context of technology and society. Although the authors appear to have complete faith in technology, critics of gene splicing have clearly lost theirs. Over-use of pesticides, the scare of Three Mile Island, Chernobyl, taking 30 yr to establish that smoking causes cancer, threat of nuclear war, thinning of the ozone layer as a result of leaked air conditioning coolants, and 9/11 have all taken their toll on public confidence in technology and its regulation. Achieving a proper regulatory balance for gene-spliced crops, like it or not, must involve dealing with this unfortunate legacy and admitting that even scientists don't have all the answers when it comes to the public's adoption of new technology.

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Crops and Environmental Change: An Introduction to Effects of Global Warming, Increasing Atmospheric CO_2 and O_3 Concentrations, and Soil Salinization on Crop Physiology and Yield. S.G. PRITCHARD and J. S. AMTHOR. Food Products Press, an imprint of the Haworth Press, Inc., 10 Alice Street, Binghamton, NY 13904-1580. 2005. Paperback, 421 pp., $49.95. ISBN 1-56022-913-6.

The world today is faced with great challenges to produce adequate food, fiber, feed, industrial products, and ecosystem services for the Earth's 6.4 billion people. With nearly 80 million added every year, we must develop ecosystem goods and services to meet the needs of 8 billion by the year 2025 and over 10 billion by 2050. Furthermore, with intensive agriculture, soil degradation and particularly salinization are becoming major concerns. Added to these stresses comes a threat—global environmental change resulting from increased greenhouse gas concentrations in the atmosphere because of anthropogenic activities. Understanding the effects and consequences of all these changes on crop production is the subject of this book, *Crops and Environmental Change,* by S.G. Pritchard and J.M. Amthor, well-known authorities in this area of research. The authors deliberately chose to focus on four important environmental change factors: global warming, soil salinity, and increases in atmospheric carbon dioxide and ozone concentrations. These four factors are a direct consequence of human activities and understanding their effects will be of interest to many groups concerned with climate change and crops, from cell physiologists and ecologists to plant and agriculture science majors.

The book consists of 10 chapters: (1) Introduction; (2) Methods of studying effects of environmental change on crops; (3) Cellular responses to the environment; (4) Water relations, (5) Photosynthesis, respiration, and biosynthesis; (6) Partitioning of photosynthate; (7) Mineral nutrition; (8) Vegetative growth and development; (9) Sexual reproduction, grain yield, and grain quality; and (10) The biotic environment. The uniqueness of this book is in its bringing together the effects of multiple environmental factors on crop physiology, growth, development, and yield rather than the individual treatments found in other books in this subject area. The quality of the presentation is generally high and the book is easy to read.

Chapter one provides the foundation for understanding the interrelationships and interdependencies of past and present climate change, population growth, environmental degradation, and crop production and yield spatially across regions and temporally over years. Chapter two describes some important techniques used to study the effects of environmental variation and change on crops. The rest of the chapters, three to nine, explore the influence of four environmental factors, global warming, salinization, and increases in atmospheric carbon dioxide and ozone concentrations, on major crop processes from the cellular level to final yield, and the consequences and implications of environmental change on crop production. I personally like the chapter on sexual reproduction, grain yield, and grain quality because understanding the processes that contribute to yield is particularly important when developing suitable tools to increase the tolerance of crops in future climates. The last chapter on the biotic environment summarizes briefly the physical and chemical environments of crops with respect to insects, diseases, and weeds.

With my research and teaching experience in global change biology for the past 20 years, I find this book easy to read and comprehend. The coverage of the book is extensive and well supported by drawings, tables, lists of key definitions, and references. Each chapter is supplemented by a concise summary and identifies future research needs. The topics covered are central to our understanding of crop responses and adaptations to environmental change. The writing style is generally clear on such complex topics. The information is carefully put together and flows logically from one section to another. The book provides a valuable synthesis of research on the effects of global climate change on crop physiology and yield. It offers an excellent entry point for students and researchers interested in climate change and crop production, and the content is suitable for advanced undergraduate and graduate students as well as others interested in crops and environmental change. I believe that this book is a valuable addition to the rapidly growing crops and environmental science literature.

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Genetic Analysis of Complex Traits Using SAS. Edited by ARNOLD M. SAXTON. SAS Institute, Cary, NC 27531. 2004. Paperback, 292 pp., $49.95. ISBN 1-59047-507-0.

The title leads the reader to expect a book that demonstrates how to use SAS in the analysis of molecular genetic data, and certainly, this is one of the book's objectives. But surprisingly, and no doubt to the delight of plant and animal breeders and traditional quantitative geneticists, the book also contains a very comprehensive treatment of traditional quantitative genetic data analyses using SAS. As the editor notes in his introduction, these conventional quantitative SAS applications are long overdue. While quantitative genetics textbooks have continued to be published, the theory they present is typically unaccompanied by statistical software applications that take advantage of modern computational techniques and hardware. Many who have taught quantitative genetics are painfully aware of this fact, and they will cheer the arrival of this volume.

The book is divided into 11 chapters written by experts in their fields. Chapter 1 provides a very brief introduction to the book and to SAS protocols. The remainder of the book is divided into two parts: Part 1 focuses on classical quantitative genetics (Chapters 2–7) and Part 2 (Chapters 8–11) covers