

---

**Book reviews**

---

**Hawkes, J.G.: The Diversity of Crop Plants.** Cambridge, Massachusetts, London: Harvard University Press 1983. vi + 184 pp., several figs. and tabs. Hard bound £ 20,-.

The book is based on a series of lectures which the author gave at Harvard University in 1977. The contents of these lectures have evidently been brought up-to-date for publication in 1983. Even without the additional data, the book is in the nature of an exhaustive introduction to the subject.

In the first chapter the differences between wild plants and cultivated forms are discussed. The author points out the wide adaptation and the great wealth of forms that have arisen under the influence of man. He also mentions the species concept. This part is rather short, and unfortunately so, since in connection with the crossability and the fertility of the  $F_1$  this concept is an important one.

Chapter 2 deals with the origins of agriculture. The author then proceeds with a discussion on the study of crop plant evolution and dispersal based on the work of Vavilov. In the chapter on 'The value of diversity to the Breeder' Hawkes pays a great deal of attention to the rich diversity occurring in cultivated crops, and rightly so. Present as well as the obsolete varieties are precious sources of diversity, which is also true for the landraces and primitive forms. Wild plants certainly do not constitute the only source of genotypic variation. This chapter and those on 'Exploration and storage of crop plant diversity' and 'Global strategies for conserving and utilizing the genetic heritage of plants' clearly bear testimony to the rich experience the author has obtained in the course of his varied activities in these fields. The last chapter would have gained in readability and clearness, if it should have

been written in a less detailed way. Such would have been in agreement with the introductory nature of the book.

With the exception of a few dull photographs, this book has been well edited.

J. Sneep, Wageningen

**Shkolnik, M.YA.: Trace Elements in Plants. Developments in Crop Science (6).** Amsterdam, Oxford, New York, Tokyo: Elsevier 1984. viii + 463 pp., 99 figs., 16 tabs.

This book has been translated from Russian and is devoted to the physiological role of trace elements. A valuable aspect of this book is that it makes a large amount of the research performed by Russian scientists available for the first time. More than 1500 references are presented in the list at the end of the book. Unfortunately, neither an author index nor a subject and plant index has been given. Thereby, the usefulness of this book is seriously hampered. The reader will not only find a critical analysis of various aspects of the physiological role of trace elements, but also a major emphasis on botanical aspects of trace elements, as seen in botanical geography, taxonomy, ecology, embryology, and genetics.

The present English version is a translation from the edition of 1974, to which new material from the literature of the period 1973-1981 has been added. The amount of literature covering the latter period is, however, limited.

Colleagues having interest in the Russian literature on trace elements are advised to buy this book.

H. Veen, Wageningen