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13: Predictive Mapping of Soil Organic Carbon: A Case Study Using
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Crop Residue Effects on Soil Carbon Turnover Using the Michaelis-
Menten Approach; Chapter 15: Geospatial Management of Andean
Technology by the Inca Empire; Chapter 16: Calculating Energy
Efficiency of Applying Fresh and Composted Manure to Soil
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from Soil in a PastureChapter 18: Improved Nitrogen and Energy-Use
Efficiency Using NIR-Estimated Soil Organic Carbon and N Simulation
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Grain Yield and Protein Maps; Chapter 20: Review of Low- and High-
Technology Nitrogen Management Approaches for Improved Nitrogen
Use Efficiency; Chapter 21: Use of GIS-Based Site-Specific Nitrogen
Management for Improving Energy Efficiency; Chapter 22: Geographic
Information and the Management of Animal Manure
Chapter 23: Spatial Ramifications of Crop Selection: Water Quality and
Biomass EnergyChapter 24: Estimating Soil Productivity and Energy
Efficiency Using the USDA Web Soil Survey, Soil Productivity Index
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Sommario/riassunto

We are entering a new era in production agronomics. Agricultural scientists the world over call for the development of techniques that simultaneously increase soil carbon storage and reduce agriculture's energy use. In response, site-specific or precision agriculture has become the focus and direction for the three motivating forces that are changing agriculture today: the expanding capacity of personal computers, the molecular biology revolution, and the recent developments in information technology such as the increasing use of geographical information systems (GIS).Using ma
