

not given in European text-books. Climate change and a move to less intensive grassland production may involve widening the range of forage species used in those temperate grasslands which presently rely on ryegrasses. This book is recommended to research and teaching institutions in temperate and sub-tropical regions. Common names are used throughout, which may irritate non-Americans and the concordance is not easy to use.

J. M. Suttie

*Genetic Resources, Chromosome Engineering and Crop Improvement: Volume 3. Vegetable Crops.* Edited by R. J. Singh. Boca Raton, FL, USA: CRC Press (2007), pp. 530. £92.00. ISBN 0-8493-9646-8. doi:10.1017/S0014479707005698

The book contains a series of reviews for ten vegetable crops/crop groups: potato, tomato, *Brassica*, okra, *Capsicum*, *Allium*, cucurbits, lettuce, eggplant and carrot. Chapter 1 presents an introduction that in some areas is perfunctory, offering little more than examples from the crop chapters. These vary significantly in length and in the range and depth of the information presented, but in general provide comment on the origin of the crop(s), taxonomy, crop production, genetic resources conservation, cytogenetics and crop improvement through the use of conventional and molecular breeding methods. There is a benefit to having colour figures included to enhance the information presented in each chapter, but the seemingly random placement of all colour plates in the cucurbit chapter lessened the expected impact. No doubt the choice of colour plates was an economic decision, but some of the black and white figures are poor and would have benefited significantly from colour.

However, on a positive note, the structure of the book in crop chapters makes it an extremely useful reference volume for students and researcher workers, both generalists and crop specialists alike. There is a wealth of information on the development of the crops, the status of current research and a view of the future directions for crop improvement work. Readers will find extensive literature citation lists offering them the opportunity to target their specific interest further.

Dave Astley

*Genetic Resources, Chromosome Engineering and Crop Improvement. Volume 4. Oilseed Crops.* Edited by R. J. Singh. Boca Raton, FL, USA: CRC Press (2007), pp. 304, £85.00. ISBN 0-8493-3639-2. doi:10.1017/S0014479707005704

Despite all the impressive advances in molecular genetics, crop development and food production still rely heavily on the essentially traditional skills of plant breeding. This volume, fourth in a series devoted to germplasm resources, concentrates on the annual oilseed crops of the world, i.e. excluding the perennial tree oil crops.

Following an introductory chapter, which could have been improved by including a short introduction to oil biosynthesis and nomenclature, the book continues with chapters devoted to each of the oil crops from soya through to safflower and sesame. The standard of editing is high and each of the chapters conforms to a common pattern – botany of the crop, production areas and usage, germplasm resources and breeding technology, and finishes with a short summary of future direction and prospects. Taxonomic relationships are particularly well covered and each chapter finishes with an excellent reference collection. Unfortunately there is little coverage of the application of genetic engineering- particularly in the cases of cotton and canola where this technology is having a major impact.

This book is well written and considering the subject surprisingly readable. Anyone with an interest in oil crops and their development will find something useful here: students will find an informative introduction while practising plant breeders and commercial producers will find a single source of much valuable information.

Jo Bowman

*Plant Breeding: The Arnel R. Hallauer International Symposium.* Edited by K.R. Lamkey and M. Lee. Iowa State University: Blackwell Publishing (2006), pp. 379, £81.00. ISBN 978-0-8138-2824-4. doi:10.1017/S0014479707005716

The book contains 27 chapters from a symposium in 2003 in Mexico City honouring A.R. Hallauer. Four chapters relate to his work on breeding methods and genetic resources in maize. The others, including one co-authored by Dr Hallauer, are reviews covering the range of plant breeding activities from the training of