

1. Record Nr.	UNINA9910743214203321
Titolo	Brassinosteroids Signalling : Intervention with Phytohormones and Their Relationship in Plant Adaptation to Abiotic Stresses // edited by Mohd Tanveer Alam Khan, Mohammad Yusuf, Fariduddin Qazi, Aqeel Ahmad
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	981-16-5742-4 981-16-5743-2
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (311 pages)
Collana	Biomedical and Life Sciences Series
Disciplina	571.742
Soggetti	Botanical chemistry Plant physiology Plant diseases Plant ecology Plant Biochemistry Plant Physiology Plant Pathology Plant Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1. Signal transduction of brassinosteroids under abiotic Stresses -- Chapter 2. Plant proteomics and metabolomics investigations in regulation of brassinosteroid -- Chapter 3. Cross talk between brassinosteroids and nitric oxide regulate plant improvement during abiotic stress -- Chapter 4. Interaction between brassinosteroids and hydrogen peroxide networking signal molecules in plantsInteraction between brassinosteroids and hydrogen peroxide networking signal molecules in plants -- Chapter 5. Brassinosteroids and strigolactone signaling in plants -- Chapter 6. Mechanism associated with brassinosteroids crosstalk with gibberellic acid in plants -- Chapter 7. Brassinosteroids and ethylene mediated cross talk in plant growth and development -- Chapter 8. Interplay of brassinosteroids and auxin for understanding of signalling pathway -- Chapter 9. Brassinosteroids crosstalk with ABA under stress condition

-- Chapter 10. Cross talk between brassinosteroids and cytokinins in relation to plant growth and developments -- Chapter 11. Role of brassinosteroids and its crosstalk with other phytohormone in plant responses to heavy metal stress -- Chapter 12. Mechanism associated with brassinosteroids mediated detoxification of pesticides in plants -- Chapter 13. Glyphosate: is brassinosteroids application a remedy? -- Chapter 14. The production of high-value secondary metabolites through hairy root transformation in the presence of brassinosteroids -- Chapter 15. Role of Brassinosteroids in Protein Folding Under High Temperature Stress -- Chapter 16. Molecular mechanism of Brassinosteroids in boosting crop yield.

Sommario/riassunto

This book presents the state of the skill of understanding brassinosteroids (BRs) signaling plus crosstalk with phytohormone and their association in plant adaptation to abiotic stresses comprising physiological, biochemical, and molecular developments. Due to progressively adverse environmental conditions and scarce natural resources, high-efficient crops have become more important than ever. For the successful improvement of stress-tolerant plants, it is vital to understand the precise signaling appliances that plants practice to abide stresses as well as how much these mechanisms are convinced by phytohormone. However, it is also debatable on which step plants can attain brassinosteroids (BRs) signaling from an evolutionary viewpoint. BRs are involved in modulating a large array of important functions throughout a plant's life cycles. BRs are considered as one of the most important plant steroidal hormones that show a varied role in observing a wide range of developmental practices in plants. Our grip on brassinosteroids signaling has quickly extended over the past two decades, owing in part to the isolation of the constituents intricate in the signal transduction trail. The book proposes a useful guide for plant researchers and graduate students in connected areas. .
