BOOK REVIEW

Salinity Tolerance in Plants: Strategies for Crop Improvement: edited by R. C. STAPLES and G. H. TOENNIESSEN. John Wiley, New York, 1984. 443 pp. £47.45.

This volume, based on papers presented at an International Symposium held in Italy in 1982, provides the reader with an overview of current developments in our understanding of salt-tolerance mechanisms in plants and of our efforts to improve salt-tolerance in agricultural crops. The first half of the book is devoted to contributions on salt transport and on mechanisms of resistance, while the second half considers crop selection and economic aspects. This is a very fashionable area of plant science and much has already been written on these subjects. The main value of this collection of essays is to provide an update on earlier publications.

From the biochemist's viewpoint, the most interesting chapters are those on the effects of salinity on plant lipid composition (P. J. C. Kuiper), on photosynthetic pathways and leaf adaptation to salinity (U. Lüttge and J. A. C. Smith) and on salt tolerance via proline and glycinebetaine accumulation (R. G. Wyn Jones et al.). There are also appropriate chapters on the use of cell culture techniques in studying the phenomena of salt uptake and tolerance.

This is a well written and excellently edited book, with many illustrations. It is certainly a cut above most symposium proceedings and will be a useful reference for several years yet.

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