

of current and one-year old shoots within and between seasons. — *Physiol. Plant.* **54** : 7–14, 1982.

VIRÁGH, K., PRÉCSÉNYI, I.: Leaf growth investigation on trees. — In: JAKUCS, P. (ed.): *Ecology of an Oak Forest in Hungary. Results of "Sikfőkút Project". 1. Structure, Primary Production and Mineral Cycling.* Pp. 231–260. Akadémiai Kiadó, Budapest 1985.

VON WÜHLISCH, G., MUHS, H. J.: Influence of age on sylleptic and proleptic free growth of Norway spruce seedlings. — *Silvae Genet.* **35** : 42–48, 1985.

BOOK REVIEW

WILCOX, J. R. (ed.): *SOYBEAN: IMPROVEMENT, PRODUCTION, AND USES.* Second Edition. Number 16 in the series *Agronomy*. — American Society of Agronomy, Inc., Crop Science Society of America, Inc., Soil Science Society of America, Inc., Publishers, Madison 1987. XXXII + 888 pp., US \$ 44.75 (incl. foreign postage).

Soybeans, originally and till the beginning of this century a major agricultural crop merely in Eastern Asia, is only from this time, and especially in the last two decades, introduced into other parts of the world, mainly into the USA, Brazil and Argentina. The reason of the increasing demands for soybeans, which would need the soybean planting area to be extended, is the nutritive value of this crop — high contents of edible vegetable oils and proteins. Research works increasing simultaneously with the production were focussed on production practices, protection of the crop from losses due to pathogens, insects and weeds and had an immediate effect on increasing soybean supplies. Increased research was also directed towards better knowledge of physiological processes, genetics and breeding that would open the way for future improvements in soybean production efficiency and in the quality of soybean products. The rapid increase in the breadth and depth of knowledge of this auspicious crop provoked ASA, CSSA and ASSA to replace the first edition of this book published in 1973 by a new, reworked and supplemented issue.

The first chapter (K. J. Smith and W. Huyser) documents recent changes in the world production of soybean, growing trends, economical and political reasons of these changes. The second chapter (T. Hymowitz and R. J. Singh) deals with taxonomic history, cytotoxicologic, morphological and chemosystematic topics. The next two chapters on vegetative (N. R. Lersten and J. B. Carlson) and reproductive morphology (J. B. Carlson and N. R. Lersten) were supplemented to this edition for better understanding the following chapters. Results of quantitative genetics and cytogenetics (R. G. Palmer and T. C. Kilen), quantitative genetics study relevant to soybean breeding (J. W. Burton), breeding methods and cultivar development (W. R. Fehr) are reviewed in three following chapters. Chapter on the seed production and technology (D. M. TeKrony *et al.*) inserted first in this edition is succeeded by four chapters on various aspects of soybeans production *i.e.* crop management (R. R. Johnson), tillage and irrigation (D. M. Van Doren, Jr. and D. C. Reicosky), weed control (T. N. Jordan *et al.*), soil fertility and liming (D. B. Mengel *et al.*). Special chapters are devoted to nitrogen metabolism (J. E. Harper), carbon assimilation and metabolism (R. Shibles *et al.*), stress physiology (C. D. Raper, Jr. and P. J. Kramer) and seed metabolism (R. F. Wilson). The subsequent group of four chapters present current knowledge of fungal (K. L. Athow), viral and bacterial (J. P. Ross) diseases, nematodes (R. D. Riggs and D. P. Schmitt) and integrated control of insect pests (S. G. Turnipseed and M. Kogan). The final chapter (T. L. Mounts *et al.*) describes in detail how soybean crops are processed, utilized and points out the requirements of special handling.

The book is complemented by the subject index containing scientific and common plant, diseases and pest as well as cultivar names, list of contributors and, in this series regularly included table "Conversions Factors for SI and non-SI Units", although the SI units are used throughout the text. The book is an asset for all agronomists specializing in plant productivity, especially in countries where soybeans is not a traditional crop, and a significant volume to those interested in plant physiology and crop production.