BOOK REVIEW

rescence; herbicide action, and biotechnology. The chapter on evolution is particularly interesting and well written and is a topic not usually covered in depth in texts on photosynthesis.

This book is a pleasure to read, featuring well-written chapters by noted authors. Each chapter is a standalone text giving surprisingly in-depth coverage of each topic in a concise presentation. Also of note is the inclusion of both a thorough coverage of the basic photosynthetic processes at the subcellular and molecular levels, and the aspects of photosynthesis important from an ecological and agronomic standpoint. The special topics are both timely and interesting. The only drawback of the text is a lack of integration of the divergent topics, resulting in, for example, four separate graphical representations of the electron transport reactions. On the whole, this book should serve well as a starting point for the study of photosynthesis.

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Documenting recent advances in agroforestry throughout the temperate zones of the world is the prime contribution of this book. Examples were drawn from 23 contributing writers throughout the parts of the temperate world where agroforestry is currently a topic of research and/or common practice. Although written primarily as a reference text on agroforestry, the book will offer value to researchers, students, policy makers and academically oriented practitioners.

In the overview section, Gordon and Newman collaborate with Peter Williams to state the important definitions setting agroforestry apart from agricultural and forestry disciplines. They also give a brief history of the agroforestry discipline. Separate sections follow on North America, New Zealand, Australia, China, Continental Europe, and Argentina. One or more regional agroforestry experts write each section, and all are well referenced. Regional reviews contain pertinent agroforestry examples, the role of research in agroforestry development, and limits to adoption. In addition, the authors were each asked to give both agro-ecological (qualitative), and economic (quantitative) measures of effectiveness for agroforestry systems described.

North American agroforestry is addressed first, and much search-based development of black walnut intercropping systems in Missouri, and riparian restoration efforts in Ontario. Both examples have extensive documentation of both qualitative and quantitative measurements of ideas for both researchers and practitioners. Sections devoted to clear-cut grazing, North America, and forest farming, are more typical subject totally overlooked in this section is the introduction towards tree-shrub hedgerows.

Readers will especially enjoy the straightforward documented section on New Zealand agroforestry systems by Hawke and Knowles. Building on a well-developed research program, the New Zealand systems have a unique, market-driven agroforestry example at a large scale. Tree-pasture, shelterbelts, and forest grazing are each discussed, with detailed information on agroforestry practices and supporting research. The decision appears to favor agroforestry over monospecies farm systems. However, increases in timber prices over the past few years have tipped the scales toward agroforestry systems, so the authors' conclusions may be a bit premature.

Moore and Bird do a good job of describing the place in curing the environmental woes of the environment in Australia. Although their description is broad, they do offer specific examples of trees on pastures, belts, similar to New Zealand examples. Furthermore, there is the subject of whole-farm and catchment planning, because they have done very successfully through education and training movement.

Wu and Zhu give an overview of China's agroforestry development and what is probably the longest practice of agroforestry. One gets the feeling that the scratching the surface in this place of much agricultural activity. At least 12 different major systems are allocated to learning about the details of these systems.

European agroforestry is addressed by Dunham. In contrast to other regions, Europe is one of the agroforests three centuries ago. The authors trace the destruction of these agroforests, and a modern solution. A variety of promising systems are detailed, such as trees on pasture, intercropped orchards, and forest grazing. Europeans have lots of experience with the use of protection devices, and this subject is extensively covered.

The final regional example is the Patagonia, Argentina, provided by Somlo, Bonvissuto, Schlichter, Laclau, Alloggia. Although just getting started into agroforestry systems, the author's pointed out an opportunity to improve on existing systems by adopting agroforestry based systems in the New World and other native forests of their region.

This book makes a good contribution to documenting agroforestry development and adoption in the temperate world. The authors made extra effort to include relevant papers and documentation.