

- FEHRMANN, H., DIMOND, A. E.: Peroxidase activity and *Phytophthora* resistance in different organs of the potato plant. — *Phytopathology* 57 : 69—72, 1967.
- HARE, R. C.: Physiology of resistance to fungal diseases in plants. — *Bot. Rev.* 32 : 95—137, 1966.
- JENNINGS, P. H., BRANNAMAN, B. L., ZSCHEILE, F. P. JR.: Peroxidase and polyphenoloxidase activity associated with *Helminthosporium* leaf spot of maize. — *Phytopathology* 59 : 963 to 967, 1969.
- KUČ, J.: Phenolic compounds and resistance in plants. — In: RUNECKLES V. C. (ed.): *Phenolics in Normal and Diseased Fruits and Vegetables*. Pp. 63—81. United Fruit Co., Norwood, Mass. 1964.
- MEAGHER, R. B., DE VAY, J. E., KOSUGE, T.: Oxidative enzymes of *Ceratocystis fimbriata* isolates differing in host specificity. — *Physiol. Plant.* 20 : 726—732, 1967.
- WEBER, D. J., CLARE, B., STAHMANN, M. A.: Enzymic changes associated with induced natural resistance of sweet potato to *Ceratocystis fimbriata*. — *Phytopathology* 57 : 421—424, 1967.

BOOK REVIEW

POLJAKOFF - MAYBER, A., GALE, J. (ed.): *Plants in Saline Environments*. — *Ecological Studies*, Volume 15, Springer-Verlag, Berlin—Heidelberg—New York 1975. 213 pp., in English.

The problem of salinity becomes more relevant every year because not only further expansion of agriculture must consider the cultivation of saline soils and use of water with relatively high content of soluble salts but also water pollution due to industrial development often induces secondary salinization of soils and sources of irrigation water. Therefore this very readable monograph of high scientific level will be certainly welcomed not only in basic and agricultural research but also in practice.

The first chapter gives a general survey of the salinity problem with special reference to the distribution of saline areas and halophytic vegetation throughout the world. Chapter II emphasizes the severity of the salinity problem in modern agriculture and points to some possible practices which enable to cope with damage caused by salinity. The main purpose of chapter III is to describe the effect of the concentration and composition of salts on the physical and chemical properties of the soil. Chapter IV reviews the criteria for water quality for irrigated agriculture and chapter V examines factors influencing the distribution of soluble salts in the natural environments, and the redistribution of salts which results from environmental disturbances. Various responses of plant to salinity and the nature of damage of agricultural crops caused by salinity (both the osmotic effect and the specific ionic effects) is a common feature of the following chapters. Chapter VI deals primarily with the morphological and anatomical changes in plants as a response to salinity stress. In chapter VII special attention is given to the structure and function of salt glands common in the families *Plumbaginaceae* and *Frankeniaceae*. The further chapter VIII is focused to the metabolic and biochemical aspects of salt tolerance. Water balance and gas exchange of plants under saline conditions is the subject of chapter IX and in the last chapter X, the combined effect of environmental factors and salinity on the plant growth is examined. The parts Introduction, Intermediary Remarks and General Discussion aptly complement the book.

It is well produced and the text is illustrated with many graphic figures, excellent microphotographs, maps and tables. The plant and subject indexes are also included.

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