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# Plant Phenolics in Abiotic Stress Management

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**Editors:** [Rafiq Lone](#), [Salim Khan](#), [Abdullah Mohammed Al-Sadi](#)

Inclusive coverage of plant phenolics in stress management in plants

Brings forth latest evidence of role of plant phenolics in abiotic stress management in plants

Explains the role of plant phenolics in abiotic stress management for sustainable agriculture

**1714** Accesses

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## About this book

This book is a comprehensive collection of information on the role of plant phenolics in stress management in plants. The main focus of this book is to address the abiotic stress management in plants by plant phenolics under varied environments. Plant metabolic networks contribute significantly to the plasticity of plant metabolism, which is required to afford the sessile lifestyle of a land plant under changing environmental conditions. In natural systems, plants face a plethora of antagonists and thus possess a myriad of defenses and have evolved multiple defense mechanisms by which they can cope with various kinds of stresses for adaptation. Plant phenolics being ubiquitous have been extracted from every plant part such as roots, stem, leaves, flowers, fruits, and seeds and thus plays important role in adapting the plants to the varied environment. The book will provide readers with an up-to-date

review of this dynamic field and sets the direction for future research. This book is of interest and use to a diverse range of topics of regulation of abiotic stress in plants. Bringing together work from leading international researchers, it is also a valuable reading material for plant and agricultural scientists, academics, researchers, students, and teachers wanting to gain insights into the role of plant phenolics in stress management in plants for sustainable agriculture.

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## Keywords

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**Phenolic compounds**      **Antioxidants**

**Abiotic Stress**      **Stress management**

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**Dr. Rafiq Lone** is presently working as Assistant Professor of Botany at Central University of Kashmir, Jammu and Kashmir- India. He has completed his M. Sc and Ph.D. in Botany from Jiwaji University, Gwalior, Madhya Pradesh, India. Dr. Lone have been awarded National Post-Doctoral Fellowship (N-PDF) by SERB, DST, Government of India. Previously he was working as Assistant Professor in Botany at SBBS University, Khiala Jalandhar, Punjab, Lecturer in higher education, Jammu and Kashmir, Teaching Assistant at School of Studies in Botany, Jiwaji University, Gwalior-India, and Project Fellow in a project funded by MPCST-Bhopal-(M.P)-India. Dr Lone has 8 years of teaching and 12 years of research experience He has published more than 30 research papers in National and International journals besides published more than 16 book chapters and two edited books are also to his credit. Dr Lone has attended 30 national and international conferences across the country and has presented papers on plant microbe interaction and plant phenolics. He has many awards to his credit. His main area of research interest focuses on Plant-microbe interaction, Plant Nutrition, Plant Phenolics and Invasion Biology.

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**Dr. Abdullah M. Al-Sadi** is currently the Dean of the College of Agricultural and Marine Sciences & Professor of plant pathology at Sultan Qaboos University, Oman. He obtained his PhD in plant pathology from the University of Queensland, Australia. His research targets plant diseases affecting vegetable and fruit crops, with a focus on the etiology, population structure and management options using chemicals, cultural practices and biological control. Al-Sadi has **288** publications, of which **178** are refereed papers published in journals indexed in **Scopus/WoS**, with a cumulative impact factor of **399**. He has supervised **22** PhD, **34** MSc and **56** BSc final year students. Al-Sadi is in the editorial and referee board of more than 20 international journals.

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