
Book Reviews

North, C.: Plant breeding and Genetics in Horticulture.

London: Macmillan Press 1979. 150 pp., 21 figs., 9 tabs. Soft bound £ 4,95.

The author has packed an amazing amount of information into this very brief introduction to plant breeding. The book as a whole constitutes an excellent survey of the many areas of horticultural plant breeding; students will get a good idea of the scope and variety within the profession from it. The chapter on fertilization and seed development is especially outstanding.

The student who is going into professional plant breeding will obviously need a more complete base in genetics, as well as subsequent courses in plant breeding. A more extensive list of references would have benefited other students, especially references relating to breeding work in the separate crops.

P.L. Crane, Lafayette

Davies, D.R., Hopwood, D.A. (eds): Proceedings of the Fourth John Innes Symposium. The Plant Genome and Second International Haploid Conference.

Norwich: The John Innes Charity, John Innes Institute 1980. 273 pp., 61 figs.

In the autumn of 1979 three important events took place at the John Innes Institute: the first was the 9th Bateson Memorial Lecture, which was presented by J. Heslop-Harrison, entitled 'The forgotten generation: some thoughts on the genetics and

physiology of angiosperm gametophytes'. This lecture was given in a sharp, refreshing manner and conferred a general overview to all listeners.

The John Innes Symposium, dedicated to Roy Markhams, the founder of this important gathering, also occurred in the Fall of 1979, as did the international workshop on haploidy. The organizers were successful in integrating the topics which makes the proceedings a fine survey of recent developments in the analysis of the plant genome. It is only right that the gametophyte gets more interest from breeders in breeding problems. Evidence pertaining to gene action in the haploid phase is uncontested, and modern methods of haploid production make it possible to answer the question of just how important the haploid genome is in controlling gametophytic development in the flowering plant. It is no wonder that breeders' interest in applications of chromosome eliminations and protoplast fusion techniques is increasing. Anther culture received special interest in both joint meetings. Furthermore, chromosome organisation and genetic instabilities were at the center of discussion with more researchers looking with increasing interest into organelle genomes. The range of topics of the meetings demonstrates again the broad interests of a breeding institute which covers genetics and fundamental physiology with a view toward innovation and opening new perspectives. Good to know that such institutes exist.

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