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Sommario/riassunto	Nanotechnology is redefining the future of agriculture by offering innovative solutions for enhanced crop productivity, sustainable farming, and improved soil health. Nanotechnology Applications in Modern Agriculture presents a comprehensive exploration of cutting-edge advancements in plant nutrition, disease management, crop protection, and precision agriculture. With detailed insights into nanoparticle synthesis, nanoencapsulation, and nanosensors, this book also delves into biosafety, ethical concerns, and emerging trends. A must-read for researchers, scientists, and students, this resource provides the knowledge needed to harness nanotechnology for a more resilient and efficient agricultural landscape. Authored by a distinguished team of 79 scientists from nine countries, this book comprises 22 rigorously reviewed chapters enriched with 27 tables and 63 color figures. It serves as a definitive resource for researchers, students, agronomists and professionals committed to leveraging nanotechnology for a sustainable agricultural future. .