## Contents

1. **Ecological Intensification through Nutrients Recycling and Composting in Organic Farming** .............................................................. 1  
   Francesco G. Ceglie and Hamada M. Abdelrahman

2. **Intensification of Aerobic Processing of the Organic Wastes into Compost** ................................................................. 23  
   A. N. Ivankin, Urja Pandya and Meenu Saraf

3. **Lignocellulose Biodegradation in Composting** .................................................. 43  
   Martin A. Hubbe

4. **Bio-composting of Aquatic Biomass Residue and its Amendments in Soil Reclamation** ........................................................... 67  
   Dinesh Kumar Maheshwari and Mohit Agarwal

5. **Physical, Chemical and Biological Parameters for Compost Maturity Assessment: A Review** .......................................................... 83  
   Rajinder Singh Antil, Dev Raj, Nuha Abdalla and Kazuyuki Inubushi

6. **Thermophilic Bacilli and their Enzymes in Composting** ..................... 103  
   Abhishek Bhattacharya and Brett I. Pletschke

7. **Agronomic, Soil Quality and Environmental Consequences of Using Compost in Vegetable Production** ...................................... 125  
   Simon M. Eldridge, K. Yin Chan and Nerida J. Donovan

8. **Principles of Compost-based Plant Diseases Control and Innovative New Developments** .................................................. 151  
   Catello Pane and Massimo Zaccardelli

9. **Integrating Compost Teas in the Management of Fruit and Foliar Diseases for Sustainable Crop Yield and Quality** ..................... 173  
   Katherine J. Evans and Alice K. Percy
10 Microbial Biomass Improvement Following Municipal Solid Waste Compost Application in Agricultural Soil ...................... 199
Olfa Bouzaiane, Naceur Jedidi and Abdennaceur Hassen

11 Bio-composting Oil Palm Waste for Improvement of Soil Fertility .................................................................................. 209
A. W. Gandahi and M. M. Hanafi

12 Decomposition of Organic Materials into High Value Compost for Sustainable Crop Productivity ......................... 245
Dinesh Kumar Maheshwari, Shrivardhan Dheeman and Mohit Agarwal

13 Compost: A Tool to Sustainable Urban and Peri-Urban Agriculture in Sub-Saharan Africa? ................................................ 269
Blaise Pascal Bougnom, Onana Boyomo, Dieudonné Nwaga,
Jean Justin Essia Ngang and François Xavier Etoa

Index ............................................................................................................................................................................. 285
Composting for Sustainable Agriculture
Maheshwari, D.K. (Ed.)
2014, X, 290 p. 43 illus., 16 illus. in color., Hardcover
ISBN: 978-3-319-08003-1