inequalities, and in a time when few seem concerned, remains one of humanity's greatest challenges."

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The primary audience for this book is the soybean producer in the midsouthern region of the USA. But, its appeal will be much broader. Written as a comprehensive resource for producers, it should also be a useful reference for crop advisers, agronomy students, and anyone else interested in efficient soybean production. The applicable geographical region is probably broader than one would infer from the title. Some chapters are region specific, but producers from much of the USA could gain important insights from many of the topics discussed in this text.

The book opens with a chapter on economics, which establishes an appropriate focus for the rest of the text. Unfortunately, this chapter is written too narrowly with nearly all data coming from a single state, Mississippi. Soil erosion is discussed in the second chapter. This topic is a wise choice for an introductory chapter. Nearly all soybean producers should be concerned about soil erosion, and cropping system choices should relate to both economics and their effect on soil. Chapters 3, 4, and 6 through 11 are about one or more aspects of crop management. Topics covered include variety selection, planting date, row spacing, seeding rate, nutrient management, tillage, irrigation, double-cropping, and crop rotation. Two relatively new approaches to these agronomic practices are early soybean production system (ESP) and stale seedbed. A full chapter is devoted to each of these two topics. Mycorrhizae are discussed in Chapter 5. Although an important aspect of soybean growth and often overlooked, a full chapter on mycorrhizae may contain too much detail. Various categories of pest management are covered in Chapters 12, 14, 15, and 16. Chapter 13, a chapter about seed quality, appears to be out of order and would be better discussed after the pest management series of chapters. Chapter 17 covers statistics. This discussion is quite thorough and contains formulas and details that are more than a casual reader requires. The next chapter goes into great detail about water movement in plants. Although some understanding of the material discussed in this chapter may be beneficial to producers, the detailed contain herein is probably beyond the appropriate scope of this text. The book ends with a chapter on crop models. This discussion is an excellent method of integrating the topics covered in the rest of the text.

The strength of this book is its comprehensive discussion of soybean production. Both producers and their advisers will find it to be an excellent reference. It would not function as a teaching text, but students of agronomy could also use it as a reference. A limitation is that the narrow geographical reference carried in the title may cause it to be overlooked by some persons that could benefit by reading it.

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This book is based on a workshop on Inherent Variation in Plant Growth Rate held at Utrecht University, the Netherlands, in June 1997. Objectives of the workshop included examining the physiological mechanisms that account for differences in relative growth rate between plant species and the ecological consequences to adaptation of these differences. The organizers of the workshop and the editors are to be complemented for the fact that virtually all of the chapters in the book focus on these themes. Several chapters address these themes at an advanced level and include up-to-date reviews, theoretical analyses, and conceptual evaluation of hypotheses using old and some new data sets. The book begins with an introduction by the editors that provides a discussion of the objectives of the book and an outline of the various chapter topics. The book has been divided into four sections. In the first section on Growth and Anatomy of Roots and Leaves, there is a current, deep analysis of possible relations between cell division and growth by D. Francis. He points out that cell division and cell elongation are integrated partners in the elongation of internodes and that, in some cases, growth may be positively associated with the proportion of cells in a tissue that are rapidly dividing and not rate of cell division per se. Another notable chapter in this section involves a discussion of the control of root growth by J. Pritchard in which he examines the possible dual role of turgor pressure in both cell expansion and translocation. He points out the importance of cell wall properties in regulating cell expansion and discusses associations between changes in solute flux and root growth.

The second section on Carbon Metabolism and Nutrient Acquisition begins with a powerful synthetic analysis by J.R. Evans of the photosynthetic characteristics of fast- and slow-growing species. His analysis points out that a lack of association between relative growth rate and net assimilation rate does not necessarily mean that photosynthetic traits have little influence on relative growth rate. He suggests that photosynthetic capacity (and rubisco levels) per unit leaf mass and the proportion of leaf mass in mesophyll cells versus epidermal, vascular and sclerenchymatous cells may be positively associated with relative growth rates. Another powerful synthetic chapter is provided in a discussion of carbohydrate partitioning by J. Farrar and S. Gunn. They propose that plants may regulate the ratio of photosynthetic to nutrient-absorbing material but that there are no obvious mechanisms how this is achieved. They point out how allometric measurements can and probably should be used when determining whether there are differences in partitioning of carbohydrates between roots and shoots. They conclude that "If plants regulate the ratio between the weights of C- and nutrient-acquiring tissues, and the mechanisms by which allocation is controlled are harnessed to this regulation, it is unlikely that fast- and slow-growing plants differ systematically in this ratio since each requires a similar balance between C and nutrients." They recommend that emphasis be given to the characteristics of the tissues that acquire resources. Reviews are provided of resource acquisition. Experiments with transgenic plants having disturbed rubisco levels and carbohydrate synthesis in leaves are reviewed by W.P. Quick. Transport mechanisms and energy costs of nitrate and ammonium uptake by roots are reviewed by D. Clarkson.

The third section on Growth Analysis of Individual Plants includes a comprehensive comparison of slow-growing alpine