Basra, A.S. (ed.): **Plant Growth Regulators in Agriculture and Horticulture: Their Role and Commercial Uses. -** Food Products Press, an imprint of The Haworth Press, New York 2000. 264 pp. Hardcover USD 89.95, ISBN 1-56022-891-1, softcover USD 39.95, ISBN 1-56022-896-2.

For many years, the crop scientists and farmers have used natural and synthetic plant growth regulators (PGRs) to manipulate the growth, shape and form of crop plants. A recent development of modern analytical methods and an integration of powerful tools of molecular biology and genetics such as the use of transformants and mutants have resulted in a huge and impressive progress in the PGRs research. This progress has revealed new vistas for the effective use of PGRs in enhancing production efficiency of agricultural and horticultural crops including discovery and registration of new PGRs as well as predicting and preventing their side effects to the environment and/or to human health. The rapidly accelerating knowledge concerning regulatory roles of both classical and newly discovered PGRs in the control of plant growth and development as well as a rationale evaluation of their commercial uses in agriculture and horticulture is summarized in this book.

The contents of the book, edited by an eminent plant physiologist in the field Amarjit S. Basra from India, is divided into 9 chapters written by 17 specialists from USA, Canada, Europe (Denmark, Finland), Israel and Japan. Chapters 1 and 2 bring general and detailed information about the involvement of PGRs in control of plant root initiation, formation and development and in manipulating the yield formation in cereals, respectively. Especially Chapter 2 dealing with different aspects of modifying cereal production resulting from the use of PGRs may be of a great practical importance for growers and breeders. Chapter 3 is specialized to the regulatory role of gibberellins in the protection of plants from environmental stresses. Other parts are focused especially on the utility of PGRs in horticultural crops. Chapter 4 brings a critical appraisal concerning applications of plant growth-retardant chemicals in ornamental horticulture, Chapter 5 deals with the role of PGRs in the postharvest behaviour of ornamentals. Different aspects concerning function of PGRs and their involvement in fruit physiology are thoroughly discussed in Chapters 6 to 9. Chapter 6 concerns manipulations of fruit development and storage quality by PGRs, Chapter 7 is devoted to the role of PGRs in citriculture, Chapter 8 evaluates the effects of PGR sprays to reduce fruit drop in lychee and Chapter 9 discusses the uses of PGRs as bloom-thinning agents of pome and stone fruits.

This book reasonably combines both basic scientific and applied research aspects of the studied topics. Due to this integrated approach it seems to be extremely beneficial to a range of experts including plant physiologists, biochemists, agriculturalists, horticulturalists, soil scientists, agrochemists and environmental biologists. Besides, as a valuable source of up-to-date information concerning PGRs it can be also warmly recommended to advanced students in the field.

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