Record Nr. UNINA9910495231303321 Induced genotoxicity and oxidative stress in plants / / edited by Zeba **Titolo** Khan, Mohd Yunus Khalil Ansari, Durre Shahwar Pubbl/distr/stampa Singapore:,: Springer,, [2021] ©2021 **ISBN** 981-16-2074-1 Edizione [1st ed. 2021.] 1 online resource (X, 227 p. 38 illus., 29 illus. in color.) Descrizione fisica 581 Disciplina Soggetti Botany Plant physiology Botanical chemistry Estrès oxidatiu Efecte de l'estrès sobre les plantes Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Induced genotoxicity and oxidative stress in plants: An overview -- Chapter 2. Genotoxicity and DNA damage induced by herbicides and toxins in plants -- Chapter 3. Role of physical agents in inducing genotoxicity and oxidative stress in plants -- Chapter 4. Plant Responses to Induced Genotoxicity and Oxidative Stress by Chemicals -- 5. Metal induced genotoxicity and oxidative stress in plants, assessment methods and role of various factors in genotoxicity regulation -- Chapter 6. Mechanisms of genotoxicity and oxidative stress induced by engineered nanoparticles in plants -- Chapter 7. Oxidative stress and genotoxicity induced by industrial wastes and effluents in plants -- Chapter 8. Mechanism & Molecular Response of induced Genotoxicity & Oxidative Stress in Plants. This book focuses on the effects of genotoxic agents causing oxidative Sommario/riassunto stress in plants. The book explores different kind of chemicals which induces genotoxicity, their mechanism of action and effects on plant health. Impacts at the physiological and molecular levels are discussed. The book is of interest to teachers, researchers and plant scientists.

Also the book serves as additional reading material for undergraduate and graduate students of agriculture, forestry, ecology, soil science, and environmental sciences. National and international agricultural scientists will also find this to be a useful read.