Root Feeders – an Ecosystem Perspective. Edited by S. N. Johnson and P. J. Murray. Wallingford, UK: CABI (2009), pp. 226, £75.00. ISBN 978-1-84593-461-3. doi:10.1017/S0014479709007728

Research on herbivores has been dominated by studies on above-ground interactions and this book aims to partially redress the balance by synthesizing current information on agricultural and ecological aspects of root herbivory. The book consists of 11 chapters to which 24 authors contributed. The book focuses on insects and nematodes and the chapters are organized under three headings: techniques for studying root feeders, root feeders in context and root feeders in the wider ecosystem. The first two chapters cover the main 'traditional' techniques for studying the impacts of root herbivory and recent developments in non-invasive methods for studying root herbivores in the field and laboratory. The next six chapters focus on root herbivory in three managed (agriculture, grassland, forestry) and one natural (forest) ecosystem and present two more specific 'case studies', one on grape phylloxera and the other on biological control of root feeders, focusing specifically on root weevils. The chapters on agriculture and forestry also contain short 'case studies' on species or groups of species. The final chapters concentrate on three more general topics of current interest: which are the interactions between above-ground and below-ground herbivores, trophic interactions in the soil environment and the potential impact of climate change on root herbivores. This is a useful and interesting book containing a large amount of information. Because of space limitations and the focus on 'case studies' in certain chapters it is by no means comprehensive, but should provide the reader with the impetus to search for additional information elsewhere.

Rosemary Collier

Science and the Garden. The Scientific Basis of Horticultural Practice. 2nd Edition. Edited by D. S. Ingram, D. Vince-Prue and P. J. Gregory. Oxford: Blackwell Publishing (2008), pp. 350, £24.99. ISBN-13: 978-1-4051-6036-6. doi:10.1017/S001447970900773X

This is the second edition of a book first published in 2002. It was written with students in mind, particularly those studying for the Royal Horticultural Society examinations. However, the editors hope it will also appeal to gardeners and growers, though they recognize the problems posed by such a wide readership.

The contents include plant form and function, genetics and plant breeding, soil structure and management, environmental factors, propagation, pest and disease control, and storage. All the chapters in the first edition have been revised, and four new chapters added, covering the diversity of plant life, conservation and sustainability, gardens as natural habitats and gardens for science.

It is the attempt to explain the relevant science to the home gardener, an aim reflected in the main title, that makes this book unusual. This could be done at many levels depending upon the scientific background of the reader, but it is clearly difficult to embrace all of these levels in a single volume. The editors were concerned to simplify without 'dumbing-down'. The 14 contributors have differed in the ways in which they have dealt with this problem. Some have minimized the use of technical terms or explained these as they occurred. Others have relied more on italicizing a term the first time it is used, to indicate that it is explained in the glossary. Though these measures have not made all the material readily accessible to the average home gardener, there remains much to interest those curious about the science underlying horticultural practice.

P. D. Waister

Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba. By J. Wright. London: Earthscan (2009), pp. 261, £60.00. ISBN 078-1-84407-572-0. doi:10.1017/S0014479709007741

This book presents the case for alternative farming and food systems on the grounds of ecology, human health and the depletion of natural resources. But it is the focus on the inevitable decline of fossil fuel availability which gives this book its impetus. The concepts of 'peak oil' and 'post-petroleum food systems' are fully recognized and used to support the case against 'industrial agriculture'.

The author uses Cuba as a living example of how an agricultural economy might cope with sudden shortages of fertilizers, pesticides and fuel, by analysing the Cuban situation after the withdrawal of Soviet support in 1989, and the continued trade embargo imposed by the USA. The book, which is adapted from the author's PhD thesis at Wageningen, analyses how Cuban agriculture adapted in the 1990s to scarce inputs and falling prices for its main exports of sugar and tobacco. Food shortages were addressed, first, by price controls and rationing,