

## PREFACE

Crop plants suffer from a number of abiotic and biotic diseases with some of them causing high-yield losses. It is generally accepted that viral diseases rank second after fungal plant diseases in terms of economic losses they cause globally. So far, more a thousand viral diseases have been described worldwide and currently new viruses are characterized due to the new technologies. Viruses are intercellular parasites which depend on the host plant cell machinery for their replication. Therefore, they cannot (at present) be controlled by chemical pesticides as is practiced for fungal or bacterial plant diseases. Management of viral diseases relies on the prevention measures. The current methods for many important crops, both those propagated by seed and those propagated vegetatively, will be outlined, describing the most up-to-date state of knowledge. The chapters were written by experts who have been working for years with the respective crop(s). Each chapter dealing with a specific or a number of related crops (e.g., *Citrus*) summarizes the most important viruses infecting the crop, their epidemiology and ecology, and finally measures for their control. Also, chapters dealing with novel strategies concerning control of air-borne viruses in the field and in greenhouses will be outlined. Transgenic resistance a novel and promising approach will help to increase food production, once some public phobia will diminish.

The information on the control of plant viruses in the various crops necessitates splitting it into two volumes. The present volume contains two general chapters and chapters on control of crops propagated by seed, such as cucurbits, legumes, maize, and pepper. The following one will be centered on control in vegetative propagated crops, such as berry crops, cassava, citrus, grapevine, and pome and stone fruits.

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Finally, we hope that this book will be of interest to plant virologists, horticulturists, and practitioners and will further contribute to the control of viral diseases and minimize the losses they cause to the crops.

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