

ROBERT M. AUGÉ

Educational History

<u>Institution</u>	<u>Program</u>	<u>Dates</u>	<u>Degree</u>
<i>Washington State University</i>	Horticulture	1983 - 1986	Ph.D.
<i>Southern Illinois University</i>	Biology	1976 - 1978	M.S.
<i>Southern Illinois University</i>	Botany	1972 - 1975	B.A.

Employment History

<u>Ranks/Positions</u>	<u>Institution/Company</u>	<u>Department</u>	<u>Dates</u>
Interim department head	University of Tennessee	Plant Sciences	Apr '08 -
Professor	University of Tennessee	OHLD ¹ , Plant Sciences	1998-present
Associate professor	University of Tennessee	OHLD	1992-1998
Assistant professor	University of Tennessee	OHLD	1987-1992
Postdoctoral associate	USDA-ARS	Weed Physiology Group	1986-1987
Graduate Research Assistant	Washington State University	Horticulture	1983-1986
Flower shop manager	Alpha Florist	—	1982-1983
Orchardist	Siddha Farms	—	1981-1982
Floral designer	Sandys Colonial Flowers	—	1979-1981

¹Ornamental Horticulture & Landscape Design

Academic Roles

Departmental Instructional Coordinator, 2004-present
Departmental Undergraduate Director, 2004-present
Member, College Undergraduate Advisory Council, 2004-present
Chair, College Graduate Advisory Council, 1996-1998
Member, College Graduate Advisory Council, 1994-2004
College representative to university Graduate Council, 2002-2004
Chair, Departmental Graduate Committee, 1996-2002
Member, Departmental Graduate Committee, 2002-present
Chair, College Committee to form Interdepartmental PhD program in Plants, Soils & Insects, 2001
Member, UT Graduate Academic Policy Committee, 2002-2004
University Representative, National Academy of Sciences Leadership Teaching Summit, Wash DC, October 2006

Courses Taught

Landscape Plant Physiology
Horticultural Internet Technology
Environmental Plant Ecophysiology (co-taught with Dr. Feng Chen)
Plant and garden Photography (co-taught with Dr. Sue Hamilton)
Preparing Thesis Proposals
Drought Physiology
Plant Water Relations
Mineral Stress
Scientific Writing

Thesis Chair/Graduate Assistantship Mentor

2008	MS	Gualandi, Richard. Mycorrhizal symbiosis in acclimation of microplantlets of biofuel crops.
2008	MS	Newburn, James. Manual for Student Interns in a Public Garden (non-thesis).
2004	MS	Cho, Ken. Mycorrhizal influence on combined drought and salinity stress in sorghum.
2002	MS	Cole, Kelly. Brooklyn Botanic Garden's Children's Programs (non-thesis).
2002	MS	O'Brien, Patrick. Graduate web assistant, UT Environmental Consortium
2002	MS	Harrison, Lindsey. Graduate web assistant, UT Environmental Consortium
2001	MS	Kubikova, Elena. Plant drought resistance and mycorrhizal symbiosis.
	MS	Johnson, T. Brendon. Hormonal signaling of soil drying and stomatal regulation in a temperate forest.
1997	MS	Crocker, Jennifer L. Ecophysiological significance of nonhydraulic root-to-shoot signaling in control of stomatal behavior during soil drying.
1996	MS	Ament, Malissa Howard. Water stress and susceptibility of <i>Cornus florida</i> and <i>Cornus kousa</i> to dogwood anthracnose (co-major professor with Dr. Mark Windham).
1996	MS	Green, Craig D. Transpiration of detached mycorrhizal and nonmycorrhizal leaves fed varying abscisic acid, pH, calcium and phosphorus.
1993	MS	Chapman, Douglas S. Drought resistance strategies of four native ornamental perennials.
1992	MS	Duan, Xiangrong. Mycorrhizal symbiosis and nonhydraulic root signals of soil drying in cowpea plants.

Membership on Other Graduate Committees

Arena, Mark M.S. (Orna Hort & LA)
 Bader, Nabeel M.S. (Orna Hort & LA)
 Clements, Jenny M.S. (Plant Sciences)
 Erbaugh, Dan M.S. (Ento & Plant Path)
 Flanagan, Philip M.S. (Orna Hort & LA)
 Fribourg, Renee M.S. (Botany)
 Holmgren, Milena Ph.D. (Ecology)
 Keebler, Joel M.S. (Orna Hort & LA)
 Koepke, Becky M.S. (Plant Sciences)
 Korczynski, Pam M.S. Orna Hort & LA)
 Krieg, Randall M.S. (Orna Hort & LA)
 Lefsrud, Mark PhD (Plant Sciences)
 MacDermott, Jomo Ph.D. (Plant & Soil)
 Moon, Hong Seok M.S. (Plant Sciences)
 Onken, Hope M.S. (Orna Hort & LA)
 Parham, Johnny M.S. (Ento & Plant Path)
 Ruiz-Marin, Olga M.S. (Orna Hort & LA)
 Singh, Meeta M.S. (Botany)
 Sinuraya, Mariati M.S. (Orna Hort & LA)
 Sutherland, Tara M.S. (Plant Phys & Gene)
 Tocco, Rodney M.S. (Plant Sciences)
 Vogelien, Dale Ph.D. (Botany)

Williams, Mildred M.S. (Orna Hort & LA)
 Willis, Elizabeth M.S. (Plant Sciences)
 Yuan, Joshua PhD (Plant Sciences)

Publications

Note: for articles preceded by an asterisk, senior author is/was a graduate student, postdoctoral associate or visiting scientist in my research program

Refereed Publications

Augé RM, Toler HD, Sams CE, Nasim G. 2008. Hydraulic conductance and water potential gradients in squash leaves showing mycorrhiza-induced increases in stomatal conductance. *Mycorrhiza* 18: 115-121.

Augé RM, Toler HD, Moore JL, Cho K, Saxton AM. 2007. Comparing contributions of soil versus root colonization to variations in stomatal behavior and soil drying in mycorrhizal *Sorghum bicolor* and *Cucurbita pepo*. *Journal of Plant Physiology* 164: 1289-1299.

Hanson PJ, Tschaplinski TJ, Wullschlegel SD, Todd DE Jr., Augé RM. 2007. The resilience of upland-oak forest canopy trees to chronic and acute precipitation manipulations. In Buckley DS and Clatterbuck WK, Eds. Proceedings 15th Central Hardwood Forest Conference, Knoxville, TN February 27–March 1, 2006, United States Department of Agriculture, Forest Service Southern Research Station, e-General Technical Report SRS–101, pp. 3-12.

*Cho K, Toler HD, Lee J, Ownley BH, Jean C, Stutz JC, Moore JL, Augé RM. 2006. Mycorrhizal symbiosis and response of sorghum plants to combined drought and salinity stresses. *Journal of Plant Physiology* 163: 517-528.

Lefsrud, M.G., D.A. Kopsell, R. Augé, and A.J. Both. 2006. Biomass production and pigment accumulation in kale grown under increasing photoperiods. *HortScience* 41: 603-606.

Klingeman WE, van Iersel MW, Kang JG, Augé RM, Moore JL, Flanagan PC. 2005. Whole plant gas exchange measurements of mycorrhizal 'Iceberg' roses exposed to cyclic drought. *Crop Protection* 24: 309-317.

Augé RM. 2004. Arbuscular mycorrhizae and soil/plant water relations. *Canadian Journal of Soil Science* 84: 373-381.

Augé RM, Sylvia DM, Park SJ, Buttery BR, Saxton AM, Moore JL, Cho K. 2004. Partitioning mycorrhizal influence on water relations of *Phaseolus vulgaris* into soil and plant components. *Canadian Journal of Botany* 82: 503-514.

Augé RM, Moore JL, Sylvia DM, Cho K. 2004. Mycorrhizal promotion of host stomatal conductance in relation to irradiance and temperature. *Mycorrhiza* 14: 85-92.

Augé RM, Moore JL, Cho K, Stutz JC, Sylvia DM, Al-Agely A, Saxton AM. 2003. Relating dehydration resistance of mycorrhizal *Phaseolus vulgaris* to soil and root colonization by hyphae. *Journal of Plant Physiology* 160: 1147-1156.

Augé RM, Stodola AJW, Moore JL, Klingeman WE, Duan X. 2003. Comparative dehydration tolerance of foliage of several ornamental crops. *Scientia Horticulturae* 98: 511-516.

- Augé RM, Moore JL. 2002. Stomatal response to nonhydraulic root-to-shoot communication of partial soil drying in relation to foliar dehydration tolerance. *Environmental and Experimental Botany* 47: 217-229.
- Augé RM, Windham MT, Moore JL, Witte WT, Kubikova E, Klingeman WE, Evans RM, Reiss J, Flanagan PC, Saxton AM. 2002. Leaf curl and water relations of kousa dogwoods showing resistance to summer stress. *Journal of Environmental Horticulture* 20: 143-147.
- Klingeman WE, Augé RM, Flanagan PC. 2002. Field-grown ornamental trees in Tennessee: a mycorrhizal assessment. *HortScience* 37: 778-782.
- *Bano A, Harper JE, Augé RM, Neuman DS. 2002. Changes in phytohormone levels following inoculation of two soybean lines differing in nodulation. *Functional Plant Biology* 29: 965-974.
- Augé RM, Stodola AJW, Tims JE, Saxton AM. 2001. Moisture retention properties of a mycorrhizal soil. *Plant and Soil* 230: 87-97.
- Augé RM. 2001. Water relations, drought and VA mycorrhizal symbiosis. *Mycorrhiza* 11: 3-24.
- Augé RM, Kubikova E, Moore JL. 2001. Foliar dehydration tolerance of mycorrhizal cowpea, soybean and bush bean. *New Phytologist* 151: 535-541.
- *Kubikova E, Moore JL, Ownley BH, Mullen MD, Augé RM. 2001. Mycorrhizal impact on osmotic adjustment in *Ocimum basilicum* during a lethal drying episode. *Journal of Plant Physiology* 158: 1227-1230.
- Augé RM. 2001. Online directory of international mycorrhizologists. *Mycorrhiza* 11: 115-116.
- *Johnson TB, Augé RM, Green CD, Stodola AJW, Olinick JB, Saxton AM. 2001. Correlations of stomatal conductance with hydraulic, chemical and environmental variables in five urban tree species. *Scientia Horticulturae* 90: 305-320.
- Augé RM, Green CD, Johnson TB, Stodola AJW, Saxton AM, Olinick JB, Evans RM. 2000. Correlations of stomatal conductance with hydraulic and chemical factors in several deciduous tree species in a natural habitat. *New Phytologist* 145:483-500.
- Augé RM, Green CD, Croker JL, Johnson TB, Stodola AJW, Duan X, Witte WT, Saxton AM, Evans RM, Olinick JB, Hanson PJ. 1999. Nonhydraulic signaling of soil drying and stomatal regulation in a forest ecosystem. *National Institute for Global Environmental Change, Southeast Regional Center. Environmental Institute Publication Number 66*, The University of Alabama. 149 pp.
- Augé RM, Duan X, Croker JL, Witte WT, Green CD. 1998. Foliar dehydration tolerance of twelve deciduous tree species. *Journal of Experimental Botany* 49:753-759.
- *Ament M, Augé RM, Grand L., Windham M. 1998. An inoculation technique for dogwood anthracnose. *Journal of Environmental Horticulture* 16:37-41.

- *Green CD, Stodola AJW, Augé RM. 1998. Transpiration of detached leaves from mycorrhizal and nonmycorrhizal cowpea and rose plants given varying abscisic acid, pH, calcium and phosphorus. *Mycorrhiza* 8: 93-99.
- *Croker JL, Witte WT, Augé RM. 1998. Stomatal sensitivity to nonhydraulic root-to-shoot signals of partial soil drying in six temperate, deciduous forest trees. *Journal of Experimental Botany* 49:761-774.
- Hanson PJ, Todd DE, Huston MA, Joslin JD, Croker JL, Augé RM. 1998. Description and field performance of the Walker Branch Throughfall Displacement Experiment: 1993-1996, ORNL/TM-13586, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- *Ebel RC, Duan X, Still DW, Augé RM. 1997. Xylem sap abscisic acid concentration and stomatal conductance of mycorrhizal *Vigna unguiculata* (L.) Walp. in drying soil. *New Phytologist* 135: 755-761.
- *Duan X, Neuman DS, Reiber JM, Green CD, Saxton AM, Augé RM. 1996. Mycorrhizal influence on hydraulic and hormonal factors implicated in the control of stomatal conductance during drought. *Journal of Experimental Botany* (47: 1541-1550).
- *Ebel RC, Welbaum GE, Gunatilaka, M, Nelson T, Augé RM. 1996. Arbuscular mycorrhizal symbiosis and nonhydraulic signaling of soil drying in *Vigna unguiculata* (L.) Walp. *Mycorrhiza* 6:119-127.
- Augé RM, Stodola AJW, Ebel RC, Duan X. 1995. Leaf elongation and water relations of mycorrhizal sorghum in response to partial soil drying: two *Glomus* species at varying phosphorus fertilization. *Journal of Experimental Botany* 46: 297-307.
- Erbaugh D, Windham M, Stodola AJW, Augé RM. 1995. Light and drought as predisposition factors for dogwood anthracnose disease. *Journal of Environmental Horticulture* 13:186-189.
- Dutta Gupta S, Augé RM, Denchev PD, Conger BV 1995. Growth, proline accumulation and osmotic adjustment in NaCl-selected and nonselected callus lines of orchardgrass (*Dactylis glomerata* L.). *Experimental and Environmental Botany* 35: 83-92.
- Augé RM, Stodola AJW, Ebel RC, Duan X. 1994. Nonhydraulic signalling of soil drying in mycorrhizal maize. *Planta* 193: 74-82.
- *Ebel RC, Stodola AJW, Duan X, Augé RM. 1994. Nonhydraulic root to shoot signalling in VA mycorrhizal and nonmycorrhizal sorghum exposed to partial soil drying or root severing. *New Phytologist* 127: 495-505.
- *Chapman DS, Augé RM 1994. Drought resistance strategies of four native ornamental perennials. *Journal of the American Society for Horticultural Science* 119(2): 299-306.
- Vogelien DL., Augé RM, Hendrix J, Hickok LG. 1993. Response of sodium chloride tolerant mutants of the fern *Ceratopteris*: growth and ion, carbohydrate and water relations of gametophytes. *Plant, Cell and Environment* 16: 959-966.

- Augé RM, Foster JG, Loescher WH, Stodola AJW . 1992. Symplastic sugar and free amino acid molality of *Rosa* roots with regard to mycorrhizal colonization and drought. *Symbiosis* 12: 1-17.
- Augé RM, Brown MS, Bethlenfalvay GJ, Stodola AJW. 1992. Stomatal response of mycorrhizal cowpea and soybean to short-term osmotic stress. *New Phytologist* 120: 117-125.
- *Duan X, Augé RM. 1992. Stomatal response to short-term osmotic stress of cowpea leaves given varying phosphorus fertilization. *Journal of Plant Nutrition* 15: 265-274.
- Augé RM, Duan X. 1991. Mycorrhizal symbiosis and nonhydraulic root signals of drying soil. *Plant Physiology* 97: 821-824.
- Augé RM. 1991. *PVCURVE*: A computer spreadsheet template for evaluating pressure-volume curves. *HortScience* 26: 75.
- Augé RM, Gealy DR, Franceschi VR, Ogg AG. 1990. Comparative effects of metribuzin and its ethylthio analog on the ultrastructure of developing chloroplasts in seedlings of *Triticum aestivum* and *Bromus tectorum*. *Pesticide Biochemistry and Physiology* 38: 204-215.
- Augé RM, Stodola AJW, Gupta SD, Hovanesian JR, Conger, BV. 1990. Using pressure-volume analysis to characterize NaCl-induced osmotic and turgor adjustment in *in vitro* cultures. *Journal of Plant Physiology* 136: 15-23.
- Augé RM, Stodola AJW, Pennell B. 1990. Osmotic and turgor adjustment in *Rosa* foliage drought-stressed under varying irradiance. *Journal of the American Society for Horticultural Science* 115: 661-667.
- Augé RM, Stodola AJW. 1990. An apparent increase in symplastic water contributes to greater turgor in mycorrhizal roots of droughted *Rosa* plants. *New Phytologist* 115: 285-295.
- Augé RM, Stodola AJW, Gealy DR. 1990. Turgor maintenance in *Rosa* foliage given three levels of nitrogen fertilization and subjected to drought. *Journal of Environmental Horticulture* 8: 108-112.
- Augé RM. 1989. Do VA mycorrhizae enhance transpiration by influencing host phosphorus status? *Journal of Plant Nutrition* 12: 743-753.
- Augé RM, Stodola AJW. 1989. Water potential isotherm analysis of two ornamental shade tree species entering winter dormancy. *Journal of the American Society for Horticultural Science* 114: 666-673.
- Augé RM, Hickok LG, Stodola AJW. 1989. Psychrometric pressure-volume analysis of osmoregulation in roots, shoots and whole sporophytes of salinized *Ceratopteris*. *Plant Physiology* 91: 322-330.
- Augé RM, Schekel KA, Wample RL. 1987. Leaf water and carbohydrate status of VA mycorrhizal rose exposed to water deficit stress. *Plant and Soil* 99: 291-302.
- Augé RM, Schekel, KA, Wample RL. 1987. Rose leaf elasticity changes in response to drought acclimation and mycorrhizal colonization. *Physiologia Plantarum* 70: 175-182.

Augé RM, Schekel KA, Wample RL. 1986. Greater leaf conductance of VA mycorrhizal rose plants is not related to phosphorus nutrition. *New Phytologist* 103: 107-116.

Augé RM, Schekel KA, Wample RL. 1986. Osmotic adjustment in leaves of VA mycorrhizal and nonmycorrhizal rose plants in response to drought stress. *Plant Physiology* 82: 765-770.

Book Chapters

Augé RM, Moore JL. 2005. Arbuscular mycorrhizal symbiosis and plant drought resistance. In: Mehrotra VS (ed.) *Mycorrhiza: Role and Applications*. Allied Publishers Limited, New Dehli.

Augé RM. 2003. Stomatal behavior of forest trees in relation to hydraulic, chemical and environmental factors. In: Hanson P, Wullschleger SD (ed) *North American Temperate Deciduous Forest Responses to Changing Precipitation Regimes*. Springer-Verlag, New York, pp. 100-120.

Augé RM. 2000. Stomatal behavior of arbuscular mycorrhizal plants. In: Kapulnik Y, Douds DD (eds) *Arbuscular mycorrhizas: physiology and function*. Kluwer Academic Publishers, Dordrecht, the Netherlands, pp. 201-237.

Ruiz-Marín O, Augé RM, Trigiano RN. 2001. Efecto de sales de metales pesados en la regeneración *in vitro* de Crisantemo (*Dendranthema grandiflora*). In: Dallos MP (ed) *Biotechnología Agrícola: Un Enfoque Hacia el Mejoramiento de Plantas*. Asociación Colombiana de Estudios Vegetales *in vitro* - ACEVIV, Bogotá, Colombia, pp. 89-98.

Grants and Contracts

Hanson PJ, Tschaplinski TJ, Wullschleger SD, Augé RM. 2006-2007. Mycorrhizal response to acute and chronic moisture stress in an eastern deciduous forest. *Department of Energy Program for Ecosystem Research*. \$21,000.

Saxton AM, Cummins J, Augé RM. 2007. Testing the efficacy of DAWG, a suite of online active-learning modules for enhancing student learning of statistical analysis. *UT Innovative Technology Center Project RITE Award (Research of Instructional Technology in Education)*. \$2500.

Hanson PJ, Tschaplinski TJ, Wullschleger SD, Augé RM. 2003-2006. Identifying critical thresholds for plant/ecosystem response to moisture stress. *Department of Energy Program for Ecosystem Research*. \$990,000.

Augé RM, Sylvia DM. 2000-2004. Mycorrhizal soils and plant drought resistance. *USDA National Research Initiative Competitive Grants Program*. \$100,000.

McDonald D, Michaels R, Augé RM. 2004-2005. Development of a novel in situ root visualization system using x-ray analysis. *Subcontract with Phenotype Screening Corporation: Inventions & Innovations Funding Opportunity, DOE*. \$10,000.

- Augé RM. 2004. Water retention properties of super-saturated hydrogels. *ORNL subcontract, Dr. Moonis Ally*. \$10,000.
- Augé RM, Saxton AM. 2003-2004. Interactive web guide for experimental design and SAS analysis. *2004 Teaching with Technology Grant, UT Innovative Technology Center*. \$5,000.
- Augé RM. 2000. Mycorrhizal symbiosis and plant drought resistance. *SARIF, summer GRA funding*. \$3000.
- Augé RM. 2000. Online environmental communication. *UT Environmental Council / UT Institute of Agriculture*. \$42,000.
- Augé RM, Croker J, Windham WT, Witte W. 2000. Testing for stress tolerance in kousa dogwoods. *Horticultural Research Institute*. \$4850.
- Klingeman W, Augé RM, Flanagan P. 1999. Colonization of field nursery stock by mycorrhizal fungi. *Tennessee Nurseryman's Association*. \$2252.
- Augé RM. 1998. International Conference on Mycorrhizae. *UTK Professional Development Research Award*. \$1200.
- Augé RM, Winistorfer PM, other TAES faculty. 1997. Author room. *Tennessee Agricultural Experiment Station Equipment Proposals Program*. \$11,650.
- Augé RM. 1996-1997. Nonhydraulic signaling of soil drying and stomatal regulation in a forest ecosystem. *DOE National Initiative for Global Environmental Change, Southeastern Region*. \$73,515.
- Augé RM. 1995. Nonhydraulic signaling of soil drying and stomatal regulation in a forest ecosystem. *DOE National Initiative for Global Environmental Change, Southeastern Region*. \$73,500.
- Augé RM. 1995. Cytokinin analysis and root signals of soil drying. *TAES Faculty Development Pemberton Award*. \$6,285.
- Augé RM. 1994. Global climate change and stomatal regulation: Testing a new paradigm. *UT Professional Development Awards Proposal: Faculty Research*. \$4500.
- Windham M, Graham ET, Trigiano RN, Augé RM, McDaniel GT, Witte WT, Gresshoff PM, Grant J, Windham A, faculty at Georgia, NC State, VA Tech. 1994. *USDA/CSRS Special Grants Program*. Ecological, physiological and molecular investigations of dogwood anthracnose. \$121,000 funded. Grant was also funded for years:
- 1993 — \$137,000
 - 1992 — \$137,000
 - 1991 — \$94,000
- Hickok LG, Augé RM. 1992. Physiological and genetic characterization of salt tolerant mutants in *Ceratopteris*. *USDA National Research Initiative Competitive Grants Program*. \$227,553.

Augé RM. 1991-1994. Mycorrhizal fungi and root signals of drying soil. *USDA National Research Initiative Competitive Grants Program*. \$90,000.

Augé RM, Windham MT. 1991-1993. Dogwood anthracnose and environmental stress. *Horticultural Research Institute*. \$5000.

Augé RM. 1993. Use of porometry in understanding mycorrhizal symbiosis and root signals of soil drying. *UTK Professional Development Research Award*. \$5000.

Augé RM. 1990. Understanding plant/soil microbe interactions. *Professional Development Research Award, University of Tennessee*. \$3000.

Augé RM. 1989. Osmoconditioning of transplants. *Bedding Plants Foundation, Inc*. \$2,280.

Augé RM. 1987. Nutritional effects on physiological hardening to drought stress. *Horticultural Research Institute*. \$1,500.

Presentations at Professional Meetings, with Published Abstracts

Augé RM, Cho K, Toler H. 2005. Mycorrhizal symbiosis and response of sorghum plants to combined drought and salt stresses. National Meetings of the American Society for Horticultural Science, Las Vegas, NV, Jul 16-21.

Augé RM, Sylvia DM, Park SJ, Buttery BR, Saxton AM, Moore JL, Cho K. 2004. Partitioning mycorrhizal influence on water relations of *Phaseolus vulgaris* into soil and plant components. 2004. National Meetings of the Ecological Society of America, Portland OR, Jul 31-Aug 6.

Augé RM, Moore JL, Stodola AJW, Stutz JC, Sylvia DM, Park S, Cho K, Saxton AM. 2003. Arbuscular mycorrhizae and soil/plant water relations. Proceedings of the 4th International Conference on Mycorrhizae, Montreal, Canada, August 10-15.

Augé RM, Moore JL, Cho K. 2002. Predicting mycorrhizal effects on stomatal conductance. Ecological Society of America National Meeting, Tucson, AZ, August 4-9, 2002

Augé RM, Stodola AJW, Tims JE, Saxton AM. 2001. Moisture retention properties of a mycorrhizal soil. Third International Conference on Mycorrhizae, July 6-13, Adelaide, Australia.

Augé RM. 1999. Stomatal behavior of deciduous forest trees in relation to hydraulic and nonhydraulic root-sourced signals of soil drying. National Meetings of the Ecological Society of America, Spokane, WA, Aug 7-13.

Augé RM. 1998. A general mycorrhizal web site. International Conference on Mycorrhizae, Uppsala Sweden, July 5-10.

- Augé RM. 1998. Transpiration of mycorrhizal leaves fed varying abscisic acid, pH, calcium and phosphorus. International Conference on Mycorrhizae, Uppsala Sweden, July 5-10.
- Augé RM, Croker JL. 1998. Leaf dehydration tolerance and stomatal sensitivity to nonhydraulic, root-to-shoot signals of soil drying in twelve temperate, deciduous tree species. National Meetings of the American Society for Horticultural Science, Charlotte, NC, Jul 12-15.
- Augé RM, Green CD, Croker JL, Johnson B, Stodola AJW. 1998. Nonhydraulic root-to-shoot signaling of soil drying and stomatal regulation in deciduous trees. NIGEC Annual Symposium, Southeast Region, Tuscaloosa, AL, Feb 25-26.
- *Johnson B, Green CD, Augé RM. 1997. Hormonal signaling of soil drying and stomatal regulation in a temperate forest. National Meetings of the Ecological Society of America, Albuquerque, NM, Aug 10-14.
- *Croker JL, Augé RM. 1997. Ecophysiological significance of nonhydraulic root-to-shoot signaling in control of stomatal behavior during soil drying. National Meetings of the Ecological Society of America, Albuquerque, NM, Aug 10-14.
- Augé RM, Croker JL. 1997. Nonhydraulic root-to-shoot signaling and stomatal behavior during soil drying in six deciduous tree species. National Meetings of the American and Canadian Societies of Plant Physiologists, Vancouver, BC, Aug 2-6.
- Augé RM, Green CD, Croker JL, Johnson B, Stodola AJW. 1997. Nonhydraulic root-to-shoot signaling of soil drying and stomatal regulation in deciduous trees. NIGEC Annual Symposium, Southeast Region, Tuscaloosa, AL, Feb 25-27.
- Augé RM, Duan X, Croker JL, Green CD, Witte WT. 1996. Foliar dehydration tolerance of twelve deciduous tree species. National Meetings of the American Society for Horticultural Science, Lexington, KY, Oct 6-10. *HortScience* 31(4): 648.
- Augé RM, Duan X, Neuman D, Reiber J, Green CD. 1996. Mycorrhizal symbiosis, stomatal sensitivity and chemical signals of soil drying. 1st International Conference on Mycorrhizae, Berkeley, CA, August 4-9.
- *Green CD, Stodola A, Augé RM. 1996. Mycorrhizal influence of transpiration rates of detached leaves of cowpea, rose, and geranium exposed to varying levels of abscisic acid (ABA), pH, calcium and phosphorus. National Meetings of the American Society for Horticultural Science, Lexington, KY, Oct 6-10. *HortScience* 31(4): 647
- *Ebel RC, Duan X, Augé RM. 1995. Xylem sap abscisic acid concentrations and stomatal conductance in mycorrhizal cowpea. National Meetings of the American Society of Plant Physiologists, Charlotte, NC, August.
- *Ebel RC, Duan X, Augé RM. 1995. Xylem sap abscisic acid concentrations and stomatal conductance in mycorrhizal cowpea. National Meetings of the American Society for Horticultural Science, Montreal, July 30 - August 2. *HortScience* 30(4):838.

- *Ebel RC, Duan X, Augé RM. 1995. Xylem sap abscisic acid concentrations and stomatal conductance in mycorrhizal cowpea. Southern Region Meeting of the American Society of Plant Physiologists, Knoxville, TN, March 18.
- *Duan X, Neuman DS, Reiber JM, Green CD, Stodola AJW, Augé RM. 1995. Mycorrhizal cowpea across a range of soil water content Southern Region Meeting of the American Society of Plant Physiologists, Knoxville, TN March 18.
- Augé RM. 1995. Nonhydraulic root-to-shoot communication and stomatal control during soil drying. Throughfall Displacement Experiment Symposium, Oak Ridge National Laboratories, Feb 23-24.
- *Duan X, Neuman DS, Reiber JM, Green CD, Stodola AJW, Augé RM. 1995. Mycorrhizal cowpea across a range of soil water content. National Meetings of the American Society of Plant Physiologists, Charlotte, NC, August.
- Augé RM. 1994. Hormonal content of xylem sap and water relations of mycorrhizal cowpea across a range of soil water content. National Meetings of the American Society of Plant Physiologists, Portland, OR July 30 - August 3.
- Augé RM, Duan X, Ebel R, Stodola AJW. 1993. Mycorrhizal symbiosis and nonhydraulic signalling of soil drying in corn given varied P fertilization. *HortScience* 28(5): 534.
- *Chapman DS, Augé RM. 1993. Drought resistance strategies of four native ornamental perennials. *HortScience* 28(5): 534.
- *Ebel R, Duan X, Stodola AJW, Augé RM. 1993. Mycorrhizal symbiosis and nonhydraulic signalling in sorghum exposed to partial soil drying or root excision. 16th Annual Symposium in Plant Physiology, Riverside, CA.
- *Duan X, Ebel R, Stodola AJW, Augé RM. 1993. Leaf growth reductions from nonhydraulic signalling of soil drying in mycorrhizal and nonmycorrhizal corn given various phosphorus fertilization. 16th Annual Symposium in Plant Physiology, Riverside, CA.
- *Duan X., Ebel R, Stodola AJW, Augé RM. 1993. Leaf growth reductions from nonhydraulic signalling of soil drying in mycorrhizal and nonmycorrhizal corn given various phosphorus fertilization. 9th North American Conference On Mycorrhizae, Guelph, Canada.
- *Ebel R, Duan X, Stodola AJW, Augé RM. 1993. Mycorrhizae and nonhydraulic signalling in sorghum exposed to partial soil drying or root excision. *HortScience* 28(5): 534.
- *Erbaugh, D, Windham M, Stodola AJW, Augé RM. 1993. Light and drought as predisposition factors for dogwood anthracnose disease. *HortScience* 28(5): 533.
- *Vogelien, D.L., Warne TR, Fribourg RS, Augé RM, Hickok LG. 1993. Altered K⁺ and Na⁺ uptake are associated with enhanced salinity tolerance in a highly salt tolerant mutant of *Ceratopteris richardii*. Proceedings for the XV International Botanical Congress, Yokohama, Japan.

- *Vogelien DL, Warne TR, Augé RM, Hickok LG. 1993. Altered K⁺ and Na⁺ uptake are associated with enhanced salinity tolerance in a highly salt tolerant mutant of *Ceratopteris richardii*. *Plant Physiology (Suppl)* 102: 158.
- *Vogelien DL, Hickok LG, Hendrix D, Augé RM. 1992. Characterization of mutations conferring NaCl tolerance in the fern *Ceratopteris richardii*. *Plant Physiology (Suppl)* 99:130.
- Duan X, Augé RM. 1991. Mycorrhizae and root signals in drying soil. *HortScience* 26: 733.
- Augé RM, Stodola AJW, Duan X. 1991. Water relations response plots of leaves of mycorrhizal *Rosa hybrida* L. in drying soil. *HortScience* 26: 771.
- Augé RM, Stodola AJW. 1990. An apparent increase in symplastic water contributes to greater turgor in mycorrhizal roots of droughted *Rosa* plants. *HortScience* 25: 1096.
- Augé RM. 1990. *PVCURVE*: A computer spreadsheet template for evaluating pressure-volume curves. *HortScience* 25: 1096.
- Augé RM, Stodola AJW, Brown MS, Bethlenfalvay GJ. 1990. Using osmotica to test for mycorrhizal effects on host plants exposed to low soil water potential. Eighth North American Conference on Mycorrhizae, Jackson, WY, p. 8.
- Augé RM, Stodola AJW, Hickok LG, Hovanesian JC. 1989. Psychrometric pressure-volume analysis of rapidly equilibrating tissues. ASHS Annual Meeting/Program and Abstracts: 58.
- Augé RM, Stodola AJW, Pennell B. 1989. Osmotic and turgor regulation in *Rosa* foliage subjected to drought under varying irradiance. ASHS Annual Meeting/Program and Abstracts: 59.
- Hovanesian JC, Augé RM, Dutta Gupta S, Stodola AJW, Conger BV. 1989. NaCl stress in cultured tissue: growth, proteins and water relations of embryogenic orchardgrass callus. ASHS Annual Meeting/Program and Abstracts: 58.
- Hovanesian JC, Augé RM, Dutta Gupta S, Stodola AJW, Conger BV. 1989. Growth, embryogenic capacity, ion uptake, nacl-shock proteins, osmotic and turgor regulation in salinized orchardgrass callus. *Plant Physiology* 89: 12.
- Hickok LG, Augé RM, Warne TR, Vogelien DL. 1989. Characterization of single and double gene sodium chloride tolerant mutants in the fern *Ceratopteris richardii*. *Plant Physiology* 89: 117.
- Augé RM. 1988. Generating water potential isotherms for roots using the pressure chamber and thermocouple psychrometer: a comparison of osmotic potential estimates. *Plant Physiology* 86: 74.
- Augé RM. 1988. Osmotic adjustment in a deciduous and an evergreen nursery crop entering winter dormancy. *HortScience* 23: 801.
- Augé RM. 1987. Transpiration rates in VA mycorrhizal and nonmycorrhizal rose plants as a function of soil water potential, leaf phosphorus content and degree of colonization. *HortScience* 22: 1115.

Augé RM, Gealy DR, Ogg AG, Franceschi VR. 1987. Ultrastructural effects of metribuzin and ethyl metribuzin on developing chloroplasts in wheat and downy brome. *Plant Physiology* 83: 82.

Augé RM, Schekel KA, Wample RL. 1986. VA mycorrhizae: aid to droughted rose? *HortScience* 21: 675.

Proceedings, Trade Journal and Agricultural Experiment Station Publications

Witte W, Windham MT, Trigiano RN, Skinner JA, Klingeman WE, Grant JF, Graham ET, Flanagan PC, Augé RM. 2000. The dogwood improvement program at the University of Tennessee. *International Plant Propagator's Society Combined Proceedings* 49:71-74.

*Erbaugh D, Windham M, Stodola AJW, Augé RM. 1996. Light and drought as predisposition factors for dogwood anthracnose disease. *Indiana Nursery News* 57: 8-14.

Augé RM. 1995. Environmental stress and dogwood anthracnose. *Tennessee Agri Science* 175: 24-29.

Augé RM 1991. Osmoregulation in plant roots. *Tennessee Farm and Home Science* 152: 42-45.

Trigiano RN, Windham MT, Augé RM, Brown DA, Grant JF, Witte WT, McDaniel GL, Windham AS, Graham ET, Gresshoff PM. 1991. Dogwood anthracnose research at the University of Tennessee. *Tennessee Nurserymen's Association Newsletter* 2(12): 12.

Augé RM. 1990. Avoid "Death by Droughting". *Greenhouse Grower*, November: 54-56.

Augé RM. 1990. Mycorrhizae and nursery production. *Proceedings of the 23rd Annual Tennessee Nursery Growers Shortcourse*, Nashville, TN, p. 15-18.

Augé RM. 1990. A realistic look at mycorrhizae. *Tennessee Flower Growers Newsletter* 4(5): 2-3.

Augé RM. 1989. Understanding plant stress: the limits to plant growth. *Tennessee Nursery Digest* 11(5): 1-3.

Augé RM. 1988. Mycorrhizal fungi help drought-stressed plants. *Greenhouse Grower*, October: 86-93.

Presentations, Seminars, Research Visits

2007 — Invited speaker: "Virtual classroom techniques and strategies", University of Tennessee Innovative Teaching Center Workshop.

2004 — Invited speaker: "Mycorrhizal inoculants in the nursery industry", Chattanooga Association of Landscape Contractors.

2003 — Invited symposium speaker: "Arbuscular mycorrhizae and soil/plant water relations". 4th International Conference on Mycorrhizae, August 10-15, Montreal, Canada.

- 2001 — Invited seminar: “Drought physiology and mycorrhizal symbiosis”, Department of Plant and Environmental Sciences, New Mexico State University.
- 1998 — Invited seminar: “Stomatal behavior of mycorrhizal plants”. International Conference on Mycorrhizae, Plenary Session on Physiology, Swedish University of Agricultural Sciences, Uppsala, Sweden, July 5-10.
- 1997 — Invited seminar: “Root signals, stomatal behavior and drought resistance”. UT Botany Department.
- 1997 — Invited seminar: “Some things to consider doing — and *not doing* — when giving a seminar”. UT, Departments of Entomology & Plant Pathology and Ornamental Horticulture and Landscape Design.
- 1996 — Professional Research Development: five weeks research project at the Electron Microscopy Center, Washington State University, hosted by the Center’s Dr. Vincent Franceschi.
- 1996 — Invited seminar: “Mycorrhizal symbiosis and stomatal behavior”. Botany Department, Washington State University.
- 1996 — Invited seminar: “Mycorrhizal symbiosis and stomatal behavior”. Horticulture Department, Texas A&M University.
- 1995 — Invited seminar: “Water relations of mycorrhizal plants”. Department of Horticulture, Virginia Tech.
- 1995 — Professional Research Development: five weeks research project in the laboratory of Dr. Dawn Newman, Department of Biological Sciences, University of Nevada Las Vegas.
- 1995 — Invited Seminar: “Research in mycorrhizal symbiosis”. Gamma Sigma Delta.
- 1995 — Invited seminar: “Mycorrhizal symbiosis and stomatal behavior”. Department of Biological Sciences, University of Nevada Las Vegas.
- 1995 — Invited presentation: “An inoculation technique for dogwood anthracnose”. Southern Nurserymen’s Association Meetings. (co-author w/ *Howard MD, Windham MT).
- 1994 — Invited seminar: “Stomatal behavior and drought resistance of mycorrhizal plants”. Department of Biological Sciences, Lancaster University, England.
- 1994 — Professional Research Development: five weeks research project in the laboratory of Dr. William Davies, Department of Biological Sciences, Lancaster University, England.
- 1993 — Invited seminar: “Mycorrhizal symbiosis and nonhydraulic signalling of soil drying in maize, sorghum and cowpea”. 9th North American Conference on Mycorrhizae, Guelph, Canada.
- 1993 — Invited seminar: “Nonhydraulic root to shoot signalling and mycorrhizal symbiosis”. OHLD.

- 1992 — Invited seminar: “Mycorrhizal symbiosis and nonhydraulic root to shoot communication”. Appalachian Soil and Water Conservation Research Laboratory.
- 1991 — Magazine interview: “Plants and stress”. UT Agriculture/Spring 1991.
- 1990 — Invited presentation: “Mycorrhizae and nursery production. Tennessee Nursery Growers Shortcourse, Nashville.
- 1990 — Professional Research Development: five weeks research project in the laboratory of Dr. Gabor Bethlenfalvy, USDA-ARS Western Research Center, Albany, CA.
- 1990 — Invited seminar: “Root signals. UT Botany Department.
- 1989 — Magazine interview: “A helpful fungus among us”. American Horticulturist 68(7): 4-5.
- 1989 — Invited presentation: “What limits plant growth? Understanding plant stress”. Tennessee Nursery Growers Shortcourse, Nashville, TN.
- 1989 — Invited presentation: “What is plant turgor and what is it good for?” Tennessee Flower Growers Shortcourse, Nashville, TN.
- 1989 — Invited seminar: “Mycorrhizal fungi and horticulture”. OHL D.
- 1988 — Invited presentation: “Nonnutritional influences of VA mycorrhizae on plant water relations. Root Growth and Rhizosphere Dynamics Working Group Workshop, American Society for Horticultural Science National Meetings, Michigan State Univ.
- 1988 — Invited seminar: “Moderation of drought stress by mycorrhizal fungi. UT Botany Department.
- 1988 — Invited seminar: “Water relations of mycorrhizal rose plants. UT Soil Biology Working Group Seminar Series.
- 1988 — Invited seminar: “Analysis of water potential isotherms. Plant Physiology & Genetics Program.

Web site development

- Augé RM. 2001-present. Department of Plant Sciences web site: <http://plantsciences.utk.edu>. Creation and maintenance. >3400 files, January 2006.
- Augé RM. 2006-present. Mycorrhizal Literature Exchange: <http://mycorrhiza.ag.utk.edu>. Creation and maintenance. >12,600 files, March 2008. Site averages >2000 hits month⁻¹.
- Augé RM. 1998-2006. Mycorrhizal Information Exchange. Creation and maintenance. >11,000 files, January 2006. Site averaged >2500 hits month⁻¹.

Augé RM. 2001-2006. International Mycorrhiza Society homepage: Creation and maintenance. 164 files, January 2006.

Augé RM. 2001-2006. International Directory of Mycorrhizasts. Creation and maintenance. ~1900 entries, January 2006.

Augé RM. 2004-present. Horticultural Internet Technology, course web site: <http://plantsciences.utk.edu/PLSC448/>. Creation and maintenance. ~700 files, January 2006.

Augé RM. 2005-present. Landscape Plant Physiology course web site: <http://plantsciences.utk.edu/plsc348/>. Creation and maintenance. 58 files, January 2006.

Augé RM. 2006-present. Landscape Plant Physiology course web site: <http://plantsciences.utk.edu/plsc532/>. Creation and maintenance. 70 files, August 2006.

Augé RM. 2004-present. Plant and Garden Photography, course web site: <http://plantsciences.utk.edu/plsc436/>. Creation and maintenance. 75 files, January 2006.

Augé RM. 2000. UT Environmental Extension web site: Creation and maintenance. ~270 files.

Augé RM. 1997-2000. OHL D Departmental web site: <http://ohld.ag.utk.edu>. Creation and maintenance. ~2100 files.

Augé RM. 1999-2000. UT Institute of Agriculture web site: Creation and maintenance. ~631 files.

Augé RM. 1997-2000. College of Agricultural Sciences & Natural Resources web site: Creation and maintenance of website. ~370 files.

Augé RM. 1999-2000. Scientific Writing web site: Creation and maintenance. 192 files.

Augé RM. 1998-1999. UTK Environmental Focus Group web site: Creation and maintenance. 302 files.

Augé RM. 1998-1999. UTK Dogwood Research Team web site: <http://dogwood.ag.utk.edu/>. Creation of website. 190 files.

Augé RM. 1999. Tennessee Agricultural Experiment Station web site: Creation of web site. 246 files.

Other: designed web sites or resources for UTIA Advisory Council, Department of Entomology and Plant Pathology, Department of Animal Sciences, Gamma Sigma Delta, UT Gardens, UT Forage.

Supervision of Postdoctoral associates, Research Associates and Undergraduate Students (last 10 years)

2004-present	Toler, Heather, research associate
2001	Cho, Keunho, research associate

2002	Law, Derek, research assistant
2000-1	Lieb, Lindsey, computer information specialist
2000-1	O'Brien, Patrick, computer information specialist
2000	Plemons, Jason, computer information specialist
2000-4	Moore, Jennifer, research associate
1999	Jones-Evans, Taffany, research technician
1999	Tims, Jayme, undergraduate research assistant
1998	Smith, Nancy, undergraduate research assistant
1998	Pridemore, Will, undergraduate research technician
1987-99	Stodola, Ann, research associate
1996-97	Green, Craig, research associate
1997	Croker, Jennifer, research associate
1997	Olinick, Joshua, undergraduate research technician
1996-7	Duan, Shawn, research associate
1992-95	Ebel, Robert, postdoc
1995	Nelson, Tammy, undergraduate research intern

Administrative Experience and Service

Interim department head, Department of Plant Sciences, April 2008 - present

Instructional Coordinator, Department of Plant Sciences, 2004 - 2008

Chair, UT Institute of Agriculture (UTIA) Committee for Faculty Performance Review Instruments, 2000-2003

Chair, Undergraduate Curricular Overhaul, Department of Plant Sciences, 2004

Substitute for our head at monthly dean's meetings for UTIA department heads, 2003-present

Leader, departmental strategic planning sessions for excellence in teaching at faculty retreats

Chair, department tenure, promotion and retention committee (conduct annual faculty-wide meeting, prepare narrative summaries for submission to dean)

Departmental representative, Institute of Agriculture Bylaws Committee

Honors and Awards

Honorary Organizations

Pi Alpha Xi

Sigma Xi

Gamma Sigma Delta

Awards

2000 — Gamma Sigma Delta Team Award

1993 — Gamma Sigma Delta Research Award of Merit: The University of Tennessee Chapter

1992 — Citation of Appreciation: Editorial Board, *Plant Physiology*

Membership and Participation in Professional Societies and Organizations

Current Memberships

International Mycorrhiza Society (founding member) (IMS)
North American Colleges and Teachers of Agriculture (NACTA)
American Society for Horticultural Science (ASHS)
Ecological Society of America (ESA)
Soil Ecology Society (SES)

Participation

Member, Steering Committee, International Mycorrhiza Society, 2005-present
Member, Environmental Stress Working Group, American Society for Horticultural Science, 1987-present.
Colloquia/workshops chairperson, 1993 American Society of Horticultural Scientists National Meetings
Chairperson, Root Growth & Rhizosphere Dynamics Working Group, American Society of Horticultural Scientists (ASHS), 1990-1991
Organized workshops: "Nonhydraulic Root to Shoot Communication", 1991 Annual ASHS Meetings, University Park, PA; "Techniques in Root Research", 1990, Annual ASHS Meetings, Tucson AZ
Attend and participate in national meetings regularly

Service to the University and Profession

University, College and Institute of Agriculture

Member, College Undergraduate Advisory Council, 2004-present
Chair, College Graduate Advisory Council, 1996-1998
Member, College Graduate Advisory Council, 1994-2004
College representative to university Graduate Council, 2002-2004
Member, UT Institute for a Secure and Sustainable Environment Advisory Board, 2006-present
Member, College Bylaws Committee, 2004-present
Judge, FFA Oratory Contest, 2006
Judge, Undergraduate Research and Creative Achievement Fair, 2006
Chair, College Committee to form Interdepartmental PhD program in Plants, Soils & Insects, 2001
Member, UT Graduate Academic Policy Committee, 2002-2004
Member, UTIA Greenhouse Construction and Renovation Committee, 2003-present
Member, Nominating Committee for the Graduate Council
Group Leader, Life of the Mind Program, August 2004
Member, Scholarship Review Committee (Hilton Smith Fellowships), 2002
Member, UT Graduate Dean's Colloquy Committee, 2002
Member, UT Department of Botany Mid-cycle Review Committee, 2002
Chair, Plant Sciences & Landscape Systems Department Head Search Committee, 2002

Chair, UTIA Faculty Performance Review Instruments Committee, 2000-1
Member, Ornamental Horticulture & Landscape Design Department Head Search Committee, 2000
Member, several Cumulative Performance Review Committees, 2001-2002
Member, UT Environment and Natural Resources Interdisciplinary Council, 1999-2001
Member, UTIA Tenure and Promotion Committee, 2000
CASNR Racheff Seminar Committee, 2000
Member, OHLD Department Head Search Committee, 2000-2001
Member, OHLD Department Head Search Committee, 1995-1996
Mentor, Math and Science Precollege Regional Center, 1996
Host, 4H Academic Conference, 1996
UT Ag Day participant, various years
Faculty member, Center for Legume Research, Univ of Tennessee, 1991-1998
Faculty member, Plant Physiology & Genetics Program, Univ of Tennessee, 1988-
Member, CASNR Graduate Brochure Committee, 1997
Chair, Plant Physiology & Genetics Program Graduate Committee, 1995-1999
Student Aquatic Center Advisory Board, UT, 1988-1989

Department

Departmental Instructional Coordinator, 2004-present
Departmental Undergraduate Director, 2004-present
Chair, Tenure, Promotion & Retention Committee, 2003-present
Member, Strategic Planning Committee, 2001-present
Member, Internal Advisory Committee, 2001-present
Member, Plant Sciences Facilities and Equipment Committee, 2002-2005
Member, Academic Review/Self-Study Committee, 2004
Chair, Plant Sciences Information Technology Committee, 2002-2003
Member, PSLS Name Change Committee, 2003
Member, several faculty and staff search committees
Departmental Representative, UT Library Representatives Council, 1990-2002
Mentor of tenure-track faculty: Dr. Klingeman, Dr. Cheng, Dr. Stewart, Dr. Kopsell
Chair, Departmental Graduate Committee, 1996-2002
Member, Departmental graduate Committee, 2003-present

Profession

Author, online International Directory of Mycorrhizologists, 2000-present. Paper version formerly published every four years by Springer-Verlag
Organizer, Plant/Soil Water Relations Symposium, 4th ICOM workshop, Montreal, 2003
Client service via Mycorrhizal Information/Literature Exchange: online work with growers and other industry groups, high school students, scientists, undergrad and grad students, high school and college teachers, organizers of meetings; etc., 1998-present
Panel member, National Technical Advisory Committee (NTAC), advisory board for DOE's National Institute of Global Environmental Change, 2000-1
Judge, Sigma Xi Undergraduate Scientific Poster Competition, 1997
Directed workshop at 1st International Conference on Mycorrhizae, Berkeley, CA, August, 1996: "VAM symbiosis and plant stress resistance"

Gamma Sigma Delta Teaching Awards Committee, 1995
Gamma Sigma Delta Research Awards Committee, 1996, 2002, 2004, 2005
Chair, Gamma Sigma Delta Research Awards Committee, 1997
Editorial Board, *Plant Physiology* journal, 1991-1992
Panel member, USDA National Research Initiative Competitive Grants Program, 1992
Panel member, DOE Review of National Laboratory Proposals, 1993.
Reviewer for a number of journals and granting agencies, including *Plant Physiology*, *Journal of the American Society for Horticultural Science*, *Journal of Experimental Botany*, *Hort Technology*, *HortScience*, *Australian Journal of Botany*, *Canadian Journal of Botany*, *Microbial Ecology*, *Tree Physiology*, *Mycorrhiza*, *Functional Plant Biology*, *Physiologia Plantarum*, *New Phytologist*, *Plant and Soil*, *Agronomy*, *Crop Science*, *Journal of Plant Physiology*, *Scientia Horticulturae*, *Experimental and Environmental Botany*, *National Science Foundation*, *USDA Competitive Grants Program*, *BARD Program*, *DOE Grants Program*, *Oak Ridge National Laboratories*, 1987 - present