

Contents

Plant Peptide Signaling: An Evolutionary Adaptation	1
Janet I. Wheeler and Helen R. Irving	
Peptides Regulating Apical Meristem Development	25
Marc Somssich and Rüdiger Simon	
Peptides Regulating Root Growth	41
Margret Sauter	
Peptides Regulating Plant Vascular Development	59
Hiroo Fukuda	
The S-LOCUS CYSTEINE-RICH PROTEIN (SCR): A Small Peptide with A High Impact on the Evolution of Flowering Plants	77
Isabelle Fobis-Loisy, Rumen Ivanov, and Thierry Gaudé	
Peptides Modulating Development of Specialized Cells	93
Lee Hunt and Julie E. Gray	
Plant Antimicrobial Peptides	107
Tatyana Odintsova and Tsezi Egorov	
The Role of Plant Peptides in Symbiotic Interactions	135
Virginie Mortier, Ulrike Mathesius, and Sofie Goormachtig	
Peptides as Danger Signals: MAMPs and DAMPs	163
Thomas Boller and Pascale Flury	

Peptides and the Regulation of Plant Homeostasis 183
Chris Gehring and Helen R. Irving

Processing of Peptides 199
Renu Srivastava and Stephen H. Howell

Methods to Isolate and Identify New Plant Signaling Peptides 217
Sunil Sagar, Chris Gehring, and Kenneth P. Minneman

Methods to Identify New Partners of Plant Signaling Peptides 241
Melinka A. Butenko, Markus Albert, and Reidunn B. Aalen

**Computational-Based Analysis to Associate the Function
of Plant Signaling Peptides with Distinct Biological Processes** 257
Stuart Meier and Lara Donaldson

Index 279