PREFACE

We present the second of two volumes of *Advances in Virus Research* dealing with natural and engineered resistance to plant viruses. Viruses constitute the single largest group of causative agents of emerging and novel plant diseases and thus represent a serious threat to crop production throughout the world. Nevertheless, and as described in our preface to Volume 75, plant viruses also provide an apparently never-ending source of fundamental insights into pathogen and host biology. In this volume, our authors address topics that must be better understood in order to foster future developments in basic and applied plant virology. These range from virus epidemiology and virus/host coevolution and the control of vector-mediated transmission through to systems biology investigations of virus–cell interactions. Other chapters cover the current status of signaling in natural resistance and the potential for a revival in the use of cross-protection (a method for exploitation of strain–strain interactions to provide protection of crops against viral diseases), as well as future opportunities for the deployment of the underutilized but highly effective crop protection strategy of pathogen-derived resistance. As with the previous volume, our aim in editing these thematic volumes of *Advances in Virus Research* is to contribute to the development of much-needed new approaches to disease control by stimulating further research on natural and engineered resistance, and by encouraging younger scientists to join in this important quest.

Once again, we want to thank Professor Karl Maramorosch for giving us the opportunity to edit these thematic volumes. We are also profoundly grateful to our contributors for their hard work in preparing these insightful and up-to-date review chapters. We also thank the technical staff of the *Advances*, particularly Mr. Ezhilvijayan Balakrishnan and Ms. Narmada Thangavelu from Chennai, India.

December 2009

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