

Allen, L.H., Jr., Kirkham, M.B., Olszyk, D.M., Whitman, C.E. (ed.): **Advances in Carbon Dioxide Effects Research.** - American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Madison 1997. ISBN 0/89118-133-4. 228 pp., USD 36.00.

One of the most important recent problems of the world, global climate change, is associated mainly with marked changes in atmospheric CO₂ concentration. Scientists concerned about the global increase in CO₂ concentration met in a symposium held at the annual society meeting at Cincinnati, Ohio, 7-12 November 1993. The paperback volume—published as ASA Special Publication Number 61—represents proceedings of the symposium organized by L.H. Allen, Jr. under the auspices of the ASA Working Group on Global Climate Change (ASA 210.10).

Ten papers included in the book, prepared by 28 well known scientists from the U.S.A., the Netherlands, Philippines, and Italy, review recent information on different plant responses to atmospheric CO₂ enrichment. They deal with plant response under unfavourable growing conditions, with implications in root-soil-microbe interactions, with response of plant respiration, with temperature effects on growth and development, with response of forest trees and nontraumatic response of natural vegetation, and with simultaneous effect of CO₂ and ozone. Special attention is devoted also to responses found in free-air and open-top chambers facilities, and to use of plant modelling to project future crop growth and yield in response to global climate change.

The book has been produced in the good standard of ASA Special Publications. Useful is a comprehensive list of conversion factors for SI and non-SI units. However, a short subject index is missing. Generally, the authors have provided an excellent reference for anyone concerned with changes in the atmosphere and its influence on plant life.

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