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BOOK REVIEW

LA PHYSIOLOGIE DE LA FLORAISON. Colloques Internationaux du Centre National de la Recherche Scientifique, N° 285. — Éditions C.N.R.S. Paris, 1979. 241 pp. FF 90.00.

The book is based on the lectures presented at the International Colloquium on the Physiology of the Plant Development, which was held in Gif-Sur-Yvette in July 1978. About 80 researchers and experts in plant development from numerous countries have participated in the colloquium and contributed to the elaboration of this publication. The aim of this book is not only to present new results but also to discuss and formulate other hypotheses which will be able to lead to new research approaches in this field. The text is divided into 6 chapters containing the most important aspects in the research of plant flowering and development: stimulation and inhibition of flowering, perception, nature and complexity of transmitted signals, time measurement, the effects of photoperiod and phytochrome in flowering, the floral evocation, metabolism and energetics in flowering, and genetic systems involved in the flowering process.

This publication presents a concise but comprehensive survey of the progress and current knowledge in flowering and in plant development and will be an invaluable source of information for all plant physiologists, biochemists, agriculturalists and tissue culture experts.

J. ULLMANN (*Praha*)

THORNE, D. W., THORNE, M. D. (ed.): *SOIL, WATER and CROP PRODUCTION*. — AVI Publishing Company, Inc., Westport — Connecticut, 1979. 353 pp. US \$ 20.—/22.—.

The welfare of human beings throughout time has remained closely dependent on natural resources. With increasing world population the food requirements are rising and the task of producing food become more complicated. As land reserves occur, especially in temperate zone, far from the major population centers and costs of bringing these new lands into production is very high, most of the additional food needed for a growing population must be provided by increasing yields on land now being cultivated rather than by cultivating more land. Further complicating factors are escalating cost of energy and fast decreasing fossil fuel resources. For this purpose there is need to critically examine the present farming systems and to evaluate available and potential technology systems in order find the most effective and profitable ways of production. This book presents an introduction to the major crop production systems in different agro-ecological zones in developed and especially developing countries. The contributors were selected taking account of their specialized knowledge of the existing systems and their improvement in different soil and climatic situations. The volume is divided into four major divisions. The first identifies and examines the climatic factors affecting the growth of crops. The next five chapters are devoted to soils and its classification, water relations, nutrient relations, physical properties and organic material. The following chapters deal with irrigation, cropping systems and farm planning by which crop yields can be easily improved. The last nine chapters examine the present and potential systems of farming in the major climatic and soil systems of the world and define the possibilities of improving crop production under these conditions.

The book is illustrated by many photos, tables, maps and figures. It will be useful to the broad public and students interested in the agriculture and food production in various parts of the world.

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