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Sommario/riassunto	This book explores the role of in silico deployment in connection with modulation techniques for improving sustainability and competitiveness in the agri-food sector; pharmacokinetics and molecular docking studies of plant-derived natural compounds; and their potential anti-neurodegenerative activity. It also investigates biochemical pathways for bacterial metabolite synthesis, fungal diversity and plant-fungi interaction in plant diseases, methods for predicting disease-resistant candidate genes in plants, and genes-to-metabolites and metabolites-to-genes approaches for predicting biosynthetic pathways in microbes for natural product discovery. The respective chapters elaborate on the use of in situ methods to study biochemical pathways for bacterial metabolite synthesis; tools for plant metabolites in defence; plant secondary metabolites in defence; plant

growth metabolites; characterisation of plant metabolites; and identification of plant derived metabolites in the context of plant defence. The book offers an unprecedented resource, highlighting state-of-the-art research work that will greatly benefit researchers and students alike, not only in the field of agriculture but also in many disciplines in the life sciences and plant sciences.
