BOOK REVIEW

Mineral Salts Absorption in Plants; by J. F. SUTCLIFFE. International Monographs on Pure and Applied Biology. Plant Physiology, Vol. 1. 194 pp. Pergamon Press 1962. 35s.

This excellently produced book will prove very attractive to Honours students of botany and to those botanists who want, without too great a labour, to acquaint themselves with the present state of knowledge and ideas in this active field of physiological research. Dr. Sutcliffe writes in an easy style, has produced a textbook with very few errors, and has illustrated each chapter with a number of clear and specially prepared figures. The inclusion of chapters on "Salt Tolerance" and on "The Soil as a Source of Mineral Salts" is particularly to be commended in view of the restriction of length under which the author has written.

At some points the restriction of length has, however, led to the adoption of a summary style which makes the account disjointed and unsatisfying; this is particularly so in the chapter on "Factors Affecting Salt Absorption". It also is perhaps the reason why the chapter on "Experimental Materials and Methods" deals only with general principles rather than with important matters of detail; an omission which the reviewer particularly regrets in view of Dr. Sutcliffe's own research activity in this field.

The chapter divisions are well chosen, though their order of presentation is rather puzzling. One would have thought that the chapter on "Structural Aspects" might well have preceded those on "Mechanisms of Ion Transport" and "Salt Absorption and Metabolism" and that these latter two chapters should follow one another directly. This raises the only serious criticism one can make of this otherwise generally excellent book. There is insufficient attention to the problem of each chapter naturally developing out of the preceding chapter and leading on to the chapter which follows. The synthesis attempted in the "Epilogue" does not compensate for this defeat.

Despite the above criticism of presentation, the book is a much needed, informed and valuable assessment based upon a very careful and critical selection of material from a vast literature. If subsequent volumes of this series are of similar standard they will be of great value in advanced teaching and will act as a valuable stimulus to critical thinking in plant physiology.

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