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Nota di contenuto	Preface -- Chapter. 1. Guarding the Greenery: Plant Health and Quarantine under climate change conditions -- Chapter. 2. Agricultural Security to ensure the food safety under the Plant Protection -- Chapter. 3. Plant Pathogen Mitigation and Adaptation to Climate Change -- Chapter. 4. Plant Health Check: Emerging Methods for Disease Detection -- Chapter. 5. Quarantine of Germplasm: Safeguarding Genetic Resources through in vitro Tissue Culture -- Chapter. 6. Effects of Climate Change on Plant Pests -- Chapter. 7. Effects of Climate Change on Plant Diseases -- Chapter. 8. Effects of climate change on bacterial and viral pathogens -- Chapter. 9. Climate change impact on Phyto-Pathogen emergence: Artificial intelligence (AI) approach -- Chapter. 10. Climate Change poses threat to Helicoverpa zea Boddie (Lepidoptera: Noctuidae) -- Chapter. 11. Does climate change heighten the risk of Xylella fastidiosa infection? -- Chapter. 12. Analyzing pest risk in the context of climate change -- Chapter. 13.

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Sommario/riassunto

The effects of climate change on food safety and plant health represent a relatively new area of study. However, evidence from recent studies is clear: climate change contributes to increased and new food safety & plant health risks as one of several global change factors. This volume analyzes the scientific understanding of the relationship between climate change, food safety, plant pests, plant diseases, and trade. It identifies and discusses four key areas for future policy consideration: risk assessment, SPS capacity in developing countries, climate change resilience, and basic research challenges. We must effectively communicate the impacts of climate change on plant health and build the capacity of national plant protection organizations. More importantly, we need to mobilize resources that will help build stronger national phytosanitary systems that can prevent the spread of plant pests, thereby protecting our food sources and environment, and facilitating safe trade. The present volume is an asset for plant quarantine personnel working in the field, agricultural university students, plant health workers, farmers doing agriculture, plant & seed traders, and all those who use agricultural produce and products. The book is a useful resource for students and professional plant pathologists, entomologists, and plant breeders because it summarizes current knowledge and suggests new research directions. It is also suitable for ecologists & researchers working on crop protection, climate change, and pest control.