

BOOK REVIEWS

Incompatibility in Angiosperms by D. DE NETTANCOURT. Monographs on Theoretical and Applied Genetics, Volume 3. Springer-Verlag, Berlin (1977). 230 pp. DM 56 or \$24.70.

Rarely, in a new subject, is a book to be found that is both well balanced and up to date. *Incompatibility in Angiosperms* is just that. From its beginnings in 'classical' genetics the study of incompatibility mechanisms in plant breeding systems has emerged as a subject of considerable scientific and commercial interest, and rapid progress has been made from genetical, physiological and structural points of view. This book, written by an acknowledged expert in the field, manages to do justice to all these aspects of the work, and to preface them with first class introductory material.

There is little doubt that this volume is intended mainly for reference. The text is set out in short, well indexed sections which makes reading the book 'cover to cover' somewhat tedious, but the extraction of particular data or other information very simple. Some of the phrasing rings strangely and it is difficult to see why the publishers failed to attend to such an easily rectified matter, but at no time is the sense lost. The illustrations that accompany the text are in general of exceptional clarity, except

with regard to the electron micrographs which leave much of the text unillustrated. Certainly the work of the group with which the author has been most associated is well exemplified, but other areas—particularly that of sporophytically controlled mechanisms, do lack good pictorial evidence. There are sources from which this material might be obtained, and this would have completed otherwise well covered sections.

Incompatibility in Angiosperms has little competition from other books. Several reviews exist in the literature, a particularly good example of which was published by J. Heslop-Harrison recently (*Ann. Rev. Pl. Physiol.*) but there is no substitute for a full length volume devoted to a particular subject. Even were other books available, there is little doubt that this volume would take its place as the 'standard work' on this exciting and fast moving subject.

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Plant Growth Regulation: edited by P. E. PILET. 305 pages. Springer-Verlag (1977). DM 64, \$28.20.

This book is the Proceedings of the 9th International Conference on Plant Growth Regulators held in September 1976 at Lausanne, Switzerland. Unlike previous volumes in this series, only the thirty major lectures are published which results in a much thinner book than usual. Instead of short contributed papers the meeting consisted of a vast number of poster demonstrations and for reasons best known to the editor a list of all two hundred and three of these are included in the book.

Those familiar with the earlier volumes will not be surprised to find that most of the papers are on the same subjects as before, written to a large extent by the same authors as before. Each paper is either a review or a review plus snippets of new work—at least it was new in 1976 but by now most of that has been published in the primary journals. Most of the papers deal with various aspects of the naturally occurring plant hormones and

there are also sections on plant tropisms and plant cell walls. This latter section, which is aptly placed first in the book, contains an outstanding paper by P. Albersheim where he describes his group's work on the molecular structure of primary cell walls and their attempts to unravel the process of cell wall growth in molecular terms. One surprising thing about this book is the paucity of chemistry compared with the earlier volumes in this series. This situation is particularly surprising when one considers the large amount of effort that is currently being put into finding new plant growth regulators for agricultural and horticultural use.

Despite its drawbacks, this volume will obviously serve as a useful work of reference and should be of value to students and experts alike. It is neatly produced in typescript—an economy which is not reflected in its price.

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