agents (microorganisms, viruses) and environmental factors (temperature, salinity and water stress). Other topics include the immunochemical identification of antigens involved in plant/pathogen interactions, the involvement of two genes in the maize anaerobic response, potato cold hardiness and freezing stress, molecular mechanisms of compensation to light stress in chloroplast membranes, plant adaptations to toxic natural products and the impact of plant stresses on crop yields.

This book will be of interest to researchers and teachers in botany, agriculture, biochemistry and genetics.

J. A. M. Schrauwen, Nijmegen

Larcher, W.; Häckel, H.; Sakai, A.: Meteorologische Pflanzenpathologie, Witterung und Klima als Umweltfaktoren. Kälte und Frost. Rademacher, B.; Richter, H. (eds.): Handbuch der Pflanzenkrankheiten, Vol. 1. Die Nichtparasitären Krankheiten, Teil 5. Berlin, Hamburg: Parey 1985. 326 pp., 184 figs. (13 in color on 2 plates), 57 tabs. Hard bound DM 248,–.

Ecologists will consider it a pity that this excellent monograph on cold and freezing as ecological factors is hidden in the famous classical Encyclopedia of Plant Diseases. For breeders, the background information on weather and climate, with emphasis on below zero temperatures, and the diagnosis of chill symptoms of frostbitten plants is useful information.

The part on chill resistance is most important and although the treatment of the genetics of cold resistance as a species and cultivar specific characteristic is only marginal all the other important aspects, such as interspecific and intraspecific resistance and differences between base and scion, are discussed. It is important to know that frost resistance is not a general criteria of a plant individual, but different for different organs and tissues, as well as in the various developmental stages. Even hardening could be gene dependent. Breeders will definitely learn a great deal by reading this monograph.

H. F. Linskens, Nijmegen

Böhme, H.; Mettin, D.; Müller-Stoll, W. R.; Müntz, K.; Rieger, R.; Rieth, A.; Scholz, F.; Stubbe, H. (eds.): Die Kulturpflanze, Mitteilungen aus dem Zentralinstitut für Genetik und Kulturpflanzenforschung Gatersleben der Akadmie der Wissenschaften der DDR, Bd. 32. Berlin: Akademie-Verlag 1984. 268 + 310 pp., 74 + 87 figs., 16 + 34 tabs. DM 120,–.

This recent volume of the yearbook of the Institute of Genetics and Crop Science of the DDR consists of two parts: the full text of the lectures of the 3rd Seed Protein Symposium, held in 1983 (K. Müntz and C. Horstmann, editors), and the usual cocktail of reviews and original papers from the institute, dressed up with information on the institute in 1983, and finishing with a subject index.

Sixty scientists from 13 different countries gathered for the topic "Genetics of Plant Seed Proteins". The 21 plenary lectures covered not only wheat, barley and maize storage proteins, but also non-cereal proteins of *Vicia faba, Glycine max* and *Pisum sativum.* Improving seed proteins by breeding is also a major topic of the institutes own research program. In addition, the text of 19 poster sessions is given in full detail, demonstrating the penetration of N-terminal amino acid sequence analysis into the area. The analysis of secaline, glutenin, albumin, legumin and vicilin is making further progress.

The annual publication of the institute contains 2 important review articles on the domestication syndrome (K. Hammer) and on models of carbon isotope discrimination during photosynthesis of C3 and C4 plants (M. Peisker). The original papers cover a broad field: pollination ecology of wild barley, variation of seed characters of *Vicia* species, the genetic resources of *Malus.* The institute's travel activities are also reported: information on the farro in southern Italy and the collection of indigenous taxa of cultivated plants in the CSSR, Lybia, Georgia and South Italy. Literature reviews on the archaeological remains, taxonomy and evolution of cultivated plants are continued.

The extensive volume again demonstrate the institutes broad interests and the staffs wide activities.

H. F. Linskens, Nijmegen

Erratum

Theor Appl Genet (1985) 71:22–25
B. Glaz et al.: Evaluation of cultivar-testing locations in sugarcane

On page 23, second column, second line, the degrees of freedom for F should read:

"...(t – 1) and st(r – 1)..."