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Coordination of Kleaf and Leaf Water StorageCoordination of Kleaf with Other Aspects of Leaf Structure, Carbon Economy, and Drought Tolerance; Variability of Kleaf Across Environments, Diurnally, and with Leaf Age; Chapter 5 Summary of Directions for Future Research; Chapter 5 Acknowledgments; Chapter 5 References; 6 Interaction of Phloem and Xylem During Phloem Loading: Functional Symplasmic Roles for Thin- and Thick-Walled Sieve Tubes in Monocotyledons; Structural Considerations of the Loading Pathway; Role of Thin- and Thick-Walled Sieve Tubes
Experimental Evidence for Apoplast/Symplast Transfer Between Xylem and PhloemChapter 6 Concluding Remarks; Chapter 6 Acknowledgments; Chapter 6 References; 7 Water Flow in Roots: Structural and Regulatory Features; Structural Components of the Radial Pathway; Regulation of Radial Hydraulic Conductivity by Aquaporins; Regulation of Root Axial Hydraulic Conductivity; Chapter 7 Conclusions and Directions for Future Research; Chapter 7 Acknowledgments; Chapter 7 References; 8 Roots as an Integrated Part of the Translocation Pathway; Root Growth and Solute Deposition
Roots Have Symplastic and Apoplastic Domains of Unloading

Sommario/riassunto

Vascular Transport in Plants provides an up-to-date synthesis of new research on the biology of long distance transport processes in plants. It will be a valuable resource and reference for researchers and graduate level students in physiology, molecular biology, physiology, ecology, ecological physiology, development, and all applied disciplines related to agriculture, horticulture, forestry and biotechnology. The book considers long-distance transport from the perspective of molecular level processes to whole plant function, allowing readers to integrate information relating to vasc