

- MILLAR, A. A., DUYSSEN, M. E., WILKERSON, G. E.: Internal water balance of barley under soil moisture stress. — *Plant Physiol.* **43** : 968—972, 1968.
- NAGARAJAH, S.: The effect of nitrogen on plant water relation in tea (*Camellia sinensis*). — *Physiol. Plant.* **51** : 304—308, 1981.
- NAGARAJAH, S., RATNASURIYA, G. B.: The effect of phosphorus and potassium deficiencies on transpiration in tea (*Camellia sinensis*). — *Physiol. Plant.* **42** : 103—108, 1978.
- PAZOUREK, J., NÁTR, L.: Changes in the anatomical structure of the first two leaves of barley caused by the absence of nitrogen or phosphorus in the nutrient medium. — *Biol. Plant.* **23** : 296—301, 1981.
- PITCAIRN, C. E. R., GRACE, J.: The effect of wind and a reduced supply of phosphorus and nitrogen on the growth and water relations of *Festuca arundinacea* SCHREB. — *Ann. Bot.* **49** : 649—660, 1982.
- RADIN, J. W.: Water relations of cotton plants under nitrogen deficiency. IV. Leaf senescence during drought and its relations to stomatal closure. — *Physiol. Plant.* **51** : 145—149, 1981.
- SHIMSHI, D.: The effect of nitrogen supply on transpiration and stomatal behaviour of beans (*Phaseolus vulgaris* L.). — *New Phytol.* **69** : 405—412, 1970.
- SLATYER, R. O., BIERHUIZEN, J. F.: A differential psychrometer for continuous measurements of transpiration. — *Plant Physiol.* **39** : 1051—1056, 1964.
- SLÁVIK, B.: The influence of water deficits on transpiration. — *Physiol. Plant.* **11** : 524—535, 1958.
- STALFELT, M. G.: The stomata as a hydrophobic regulator of the water deficit of the plant. — *Physiol. Plant.* **8** : 572—593, 1955.
- YOSHIDA, S., CORONEL, V.: Nitrogen nutrition, leaf resistance, and leaf photosynthetic rate of the rice plant. — *Soil Sci. Plant Nutr.* **22** : 207—211, 1976.

BOOK REVIEW

EGAN, H., PREUSSMANN, R., O'NEILL, I. K., EISENBRAND, G., SPIEGELHALDER, B., BARTSCH, H. (ed.): ENVIRONMENTAL CARCINOGENS SELECTED METHODS OF ANALYSIS. VOL. 6: N-NITROSO COMPOUNDS. — International Agency for Research on Cancer, Lyon 1983. 508 pp. US \$ 40.00.

The existence of N-nitroso compounds in the environment represents a serious problem in environmental health hazard studies. A large number of compounds are involved and they or reactants capable of forming them, are widely distributed. The IACR has published since 1972 several specific volumes, dealing with the genotoxic effects of N-nitroso compounds and with analytical methods for their detection. This volume is a manual concerned with selected methods of analysis of N-nitroso compounds. The introductory chapters comprise reviews of the public health hazards of environmental N-nitroso compounds, problems of contamination and artifact formation in nitrosamine sampling and analysis, and of hazards in handling these compounds. Chapter II presents methods of analysis of volatile N-nitrosamines in air, tobacco and tobacco smoke, in malt and malt-based beverages, in animal feed and food, further in rubber and plastic commodities and in pesticides. In chapter III general clean-up and analysis procedures for non-volatile N-nitroso compounds (e.g. nitrosodiethanolamine, nitrosoamino acids) are given in detail. The modern methods for the separation and detection of volatile and non-volatile nitroso-compounds, i.e. gas chromatography, high-performance liquid chromatography, mass spectrometric analysis, voltammetry, polarography and the use of TEA (thermal energy analyzer) are described in chapters IV and V.

This publication makes available a complete set of methods for the analysis of N-nitroso compounds for those engaged in research and in setting regulations. An excellent hand-ready manual.

T. GICHNER (Praha)