Contents

Part I  Section A: Sustainable Horticultural Systems

Sustainable Vegetable Production: Caribbean Perspective ............................. 3
Velta Napoleon-Fanis and Dilip Nandwani

Horticulture Based Production Systems in Indian Arid Regions ................. 19
D. C. Bhandari, P. R. Meghwal and S. Lodha

Principles and Practices of Sustainable Vegetable Production Systems............................................................... 51
Ajay Nair, Dana Jokela and Jennifer Tillman

A Small-Scale Integrated Farm System in a Tropical Insular Environment of Guam: A Case Study............................................................ 79
Mari Marutani and John Brown

Impacts of Vulnerabilities and Climate Change on Sustainable Agriculture for Caribbean Small Island Developing States (CSIDS) ........ 95
Rohanie Maharaj and Dimple Singh-Ackbarali

Part II  Section B: Biodiversity in Sustainable Horticultural Systems

Agroforestry in the Caribbean, Traditional Systems, both Sustainable and Biodiverse ........................................................................ 129
Michael Morgan and Thomas W. Zimmerman

Role of Horticulture in Biodiversity Conservation ........................................ 143
Ashwani Kumar

Avocado History, Biodiversity and Production ............................................... 157
Tomas Ayala Silva and Noris Ledesma
Orchid Fruit Diversity at Puebla Mexico: A New Insight into the Biodiversity of a Fragmented Ecosystem with Need for Conservation and Potential for Horticultural Exploitations in Future ................................................................. 207
William Cetzal-Ix, Raúl Alvarez-Mora, Saikat Kumar Basu, Jaqueline Cosme-Pérez and Eliana Noguera-Savelli

Part III  Section C: Breeding and Improvement in Sustainable Horticultural Systems

Advances in Microbial Insect Control in Horticultural Ecosystem .......... 223
Shaohui Wu, Gadi V.P. Reddy and Stefan T. Jaronski

Plant Breeding: A Tool for Achieving Food Sufficiency ...................... 253
M. K. Osei, M. D. Asante, A. Agyeman, M. A. Adebayo and H. Adu-Dapaah

Transcriptome Analysis of Musa and its Applications in Banana Improvement ......................................................... 275
S Backiyarani, S Uma, M. S. Saraswathi and A Chandrasekar

Commiphora wightii (Arnott.) Bhandari in the Indian Desert: Biology, Distribution and Threat Status ............................................. 301
R. N. Kulloli and Suresh Kumar

Risk Assessments and Management Practices for the Major Invasive Plants Recorded in the Horticultural Ecosystem of the Western Pacific ................................................................. 315
Gadi V. P. Reddy

Genetic Resources of Vegetable Crops: Indian Perspective ............... 329
Anjula Pandey

Plant Disease Prevention and Management in Sustainable Agricultural Systems ......................................................... 353
Koon-Hui Wang and Janice Uchida

Index ................................................. ................................................. 385
Sustainable Horticultural Systems
Issues, Technology and Innovation
Nandwani, D. (Ed.)
2014, XX, 395 p. 42 illus., 31 illus. in color., Hardcover
ISBN: 978-3-319-06903-6