Fruits for the Future. 1. Revised edition. Tamarind. (Tamarindus indica L.) By K. El-Siddeg, H. P. M. Gunesana, B. A. Prasad, D. K. N. G. Pushpukumara, K. V. R. Ramana, P. Vijayananand and J. T. Williams. Southampton, UK: Southampton Centre for Underutilized Crops (2006), pp. 188, available free on request to national scientists of developing countries. ISBN 854328599. doi:10.1017/S0014479707005170

This book has come a long way from the days of Purseglove, who wrote his three volumes on Tropical Crops unaided, and it may be questioned whether the use of so many authors and editors was really necessary for a book on a single species. It does appear that the chapters contributed were of widely differing quality, something not effectively remedied by the editors.

As a book to pick up and read casually, it contains lots of interesting facts. The problems arise when you start to look critically at each section. Some issues could be said to be petty, such as the separate distribution map for Africa that adds nothing to the world map and neither give an attempt at distribution within countries, or agree with Chapter 1.

Other considerations are more pervasive. The value of the seed and foliage for human consumption is not clear. I feel that Chapters 2 and 3 on properties and uses respectively could have been condensed into a single chapter, thus avoiding the repetition that occurs. This duplication extends to tables of chemical composition, so that you end up wondering which information to believe. Other chapters such as on the agronomy, are much better.

A worthwhile book on the subject of tamarind, but I look forward to the next edition!

Ian Martin

Fruits for the Future. 2. Revised edition. Ber and other jujubes, Ziziphus species. By S. Azam-Ali, E. Bonkoungou, C. Bowe, C. deKock, A. Godara and J. T. Williams. Southampton: University of Southampton (2006), pp. 289, available free on request to national scientists of developing countries. ISBN 854328580. doi:10.1017/S0014479707005182

Ber and other jujubes refer to fruit-bearing trees, large shrubs or climbers of the genus *Ziziphus*, which is part of the family Rhamnaceae. The plants of this genus comprise a complexity of taxa which grow in the tropical and temperate zones and includes the two major domesticated jujubes, *Z. mauritiana* Lam., the Indian jujube or ber, and *Z. jujuba* Mill., the Chinese or common jujube. The fruits of these species are very nutritious, high in vitamin contents and are eaten fresh, dried (e.g. Chinese date), pickled or consumed as drinks. Although a minor fruit, they are important locally throughout Asia and Africa but, as they do not transport or store well, do not feature in export.

This book is a response to the recognition that the jujubes could be better exploited, and reflecting new information, is a revision of an earlier (2001) edition from the same publisher and has the aims of encouraging 'enhanced production, processing and marketing of jujubes'. Thus, the layout of the book covers the taxonomy, composition (including nutritional and pharmocognosy studies), uses, ecology, propagation, agronomy, breeding and genetic resources. This is followed by chapters on harvesting, post-harvest and processing, on marketing and on the research needs for improving the utilization of these plants.

This compact multi-authored volume provides a comprehensive update on what is published on these fruit trees with a practical bent (includes some recipes) supplemented with an extensive reference list, cultivar list and involved research organizations, specialists and seed suppliers.

Richard Wilkins

Fruits for the Future 10. Jackfruit (Artocarpus heterophyllus). By N. Haq. Southampton,UK: Southampton Centre for Underutilised Crops (2006), pp. 192, available free on request to national scientists of developing countries. ISBN 0854328394. doi:10.1017/S0014479707005194

This book is one of a series on underutilized tropical fruit crops. Eight chapters cover taxonomy and distribution, properties and uses, agronomy, reproductive biology, genetic resources and crop improvement, harvesting and processing, economics and marketing, and future research needs. There is also a list of over 40 institutes and individuals working on jackfruit, and 25 pages of recipes using the fruit or seeds. With over 200 references, the book appears to be a comprehensive compilation of information on the crop, but it is hard to extract this information. The text is badly organized and repetitive, with many errors and contradictions, and the index is

inadequate. The book will probably be useful to anyone with a serious interest in jackfruit, but it fails to reach the standard of some others in the series, and would have been greatly improved by more thorough editing.

Hereward Corley

The Encyclopedia of Seeds: Science Technology and Uses. Edited by M. Black, J. D. Bewley and P. Halmer. Wallingford, UK: CABI (2006), pp. 900, £185.00. ISBN-9780851997230. doi:10.1017/S0014479707005200

This is a major A–Z reference work written by more than 100 well-known and respected contributors and edited by three experts from academia and industry. A review copy was not available but, on the basis of the limited information provided by the publishers, this appears to be a significant contribution to the subject and is likely to be regarded as a necessary purchase by university and college libraries. In particular, the text seems to be a worthwhile (because it is different) contribution to the crowded seed textbook market place. Moreover, the opening text at least is very clearly written and the layout well designed. Well worth investigating further by the specialist reader.

Richard Ellis

Dictionary of Plant Tissue Culture. By A. C. Cassells and P. B. Gahan. New York: Food Products Press/Haworth Press (2006), pp. 265, £15.72. ISBN-10 1-56022-019-5. doi:10.1017/S0014479707005212

It has been nearly 20 years since the *Glossary of Plant Tissue Culture* by Donnelly and Vidaver was published, and a new volume covering and updating definitions in this fast-moving field would be a useful addition to research laboratories and teaching organizations. In many areas this new volume does meet this remit, as the layout is very straightforward, most of the descriptions of over 1000 terms within are quite clear and instructive, and the tables and figures generally informative. Some of the key definitions would, however, be improved by the addition of the original source references rather than an exhaustive list of the authors' own papers. There is a certain unevenness of the importance apparently given to some of the definitions; an example is the major area of somatic embryogenesis, which is covered in a mere ten words. The volume could also have been improved by a short section outlining the history of the science and the context. Furthermore, there is no consideration of internet resources, which surely would be the first point of enquiry for a scientific definition by students today. In summary, this is an inexpensive and generally informative resource which would be a valuable addition to many of the workers in the field, and in particular to students who wish to gain a wider knowledge of the applied and fundamental techniques of plant tissue culture.

Steve Millam

Microbial Biotechnology in Horticulture. Volume 1. Edited by R. C. Ray and O. P. Ward. Enfield, NH, USA: Science Publishers (2006), pp. 569, £64.40. ISBN 1-57808-417-2. doi:10.1017/S0014479707005224

As the editors point out, the application of microbial biotechnology is of great importance to horticulture as it has the potential to improve the quality of produce, increase productivity, create innovative uses for products and provide technologies for dealing with waste streams. The diverse mix of crops that loosely define horticulture is reflected in the collection of 15 chapters that make up this book. Crops covered include, amongst others, legumes, potatoes, vegetables, mushrooms and cassava. Technologies include nitrogen fixation, biocontrol of pathogens and pests, fermentation, post harvest microbiology and more.

The editors have made a valiant attempt to pull together an eclectic mix of information. However, for me the book fails to deliver on a number of levels. There seems to be a lack of editorial consistency in the content with, on the one hand, details of, for example, the structure of insecticidal proteins and on the other, recipes for sauerkraut and pickling cucumbers. Perhaps it could be argued that this is a strength rather than a weakness? There is repetition between chapters and the information on occasions appears to be dated. Photographic production is of poor quality instantly giving the book a dated feel. There are highlights in the book, in particular the chapters written by Owen Ward himself on an overview of the subject and also his chapter on renewable energy.