

Figures at the end of the issue.

Fig. 1. The labelling of interphase nuclei and chromosomes of barley root meristems after the application of [^3H] DNA on isolated embryos cultivated in 1.5% sucrose + 0.2 SSC. Only nuclear structures were labelled.

Fig. 2. The labelling pattern of metaphase chromosomes of root meristem cells after the application of [^3H] DNA. Diffuse distribution of the label throughout all the chromosome set is always observed.

Fig. 3. Distribution of the label after the application of [^3H] DNA with excess of unlabelled thymidine on isolated barley roots. The figure shows the labelling of cytoplasm and possibly cell walls.

Fig. 4. Distribution of the label from [^3H] DNA after the application of DEAE-dextran on isolated barley roots. The figure shows one of the rare cells with labelled cell walls.

BOOK REVIEW

Dregne, H. E. (ed.): **Managing Saline Water for Irrigation**. Proceedings of the International Conference on Managing Saline Water for Irrigation: Planning for the Future. — Texas Technical University, Lubbock 1976. Pp. 618.

At the international conference, held at Texas Technical University in Lubbock, 16–20 August 1976, were presented 43 papers assessing the current state of knowledge of managing saline water for irrigation and presenting new information on how to cope with salinity. Plant and soil scientists and engineers from 20 countries participated in this conference. Proceedings are arranged into 5 sections. Eight papers of the first section are devoted to "Modelling" of techniques for evaluating irrigation water quality, effect of saline water irrigation on ion concentration and accumulation in soil and especially in plant root zone, infiltration of saline water to the river and salt leaching from soils.

For the readers of *Biologia Plantarum* ten papers of the second section are most interesting. "Plant effects" deals with plant reaction on transplantation to saline soils (M. A. Zahran *et al.*), foliar content of sodium and chloride after irrigation with saline water (A. Cerda *et al.*), results of irrigation with saline water in desert conditions (A. Hardan), yield decline from fifty percent increase in salinity (F.E. Robinson), distribution and seasonal variability of micronutrients in salt affected soils (E. P. Papanicolaou *et al.*), crop salt tolerance (E. V. Mass and G. J. Hoffman), soil salinity and plant nutritional status (A. Finck), problems of managing geothermal waters for irrigation (H. B. Peterson and J. L. Shupe), salt tolerance of beans under a sand mulch culture (M. A. Parra and G. C. Romero), and use of highly saline water in citrus irrigation (A. Goell *et al.*).

The third section "Soil effect" (11 papers) is concerned with the influence of saline water irrigation on soil properties and with its possible consequences for plant growth and development. Five papers of the fourth section "Classification" deal with the method of evaluation of water salinity for agricultural purposes. The last section "Management" (nine papers) deals with on-farm use of saline water for irrigation.

On the basis of most of these papers it is possible to conclude that careless management of saline water can be disastrous to the land and more importantly to the people living on that land. The proceedings are concluded by "Summaries of papers not presented" and "List of participants". Although the Proceedings are printed in photooffset, individual papers are illustrated by instructive tables, maps, figures and photographs and complemented by lists of references. The book is a valuable source of information on this serious problem of modern agriculture particularly in semiarid regions, where the necessity of using large amounts of water for agricultural purposes leads to utilizing sources of decreasing quality.

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