

provide genetic explanations for empirical advances in breeding. With this background, the editors of *Breeding Oilseed Brassicas* have attempted to "bring together critical and comprehensive reviews on research approaches, achievements and limitations to breeding better brassicas". This is an admirable but daunting task considering the many different environments in which oilseed brassicas are cultivated, and the need to consider at least three species, *B. campestris*, *B. juncea* and *B. napus*, each of which is of global importance. I am not sure that they have succeeded very well.

The book does not provide comprehensive reviews. For example, there is an entire chapter devoted to isozymes and their potential use (or lack of use) as molecular markers, but no consideration at all is given to other types of molecular markers, particularly restriction fragment length polymorphisms, which are likely to be of considerably greater use than isozymes, and are currently being used within several breeding programmes. Similarly, the chapters on disease and insect resistance are very much orientated towards those pathogens and pests which are important in India, with little consideration of those important in other areas. While I realize that it can be argued that many books on plant breeding are written from a western perspective, it is rather bizarre that in a book which purports to provide a comprehensive account, little information is given on any insect pest other than the Indian mustard aphid. This is particularly so when considering the importance of, for example, flea beetles in Canadian Canola production. The same problem arises in the chapter on diseases, which is largely concerned with the two most important diseases in India, namely *Alternaria* blight and white rust, with relatively little on diseases such as *Sclerotinia* and (particularly), blackleg, which are of import-

ance in Europe, Australia and Canada. The chapter on transformation is well written and appropriate but I would have liked to have found some more examples of the potential economic exploitation of genetic modification, such as the development of cultivars with novel fatty acids for industrial uses or the introduction of pest resistance genes.

In addition, the standard and content of the different chapters is variable. The chapter on embryo rescue appears to have provided the author an opportunity to publish some of his own results rather than provide a review of the different methods and technical approaches available. The chapters on pest and disease resistance however, are akin to a practical handbook rather than a review of the pertinent features of the different pest/pathogen interactions. In contrast, several of the other chapters are well written and provide good overviews of the subject areas and excellent literature reviews.

To conclude, I think that the book is good in parts. However, I do not think that it provides comprehensive reviews, nor do I think that it has a strong practical bias, as the editors claim in the preface. Despite my reservations, I think that many students, plant breeders and research scientists who want some background information on breeding oilseed brassicas will find it useful. However, I expect it will soon be superseded by other books of a more comprehensive nature. Lastly, like many potentially useful books, it is grossly overpriced.

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## Books received

**Gene Regulation in Eukaryotes.** Edgar Wingender. VCH, Weinheim. 1993. Pp. 430. Price £67.00, hardback. ISBN 3 527 28460 5.

**Introduction to Molecular Cloning Techniques.** G. Lucotte and F. Baneyx. VCH, Weinheim. 1993. Pp. 298. Price £32.50, hardback. ISBN 3 527 89613 9.

**The Molecular Biology of Flowering.** Brian R. Jordan (ed.). CAB International, Oxford. 1993. Pp. 272. Price £45.00, hardback. ISBN 0 85198 793 1.

**Molecular Markers, Natural History and Evolution.** John C. Avise. Chapman and Hall, London. 1993. Pp. 511. Price £75.00, hardback. ISBN 0 412 03771 8.

**Nucleic Acids and Molecular Biology (7).** Fritz Eckstein and David Lilley (eds). Springer-Verlag, Berlin. 1993. Pp. 341. Price £99.00, hardback. ISBN 3 540 56218 4.

**Handbook of New Bacterial Systematics.** M. Goodfellow and A. G. O'Donnell (eds). Academic Press (Harcourt Brace), London. 1993. Pp. 560. Price £80.00, hardback. ISBN 0 12 289672 6.

**Methods in Molecular Genetics: Gene and Chromosome Analysis (Part A).** Kenneth W. Adolph (ed.). Academic Press (Harcourt Brace), London. 1993. Pp. 404. Price £34.00, hardback, ISBN 0 12 044301 5.

**Twins as a Tool of Behavioural Genetics: Dahlem Workshop Reports (Life Sciences Research Report 53).** T. J. Bouchard Jr. and P. Propping (eds). John Wiley, Chichester. 1993. Pp. 310. Price £60.00, hardback, ISBN 0 471 94174 3.