

Contents

1	Introduction	1
	1.1 Auxins 1.2 Gibberellins 1.3 Cytokinins 1.4 Inhibitors 1.5 Ethylene	
2	Methods	9
	2.1 Extraction procedures 2.2 Biological assays 2.3 Physico-chemical methods	
3	The hormonal control of growth I. Auxins and gibberellins	19
	3.1 Introduction 3.2 Auxins 3.3 Gibberellins	
4	The hormonal control of growth II. Cytokinins, abscisic acid, ethylene	29
	4.1 Cytokinins 4.2 Absciscic acid (ABA) 4.3 Ethylene	
5	Interactions, multiple actions and sequential actions of plant growth substances	41
	5.1 Effects of ABA and a cytokinin 5.2 Effects of ABA and gibberellins 5.3 Interactions between IAA, GA ₃ and kinetin (K) in stem growth and the movement of metabolites 5.4. Interaction between GA ₃ and K in controlling lateral bud growth 5.5 Multiple and sequential actions of plant growth substances in growth of the young wheat coleoptile	
6	A digression: some experiments with plant growth substances	49
	6.1 Experiments with auxins 6.2. Experiments with gibberellic acid 6.3 Experiments with kinetin	
7	The mechanism of action of plant growth substances	53
	7.1 The mechanism of action of gibberellins 7.2. The mechanism of action of auxins	
8	The future	61
	8.1 Unresolved problems 8.2. Applied aspects of plant growth substances	
	References	67