Utilization of Sewage Sludge on Land: Rates of Application and Long-Term Effects on Metals


This book is the proceedings of a seminar held at Uppsala, Sweden, 7-9 June 1983, under the auspices of the Commission of the European Communities. It comprises 15 chapters by individual authors from Denmark, France, Belgium, Norway, Sweden, the Federal Republic of Germany, and the United Kingdom, and summaries of the discussion sections.

Several of the chapters are quite general and deal with European statistics on sludge production, use, and quality, and there are two brief reviews—one on metal toxicity in animals and humans and the other on “heavy” metal behavior in soils. There are also two chapters on the effects of bans on levels of Cd, DDT, and PCBs in Swedish sludges. Most of the other chapters present results of field studies on the use of municipal sludges and composts on crops, forages, and trees and for the reclamation of disturbed land. Many of these studies were sufficiently long-term to be of interest to workers in this area and will add to our knowledge of the behavior of sludge-applied metals in soil.

The major fault of this book is the very poor editing that was done. Chapters were photographed from typed copies rather than typeset, and there was no attempt made to use a consistent style of presentation. There is no consistent use of units, and readers will have difficulty interpreting some of the tables and figures. The writing style, misspellings, and use of non-English words is an additional burden for the reader. However, the serious student of fate of sludge-applied metals in soil will find sufficient information here that is absent in U.S. and Canadian literature, which makes the inconvenience worthwhile. In contrast to the poor type quality, the book is nicely bound and cloth-covered.—T. J. LOGAN, Agronomy Department, The Ohio State University, 2021 Coffey Road, Columbus, OH 43210.

Protection Against Trichothecene Mycotoxins


This publication presents an aggregation of information on protection against mycotoxins that was assembled by a committee of the National Research Council in response to a request from the U.S. Army. The compendium provides a fascinating illustration of the breadth of biological impact. The potential hazards associated with trichothecene contamination of agricultural commodities is underscored in these fungi toxin-producing Fusarium spp. are particularly important, since they are often the dominant microbe in a disease system. Presence of the toxins have often been implicated in cases of unknown etiology in domestic animals. Of the many identified trichothecenes, special attention has been devoted to the association with T-2 toxin and the less toxic deoxynivalenol. Unfortunately, an inference from the concentration of report on T-2 toxin is the inaccurate assumption of the occurrence of the metabolite in food and feed. A common identification in commodities under consideration reports of broad T-2 contamination are rare. The report’s toxicological summaries of the trichothecene represents an extraordinary resource for research mammalian and avian toxicologists who attempt to diagnose nutritionally toxicological disorders. Clinical manifestations of trichothecene-mediated disease and cellular events responsible for the symptoms have been thoroughly elucidated. Although the wealth of toxicology has been assembled to provide pertinent data to those in the data synopsis may have a greater impact in the text. It is certain that scientists and regulatory people in the feed safety area will find the compendium an important reference in consideration of the trichothecene group. E. B. LILLEHOJ, USDA-ARS, Southern Regional Research Center, 1100 Robert E. Lee Blvd., New Orleans, LA 70179.

Productivity Effects of Cropland Erosion in the United States


The material in this book is “a progress report on research at Resources for the Future on erosion and its effects on productivity,” as stated by the authors in their introduction. The report does a very good job of assessing the status of research on the topic and pointing out information gaps and future research needs. Thus, the book should be of value to anyone interested in soil erosion on productivity. The book is written in a straightforward manner, with an emphasis on the need for data and research. The authors provide a comprehensive overview of the effects of erosion on productivity, including the economic implications of soil loss and the need for additional research to improve our understanding of the problem. Overall, the book is a valuable resource for anyone interested in the effects of erosion on productivity.

In recent years, military interest in the trichothecene group has been focused on reports that implicate the USSR in the use of these fungal metabolites as airborne chemical warfare agents in Southeast Asia as “yellow rain.” Although an intense controversy has arisen in diplomatic circles concerning the authenticity of these reports, the current publication does not deal directly with this contentious issue. Instead, the report concentrates on evidence of the occurrence of the fungal metabolites in the biological impact.