

lack of rootability of this plant, as in cuttings from 3 month old plants which are able to root, no significant zone of inhibition of growth was detected, whereas it was apparent when the plant became older (VIEITEZ *et al.* 1966a).

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BOOK REVIEW

SUTCLIFFE, J. F., PATE, J. S. (ed.): **The Physiology of the Garden Pea**. — SUTCLIFFE, J. F. (ed.): *Experimental Botany: An International Series of Monographs* Vol. 12. Academic Press, London—New York—San Francisco 1977. 500 pp. £ 18.5, US \$ 36.10.

This book published as Volume 12 of *Experimental Botany: An International Series of Monographs*, is unique in its subject and scope. In contradiction to traditional textbooks of plant physiology, in which individual processes and interactions between them are derived from various plant species, this book is a comprehensive survey of the physiology of one of the most useful experimental plant material — garden pea (*Pisum sativum* L.).

In 16 chapters the contributors deal with various physiological features of this valuable material. The introductory chapter, written by the first editor, J. F. Sutcliffe, is a well over-viewed History of the Use of the Pea in Plant Physiological Research; the second chapter — Classification, Genetics and Breeding is written by G. A. Marx. In 11 chapters attention is paid to physiological aspects of separate phases of ontogenesis and their characteristic structures and processes. The two chapters on — Nodulation and Nitrogen Metabolism and Photosynthesis and Translocation are relatively comprehensive. The latter deals with the exchange of carbon dioxide and its components, i.e. photosynthesis and respiration, structures and pathways of assimilate production and translocation. Unfortunately, the corresponding specialized chapter on water relations is lacking as well as the chapter on experimental cultivation and environmental requirements in general, and the conclusions of individual chapters, applicable to experimental conditions, are too brief or missing. The last chapter — The Pea as a Crop Plant deals with practical questions namely production and husbandry of pea as a significant producer of proteins, and with the possibilities of production improvement. Each chapter ends with a list of references, containing on an average nearly one hundred references.

This book will be certainly welcomed as a valuable compendium of information on this commonly used experimental material. It is very well arranged and printed, illustrated with 27 tables and 137 figures, diagrams and excellent photographs, and supplemented with a detailed subject index. Although the book was written above all as a monograph on pea for researchers working with this material, it will be appreciated by many other plant physiologists, especially by those interested in plant development and interactions between various organs.

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