

Preface

Sustainable horticulture is gaining increasing attention in the field of agriculture as demand for the food production rises to the world community. Sustainable horticultural systems are based on ecological principles to farm, optimizes pest and disease management approaches through environmentally friendly and renewable strategies in production agriculture. It is a discipline that addresses current issues such as food security, water pollution, soil health, pest control, and biodiversity depletion. Novel, environmentally-friendly solutions are proposed based on integrated knowledge from sciences as diverse as agronomy, soil science, entomology, ecology, chemistry and food sciences. Sustainable horticulture interprets methods and processes in the farming system to the global level. For that, horticulturists use the system approach that involves studying components and interactions of a whole system to address scientific, economic and social issues. In that respect, sustainable horticulture is not a classical, narrow science. Instead of solving problems using the classical painkiller approach that treats only negative impacts, sustainable horticulture treats problem sources.

Because most actual society issues are now intertwined, global, and fast-developing, sustainable horticulture will bring solutions to build a safer world. This book gathers review articles that analyse current horticultural issues and knowledge and propose solutions. This book is the most up-to-date and comprehensive review of our knowledge on the use of innovative technologies and issues in sustainable horticultural systems with case studies from various regions of the world. It contains sixteen reviews written by leading international scientists from various countries. The reviews consider the production, management and issues in fruits and vegetable systems. The book has following sections:

- Section A: Sustainable Horticultural Systems
- Biodiversity in Sustainable Horticultural Systems
- Breeding and Improvement in Sustainable Horticultural Systems

The book is primarily designed for use by the undergraduates and post graduates studying horticulture, sustainable crop production, crop protection, agricultural sciences, plant pathology, and plant sciences. Horticulturists, vegetable specialists, plant and agricultural research scientists, crop protection, and in academia, will find

much of great use in this book. Libraries in all universities and research establishments where agricultural and horticultural sciences are studied and taught should have multiple copies of this valuable book on their shelves. Editor wishes to thank all the contributors and staff of Springer for their cooperation in the completion of this book. Valuable suggestions and encouragement received from Prof. K.G. Ramawat is highly appreciated. Lastly, this journey would not have been possible without the support of my family, G. K. Nandwani (father), Varsha (wife), Gayatri (daughter) and Rahul (son).

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