

Preface	vii		
Preface of the Fourth Edition	ix		
About the Author	xi		
List of Abbreviations	xiii		
Section I		Section III	
Introduction		Applied Aspects	
1. Introduction	3	11. Virus–Plant Interactions in Non-Permissive and Permissive Hosts	605
2. Plant Viruses and Their Classification	15	12. Plant to Plant Movement	669
3. Architecture and Assembly of Virus Particles	69		
4. Symptoms and Host Range	145	Section IV Plant Virus Viromics	
5. Agents Resembling or Altering Virus Diseases	199	13. Assay, Detection, and Diagnosis of Plant Viruses	755
		14. Ecology, Epidemiology, and Control of Plant Viruses	809
		15. Plant Viruses and Technology	877
Section II			
Virus-Plant-Vector; Molecular Mechanisms and Interactions		16. Plant Virus Viromics: Involvement of Genomes of Three Organisms—Virus, Host, and Vector	929
6. Genome Composition, Organization, and Expression	247		
7. Replication of Plant Viruses	341	Appendix A Profiles of Families and Genera of Plant Viruses	973
8. Origins and Evolution of Plant Viruses	423	Appendix B Plant Virus Biological Properties	1043
9. Virus–Plant Interactions: RNA Silencing	477	Appendix C Plant Virus Genomes	1047
10. Movement of Viruses Within Plants	531	Appendix D List of Plant Virus Names in Alphabetical Order and Their Abbreviations That Are Used in the Ninth ICTV Report	1053
		Index	1091