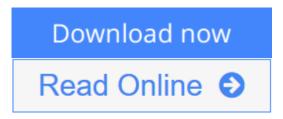


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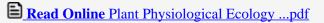
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Box 9E. 1 Continued FIGURE 2. The C–S–R triangle model (Grime 1979). The strategies at the three corners are C, competiti- winning species; S, stresstolerating s- cies; R,ruderalspecies. Particular species can engage in any mixture of these three primary strategies, and the m- ture is described by their position within the triangle. comment briefly on some other dimensions that Grime's (1977) triangle (Fig. 2) (see also Sects. 6. 1 are not yet so well understood. and 6. 3 of Chapter 7 on growth and allocation) is a two-dimensional scheme. A C?S axis (Com-tition-winning species to Stress-tolerating spe- Leaf Economics Spectrum cies) reflects adaptation to favorable vs. unfavorable sites for plant growth, and an R- Five traits that are coordinated across species are axis (Ruderal species) reflects adaptation to leaf mass per area (LMA), leaf life-span, leaf N disturbance, concentration, and potential photosynthesis and dark respiration on a mass basis. In the five-trait Trait-Dimensions space, 79% of all variation worldwideliesalonga single main axis (Fig. 33 of Chapter 2A on photo- A recent trend in plant strategy thinking has synthesis; Wright et al. 2004). Species with low been trait-dimensions, that is, spectra of varia- LMA tend to have short leaf life-spans, high leaf tion with respect to measurable traits. Compared nutrient concentrations, and high potential rates of mass-based photosynthesis. These species with category schemes, such as Raunkiaer's, trait occur at the "quickreturn" end of the leaf e- dimensions have the merit of capturing cont- nomics spectrum.





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Review

"This book must be regarded as the most integrated, informative and accessible account of the complexities of plant physiological ecology." -- Plant Science

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About the Author

Hans Lambers is Professor of Plant Ecology and Head of School of Plant Biology, Faculty of Natural and Agricultural Sciences at the University of Western Australia. **F. Stuart Chapin III** is Professor of Ecology at the Institute of Arctic Biology, University of Alaska Fairbanks. **Thijs L. Pons** recently retired as Senior Lecturer in Plant Ecophysiology at the Institute of Environmental Biology, Utrecht University.

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