

Book reviews

Spencer, J.F.T.; Spencer, D.M. (eds.): Yeast Technology. Berlin, Heidelberg, New York: Springer 1990. DM 198,00

The first sentence in the Introduction in this book asks "Why another book on yeast technology?", and so do I. This book, which cites literature up to 1988 seems to me to be a rearrangement of the contents of two similar books that appeared in 1989–1990. I am referring to the three-volume "The Yeasts" by Rose and Harrison and "Yeast Biotechnology and Biocatalysis" by Verachtert and de Mot: both deal with identical subjects and their state of affairs (both citing literature up to 1987–1989).

A number of reviews (for instance on baking, brewing and others) cover almost the whole field of application, while others have the appearance of mini-reviews with encyclopedial information, even about bacteria! Too bad that hardly any author reviewed patent literature. Important applied yeast technological progress is lacking; for instance the commercial production of rennin with *K. lactis*. Also, it appears to have escaped the attention of reviewers that virtually all of Germany's wine and part of the wine from France is produced with instant dry wine yeast; this is a major change in this technology of wine making. On the other hand, some of the developments pictured are of a pure academic nature, like yeast biomass production from petrol or from wood. Applied research on these subjects has been terminated by industry.

Summarizing, I conclude that this book is only suitable as an introduction to yeast technology for graduate students who are confronted for the first time with this beautiful organism.

G.S.P. Groot, Oudorp

Science for Plant Breeding. Proceedings of the XII Congress of EUCARPIA (The European Association for Research in Plant Breeding). Berlin, Hamburg: Paul Parey 1989. 477 pp. Soft bound DM 78.00.

The Proceedings of the XII Congress of EUCARPIA, held in Göttingen, Germany, from February 27 to March 4, 1989, have now been published under the title "Science for Plant Breeding". This book is a welcome and stimulating compensation for those of us who were unfortunately unable to attend the meeting.

Erratum

Theor Appl Genet (1981) 82:201–208. A. Breiman; M. Bogher; H. Sternberg; D. Graur. Variability and uniformity of mitochondrial DNA in populations of putative diploid ancestors of common wheat. Unfortunately, in Fig. 5c, the Fig. 2c has been printed instead of the corrected one. The following figure is correct.

The topics dealt with all within the field of plant genetics and its application to breeding, are grouped in eight Symposia of four contributions each. Two chapters, Genome organization and Applications of biotechnology to breeding, deal directly with molecular biology investigations. Other Symposia deal with Breeding methods, Mutagenesis, Breeding for disease resistance, Genetic mechanisms for hybrid breeding and Low input and stress tolerance in breeding.

Chapter 5 (Proprietary rights for new plant material) has to do with an issue intimately associated with the manipulation of cells and genes: The present legal approach to the problem of protecting the products that originate through the methods of modern biotechnology. This problem has been analyzed by representatives of UPOV and the seed industry. The tendency observed inexorably leads away from a situation of partial protection of the phenotype, as it was in earlier times, to a case of ownership of genotypes and lastly, or genes.

An interesting section in the book is the one referring to quantitative traits, which include those with a continuous phenotypical distribution regulated by polygenic systems, quantitative resistance being one of them. The use of molecular markers such as isozymes and RFLPs presents clear advantages for the identification of the genes involved, and the methods of analysis have been clearly described.

Root characters liable to selection constitute another important area of study, the importance of which has grown during the last 15 years. The contribution presented herein is attractive and promising.

The reviewer can not resist the temptation to stress an interesting aspect of the meeting which he would like to see repeated. This was the podium discussion conducted by Professor F. Salamini, who presented a list of questions related to molecular genetics to a panel of distinguished participants who were then prompted to answer them in a concise way.

Due to the appeal of the subjects and the solid scientific background of the participants, this book will undoubtedly be a useful source of information for plant breeders and genetic researchers working in the field of technology applied to the seed.

E. A. Favret, Castelar (Argentina)

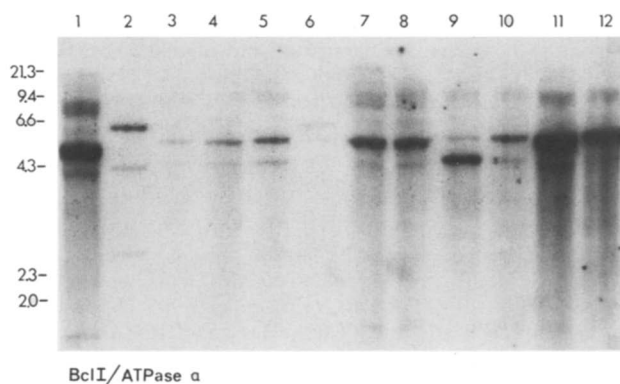


Fig. 5c.