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Figures at the end of the issue.

BOOK REVIEW

POTASSIUM RESEARCH — REVIEW AND TRENDS. Proceedings of the 11th Congress of the International Potash Institute 1978. — International Potash Institute, Bern 1979. Pp. 499. US\$ 21.15.

This book presents the proceedings of the Congress, held on September 4–8, 1978 in Bern, on the occasion of the 25th anniversary of the Scientific Board of the International Potash Institute. Specialists from forty-eight countries of Africa, America, Asia and Europe, from FAO and five other international organizations assembled to survey the progress achieved over the past twenty-five years, to assess the gaps in present knowledge, decide on the future work and suggest how the improvements may be translated into agricultural practice. The Congress agenda was divided into six sessions, the first of which was devoted to the Jubilee of the Scientific Board of IPI. The themes of the remaining sections were organized under following headings: (2) Potassium in the soil/plant root system; (3) The role of potassium in yield formation; (4) Potassium requirements of crops; (5) Potassium fertilization in agricultural practice and (6) Translation of research into practice. In section 2 articles on "Structure and weathering of potassium containing minerals", "The physical chemistry of equilibria involving the potassium ion in soils", "Factors affecting the availability of potassium in soils" and "The evaluation of soil K status by means of soil testing" were included. Section 3 was devoted to "Potassium transport through plant cell membranes and metabolic role of potassium in plants", "The effect of potassium on growth and yield components of plants" and "Influence of K nutrition on the response to environmental stress". The most voluminous fourth section provides a comprehensive survey of the requirements of different crop types for potassium. The last but one session was dedicated to potassium effects in long term cultivation, to the concepts of potash use and interaction of potassium with other nutrients. The brief closing section summarizes the present knowledge in two chapters which also show how scientific knowledge can be better applied in modern agriculture.

There is such a wealth of information in this publication that it is beyond my scope to mention here all the items. Perhaps the only serious defect of the book is the absence of an author and especially a subject index. In every other respect, it is very interesting and should have a general appeal to all those working on this and related problems.

JARMILA SOLÁROVÁ (Praha)

MENZINGER, W., SANFTLEBEN, H.: PARASITÄRE KRANKHEITEN UND SCHÄDEN AN GEHÖLZEN. — Paul Parey, Berlin—Hamburg 1980. 264 pp. DM 58,—.

This reference work is meant for gardeners, agriculturists and foresters who will find here necessary data on plant protection. The idea of authors has been to fill the gap in literature on protection of more than 300 tree species, hosts of diseases and pest injuries in nurseries. This practical guide is to help the workers in a rapid orientation in the diagnostics of diseases and insects pests according to the symptoms of diseases and developing injuries, and in connection with it in the plant protection. The authors start with a short description of damage on the individual parts of plants from the viewpoint of visual observation, by naked eye or maximally with the use of magnifying glass.

Bionomic data are limited to minimum; they are only given in connection with the development of the damage and the protection method.

The last (sixth) chapter under the title "Special Instruction for Control" is, with respect to the rapid development of chemicals in plant protection, in the form of a free annex (in the pocket of the rear cover) so that it may be replaced after a certain time by new data. The book may thus be always up-to-date as concerns the practical part and its use may be prolonged.

The book contains the introduction into the biology of pests and pathogens (about 16% of book volume). Special parasitic diseases and injuries of plants in nurseries cover the largest part (about 40%) of the book. The data on chemicals for plant protection and on their application (nematicides, chemicals for soil disinfection, acaricides, insecticides, rodenticides, fungicides and herbicides) form 16% of the content and are suitably complemented by instructions on pest control and control of diseases on individual tree species, which represent in total 31% of the content. The book also includes explanation of scientific terms, an index of Latin names of pests and plant diseases, and an index of chemicals for plant protection not only according to the content of active substances but also according to commercial names. To individual chapters references to modern professional literature are added.

A more detailed study of the book reveals that in the second chapter the authors also pay attention to cultures and older stands. Dealing with oak *Quercus* sp. it would be advisable also to include important pests like *Operophtera brumata* (L.), *Hibernia defoliaria* (L.), *Lymantria dispar* (L.), a very important harmful pest of oak, *Orgyia antiqua* (L.), *Malacosoma neustria* (L.), *Euproctis chrysorrhoea* (L.), and with fir *Abies* the pest *Epinotia nigricana* (H. S.), which destructs buds and deform fir tops into "stork nests", should be added.

With respect to the differences in local occurrence of some pests and diseases it would be suitable to include specially important harmful insects in stool beds of poplars like *Aegeria apiformis* (CL.), or *Paranthrene tabaniformis* (ROTT.); we also miss a very frequent, in all gardens and in many forest cultures occurring insect pest, *Pristiphora abietina* (HTG.) with larvae clean eating needles of sprouts, mainly top sprouts of spruce *Picea*. The list of harmful insects on pine *Pinus* should include important species like *Aradus cinnamomeus* (PANZ.), *Acantholyda hieroglyphica* (CHR.), *Evetria resinella* (L.), blast beetles of genus *Hylastes*, but mainly the important pest-like pine weevil *Hyllobius abietis* (L.), which occurs not only in cultures of pines and other conifers but also in nurseries.

The above mentioned pests selected at random should be included for the needs of forestry and their inclusion into the book will also serve to professionals in forest nurseries.

It would be of use to the readers if there were more pen drawings and mainly diagnostic reference figures.

The present book is nevertheless well aimed in many directions at the concentration of data for plant protection in nurseries.

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