BOOK REVIEW

Recent Advances in the Biochemistry of Cereals: edited by D. L. LAIDMAN and R. G. WYN JONES. Phytochemical Society of Europe Symposium Series No. 16, Academic Press, London, 1979. 391 pp. £23.70.

While earlier volumes of this series have ranged variously over the whole of the plant kingdom, this one is restricted to temperate cereals and within this research area, only selected topics in cereal biochemistry are covered. Indeed, the book falls into three distinct sections: the first four chapters cover nutrient uptake, osmotic relations and translocation of ions; then the middle six chapters are concerned with changes in nucleic acids, proteins, carbohydrates and lipids during grain formation and germination; and the final two chapters, more practically orientated, describe changes in wheat proteins and lipids during the process of bread-making. The book concludes with five short papers on different aspects of cereal proteins, which were originally communicated at the time of the meeting.

Superficially, one might conclude from the above summary that this volume will only have a specialist appeal. However, this is far from so, since the volume includes a great deal of interesting plant biochemistry, both pure and applied, which is not readily available in any other form. The authors of the chapters on ion uptake and transport, in particular, take a broad view of their subjects and much of what is written here is of general application. Throughout, a number of basic biochemical principles emerge, which is not really surprising when one recollects that many of the key experiments on the control of growth and development in plants have been conducted using barley, oat or wheat seedlings.

It only remains to be mentioned that there is a distinguished line-up of contributors of international repute and that the editing and production are well up to the high standard we have come to expect from this series. This is one book that should be on every plant biochemist's book shelf.

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