

CONTENTS

	Page
Preface	xi
Overviews	
1. Pesticide Transformation Products in the Environment	2
2. Pesticide Degradation Mechanisms and Environmental Activation	10
Fate	
3. Biotransformation of Organophosphorus Insecticides in Mammals : Relationship to Acute Toxicity	32
4. Degradation Products of Commonly Used Insecticides in Indian rice Soils : Degradation and Significance	43
5. Degradation Products of Sulfur-Containing Pesticides in Soil and Water	61
6. Atrazine Metabolite Behavior in Soil-Core Microcosms : Formation, Disappearance, and Bound Residues	75
7. Factors Affecting the Degradation of 3,5,6-Trichloro-2-Pyridinol in Soil	93
8. Bound (Nonextractable) Pesticide Degradation Products in Soils : Bioavailability to Plants	108
9. Enzymatic Binding of Pesticide Degradation Products to Soil Organic matter and Their Possible Release	122
10. Mineralization of Pesticide Degradation Products	133
11. Computer-Assisted Molecular Prediction of Metabolism and Environmental Fate of Agrochemicals	148
Significance	
12. Interactions Between Pesticides and Their Major Degradation Products	162
13. Pesticidal Activity of Degradation Products	172
14. Phytotoxicity of Pesticide Degradation Products	188
15. Effects of Pesticide Degradation Products on Soil Microflora	205
16. Pesticide Transformation Products in Surface Waters : Effects on Aquatic Biota	217
17. Toxicological Significance of bound Residues in Livestock and Crops	242
18. Groundwater Contamination by Atrazine and Its Metabolites : Risk Assessment, Policy, and Legal Implications	254
19. Pesticide Degradation Products in the Atmosphere	274
20. Pesticide Transformation Products Research : A Future Perspective	285
Indexes	
Author Index	291
Affiliation Index	291
Subject Index	291