Linn, D.M., Carski, F.H., Brusseau, M.L., Chang, T.-H. (ed.): **Sorption and Degradation of Pesticides and Organic Chemicals in Soil** (SSSA Special Publication 32). - Soil Science Society of America, American Society of Agronomy, Madison 1993, 260 pp.

Soil organic matter is a complex and heterogeneous mixture of primarily humic substances (humic and fulvic acids and humin), polysaccharides, lignin, simple carbohydrates, lipids, proteins, and organic acids. This organic matter is associated with clays, iron, and aluminium hydroxides, as well as other inorganic constituents. Soil may be contaminated with various types of manmade organic chemicals, including pesticides. Understanding sorption, biodegradation, and transport of organic chemicals in soils is essential for predicting their fate in the environment. This publication, based on the proceedings of a symposium held at the annual SSSA meetings in Denver, CO, 1991, focuses on the biovailability of sorbed compounds, effects of sorption on degradation and technologies required to measure degradation of sorbed and non-sorbed compounds. Fourteen chapters examine critically the present knowledge regarding the models predicting the fate of organic compounds in soil and discuss in detail the discrepancies between model predictions and experimental observations. It can be assumed that soil organic matter is far too complicated to allow at present realistic description in kinetic models of sorption and biodegradation. Of interest are reviews on biodegradation of organic chemicals, *e.g.*, of the pesticides atrazine, alaclor, diazinon, carbofuran *etc.*, further of naphthalene, aromatic acids and bases, and the effect of various environmental factors, including nutrient and pH factors of the soil, temperature and moisture on microbial and plant degradation of soil contaminants.

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Young, A.R., Bjorn, L.O, Moan, J., Nultsch, W. (ed.): **Environmental UV Photobiology.** - Plenum Press, New York - London 1993. 479 pp.

The sun is a yellow main sequence star composed primarily of hydrogen and helium. Nuclear reactions in its interior generate energy which is propagated outward. The UV region spans the 10 to 400 nm wavelength range and accounts for less than 9 % of the total energy output. The aim of this publication is to gather information on the effects of UV-radiation on aquatic and terrestrial life. The introductory chapters deal with the atmosphere and UV-B radiaton and methods of monitoring UV-radiation. Following chapters concentrate upon the possible UV-radiation damage induced to animals and humans, with topics such as ozone depletion and skin cancer, UV-induced immunosuppression, ocular damage by radiant energy and epidemiological data on skin cancer in Australia, Scandinavia, USA and Canada. The readers of Biologia Plantarum will be interested mainly in 3 last chapters: "The Induction and Repair of DNA Photodamage in the Environment", "UV Radiation and Aquatic Environment" and "The effects of UV-B Radiation on Plants". The last chapter deals with penetration, targets and measurements of UV-B radiation, effects on reproduction, growth and morphology, water stress, and on species and cultivar differences.

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