

Klingeman, W. E., R. M. Augé, and P. C. Flanagan. 2002. Arbuscular Mycorrhizal Assessment of Ornamental Trees Grown in Tennessee Field Soils. *HortScience* 35(7): 778-782.

Mycorrhizal symbiosis, a natural association between roots and certain soil fungi, can improve growth and increase stress resistance of many nursery crops. Field soils of four middle Tennessee and two eastern Tennessee nurseries were surveyed for their mycorrhizal inoculum potential (MIP), phosphorus (P) and potassium (K) concentrations, and soil pH. Arbuscular mycorrhizal (AM) fungi, which colonized seedlings of a *Sorghum bicolor* trap-crop, were recovered from all soils. Tissue samples were taken from young roots of three economically important tree species grown in nursery field soils: red maple (*Acer rubrum* L. 'October Glory'), flowering dogwood (*Cornus florida* L. 'Cherokee Princess'), and Kwanzan cherry (*Prunus serrulata* Lindl. 'Kwanzan'). AM fungi, regardless of soil type, soil pH, or P or K concentration, had colonized young roots of all three species. Unless interested in establishing exotic mycorrhizae, ornamental nursery producers in Tennessee do not need to supplement field soils with these beneficial fungi.