

- production in *Melilotus alba* (DES.) callus tissue cultures. — *Z. Pflanzenphysiol.* **74** : 95–105, 1974.
- HILDEBRANDT, A. C., WILMAR, J. C., JOHNS, H., RIKER, A. J.: Growth of edible chlorophyllous plant tissues *in vitro*. — *Amer. J. Bot.* **50** : 248–254, 1963.
- JASTARS, E. M.: Pigmentation of tobacco crown-gall tissues cultured *in vitro* in dependence of composition of the medium. — *Physiol. Plant.* **18** : 933–940, 1965.
- KAMÍNEK, M., LUŠTINEC, J.: Reduced chlorophyll synthesis in cytokinin-autonomous strains of tobacco callus. — *Z. Pflanzenphysiol.* **73** : 65–73, 1974a.
- KAMÍNEK, M., LUŠTINEC, J.: Induction of cytokinin-autonomy and chlorophyll deficiency in tobacco callus tissue. — *Z. Pflanzenphysiol.* **73** : 74–81, 1974b.
- KAMÍNEK, M., LUŠTINEC, J.: Induction of cytokinin-autonomy in tobacco stem pith tissue by 2,4-dichlorophenoxyacetic acid. — In: SCHREIBER, K., SCHÜTTE, H. R., SEMBIDNER, G. (ed.) *Biochemistry and Chemistry of Plant Growth Regulators*. Pp. 307–310. Acad. Sci. GDR, Halle (Saale) 1975.
- KAUL, K., SABHARWAL, P. S.: Effect of sucrose and kinetin on growth and chlorophyll synthesis in tobacco tissue cultures. — *Plant Physiol.* **47** : 691–695, 1971.
- LAETSCH, W. M., STETLER, A.: Chloroplast structure and function in cultured tobacco tissue. — *Amer. J. Bot.* **52** : 798–804, 1965.
- LINSMAIER, E. M., SKOOG, F.: Organic growth factor requirements of tobacco tissue cultures. — *Physiol. Plant.* **18** : 100–127, 1965.
- LUŠTINEC, J., KAMÍNEK, M., HADAČOVÁ, V.: Hormonal control of starch accumulation and cell expansion in tobacco stem pith. — In: *Proceedings of the IV International Symposium on Plant Growth Regulators*, Toruń, Poland 1974 (in press).
- MURASHIGE, T., SKOOG, F.: A revised medium for rapid growth and bio assays with tobacco tissue cultures. — *Physiol. Plant.* **15** : 473–497, 1962.
- NEUMANN, K. H., RAAFAI, A.: Further studies on the photosynthesis of carrot tissue cultures. — *Plant Physiol.* **51** : 685–690, 1973.
- SEYER, P., MARTY, D., LESCURE, A. M., PÉAUD-LENOËL, C.: Effect of cytokinin on chloroplast cyclic differentiation in cultured tobacco cells. — *Cell Differentiation* **4** : 187–197, 1975.
- SJOLUND, R. D., WEIER, T. E.: An ultrastructural study of chloroplast structure and differentiation in tissue cultures of *Streptanthus tortuosus* (*Cruciferae*). — *Amer. J. Bot.* **58** : 172–181, 1971.
- STETLER, D. A., LAETSCH, W. M.: Kinetin-induced chloroplast maturation in cultures of tobacco tissue. — *Science* **149** : 1387–1388, 1965.
- THORPE, T. A., MEIER, D. D.: Sucrose metabolism during tobacco callus growth. — *Phytochemistry* **12** : 493–497, 1973.

BOOK REVIEW

NASYROV, YU. S., ŠESTÁK, Z. (ed.): *Genetic Aspects of Photosynthesis*. Selected Papers from the Symposium held on October 17–24, 1972, in Dushanbe, U.S.S.R. — Dr. W. Junk B. V. Publishers. The Hague 1975. 22 + 392 pp., 179 Figs., 59 Tables. Hfl. 110.—.

The books devoted to the study of photosynthesis begin to appear regularly in the publication plan of Dr. W. Junk B. V. Publishers in The Hague. The volume being reviewed comprises an assortment of reports presented on the International Symposium in Dushanbe, Tajik S.S.R. Twenty-two papers are by Soviet authors and 12 papers by the authors from Australia, Czechoslovakia, the G.D.R., Hungary and the U.S.A.

The book is divided into six sections: Genome and origin of chloroplasts (5 papers), Genetic control of biosynthesis in chloroplasts (7), Genetic control of photosynthetic CO₂ assimilation (4), Genetic nature of photosynthetic mutations and their phenogenesis (5), Models for studying the mechanism of photosynthesis (7), and Genetic basis of optimization of plant photosynthetic activity (6) and the concluding chapter "Actual problems of genetics of photosynthesis". Adequate authors, subject and plant indexes are added. The book provides a good overview of present knowledge and approaches to the genetic study of photosynthetic activity and principles of optimization of plant photosynthetic production. Its great advantage is a comprehensive selection from the great wealth of information gathered in Soviet laboratories, which are often unavailable to readers unfamiliar with the Russian language.

The paperback edition is well printed in photooffset on glossy paper, and carefully edited. It can be recommended to all who are engaged in the study of photosynthesis even from another than genetic point of view.

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