson, Carol H. Rubin, and Michael McGeehin</i>	783	57 Inhibitors and Uncouplers of Mitochondrial Oxidative Phosphorylation <i>Robert M. Hollingworth</i>	1169
38 Pesticide Residues in Food and Cancer Risk: A Critical Analysis <i>Lois Swirsky Gold, Thomas H. Slone, Bruce N. Ames, and Neela B. Manley</i>	799	58 Pyrethroid Chemistry and Metabolism <i>Hideo Kaneko and Junshi Miyamoto</i>	1263
39 Perceptions of Pesticides as Risks to Human Health <i>Paul Slovic</i>	845	59 Pyrethroid Insecticides: Mechanisms of Toxicity, Systemic Poisoning Syndromes, Paresthesia, and Therapy <i>David E. Ray</i>	1289
40 Mammalian Toxicity of Microbial Pest Control Agents <i>Andrew L. Rubin</i>	859	60 DDT and Its Analogs <i>Andrew G. Smith</i>	1305
41 The Influence of Age on Pesticide Toxicity <i>Carey Pope</i>	873	61 Inorganic and Organometal Pesticides <i>Thomas W. Clarkson</i>	1357
42 Emerging Issues: Children's Exposure to Pesticides in Residential Settings <i>John L. Adgate and Ken Sexton</i>	887	62 Boric Acid and Inorganic Borate Pesticides <i>Philip L. Strong</i>	1429
43 Pesticide Percutaneous Absorption and Decontamination <i>Ronald C. Wester and Howard I. Maibach</i>	905	63 DEET <i>Gerald I? Schoenig and Thomas G. Osimitz</i>	1439
Volume 2		64 The Safety Assessment of Piperonyl Butoxide <i>Thomas G. Osimitz and Ruaidhri Breathnach</i>	1461
44 Chemistry of Organophosphorus Insecticides <i>Howard W. Chambers, J. Scott Boone, Russell L. Carr, and Janice E. Chambers</i>	913	65 Pentachlorophenol <i>Gay Goodman</i>	1481
45 The Metabolism of Organophosphorus Insecticides <i>Janice E. Chambers, Russell L. Carr, J. Scott Boone, and Howard W. Chambers</i>	919	66 Symmetrical and Asymmetrical Triazine Herbicides <i>James T. Stevens, Charles B. Breckenridge, James Simpkins, and J. Charles Eldridge</i>	1511
46 Organophosphate Pharmacokinetics <i>Charles Timchalk</i>	929	67 Phenylurea Herbicides <i>Jing Liu</i>	1521
47 Neuropathy Target Esterase <i>Martin K. Johnson and Paul Glynn</i>	953	68 Protoporphyrinogen Oxidase Inhibitors <i>Franck E. Dayan, Joanne G. Romagni, and Stephen O. Duke</i>	1529
48 Cholinesterases <i>Barry W. Wilson</i>	967	69 Chloracetanilides <i>William F. Heydens, Ian C. Lamb, and Alan G. E. Wilson</i>	1543
49 Organophosphorus-Induced Delayed Neuropathy <i>Marion Ehrlich and Bernard S. Jortner</i>	987	70 Paraquat <i>Edward A. Lock and Martin E Wilks</i>	1559
50 Understanding the Toxic Actions of Organophosphates <i>Kai Savolainen</i>	1013	71 Diquat <i>Edward A. Lock and Martin F. Wilks</i>	1605

72 Phenoxy Herbicides (2,4-D) <i>Elke Kennepohl and Ian C. Munro</i>	1623	81 Dialkyldithiocarbamates (EBDCs) <i>Susan Hurt, Janet Ollinger, Gail Arce, Quang Bui, Abraham J. Tobia, and Bennard van Ravenswaay</i>	1759
73 Dicamba <i>Paul Hard</i>	1639	82 A Toxicological Assessment of Sulfur as a Pesticide <i>Derek W. Gammon, Thomas B. Moore, and Michael A. O'Malley</i>	1781
74 Imidazolinones <i>Frederick G. Hess, Jane E. Harris, Kimberly Pendino, and Kathryn Ponnock</i>	1641	83 Rodenticides <i>Alain E Pelfrene</i>	1793
75 Toxicology of Triazolopyrimidine Herbicides <i>Thomas R. Hanley and Richard Billington</i>	1653	84 Methyl Bromide <i>Vincent J. Piccirillo</i>	1837
76 Inhibitors of Aromatic Acid Biosynthesis <i>Donna Farmer</i>	1667	85 1,3-Dichloropropene <i>W. T. Stott and B. B. Gollapudi</i>	1849
77 Inhibitors of DNA Biosynthesis—Mitosis: Benzimidazoles—The Benzimidazole Fungicides Benomyl and Carbendazim <i>Ronald L. Mull and Leon W. Hershberger</i>	1673	86 Phosphine <i>V. F. Garry and A. V. Lyubimov</i>	1861
78 Cyprodinil: A Fungicide of the Anilinopyrimidine Class <i>Felix Waechter, Edgar Weber, and Thomas Hertner</i>	1701	87 Metam-Sodium <i>Linda L. Carlock and Timothy A. Dotson</i>	1867
79 Captan and Folpet <i>Elliot B. Gordon</i>	1711	88 Sulfuryl Fluoride <i>Kenneth D. Nitschke and David L. Eisenbrandt</i>	1881
80 Mammalian Toxicokinetics and Toxicity of Chlorothalonil <i>P.P. Parsons</i>	1743	Index	1897