

Other lines of investigation have highlighted the importance of water transport sectoriality(Zanne et al., 2006; Schenk et al., 2008) and showed that this syndrome occurs more frequently under particular environmental conditions. Loepfe et al.(2007) used graph theory to model xylem properties as a network of interconnected elements. They employed their model to assess the significance of conduit connectivity on Other lines of investigation have highlighted the importance of water transport sectoriality(Zanne et al., 2006; Schenk et al., 2008) and showed that this syndrome occurs more frequently under particular environmental conditions. Loepfe et al.(2007) used graph theory to model xylem properties as a network of interconnected elements. They employed their model to assess the significance of conduit connectivity on both xylem conductivity and P50, the pressure at which 50% of the conductive capacity is lost because of xylem embolism(Tyree et al., 1994).

LOEPFE, L., J. MARTINEZ-VILALTA, J. PINOL, AND M. MENCUCCINI. 2007. The relevance of xylem network structure for plant hydraulic efficiency and safety. *Journal of Theoretical Biology* 247: 788–803.

SCHENK, H.J., S. ESPINO, C.M. GOEDHART, M. NORDENSTAHL, H.I.M. CABRERA, AND C.S. JONES. 2008. Hydraulic integration and shrub growth form linked across continental aridity gradients. *Proceedings of the National Academy of Sciences of the United States of America* 105: 11248–11253.

TYREE, M., S. DAVIS, AND H. COCHARD. 1994. Biophysical Perspectives of Xylem Evolution - Is There a Tradeoff of Hydraulic Efficiency for Vulnerability to Dysfunction. *Iawa Journal* 15: 335–360.

ZANNE, A.E., K. SWEENEY, M. SHARMA, AND C.M. ORIAN. 2006. Patterns and consequences of differential vascular sectoriality in 18 temperate tree and shrub species. *Functional Ecology* 20: 200–206.