Peppers: vegetable and spice capsicums Crop production science in horticulture Series, No. 12, Edited by Paul W. Bosland, Eric J. Votava, Department of Agronomy and Horticulture, New Mexico State University, New Mexico, 1999. ISBN 0-85199-335-4; £27.50 (US$45.00).

Like the previous books in the series, ‘Peppers’ is a concise reference source that is geared toward university students and horticulture, crop science, and food science industry professionals looking for a brief scientific introduction to this crop including references to the primary literature. Topics that are covered include pepper history, taxonomy, botany, genetics, physiology, composition, production, harvesting and postharvest handling, and disorders, diseases and pests. While no single chapter can be considered complete enough in its coverage to satisfy a specialist, that same person may find in the coverage of the other topics a useful and succinct source of information. Thus, for example, I will not complain that the chapter, ‘Postharvest Handling’ devotes only two pages to fresh peppers while the remaining 85 percent deals with processing peppers, because I did find other topics that were new and interesting to me within the other chapters in this book.

The introductory chapter describes the history of peppers (Capsicum) from current economic and dietary value through medicinal uses. The taxonomy chapter makes sense of the surprisingly large number of domesticated and wild pepper species and pod types, including their relative pungency ratings. A short chapter on seeds serves somewhat as an introduction to the next chapter on genetics, plant breeding and biotechnology. This chapter covers traditional breeding methods and hybrid seed production as well as the use of molecular markers and tissue culture in pepper biotechnology. The chapter on chemical composition briefly mentions the major components of peppers as well as the important minor components, ascorbic acid, vitamin E, carotenoids, and capsaicinoids. Unfortunately, probably due to lack of comprehensive studies, the examples of compositional levels seem to jump around among different pepper types. The chapter on pepper production is several times longer than most of the other chapters in the book and covers both field and protected production along with all the variety of production techniques used throughout the world. The harvesting chapter is another short chapter that could quite easily have been merged with the next chapter on postharvest handling. Harvesting for fresh market and processing, hand and machine harvesting are covered, along with packinghouse sorting and grading, and mechanical injury during harvest and on the packing line. The postharvest handling chapter contains brief descriptions of fresh pepper handling, the various ways that peppers are processed, and pepper color measurement. The final chapter covers pepper disorders, diseases, and pests. Despite the chapter title, diseases are referred to as ‘biotic disorders’ within the chapter. While the listings of individual pathogens and pests are seemingly exhaustive, very little specific information is given, with few reference citations and no recommendations for control made (perhaps wisely given the variability and fluidity of labeling laws worldwide).

This book could be a useful source of information for lay readers with a desire to know some-
thing about the scientific underpinnings of pepper biology, growing, and handling practices. For students beginning to work with peppers, this book could be a convenient introduction. More advanced workers, including postharvest physiologists, may find some parts of the book interesting, but probably not enough so to justify its purchase.

Jeffrey K. Brecht
Horticultural Sciences Department,
University of Florida,
PO Box 110690,
Gainesville,
FL 32611-0690,
USA