

- GASPAR, TH., PENEL, C., GREPPIN, H.: Peroxidases: Structures and catalytic reactions, biosynthesis, transport and location, physiological roles. - Bull. Groupe Polyphenols 13 : 159-176, 1986.
- HAHLBROCK, K., WELLMANN, E.: Light-induced flavone biosynthesis and activity of phenylalanine ammonia-lyase and UDP-apiose synthetase in cell suspension cultures of *Petroselinum hortense*. - Planta 94 : 236-239, 1970.
- HALL, R. D., YEOMAN, M. M.: Factors determining anthocyanin yield in cell cultures of *Camaranthus roseus* (L.) G. DON. - New Phytol. 103 : 33-43, 1986.
- HRUBCOVÁ, M., CVIKROVÁ, M., POSPÍŠIL, F., MERAVÝ, L., EDER, J.: Content of phenolic acids in callus culture of alfalfa (*Medicago sativa*): The effect of age and biochemical differentiation. - Biol. Plant. 30 : 321-326, 1988.
- LEGRAND, B.: Action de la lumière sur les peroxydases et sur la teneur en composés phénoliques de tissus de feuilles de *Cichorium intybus* L. cultivés *in vitro*. - Biol. Plant. 19 : 27-33, 1977.
- SAHAI, O. P., SHULER, M. L.: Environmental parameters influencing phenolics production by batch cultures of *Nicotiana tabacum*. - Biotechnol. Bioeng. 26 : 111-120, 1984.
- WELLMANN, E., HRAZDINA, G., GRISEBACH, H.: Induction of anthocyanin formation and of enzymes related to its biosynthesis by UV light in cell cultures of *Haplopappus gracilis*. - Phytochemistry 15 : 913-915, 1976.
- YAMAKAWA, T., KATO, S., ISHIDA, K., KODAMA, T., MINODA, Y.: Production of anthocyanins by *Vitis* cells in suspension culture. - Agr. biol. Chem. 47 : 2185-2191, 1983.
- YU, D., MEREDITH, C. P.: The influence of explant origin on tissue browning and shoot production in shoot tip cultures of grapevine. - J. amer. Soc. hort. Sci. 111 : 972-975, 1986.
- ZAPROMETOV, M. N., ZAGOSKINA, N. V.: [One more evidence for chloroplast involvement in the biosynthesis of phenolic compounds.] In Russ. - Fiziol. Rast. 34 : 165-172, 1987.

BOOK REVIEW

LEWIS, N. G., PAICE, M. G. (ed.): PLANT CELL WALL POLYMERS. BIOGENESIS AND BIODEGRADATION. ACS Symposium Series 399. - American Chemical Society, Washington, DC 1989. 676 pp. US + Canada \$ 119.95, Export \$ 143.95.

The aim of this publication, based on lectures presented at the 195th National Meeting of the American Chemical Society (Toronto, 1988) is to provide information on relevant current research in the changes of the composition and structure of the plant cell wall during growth and differentiation. A further main objective of the symposium was to bring together scientists from different backgrounds but with a common interest in the plant cell wall. The introductory article (D. H. Northcote) reviews known data on the control of the synthesis of the main constituents of the plant cell wall, i.e. polysaccharides and lignin, and the minor but important proteins and lipids. The further 46 chapters are divided into 8 sections: 1) Plant cell development; 2) Plant phenolic compounds; 3) Biogenesis and structure of protolignin and cutin; 4) Cellular biogenesis and structure; 5) Pectin and other polysaccharides; 6) Plant-microbe interactions; 7) Biodegradation of lignin and tannins, and 8) Biodegradation of cellulose and xylan. The publication clearly demonstrates how much progress has been made in the field of the biosynthesis and biodegradation of plant cell wall polymers in the past few years.

Anyone with interest in the subject area of plant cell wall, such as plant physiologists, biochemists and food scientists will find this publication of much interest.

T. GICHNER (Praha)