## Contents

1	The Salient Features of Aphids	1
	1.1 Introduction 1.2 Mouthparts: their structure and mode of operation 1.3 Ingestion and digestion of plant sap 1.4 Nitrogenous metabolism and excretion 1.5. Gonads and embryogenesis	
2	Life Cycles and Polymorphism  2.1 Life cycles 2.2 Factors affecting morph determination  2.3 Adaptive significance of apterousness	7
3	Host Alternation 3.1 Introduction 3.2 Adaptive significance of host alternation	17
4	Migration  4.1 Introduction 4.2 Factors that determine flight 4.3 Energy for flight 4.4 Location of host plants 4.5 Wing muscle autolysis 4.6 Fecundity of migrants	22
5	Aphid-Plant Interactions 5.1 Introduction 5.2 Galling of plants 5.3 Advantages of galling 5.4 Effects on plants other than galling 5.5 How aphids affect plant growth	30
6	Aphids and Plant Viruses 6.1 Introduction 6.2 Virus and its aphid vector 6.3 Aphid behaviour and virus transmission 6.4 Weather and virus trans- mission 6.5 Advantages of virus transmission to aphids	38
7	Predators and Parasites of Aphids 7.1 Introduction 7.2 How insect predators and parasites find aphids 7.3 Aphids' escape responses and defence mechanisms	44
8	Regulation of the Numbers of Aphids 8.1 Introduction 8.2 Weather 8.3 Aphid enemies 8.4 Intra- specific mechanisms	51
	Scientific names of aphids mentioned in the text	55
	References	57