

Advances in Phytonanotechnology

From Synthesis to Application

Edited by

Mansour Ghorbanpour and Shabir Hussain Wani

Effectively and efficiently apply targeted nanotechnologies for plant improvement

- Discusses the morphological, physiological, and biochemical responses of plants to nanomaterials and the ability of nanomaterials in modifying the genetic constitution of plants
- Emphasizes new applications of nanomaterials including nanosensor technology and nanomaterials as nanocarrier-based antimicrobial phytochemicals
- Presents the role of nanotechnology as a novel technique for remediation of heavy metals by plants

Advances in Phytonanotechnology: From Synthesis to Application guides readers through various applications of nanomaterials on plants by presenting the latest research related to nanotechnology and nanomaterials on plant systems. The book focuses on the effects of these applications on plant morphology, physiology, biochemistry, ecology, and genetics. The book covers impacts on plant yield, techniques, review of positive and negative impacts, and overview of current policies regarding use of nanotechnology on plants. Additionally, this book offers insights into the appropriate application of nanoscience to plants and crops for improved outcome while also exploring their bioavailability and toxicity to the environment. This book is an important resource for students, academics, and researchers in phytonanotechnology.

Mansour Ghorbanpour is a faculty member at the Department of Medicinal Plants, and the Institute of Nanoscience and Nanotechnology at Arak University, Iran. He has also been a visiting scholar in the Nutrient Uptake and Toxicity Stress (NUTS) group at the University of Western Australia. He has published over 100 peer-reviewed journal articles as well as seven books and is an editor for several international journals. His research interests include nanotechnology in plant systems, bioavailability of emerging contaminants, environmental stresses, and plant metabolism. He has previous experience in beneficial soil microorganisms and secondary metabolite biosynthesis pathways.

Shabir Hussain Wani is an Assistant Professor (Senior Scale) at the Mountain Research Center for Field Crops, Khudwani, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, India. He has published more than 100 papers/chapters in journals and books of international and national repute. He was Reviews Editor for *Frontiers in Plant Sciences*, Switzerland (2015 to 2018). He is also the editor of *Life Sciences (LS): An International Journal of Life Sciences* and *SKUAST Journal of Research*. He was awarded the Young Scientist Award (Agriculture) 2015 from the Society for Plant Research at the National Conference on Plant Science Research at University of Delhi, India. He has also worked as Visiting Scientist in the Department of Plant Soil and Microbial Sciences, Michigan State University, USA, for 2016–17 under the UGC Raman Postdoctoral Fellowship Program. Currently, he is in charge of the wheat improvement program of SKUAST-Kashmir under the All India Coordinated Wheat and Barley Improvement Project.



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