

BOOK REVIEWS

F. G. W. Jones and R. A. Dunning: Sugar beet pests. Bulletin 162. Ministry of Agriculture, Fisheries and Food, 2e druk 1969. 108 pp., 15 figuren, 12 bladzijden met foto's, 1 tabel, HMSO, prijs 14 sh. net.

In dit boekje wordt een overzicht gegeven over de plagen van de suikerbiet in Engeland. Besproken worden insecten, aaltjes, vogels en zoogdieren. Ook wordt aandacht geschonken aan de drempelwaarde van de aantasting waarbij schade optreedt. Opgegeven wordt bijvoorbeeld dat bij verlies van het halve blad-oppervlak in een jong stadium 5% oogstverlies optreedt. Deze gegevens zijn voor de beslissing of al dan niet een bestrijdingsmaatregel moet worden uitgevoerd van wezenlijk belang.

Van de verschillende plagen worden economische betekenis, schadebeeld, biologie, bestrijding en literatuur aangegeven. Daar de genoemde plagen overeen komen met de in Nederland voorkomende, is het een nuttig boekje voor iedereen die hier met de bietenteelt te maken heeft.

A.

K. W. Smilde and J. P. N. L. Roorda van Eysinga: Nutritional diseases in glasshouse tomatoes. Pudoc, Wageningen, 1968; Size 14 × 20 cm; 48 pages, 26 colour plates; cloth-bound; Dfl. 17,50.

The authors have tried to explain to the reader how the mineral nutrition influences the plant; firstly by illustrating the symptoms in colour plates, secondly by describing these symptoms and thirdly by giving figures about the quantities of the various elements in healthy and diseased plants. No doubt the value of the booklet hinges on the colour prints because this language is understood by everyone. The jargon of interveinal chlorosis, down curved leaflets, desiccating spots, shrivelled petioles, chlorotic mottling and interveinal necrosis is already less easy to absorb, whereas amounts of 2000 ppm Zn in case of zinc excess in the leaf are even less digestible to the ordinary reader. This, however, widens the circle of future buyers. With few exceptions (manganese deficiency, zinc deficiency) the colour plates are both well chosen and of the right colours. As regards the language one might have objections against a few expressions like 'plant habit', 'water painting', 'industrial emissions' and 'soil applied nutrients'. A change in this respect might be something to look forward to in the second edition.

There is no doubt, however, that in its present form this book will be most valuable both for growers, research workers and teachers.

D. Mulder

J. P. N. L. Roorda van Eysinga and K. W. Smilde, Nutritional disorders in cucumbers and gherkins under glass. Pudoc, Wageningen, 1969. Size 14 × 20 cm; 50 pages; 30 colour plates; cloth-bound; Dfl. 15,00.

This valuable little book has been written around a fine collection of colour pictures of 12 nutritional deficiencies and 4 cases of mineral toxicity.

The authors have studied the symptoms of nutritional disorders on cucumber and gherkin in water-culture, on sphagnum peat substrate and in commercial glasshouses and analysed the leaves of healthy and diseased plants. The booklet appears in a Dutch and an English version.

The colour pictures excel in true colours and simplicity of the object. One might have preferred to see a few pictures of damage due to pesticide application or air pollution added to this series. For growers it will be of interest to get an impression of the mineral contents of their products as given in a table at the end. Although zinc deficiency was a common feature in apple orchards around 1948, this deficiency does not occur in greenhouses on cucumbers and gherkins these days according to the present authors. Although a few improvements (numbering of pictures?) might be possible, this addition to the literature on nutritional disorders will be an asset to every growers' library and to many scientific institutes as well.

D. Mulder

Erwin Schimitschek: Grundzüge der Waldhygiene. Paul Parey, Hamburg und Berlin. 167 pages, 24 tables and 44 plates, bound, price Dfl. 36,-.

Schimitschek, who is an experienced forest entomologist, presents his own philosophy on pest control in forests in this book. He has certainly thought a lot about the problem. The book makes therefore most rewarding reading.

Schimitschek stresses the importance of forest management based on ecological considerations. Host plant condition is the central theme of his discussion. In his opinion pests and diseases result from physiological disturbances in the trees. These are often the result of the planting of species outside their normal range, where soil and climatic conditions are not optimal. One may consider this a too narrow point of view.

He omits a critical evaluation of all the factors in the complex ecological system that can be found in our forests. Parasites and predators, for example, are discussed in only 4 pages.

The book contains an extensive list of references but with few exceptions only the German literature is quoted. Thus no reference is made of the extensive Canadian entomological research. However, as a whole the book provides the critical reader with a wealth of information on the epidemiology of forests pests and diseases. It should stimulate further research into this interesting field.

A.

J. G. Horsfall, K. F. Baker and D. C. Hildebrand (Editors): Annual Review of Phytopathology. Annual Reviews, Inc., Palo Alto, Calif., U.S.A.; vol. 7 (1969), 477 pp., \$ 9.00.

In a prefatory chapter to the seventh volume of this series McCallan describes a shift in the fields of interest of plant pathologists in the USA during the last half century. In the early years the attention was concentrated on diseases of crops and on mycology. Later on virology and fungicides attracted increasing attention, and during the last 15 years the subjects which rose most rapidly on the list of interests were: soil pathogens, physiology of parasitism, epidemiology, ecology and nematology.

Further this volume contains a historical review of plant pathology in Great-Britain, an introduction to the economic basis of plant disease control and 16 articles on various subjects, half of which refer to the physiology of parasitism and epidemiology. The other articles concern breeding for resistance, the action of toxicants and various topics in fungus, virus or nematode research. Of these subjects I should like to mention a paper on the culturing of rust fungi in vitro and a somewhat speculative, but interesting topic on the use of plant pathogens in weed control.

As in foregoing volumes the classification of the various articles under different heads seems illogical or sometimes even incorrect. The heads could safely be omitted. This minor critical remark, however, does not diminish the great value of this volume to everybody interested in the developments in plant pathology.

Dekker