

- alkaloid accumulation in suspension cell cultures of *Catharanthus roseus* G. Don by cytokinins. – Comp. rend. Acad. Sci. Paris, Sér. III, **309**: 453–458, 1989.
- Madyastha, K. M., Meehan, T. D., Coscia, C. J.: Characterization of a cytochrome P-450 dependent monoterpene hydroxylase from the higher plant *Vinca rosea*. – *Biochemistry* **15**: 1097–1102, 1976.
- Mérillon, J. M., Chénieux, J. C., Rideau, M.: Time-course of growth, evolution of sugar-nitrogen metabolism and accumulation of alkaloids in a cell suspension of *Catharanthus roseus*. – *Planta med.* **47**: 169–176, 1983.
- Mérillon, J. M., Doireau, P., Guillot, P., Chénieux, J. C., Rideau, M.: Indole alkaloids accumulation and tryptophan decarboxylase activity in *Catharanthus roseus* cells cultured in three different media. – *Plant Cell Rep.* **5**: 23–26, 1986.
- Mérillon, J. M., Ouelhazi, L., Doireau, P., Chénieux, J. C., Rideau, M.: Metabolic changes and alkaloid production in habituated and non-habituated cells of *Catharanthus roseus* grown in hormone-free medium. Comparing hormone-deprived non-habituated cells with habituated cells. – *J. Plant Physiol.* **134**: 54–60, 1989.
- Plumb-Dhindsa, P. L., Dhindsa, R. S., Thorpe, T. A.: Non-autotrophic CO₂ fixation during shoot formation in tobacco callus. – *J. exp. Bot.* **30**: 759–767, 1979.
- Schiel, O., Witte, L., Berlin, J.: Geraniol 10-hydroxylase activity and its relation to monoterpene indole alkaloid accumulation in cell suspension cultures of *Catharanthus roseus*. – *Z. Naturforsch.* **42c**: 1075–1081, 1987.
- Turner, J. F., Turner, D. H.: The regulation of glycolysis and the pentose phosphate pathway. – In: Conn, E. E. (ed.): *The Biochemistry of Plants*. Vol. II. Pp. 279–316. Academic Press, New York, 1980.
- Van Den Berg, A. J. J., Radema, M. H., Labadie, R. P.: Influence of acetate and malonate on the production of 1,8 dihydroxy-anthracene derivatives in suspension cultures of *Rhamnus purshiana*. – *Planta* **174**: 417–421, 1988.
- Van Der Heijden, R., Verpoorte, R., Ten Hopen, H. J. G.: Cell and tissue cultures of *Catharanthus roseus* (L.) G. Don: A literature survey. – *Plant Cell Tissue Organ Culture* **18**: 231–280, 1989.
- Wagner, A. M., Kneppers, T. J. A., Kroon, B. M., Van Der Plas, L. H. W.: Enzymes of the pentose phosphate pathway in callus-forming potato tuber discs grown at various temperatures. – *Plant Sci.* **451**: 159–164, 1987.

BOOK REVIEW

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Diesel and Gasoline Engine Exhausts and Some Nitroarenes. Volume 46. – International Agency for Research on Cancer, Lyon 1989. Pp. 458. Sw. Fr. 65.–.

In 1980, there were approximately 320 million passenger cars, 75 million trucks and 20 million buses. Since, their numbers had rapidly increased and the adverse effects on our environment are apparent. Engine exhausts are complex mixtures containing chemical compounds in the particulate and gaseous phases. The first part of the IARC Volume 41 covers diesel and gasoline exhausts, their composition, environmental exposure and biological data relevant to the evaluation of their genotoxicity. The second part of the Monographs covers chemical and physical data and biological effects of 15 nitroarenes, found mainly in engine exhausts, e. g. 1,3-dinitropyrene, 6-nitrobenzo (a) pyrene, 6-nitrochrysene, 2-nitrofluorene, 1-nitronaphthalene and 1-nitropyrene. Of the tested complexes and compounds, only diesel engine exhaust is considered as probably carcinogenic to humans, while most of the other compounds as possibly carcinogenic. Very useful are the appended activity profiles for genetic and related tests. The x-axis of the activity profile represents the bioassays in phylogenetic sequence by endpoints and the values on the y-axis represent the lowest effective doses and the highest ineffective doses tested.

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