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BOOK REVIEW

TANNER, W., LOEWUS, F. A. (ed.): *PLANT CARBOHYDRATES II. Extracellular Carbohydrates.* (Encyclopedia of Plant Physiology, New Series, Volume 13 B). — Springer Verlag, Berlin—Heidelberg—New York 1981. 769 pp. Cloth DM 268,—; approx. US \$ 124.80.

This large volume of Encyclopedia devoted to extracellular plant carbohydrates reflects the explosive increase in information and the heightened interest that has attended this class of compounds in these 25 years. The carbohydrates have been for many years neglected in favor of the study of proteins and nucleic acids. Now their important role in such biological functions has been recognized as in host-parasite and pollen-pistil interactions, the mating reaction in fungi, symbiosis, and secretion, to name a few. The knowledge of metabolic, structural and other properties and functions of extracellular carbohydrates contributes to our understanding of the physiological processes of growth and development in plants.

The volume contains twenty six chapters divided into five sections which deal with cell walls of higher plants and of algae and fungi, export of carbohydrates across the cell wall, cell surface interactions and carbohydrate-lectin interactions. "Extracellular" is defined as the space outside the plasmalemma. All molecules destined for this space are therefore considered to be secretory substances. For this reason, three chapters on secretion appear in this volume.

The work was written by thirty seven foremost specialists. It is an outstanding source of scientific information and new ideas.

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