

## Book Reviews

**Regulating Pesticides in Food: The Delaney Paradox.** Committee on Scientific and Regulatory Issues Underlying Pesticide Use Patterns and Agricultural Innovation, Board on Agriculture, National Research Council, National Academy Press, Washington DC, 1987. 272 pp. ISBN 0-309-03746-8. Price: £17.05.

This is an excellent book for those wishing to gain some insight into the relationship between science and law in the setting of tolerances for pesticide residues in the USA. It is a National Research Council Report to the US Environmental Protection Agency (EPA), setting out the impact of the Delaney Clause on the already complex statutory scheme governing the regulation of pesticide residues, and offering a series of recommendations on methodology and priorities. The legal framework and oncogenic risk assessment methodology are set out, initially, with commendable clarity. This is followed by a detailed assessment of four different theoretical regulatory policy scenarios, ranging from a complete zero risk approach through a zealous application of the Delaney concept, through to one defining an acceptable risk of one in a million. The book concludes with a chapter considering the impact of regulatory policy on the economic and innovative aspects of pest control. Overall, the book is well written and free of misprints, with a good index, and, in its context, is well worth reading.

However, as a scientist with a reasonably enquiring mind, this book left me with feelings of frustration and despair. The benefit to public health conferred by the Delaney Clause, which prohibits the addition to food of any substance that induces cancer when ingested by man or animal, is never

seriously discussed. Epidemiological approaches used, for example, to check out highly dubious mathematical risk assessments, hardly get a mention. The success or otherwise of different regulatory policies in other countries is completely disregarded, and perhaps most critical of all, problems in the design, conduct and interpretation of animal carcinogenicity assays, are totally ignored. But this, I suppose, is what the Delaney Clause—described recently by Dr Elizabeth Whelan of the American Council of Science and Health as ‘... one of the most costly, insidious and scientifically bereft pieces of legislation passed by Congress’—is all about.

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**Food Toxicology. Parts A & B.** By Jose M. Concon, Marcel Dekker, 1988. Part A: xiii + 675 pp. **Principles and Concepts.** ISBN 0-8247-7736-0. Part B: xiii + 1371 pp. **Contaminants and Additives.** ISBN 0-8247-7737-9.

This excellent compendium of knowledge is in two volumes (parts A and B). Part A has chapters on General Toxicological Principles Applicable to Foods and Food Toxicants, The Toxicological Role of the Intestinal Tract, The Role of Intestinal Microflora in the Toxicity of Food Components, Metabolism of Nutritive Components in Foods and Related Components, Manifestations of Toxic Effects, Carcinogenesis, Nutritional Factors and Carcinogenesis, Endogenous Toxicants in Foods Derived from Higher Plants, Naturally Occurring Antinutritive Substances, Toxic Mushrooms and Other Macrofungi, Toxicology of Marine Foods, Derived Food Toxicants. Part B has chapters on Mold Mycotoxin Contamination of Food Products, Bacterial Food Contaminants: Bacterial Toxins, Bacterial Contaminants: Foodborne Infections, Bacterial Contaminants: Miscellaneous Foodborne Pathogenic Bacteria, Miscellaneous Food Contaminants Derived from Toxic Plants, Inorganic and Organometallic Contaminants in Foodstuffs, Man-Made Organic Chemical Food Contaminants, Radionuclides in Foods, Food Additives.

What makes the book so valuable to chemists is the excellent use of clearly depicted structures, often in tabulated form and a joy for identifying rapid structure–activity relationships. The bibliography after each chapter is thorough and imposing though there seems to be an absence of references beyond about 1983, probably due to the untimely decease of the author. The sheer size of the work makes it a valuable and lasting source of data.

As in any book of this size there are mistakes and, unfortunately, these begin with some of the names and structures in Table 1 (p. 8). The publishers should note the corrections needed for subsequent editions of this important book.