SALAHADDIN UNIVERSITY ERBIL

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New Book Proposal : Advances in Stress Biology of Medicinal and Aromatic Plants

1 message

Raheela Anjum <raheelaanjum@bentham-review-correspondence.net> Fri, Mar 8, 2024 at 1:12 PM
To: akhter.ahmed@su.edu.krd

Dear Dr. A.A. Ahmed,

In view of your expertise in the field, your name has been recommended as a potential reviewer of a new eBook proposal entitled "**Advances in Stress Biology of Medicinal and Aromatic Plants**" that has been submitted to us for consideration. I hope that you will be able to help us in this regard. Kindly check the novelty, importance and scope of the proposal and please reply to the queries below, which will help us in arriving at a decision on this proposal.

Criterion	Excellent	Good	Fair	Poor
Originality of the Topic				
Technical Quality				
Importance in Field				
Extends the Previous Study				
Readily Understandable				
Suitability as eBook				
Interesting for a Non-Expert				
Overall the Abstract is rated	**(Excellent ---------- Poor)** **10 9 8 7 6 5 4 3 2 1**			

REFEREE'S RECOMMENDATIONS

Accept with minor changes	
Accept with revision based on attached comments	
Rejected	

REFEREE'S COMMENTS

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Background and Purpose: The primary purpose of this book is to provide a comprehensive and up-to-date exploration of the recent advancements in stress biology as it pertains specifically to medicinal and aromatic plants. Recognizing the paramount importance of these plants in various industries, including pharmaceuticals and aromatherapy, our aim is to synthesize cutting-edge research findings that shed light on the intricate molecular, physiological, and ecological responses of these plants to various stressors.

This book will serve as a valuable resource for biology students, researchers, academics, and professionals seeking a deeper understanding of how stress influences the growth, development, and bioactive compound synthesis in medicinal and aromatic plants. By focusing on recent breakthroughs in the field, we aspire to bridge existing knowledge gaps and stimulate further inquiry into innovative strategies for enhancing the resilience and productivity of these valuable plant species.

Through a meticulous examination of molecular mechanisms, physiological adaptations, and ecological interactions, we intend to offer insights that not only contribute to the scientific community's understanding but also have practical applications in sustainable cultivation, conservation, and the optimization of bioactive compound production. The overarching purpose is to propel the discourse on stress biology in medicinal and aromatic plants forward, fostering a collaborative effort towards the development of robust and effective stress management strategies for these vital botanical resources.

Abstract/Proposal Summary: The book, titled "Advances in Stress Biology of Medicinal and Aromatic Plants," intends to unravel the intricate mechanisms by which plants navigate stress and adapt to environmental challenges. Its focus extends to the subcellular level, elucidating the intricacies of gene functioning and the signaling processes initiated by plants in response to stress stimuli. It systematically outlines the repercussions of these stress-induced responses on plant growth and the synthesis of bioactive compounds. Beyond its applicability to the scientific community, the book incorporates narratives illustrating successful stress management strategies employed in cultivating these plants. Leveraging contemporary technologies, the publication elucidates these narratives, facilitating a comprehensive understanding of plant stress dynamics for a diverse audience, including researchers, biology students, and academicians. The book will serve as an informative resource for individuals keen on exploring the captivating realm of plants and their adaptive responses to stress. In essence, it offers an engaging expedition into the remarkable domain of stress biology of medicinal and aromatic plants.

Table of Contents: Chapter 1: Introduction to Stress Biology in Medicinal and Aromatic Plants

Chapter 2: Molecular Insights: Genetic and Epigenetic Regulation under Stress

Chapter 3: Signaling Pathways in Medicinal and Aromatic Plants' Stress Responses

Chapter 4: Omics Technologies: Unraveling Transcriptomic, Proteomic, and Metabolomic Responses

Chapter 5: Physiological Adaptations: Impact on Growth, Development, and Photosynthesis

Chapter 6: Water Use Efficiency and Osmotic Regulation in Stress Conditions

Chapter 7: Ecological Dynamics: Interactions and Adaptations in Plant Communities

Chapter 8: Plant-Microbe Interactions under Stress Conditions

Chapter 9: Impact on Bioactive Compounds: Altered Synthesis and Profiles

Chapter 10: Pharmaceutical Implications: Stress-Induced Changes in Medicinal Properties

Chapter 11: Aromatherapy Perspectives: Stress and Essential Oil Production

Chapter 12: Advanced Imaging Techniques: Studying Stress at the Cellular Level

Chapter 13: Bioinformatics Approaches: Data Analysis and Integration in Stress Research

Chapter 14: Stress Management Strategies in Medicinal and Aromatic Plants

Chapter 15: Future Frontiers in Medicinal and Aromatic Plants: Avenues for Research in Stress Biology

Foreword: Foreword will be taken from renowned scientists / professors after acceptance of the proposal.

Preface: In the pursuit of botanical knowledge, "Advances in Stress Biology of Medicinal and Aromatic Plants" emerges as a culmination of scholarly endeavors aimed at unraveling the intricate web of responses that plants deploy when faced with stress. This endeavor seeks to bridge the gap between the microscopic world of cells, where genes silently choreograph responses, and the tangible outcomes observed in the growth and synthesis of compounds in medicinal and aromatic flora.

The genesis of this work lies in the recognition of the paramount importance of stress biology in shaping the destiny of plants integral to our ecosystems and human well-being. As we navigate the burgeoning landscape of botanical sciences, we are compelled to understand the adaptive strategies these plants employ to endure environmental challenges.

The chapters within traverse the molecular landscape, deciphering the language of genes and decoding the intricate signaling cascades that become instrumental in orchestrating a plant's response to stressors. Through a synthesis of cutting-edge research and a nuanced exploration of case studies, this book not only aspires to contribute to the academic discourse but also seeks to engage a broader audience in the wonders of plant biology.

Embedded within the scientific fabric are narratives of resilience and triumph—stories of individuals who, through wisdom and dedication, have successfully managed stress in cultivating medicinal and aromatic plants. These stories are more than anecdotes; they are windows into the practical applications of our scientific understanding, showcasing the real-world impact of stress biology research.

This book is not exclusively designed for the seasoned researcher but extends a warm invitation to students, educators, and anyone with an inquisitive mind. It endeavors to demystify the complexities of plant stress biology, offering a journey that is both enlightening and accessible.

As we embark on this collective exploration, I extend my gratitude to the contributors whose expertise has enriched the pages within. May this book serve as a valuable resource, inspiring a renewed fascination for the botanical realm and encouraging an appreciation for the delicate dance of plants with the stresses they encounter.

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We would request that you send your comments and recommendations back to us as soon as possible.

Best regards,

Editorial Manager

Bentham Science Publisher