

BOOK REVIEW

The Biosynthesis and Metabolism of Plant Hormones:
edited by A CROZIER and J R HILLMAN Society for
Experimental Biology Seminar Series no 23, University
Press, Cambridge, 1984 288 pp £17.50

The biochemistry of plant hormones has been very well covered in the recent review literature and one might argue that yet another multi-author compilation is hardly needed. However, this particular book has to be seen as a companion to the SEB's 1976 review of plant hormone methodology, which certainly proved to be excellent value. Furthermore, like that volume, this one has a first class group of contributors who together provide a thoroughly up-to-date and highly critical review of recent experiments aimed at elucidating the pathways of hormone synthesis and subsequent turnover. It is so well done that it deserves its place on the shelf of every scientist interested in these plant hormones.

The term 'hormone' is still used, in spite of a recent preference for the more non-committal 'growth substance'. This, of course, follows from Trewavas' iconoclastic review of the earlier hormone literature, which pointed out that the analogy with animal hormones could be dangerously misleading and that hormone levels *per se*

were probably not as important as the 'sensitivity' of particular tissues to them. In fact, these points are taken up here by both B O Phinney, writing on gibberellin-deficient mutants in maize, pea and rice, and by R Horgan, who reviews abscisic acid biosynthesis. These authors both indicate that at least under some circumstances, gibberellic acid and abscisic acid are able to trigger growth responses like true hormones.

Besides coverage of the four main classes of hormone, there is an additional chapter by D K Lawrence on the metabolism of synthetic plant regulators. This is most informative, fits in well with the rest of the book and leads usefully into the more applied aspects of plant growth research. The book is dedicated to Leslie Audus, one of the pioneering spirits of this field, and he at least will be pleased to see how much progress has been made in recent times in sorting out the various precursors, pathways and metabolites. Nevertheless, there are still many areas of controversy, confusion and uncertainty, this volume usefully indicates the many places where further experiments are needed.

*Plant Science Laboratories,
University of Reading*

JEFFREY B HARBORNE