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Nota di contenuto	Intro -- SOIL FERTILITY -- SOIL FERTILITY -- Contents -- Preface -- Effects of Organic Residue Chemistry on Soil Biogeochemistry: Implications for Organic Matter Management in Agroecosystems -- Abstract -- 1. Introduction -- 2. Materials and Methods -- 2.1. Soil Characterization -- 2.2. Plant Residue Characterization -- 2.3. Incubation Experiment -- 2.4. Soil Carbon and Nitrogen Mineralization -- 2.5. Soil Microbial Biomass -- 2.6. Enzyme Assays -- 2.7. Statistical Analysis -- 3. Results -- 3.1. Organic Residue Chemistry -- 3.2. Soil Nitrogen Mineralization -- 3.3. Soil Carbon Mineralization and Microbial Respiration -- 3.4. Soil Microbial Biomass and Metabolic Quotient -- 3.5. Soil Enzyme Activities -- 3.6. Relationship between Soil Parameters -- 3.7. Relationship between Organic Residue Chemistry and Soil Parameters -- 4. Discussion and Conclusion -- Acknowledgment -- References -- Agricultural Management Changes in Pampean Soils Related to Rotation and Tillage: Impacts on Soil Organic Reservoirs -- Abstract -- Description of the Region and Its Cropping History -- Cultivation Effects on Soil Carbon Reservoirs -- Soil Carbon Balance in Cultivated Soils -- Impact of Soybean Introduction in Rotations on Soil Nitrogen Budget -- References -- Fertility and Soil Management in Agroforestry Systems in the Eastern Amazon -- Abstract -- Introduction -- Materials and Methods --

Results and Discussion -- Conclusion -- References -- Maintaining Soil Fertility under Energy Crop Production Systems -- Abstract -- 1. Need for Biofuel Feedstock Nutrient Management -- 2. Nutrient Removal by Biofuel Feedstock -- 3. Nutrient Content of Harvested Crop Residue in United States -- 4. Developing Nutrient Recommendation for Feedstock -- 5. Managing the Nutrient Removal in Feedstock -- 6. Future Research -- References.

Evaluation of the Potassium Supplying Abilities of Three Animal Manures: An Incubation Study -- Abstract -- Introduction -- Methodology -- Soil and Manure Analyses -- Laboratory Incubation -- Calculations -- Statistical Analysis -- Results -- Soil Characteristics -- Manure Characteristics -- Net Mineralization/Immobilization of Potassium -- Conclusion -- References -- Soil Fertility and Nitrogen Fertilization in the Modern Sustainable Farming Systems of Moldova(-- Abstract -- Introduction -- Methods and Conditions -- Results and Discussions -- Conclusion -- Acknowledgments -- References -- Soil Fertility Enhancing Microorganisms and Their Application as Biofertilizers(-- 1 Chemistry and Life Sciences College, Tianjin Normal University, Tianjin, PR China -- 2 Department of Biology, University of Western Ontario, London, Ontario, CA -- Abstract -- 1. Introduction -- 2. Nitrogen-Fixing Bacteria and Their Application as Biofertilizers -- 2.1. Symbiotic Nitrogen Fixers -- 2.2. Non-Symbiotic Nitrogen Fixers -- 2.3. Application of Nitrogen Fixing Bacteria as Biofertilizer -- 3. Phosphate Solubilizing Bacteria -- 3.1. Application of P Solubilizing Bacteria as Biofertilizer -- Conclusion -- Acknowledgments -- References -- Index.

Sommario/riassunto

This book presents topical research in the study of the characteristics, processes and management of soil fertility in agriculture. Topics discussed include agricultural management changes in Pampean soils related to rotation and tillage; agroforestry systems in the Eastern Amazon; soil and crop management practices in bioenergy cropping systems; evaluation of the potassium supplying abilities of animal manures; nitrogen fertilization in the modern sustainable farming systems of Moldova; and soil fertility enhancing microorganisms and their application as biofertilizers.
