Contents

List of contributors vii

Preface xi

- 1 Cyclin-Dependent Kinases in Plants 1 Gerda Segers, Pierre Rouzé, Marc Van Montagu and Dirk Inzé
- 2 Tyrosine- and Casein-Protein Kinases as Possible Mediators of Cell Cycle Regulation in Pisum sativum 21 Paola Brusa, Carlo Marelli, Stefano Babayantz, Elena Germani and Lorenzo Nannariello
- 3 Biochemical Aspects of S-Phase Regulation in the Plant Cell Cycle 31 John A. Bryant
- 4 Cytokinins and the Plant Cell Cycle: Problems and Pitfalls of Proving their Function 45
 Milka Ivanova and Thomas L. Rost
- 5 Auxin, Cell Division and the Control of Plant Development 59 Ottoline Leyser
- 6 Control of the Cell Division Cycle Changes in the Shoot Meristem of Sinapis alba During the Transition to Flowering 67
 A. Jacqmard, C. Houssa and G. Bernier
- 7 Environmental Control of the Cell Cycle in Higher Plants 79
 Dennis Francis
- 8 The Cell Cycle in Roots of *Pisum sativum* During Germination and Under Abiotic Stress 99

 Marisa Levi and Maria Grazia Galli
- 9 Tolerance of Meristematic Root Cells to Water Stress and Quantitative Variations of Proteins at Different Subcellular Levels 119
 - Donato Chiatante, Lucia Maiuro and Gabriella S. Scippa
- 10 Effects of Arbuscular Mycorrhizal and Ericoid Fungi on the Structure and Activity of Host Cell Nuclei 135

 Graziella Berta and Anna Fusconi

vi CONTENTS

11 Chromosome Endoreduplication in Plant Tissue Development and Function 153
Francesco D'Amato

12 The Development of Intraspecific Dominance in some Nucleolar Organizer Regions of Plants 167
M.I. Gimenez-Abian, J.F. Gimenez-Abian, A. Cuadrado, H.R. Pelayo, G. Gimenez-Martin and C. De la Torre

13 Exploring the Root Meristem with Flow Cytometry 185 Sergio Sgorbati, Sandra Citterio and Sergio Lucretti

Index 207