

1. Record Nr.	UNINA9910502669703321
Autore	Gupta Dharmendra K
Titolo	Hormones and Plant Response // edited by Dharmendra K. Gupta, Francisco J. Corpas
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-77477-5
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (317 pages)
Collana	Plant in Challenging Environments, , 2730-6208 ; ; 2
Altri autori (Persone)	CorpasFrancisco J
Disciplina	571.742
Soggetti	Botany Plants Stress (Physiology) Botanical chemistry Plant biotechnology Agriculture Plant Science Plant Signalling Plant Stress Responses Plant Biochemistry Plant Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Plant hormones and plant defense response against pathogens (Marocco) -- Chapter 2. Plant hormones and nutrient deficiency responses (Romera) -- Chapter 3. Seed germination: Explicit cross talk between hormones and ROS (Kar) -- Chapter 4. Hormones and light-regulated seedling development (Datta) -- Chapter 5. Light-mediated regulation of plant hormone metabolism (Freschi) -- Chapter 6. Hormones in photoperiodic flower induction (Kopcewicz) -- Chapter 7. Recent insight into auxin mediated molecular cross talk events associated with regulation of root growth and architecture during abiotic stress in plants(Mukherjee) -- Chapter 8. Abscisic acid and fruit ripening: Its role in grapevine acclimation to the environment, a case study (Berli) -- Chapter 9. Biosynthesis and molecular mechanism of

brassinosteroids action (Bajguz) -- Chapter 10. Regulatory role of melatonin in the redox network of plants and plant hormones relationship in stress (Arnao) -- Chapter 11. Tryptophan: A precursor of signaling molecules in higher plants (Corpas) -- Chapter 12. GABA and proline metabolism in response to stress (Signorelli).

Sommario/riassunto

This book provides an overview of the recent advancements for plant scientists with a research focus on phytohormones and their responses (nature, occurrence, and functions) in plant cells. This book focuses on the role of phytohormones in biosynthesis, plant sexual reproduction, seed germination and fruit development and ripening. It further highlights the roles of different phytohormones on signaling pathways as well as on photoperiodism/Gravitropism/Thigmotropism. The volume also explores the role of phytohormones in gene expression and plant melatonin and serotonin and covers how plant hormones react in case of stress/defence response (metals/metalloids/pathogen). Last but not least, this volume also discusses phytohormones in the context of new regulatory molecules such as Nitric oxide, hydrogen sulfide, melatonin.
