1. Record Nr. UNINA9910865280403321 Autore Khan Masudulla Titolo Nanoparticles in Plant Biotic Stress Management Pubbl/distr/stampa Singapore: ,: Springer Singapore Pte. Limited, , 2024 ©2024 **ISBN** 9789819708512 9789819708505 Edizione [1st ed.] Descrizione fisica 1 online resource (496 pages) Altri autori (Persone) ChenJen-Tsung Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Intro -- Preface -- Acknowledgements -- Contents -- Chapter 1: Nanomaterials for the Management of Crop Diseases: Methods and Applications -- 1.1 Small Wonders, Big Impact: Nano-biosensors in Crop Disease Management -- 1.2 Precision Pest Control: Nanopesticides and Nano-insecticides Leading the Way in Crop Disease Mitigation -- 1.3 Different Types of Nanomaterials Used for Crop Protection -- 1.4 Revolutionizing Crop Protection Through Nanoparticle-Enhanced Gene Delivery -- 1.5 Nanoparticles as Biostimulant: A Platform in Agro-environment -- 1.6 Metallic Nanoparticles as Biostimulant in Crop Growth and Development in Agriculture -- 1.7 Innovation in Organic Pest Control Methods for Sustainable Agriculture -- 1.8 Conclusion -- References -- Chapter 2: Nanoparticles: A Novel Promising Strategy for the Management of Plant Disease-Causing Pathogens -- 2.1 Introduction -- 2.2 Nanoparticles (NPs): An Overview -- 2.2.1 Definition and Applications of Nanoparticles in the Past -- 2.2.2 A Nanoscale Analysis of Materials' Behavior -- Relative Surface Area -- Quantum Size -- 2.2.3 Types of Nanoparticles -- Organic Nanoparticles -- Carbon-Based Nanoparticles -- Inorganic Nanoparticles -- 2.2.4 Metal-Based

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