

Biochemical, Physiological, and Molecular Avenues

for Combating Abiotic Stress in Plants

Edited By: Shabir Hussain Wani

Abiotic stress tolerance is a constant challenge for researchers and professionals working on improving crop production. Combining recent advances with foundational content, *Biochemical, Physiological, and Molecular Avenues for Combating Abiotic Stress in Plants* offers in-depth coverage of a variety of abiotic stress-tolerance mechanisms to better understand and improve plant response and growth under stress conditions. The mechanisms explored in this book include stress perception, signal transduction, and synthesis of stress-related proteins and other molecules.

This book also provides a critical understanding of the networks of genes responsible for abiotic stress tolerance and their utilization in the development of stress tolerance in plants. Practical breeding techniques and modern genetic analyses are also covered. *Biochemical, Physiological, and Molecular Avenues for Combating Abiotic Stress in Plants* is a must have reference for researchers and professionals in agronomy, plants science, and horticulture.

Key Features

- Unlocks the physiological, biochemical, and molecular basis of abiotic stress response and tolerance in crop plants
- Presents comprehensive information on abiotic stress tolerance from gene to whole-plant level
- Includes content on antioxidant metabolism, marker-assisted selection, microarrays, next-generation sequencing, and genome editing techniques



ACADEMIC PRESS

An imprint of Elsevier
elsevier.com/books-and-journals

FOOD SCIENCE/AGRICULTURE

ISBN 978-0-12-813066-7



9 780128 130667