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Sommario/riassunto

The third volume of the series 'Bacilli and Agrobiotechnology' is comprised of 25 chapters that bring a unique perspective to the readers about Bacillus-mediated biotic and abiotic plant stress tolerance, bioremediation and bioprospecting. These chapters are prepared by the leading scientists of global repute. The negative impacts of agrochemicals such as chemical fertilizers and pesticides on human health and environment are paramount. Bacillus and allied genera of beneficial plant-associated microbes are presenting beacon of hope to the farmers, plant scientists and stewards of environment. Several chapters of this volume focus on the induction of various signaling pathways in plants by Bacillus spp. to alleviate biotic and abiotic stresses impacted by global climate change. Agricultural lands contaminated with heavy metals affect the ecological food chain starting from crop cultivation. How the toxic effects of trace metals originating from industrial effluents and agrochemicals can be remediated? This book addresses how to overcome these issues by applying elite strains of Bacillus. Bioprospecting is a systematic and organized search for conversion of bioresources to industrially important products by utilizing microbe-derived metabolites. This volume is enriched by including the bioprospecting aspects mediated by Bacillus spp. with novel insights.
