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Nota di contenuto	Front cover; Foreword; Preface; Acknowledgment; Contents; SECTION 1: New Methodology and Approach (Dose Response, Bioassay); Chapter 1. Dose/Response Relationships in Allelopathy Research; Chapter 2. Can Data Derived from Field and Laboratory Bioassays Establish the Existence of Allelopathic Interaction in Nature?; Chapter 3. Plant-box Method: A Specific Bioassay to Evaluate Allelopathy through Root Exudates; SECTION 2: New Allelochemicals (Pharmaceuticals, Degradation, Promotion, Ion Dissolution) Chapter 4. Isolation, Structural Elucidation and Synthesis of Biologically Active Allelochemicals for Potential Use as Pharmaceuticals; Chapter 5. Recent Chemical Aspects of Wheat Allelopathy; Chapter 6. Ecological Relevance of the Degradation Processes of Allelochemicals; Chapter 7. Iron Dissolution Reaction of Mugineic Acids for Iron Acquisition of Gramineous Plants; Chapter 8. Chemical and Biological Analysis of

Novel Allelopathic Substances, Lepidimoide and Lepidimoic Acid;
SECTION 3: Allelopathy in Potential Invasive Weeds
Chapter 9. Allelopathic Activity of White Rocket [*Diplotaxis erucoides* (L.) DC.]; Chapter 10. Weed-crop Interferences in Hungary; SECTION 4: Allelopathic Cover Crops to Suppress Weeds; Chapter 11. Allelopathic Activity of Buckwheat: A Ground Cover Crop for Weed Control; Chapter 12. Sunflower-desired Allelopathic Crop for Sustainable and Organic Agriculture?; Chapter 13. The Potential for Allelopathy During Decomposition of Hairy Vetch Residue; Chapter 14. Allelopathic Effect of *Astragalus adsurgens* Pall Root Culture
Chapter 15. Evaluation of Weed Suppressive Effect of Allelochemicals of Ornamental Marigold Species; SECTION 5: Rice Allelopathy; Chapter 16. Rice Allelopathy; Chapter 17. Allelochemicals Involved in Rice Allelopathy; SECTION 6: New Approach in Tree Allelopathy; Chapter 18. Variation in Allelopathic Influence among Wide Range of Tree Species; Chapter 19. Monitoring Allelopathic Expression and Functional Performance of Tamarind (*Tamarindus indica* L.): A Case Study; Chapter 20. Influence of Water Extract from *Uncaria tomentosa* Bark on Ultrastructure of *Capsicum*
SECTION 7: New Field in Allelopathy (Aquatic Plants, Mushrooms, Insects, Animals); Chapter 21. Production of Allelochemicals by an Aquatic Plant, *Myriophyllum spicatum* L.; Chapter 22. Fruiting Bodies of Mushrooms as Allelopathic Plants; Chapter 23. Allelopathic Action of Triticale Allelochemicals Towards Grain Aphid; Chapter 24. Rat Sexual Behavior and Volatile Substance from Plants; Back cover

Sommario/riassunto

The principal goal of allelopathy is to foster sustainable agriculture, forestry, and environment. The objective is to minimize the industrial chemicals and to maximize the use of natural resources locally available while improving crop productivity, forestry and the environment. The technological advances made in allelopathy research in recent years have been created, analyzed, and developed by scientific establishments throughout the world. They present exciting and intellectually challenging problems which are solvable using modern techniques. These modern and advanced techniques as described in the chapters presented in this volume are representative of the exciting research and development approaches today.
