

About the Book

Plant Micronutrients is an overview of the roles of micronutrients, their deficiency responses and management of the deficiencies presented in two parts. Part I addresses the roles of micronutrients, drawing profusely from contemporary researches using functional analysis of phenotypic mutants and advances in molecular biology of plants, with an accent on expression of genes encoding membrane transporter proteins and enzymes involved in plant defenses against stresses. The deficiency responses have been given a good coverage, as looking for explanations to these may pave the way for greater insight into the roles of the micronutrients. Part II centers around identification, evaluation and management of micronutrient deficiencies that restrict the production potential of the crop plants world over.

The book will serve as a useful resource for advanced students and researchers in the area of plant nutrition, as also the agricultural / extension workers for optimizing crop yields in low micronutrient soils through soil and / or plant based approaches.

About the Author

The author, credited with initiating experimental research on plant micronutrients in India, is presently Emeritus Professor with the Botany Department of the Lucknow University, Lucknow (India). In his over 50 years stint with the University, he has given advanced courses in plant nutrition and soil-plant relationships and has guided over 25 students for Ph.D. degree. Trained in methods of micronutrients research in Australia, the author has been actively associated with several research projects on micronutrients, of which the US-PL480 projects on *Iron* and *Molybdenum* and the ICAR, All India Coordinated Research Project on *Soil and Plant Micronutrients* figure prominently. He has published over 140 research papers and edited/authored three books and six chapters to books. The author's contributions in the area of micronutrients have won him wide recognition and several awards.

ISBN 1-57808-416-4



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