

CONTENTS

Contributors	vii
--------------------	-----

Fern Antheridiogens

Hisakazu Yamane

I. Introduction	1
II. Isolation and Characterization of Antheridiogens	3
III. Biological Activities	14
IV. Biosynthesis and Functions of Antheridiogens	20
V. Concluding Remarks	28
References	29

Signaling to the Microtubular Cytoskeleton in Plants

Peter Nick

I. Introduction	33
II. Components of the Microtubular Cytoskeleton in Plants	37
III. Functions of the Microtubular Cytoskeleton in Plants	45
IV. Signal-Controlled Responses of MTs	51
V. Approaches	65
VI. Concluding Remarks	70
References	71

Morphology of Cryofixed Myelin Sheath

Karl Meller

I. Introduction	81
II. Structure and Function of Myelin	82

III.	Myelin Observed under Experimental Conditions	90
IV.	Structural Role of the Myelin Proteins	98
V.	The Fusion of Myelin Lamellae	99
VI.	Concluding Remarks	103
	References	103

Mechanisms of Signal Transduction in the Stress Response of Hepatocytes

Shelley Bhattacharya

I.	Introduction	109
II.	Signaling of General Stress Response	112
III.	Oxidative Stress Signals	117
IV.	Xenobiotic Stress Signals	126
V.	Concluding Remarks	139
	References	141

Intracellular Proteinases of Invertebrates: Calcium-Dependent and Proteasome/ Ubiquitin-Dependent Systems

Donald L. Mykles

I.	Introduction	158
II.	Calcium-Dependent Proteinases	159
III.	Proteasome/Multicatalytic Proteinase	171
IV.	Ubiquitin and Ubiquitin Conjugation	199
V.	Physiological Processes in Invertebrate Systems	205
VI.	Conclusion and Perspectives	245
	References	251
	Index	291