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Titolo	SALICYLIC ACID : Plant Growth and Development // edited by Shamsul Hayat, Aqil Ahmad, Mohammed Nasser Alyemeni
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Nota di contenuto	Preface -- Contributors -- About the editors -- 1. Salicylic acid: An update on biosynthesis and action in plant response to water deficit and performance under drought -- 2. Salicylic acid: Physiological roles in plants -- 3. Salicylic acid and phospholipid signaling -- 4. Transport of salicylic acid and related compounds -- 5. Interplay between environmental signals and endogenous salicylic acid concentration -- 6. Impact of salicylic acid on the transport and distribution of sugars in plants -- 7. Endogenous ABA as a hormonal intermediate in the salicylic acid induced protection of wheat plants against toxic ions. -- 8. Salicylic acid biosynthesis and role in modulating terpenoid and flavonoid metabolism in plant responses to abiotic stress -- 9. Salicylic acid-mediated stress-induced flowering -- 10. Salicylic acid-mediated abiotic stress tolerance -- 11. Signaling role of salicylic acid in abiotic stress responses in plants -- 12. The interplay between salicylic and jasmonic acid during phytopathogenesis -- 13. Potential benefits of salicylic acid in food production -- 14. Short and long term effects of

salicylic acid on protection to phytoplasma associated stress in potato plants -- 15. Efficiency of salicylic acid application on postharvest perishable crops -- 16. Recent advances and future prospects on practical use of salicylic acid.

Sommario/riassunto

Phytohormones are known to direct plant growth, in a coordinated fashion in association with the metabolism that supplies energy and the building blocks to generate the form that is recognized as a plant. Out of the chemicals recognized as hormones, attention has largely been focused on Auxins, Gibberellins, Cytokinins, Abscisic acid, Ethylene and more recently to Brassinosteroids. However, this book provides the recent information about a natural chemical, Salicylic Acid, that could be raised to the status as assigned to the above phytohormones because it has significant regulatory impact on important aspects of the plant life. Salicylic acid (SA) was first discovered as a major component in the bark extracts from *Salix* (willow) which was used as an anti-inflammatory drug. However, SA is ubiquitous in plants, generating a significant impact on plant growth and development, photosynthesis, transpiration, ion uptake and their transport. Moreover, SA also induces specific changes in leaf anatomy and chloroplast structure. SA is recognized as an endogenous signal, mediating in plant defence, against pathogens. In this book a total of 16 chapters have been included which provide a recent update on salicylic acid. This book is not an encyclopedia of reviews but includes a selected collection of newly written, integrated, illustrated reviews describing our knowledge on salicylic acid. The aim of this book is to tell about the salicylic acid involvement in plants, by the present time. The various chapters incorporate both theoretical and practical aspects which may serve as a baseline information for future research through which significant developments are possible. We are of the opinion that this book will be of immense importance to all those who have even the least interest in biological and agricultural sciences.