

Preface

Why a book about plant programmed cell death? For us, one of the central reasons is that programmed cell death (PCD) is a fundamental process that, while utterly destructive on a cellular level, plays an indispensable role in plant development and defense. Indeed, it is a crucial cellular event that occurs throughout a plant's life cycle from the death of the embryonic suspensor to leaf and floral organ senescence. Plant PCD, however, has only been recognised as an organised, genetically controlled cellular process in the past 20 years, but after a slow start, publications are now beginning to exponentially increase as PCD becomes a mainstream research topic. While the number of research groups grows rapidly, there is at the same time a lack of content that provides a comprehensive overview, and which summarizes recent findings, in this fascinating new area of cell death. With this in mind, we therefore accepted the invitation of Eric Stannard, the Editor of Botany, Springer Science, USA, to write a book on "plant programmed cell death." We invited a broad range of internationally recognized PCD experts to contribute chapters for this book. There are 11 chapters in total, covering the most recent research findings in the area of plant PCD at the molecular, biochemical, and cellular levels. We hope this book will be an invaluable guide for graduate students, upper-level undergraduate students, and researchers who are entering the field of cell death research for the first time. Established researchers will also find this work indispensable as an up-to-date review of PCD topics.

We would like to thank all the authors for their help and patience in completing their chapters and for ultimately contributing to a book that provides researchers with a valuable and timely resource into the topic of cell death. We are grateful for the encouragement that we have received from many colleagues; without them, we would not have completed this book.

Halifax, Canada
Dublin, Ireland

Arunika N. Gunawardena
Paul F. McCabe

Plant Programmed Cell Death

Gunawardena, A.N.; McCabe, P. (Eds.)

2015, XI, 306 p. 60 illus., 47 illus. in color., Hardcover

ISBN: 978-3-319-21032-2