

Proceedings of the second international conference on quantitative genetics. B. S. Weir, E. J. Eisen, M. M. Goodman and G. Namkoong (eds) Sinauer Associates Inc., Sunderland, Massachusetts, U.S.A. 1988. Pp. xii+724. Price £26.95. ISBN 0 87893 901 6.

As the title suggests this book is the published proceedings of the second international conference on quantitative genetics to be held in America. The first was held in Ames, Iowa in 1976 while this one took place in 1987 with the venue being Raleigh, North Carolina. The editors must be congratulated on the speed with which they achieved publication. They should also be commended on the quality of the production. Too many such proceedings appear in a heterogeneity of type faces and styles because of the use of authors' "camera ready" copy for setting. The speed of the publication of these present proceedings combined with a quality appearance must surely point to a standard for the future.

The book contains forty-eight presented papers each appearing as a separate chapter. As noted in the Preface, but not made explicit in the List of Contents, the contributions can be divided into sets which are each introduced by a review of progress over the intervening years since the Iowa conference. The first describes the contributions of C. Clark Cockerham, to whom the book is dedicated, and lists his publications. It also serves as an introduction to the subsequent three chapters which cover aspects of quantitative genetics relevant to Cockerham's interests. The next review (Chapter 5) gives an overview of progress in the subject followed by one covering the progress in statistical methods (Chapter 8), changes in technology associated with animal breeding (Chapter 12), molecular genetics (Chapter 16), induced variation (chapter 19), domestic animals (Chapter 22), humans (Chapter 25 and 28), inbreeding (Chapter 31), epistasis and heterosis (Chapter 34), selection in animals (Chapter 38) and plants (Chapter 41), genotype-environment interaction (Chapter 44), non-traditional species (Chapter 47), forest trees (Chapter 50) and finally, ecology and evolution (Chapter 53). As is almost inevitable, the quality of these reviews and the success with which they provide a coverage of the progress in the particular area over a ten year period is slightly variable, but generally they are admirable attempts to "set the scene". In addition they do provide some useful points at which to delve into the book and it is, therefore, a pity they are not highlighted in some way in the List of Contents. This is, however, a minor criticism in a well presented book.

Many of the individual papers concentrate on the applications of quantitative genetics to plant and animal genetics but there are some useful papers covering human aspects as well. There are a few papers which touch on the "realised" and potential contribution to our knowledge that the use of molecular techniques can make. If the symposia was held now, *i.e.*, two years later, it would be interesting to speculate which techniques would figure in the contributions and with what

emphasis! It is also interesting that although there may be a bias towards breeding applications, at least as far as plants are concerned I did not detect a feeling of the real progress that had been made in this area over the time period of concern. For example, what of the now extensive literature covering cross-prediction? What of the potential for genetic analysis using doubled-haploids? Other topics could also be raised. One reply would of course be that there is a limit to what can be covered in such a symposium and its published proceedings. This I accept, but felt that once again the excitement of working in the area of quantitative genetics was not made completely obvious. I enjoyed reading the book, but would someone who is uncommitted perceive more than a steady progression rather than a dynamic ten year period of development?

The other impression that appeared, at least to this reader, was the still obvious gap between the different "Schools of Thought" which have moulded this subject. I certainly struggled with some of the contributions and found I was somewhat unfamiliar with the concepts and approaches that were being presented. Others had a more comfortable and easy warmth to them! We are all conscious of the need to be aware of new biological techniques and how they interact with our existing experimental framework but should we not be even more anxious to develop and strengthen our intellectual interactions? Perhaps a seed should now be planted which could germinate into the Third International Conference? Maybe it should be ripened and harvested in another country?

I enjoyed reading these well presented and wide ranging proceedings. They stimulated thought and provided some useful insights into work in less familiar areas. I congratulate the symposium organisers and editors on their efforts and suspect that whatever slight bias, real or imagined, one reader may see another would feel it was actually justified from their standpoint while, perhaps, some other area was over- or under-represented.

I would recommend that anyone interested in quantitative genetics read the book but suggest that each reader does indeed decide for themselves whether it represents, to them, "Both old and new spheres of quantitative genetics and (speakers) who represent a broad international community".

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Principles of population genetics 2nd edn. Daniel L. Hartl and Andrew G. Clark. Sinauer Associates Inc., Sunderland, Massachusetts, U.S.A. 1989. Pp. xiii+682. Price £23.95. ISBN 0 87893 302 6.

At one time there was only one textbook on population genetics. It was so rarefied that it barely mentioned selection, or even living things. There were also books