

BOOK REVIEW

Plant Growth Substances 1970: edited by D. J. CARR. Springer, Berlin, 837 pp. 1972. DM 60.

THIS MAMMOTH production records the proceedings of the Seventh International Conference on Plant Growth Substances held in Canberra in December 1970. It weighs exactly 4 lbs, contains 104 research papers, collected under 17 sectional headings, and concludes with author, organism and subject indexes. The papers together provide a useful overall picture of recent developments with growth substances, since there are contributions from practically all the leading experts.

It is clear from this volume that phytochemistry has had a considerable impact on this field of physiological research and there is much of interest to the phytochemical reader. Indeed, a majority of these papers cover phytochemical aspects of plant hormones in the broadest sense, i.e. their isolation, characterisation, metabolism, biosynthesis and mode of action. For example, there are no less than seven papers on auxin biosynthesis and six on gibberellin biosynthesis. These are balanced elsewhere in the volume by articles on more traditional aspects of plant physiology: the flowering process, geotropism, growth and morphogenesis.

Having said all this, I am not entirely clear for whom this volume is intended. Certainly, it cannot be meant for the general plant scientist or the student, since it is rather like having the papers from several monthly issues of *Plant Physiology* reshuffled and bound together in a single volume. The unfortunate delay in publication (not, I hasten to add, the fault of the symposium organizers or the present publishers) must mitigate against its usefulness to physiologists working with plant regulators. Many of the topics covered, such as the metabolism of abscisic acid, have developed significantly in recent months. Also, accounts of other topics (e.g. ethylene biosynthesis) have since been published elsewhere in more detail by their authors.

Personally, I would have preferred to see a shorter volume emerge from this conference, containing ten to fifteen well chosen review articles rather than this exhaustive collection of short papers. Good as they individually are, these papers really belong in primary journals and I hope this fact will be borne in mind by the organizers of the Eighth International Conference on Growth Regulators, which takes place shortly in Japan. In the meantime, we have a volume which most botanical libraries will need to buy but which very few individuals will want to keep on their shelves.

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