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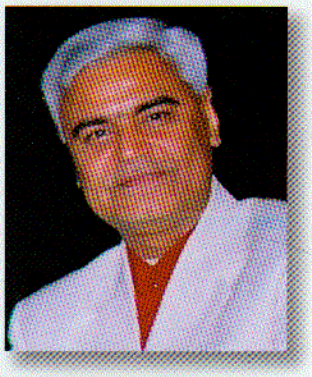
Understanding abiotic stress responses in plants is critical for the development of new varieties of crops, which are better adapted to harsh climate conditions. The new book by the well-known editor team Narendra Tuteja and Sarvajeet Singh Gill provides a comprehensive overview on the molecular basis of plant responses to external stress like drought or heavy metals, to aid in the engineering of stress resistant crops.

After a general introduction into the topic, the following sections deal with specific signaling pathways mediating plant stress response. The last part covers translational plant physiology, describing several examples of the development of more stress-resistant crop varieties.



*An elected fellow of numerous academies and visiting scientist at ICGEB, New Delhi,* ***Narendra Tuteja*** *is currently a Professor and Head of Amity Institute of Microbial Technology, Noida, UP, India. He has made significant contributions to crop improvement under adverse conditions, reporting the first helicase from plant and human cells and demonstrating new roles of Ku autoantigen, nucleolin and eIF4A as DNA helicases. Furthermore, he discovered novel functions of helicases, G-proteins, CBL-CIPK and LecRLK in plant stress tolerance, and PLC and MAP-kinase as effectors for G proteins. Narendra Tuteja also reported several high salinity stress tolerant genes from plants and fungi and developed salt/drought tolerant plants.*

*Assistant professor at MD University, Rohtak, India,* ***Sarvajeet Singh Gill*** *has made significant contributions in the field of abiotic stress tolerance. Together with Narendra Tuteja he worked on plant helicases and discovered a novel function of plant PDH45, MCM6 and p68 in salinity stress tolerance that will help to improve crop production at sub-optimal conditions. Sarvajeet Gill has also exploited the potential of P. indica for abiotic stress tolerance and sustainable agriculture. Sarvajeet Gill has edited several books and has a number of research papers and review articles to his credit in the journals of International repute.*

ISBN 978-3-527-33918-1

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