Daniel K. Struve

Professor
Department of Horticulture and Crop Science
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Education:

BS 1973 University of Wisconsin, Madison
MS 1975 Rutgers, The State University of New Jersey, New Brunswick
PhD 1980 North Carolina State University, Raleigh

Positions held:

1981-1987: Assistant Professor, The Ohio State University
1987-1996: Associate Professor, The Ohio State University
1996-present: Professor, The Ohio State University

Current Duties at OSU:

I teach Nursery Management and Plant Propagation courses at The Ohio State University, Columbus and conduct research on production systems for woody plants, including nutrient and water use efficiency during production, and seed dormancy and transplant establishment.

As part of a USDA funded project, I have mentored a Lebanese PhD student, Hala Zahreddine. Her project was to develop propagation and production protocols for native Lebanese tree species. We are also trying to develop a landscape nursery industry in Lebanon. Dr. Zahreddine is now a post-doc under my direction. We are writing a propagation manual for native Lebanese trees and a plant ID manual for exotic and native landscape taxa for Lebanon.

Administration:

Chairman of the Graduate Studies Committee
Chairman of the OSU Nursery and Landscape Horticulture Short Course Committee
Responsible for all activities involved in delivering three days of educational programing for the nursery and landscape sectors of Ohio's green industry. The Short Course had over

5000 paid attendees and generated $150,000 for the department's Landscape Horticulture program.

Chairman of the department's Promotion and Tenure Committee

International Experience:

1980: October to December. Grafting consultant for the FAO in Guatemala.

2001: Study Abroad Resident Director for the six week Landscape Horticulture program at Meyerscough College, Preston England.

2003 to present: Co-Principal Investigator in USDA project with OSU, The American University in Beirut and University of Toledo: A Partnership for Pharmaceutical and Economic Development of Wild Lebanese Plants.

2005 to present: PhD advisor for Robert Gesimba, on USDA/AID project in Kenya through OSU's International Program in Agriculture.

I have had internship undergraduate students from Germany, Ireland, England, Slovenia, and Lebanon, and have graduate students from Germany, Lebanon and Kenya.

I have lectured in Brazil, China and France.

Refereed publications, 1999 to 2006.

Struve D. K. and L. M. Lagrimini. 1999. Survival and growth of *Stewartia pseudocamellia* rooted cuttings and seedlings. J. Environ. Hort. 17: 53-56.

Struve, D. K., B. A. Oleksak, T. Kawahara, and A. Kanazashi. 1999. Germination of Japanese Stewartia seeds: The effects of warm and cold stratification. J. Environ. Hort. 197-202.

Oleksak B. A. and D. K. Struve. 1999. Germination of *Stewartia pseudocamellia* seeds is promoted by desiccation avoidance, gibberellic acid treatment, and warm and cold stratification. J. Environ. Hort. 17: 44-46.

Struve, D. K., L. Burchfield and C. Maupin. 2000. Survival and growth of transplanted large- and small-caliper red oaks. J. Arboric. 26: 162-169.

Kmetz-Gonzalez, M. and D. K. Struve. 2000. Blackgum seed conditioning increases germination rate, seedling emergence and quality. Seed Sci. & Technol. 28:49-57.

D'Amato, N. E., T. D. Sydnor, and D. K. Struve. 2002. Urban foresters identify Ohio's tree needs. J. Arboric. 28:291-301.

Larimer, J. and D. Struve. 2002. Growth, dry weight and nitrogen distribution of red oak and 'Autumn Flame' red maple under different fertility levels. J. Environ. Hort. 20: 28-35.

Struve, D. K. 2002. A review of shade tree nitrogen fertilizatin research in the United States. J. Arboric. 28:252-263.

Struve, D. K. 2002. Growth of several tree spp. In containers in response to N loading, fertilizer type, and substrate. J. Environ. Hort. 20: 133-137.

P. J. Wilson and D. K. Struve. 2003. Rooting variables for stem cuttings. J. Hort. Sci and Biotech. 78: 29-31.

Craig, J., B. A. Birrenkott and D. K. Struve. 2003. Nutrient uptake and dry weight patterns of three container-grown woody species. J. Environ. Hort. 21:209-215.

Wilson, P. J. and D. K. Struve. 2003. Rooting variables for stem cuttings. J. Hort.Sci & Biotech. 78:29-31.

Sammons, J. and D. K. Struve. 2004. Effect of Bioplex on transplant success of non-dormant red oak (*Quercus rubra* L.). J. Environ. Hort. 22: 197-201.

Zahreddine, H. G., D. K. Struve and M. Quigley. 2004. Growing *Pinus nigra* seedlings in Spinout-treated containers reduces root malformation and increases growth after transplanting. J. Environ. Hort. 22:176-182.

Wilson, P. J. and D. K. Struve. 2004. Overwinter mortality in stem cuttings. J. Hort. Sci. & Biotech. 79: 842-849.

Drunasky, N. and D. K. Struve. 2005. *Quercus macrocarpa* and *Q. prinus* physiological and morphological responses to drought stress and their potential for urban forestry. Urban For. & Urban Greening 4: 13-22.

Sammons. J. and D. K. Struve. 2005. Effect on Bioplex on transplant success and recovery of summer-dug Goldenraintree. J. Environ. Hort. 23: 59-62.

Wilson, P. J. and D. K. Struve. 2006. Axillary shoot growth, rooting and overwinter survival in stem cuttings of *Viburnum dentatum* 'Chicago Luster. J. Environ. Hort. 24:6-12.

Stoven, A. A., H. M. Mathers and D. K. Struve. 2006. Fertilizer application method affects growth, nutrient and water use efficiency of container-grown shade tree whips. HortScience 41:1-7.

Sternberg, P., Bresko, K, Struve, D., Drunasky, N and Gonzalez, R. 2006. Growth and water use characteristics of six Eastern North American oak species and the implications for urban forestry. J. Arboriculture and Urban Forestry (in press).

In Review:

Mathers, H. M., Scagel, C. Struve, D.K. and Lowe, S. B. Factors that influence root growth in nursery containers. HortTech.

Zahreddine, H. G., D.K. Struve and S. Talhouk. *Cercis siliquastrum, Malus trilobata* and *Acer syracum* water use as affected by two fertilizer rates. Scientia Hort.

Zahreddine, H. G., D. K. Struve and S. Talhouk. *Cercis siliquastrum* growth, N, P, K content, concentration , distribution and efficiency under two fertilizer rates. Scientia Hort.

Zahreddine, H. G., D. K. Struve and S. Talhouk. *Malus trilobata* and *Acer syriacum* growth, N, P, K content, concentration , distribution and efficiency under two fertilizer rates. Scientia Hort.