

BOOK REVIEWS

A Handbook of Tropical Soil Biology. Sampling and Characterization of Below-ground Biodiversity. By F. M. S. Moreira, E. J. Huising and D. E. Bignell. London: Earthscan (2008), pp. 218, £29.95 (paperback). ISBN 978-1-84407-593-5. doi:10.1017/S0014479709007601

I believe this book to be a great resource for teaching and for researchers interested in soil biodiversity in the tropics as well as elsewhere, providing a guide with standardized and tried methods to monitor biodiversity. With soils in decline world-wide and new pressure for changes in land use, there is an urgent need for standardized methods to monitor the effect of land management on soil biodiversity. The book brings together world leading experts and establishes standards for characterization and quantification of soil organisms ranging from macrofauna and mesofauna to micro-organisms. Methodologies for each group of soil biota are described and discussed in great detail so that it is accessible for non-specialists. All methods have been applied in an integrated sampling scheme to assess the relationship between land use and soil biodiversity in tropical soils. In addition to a description of standardized methods, there are detailed chapters on general concepts, sampling strategies and classification of land use and management. The book starts with the relationship between soil community and ecosystem services and goods from which functional groups are derived and target groups are selected. This is followed by a chapter on selection of sampling sites and requirements for replication emphasizing the need to design a sampling scheme that matches the objectives of the study. The integration of the standardized methods into a well-designed monitoring and sampling scheme makes this book valuable for everybody involved in monitoring changes in soil biodiversity.

Wilfred Otten

Environmental Risk Assessment of Genetically Modified Organisms. Volume 4: Challenges and Opportunities with Bt Cotton in Vietnam. Edited by D. A. Andow, A. Hilbeck and V. T. Nguyen. Wallingford, UK: CAB International (2008), pp. 360, £85.00. ISBN-13: 978-1-84593-390-6. doi:10.1017/S0014479709007613

This book attempts to address potential environmental risks posed by Bt cotton in Vietnam. It provides an excellent summary of the vast amount of data on Bt cotton since its commercialization over a decade ago. It also contains a useful overview of cotton production in Vietnam. But the book does not completely fulfil its promise to be ‘used as a technical manual to enable Vietnamese scientists to evaluate the potential environmental impacts of Bt cotton prior to commercialization’. First, with the exception of Chapter 12 on the possible development of Bt resistance in the insect pests, there is insufficient focus on the potential risks that are specific to Vietnam. Second, the book does not provide a detailed road map of how to address the potential risks in a logical, comprehensive and scientifically justified fashion. Third, the book does not take full advantage of information generated elsewhere to make informed judgments for Vietnam. For example, Chapter 5 focuses on assessing Bt cotton effects on non-target arthropods, and attempts to justify the necessity of field-testing nearly all, if not all, future hybrids despite an abundance of existing information on the gene, the plant in which it is expressed and the receiving environment. A far more efficient and rigorous assessment would be the tiered-testing approach that has been advocated by the US Environmental Protection Agency and the Western Palearctic Regional Section of the International Organization of Biological Control which relies on relevant information from previous studies to determine if additional tests are needed.

Peter Gregory

Governing Agrobiodiversity: Plant Genetics and Developing Countries. By R. Andersen. Aldershot, UK: Ashgate Publishing (2008), pp. 419, £65.00. ISBN 978-0-7546-4177-3. doi:10.1017/S0014479709007625

Systematic analyses aimed at illuminating our understanding of the combined impact of the international regimes that pertain fully or partially to plant genetic resources for food and agriculture (PGRFA) on