

CONTENTS

Preface	ix
1. Principles of Controlled Release Pesticides	1
D. H. Lewis and D. R. Cowsar	
2. Structural and Chemical Factors Controlling the Permeability of Organic Molecules through a Polymer Matrix	17
C. E. Rogers	
3. A Challenge for Controlled Release Pesticide Technology	30
Philip C. Kearney	
4. Environmental Aspects of Controlled Release Pesticide Formulations	37
Gunter Zweig	
5. Clinical Toxicology Aspects of Controlled Release Pesticide Formulations	54
John Doull	
6. Matrix Factors Affecting the Controlled Release of Pesticides from Elastomers	60
N. F. Cardarelli and S. V. Kanakkanatt	
7. Encapsulation of Pesticides within a Starch Matrix	74
W. M. Doane, B. S. Shasha, and C. R. Russell	
8. Controlled Release of Pesticides from Kraft Lignin Carriers	84
H. T. DelliColli	
9. Controlled Release of Herbicides from Biodegradable Substrates ..	94
G. G. Allan, J. W. Beer, and N. J. Cousin	
10. Polymers Containing Pendant Herbicide Substitutes: Hydrolysis Studies II	102
Frank W. Harris, Mary R. Dykes, Jim A. Baker, and Ann E. Aulabaugh	
11. Synthesis, Characterization, and Release Mechanisms of Polymers Containing Pendant Herbicides	112
Charles L. McCormick and Michael Fooladi	
12. Microencapsulated Pesticides	126
Herbert B. Scher	
13. Effects of Wall Parameters on the Release of Active Ingredients from Microencapsulated Insecticides	145
J. R. Lowell, Jr., W. H. Culver, and C. B. DeSavigny	
14. The Effect of Some Variables on the Controlled Release of Chemicals from Polymeric Membranes	152
Agis F. Kydonieus	

15. **Controlled Release of Pheromone in the Gypsy Moth Program** 168
J. R. Plimmer, B. A. Bierl, R. E. Webb, and C. P. Schwalbe

16. **Controlled Release Formulations of Insect Growth Regulators and
Pheromones—Evaluation Methods and Test Results** 184
J. W. Young, T. M. Graves, R. Curtis, and M. M. Furniss

Index 201