

Contents

General Preface to the Series	iii
Preface	iii
1 Introduction	1
1.1 What is a virus? 1.2 Virus structure and composition	
1.3 Symmetry in virus particles 1.4 Terminology	
2 Icosahedral Viruses	6
2.1 Morphological units and structure units 2.2 Triangulation numbers	
3 Helical Symmetry	10
3.1 Combined symmetry forms in viruses	
4 Bacterial Virus System	14
4.1 Attachment and penetration stage 4.2 Eclipse phase	
4.3 Maturation stage 4.4 Cell lysis and release stage 4.5 Lysisogenesis 4.6 Other phage structures	
5 Viruses and Animal Cell Systems	24
5.1 Interaction between animal viruses and host cell plasma-lemma 5.2 Uncoating 5.3 Adenoviruses 5.4 Replication of an animal DNA virus 5.5 Cytopathic effects of adenovirus	
5.6 Infection and replication of RNA viruses 5.7 Poliovirus 5.8 Enveloped RNA viruses 5.9 Rhabdoviruses 5.10 Poxviruses 5.11 Viroids	
6 Plant Virus Systems	45
6.1 Virus infection and replication in plants 6.2 Virus infection of plant cell protoplasts 6.3 Virus replication in plant cells	
7 Virus Infection of Mycoplasmas	49
7.1 Form and size of mycoplasma viruses 7.2 Mycoplasma virus replication 7.3 Origin of mycoplasma viruses	
Concluding Remarks	52
Further Reading	53