

Ion Transport in Plants: edited by W. P. ANDERSON, Academic Press, London, 1973. £10. pp. xvii + 630.

OVER the last five or six years the introduction of new instrumentation, such as electron probe analysis, and the better understanding of the nature of biological membranes has given an exciting new outlook to the field of ion transport in plants. This excitement is reflected in the 43 papers presented in this book which were originally given at the "Liverpool Workshop on Ion Transport" in 1972. It seems unlikely that anybody who is active in the field will not have heard of this meeting even if unable to attend, since the participants include a cross-section of the leading workers in almost every country of the world. It is undoubtedly important, therefore, to have their papers collected into a single volume. But for anyone outside the field, this book is very hard going, and should not be regarded as giving an easily assimilated introduction to the modern ideas on ion transport. Indeed, it reads more like a collection of papers in a research journal, since each author has detailed the experimental methods used and discussed his results in a rather brief way that assumes the reader's expert knowledge of the field in a way not normally found in a book. There is, naturally, a great deal of repetition both in the discussion sections of each paper and in the outlines of the methodology. Nevertheless, there are a sufficient number of gems to make it well worthwhile wading through the papers with some degree of care, and many of the ideas which are proposed are novel and stimulating. I am not sure about the wisdom of the Editor's inclusion of a summary of the tape-recorded discussion sessions. I am sure that they were highly interesting at the time of the meeting, but it might have been wiser to have asked participants who had put forward ideas to append them to their own contributions. Nevertheless, the Editor is to be congratulated on the organisation of the papers and on his foresight in arranging the original meeting. I am sure that everyone in the field of ion transport will be grateful for his efforts. The book covers every aspect of the subject from ultra-structural localization to ion transport in roots, and the production is at the expectedly high standard that Academic Press set themselves. Altogether a worthwhile buy for aficionados.

Royal Botanic Gardens, Kew

T. SWAIN