

Richard E. Durham
Extension Professor of Horticulture
Department of Horticulture, University of Kentucky
N-318 Agriculture Science Center – North, Lexington, KY 40546-0091

Current Position:

Split appointment of 90% extension and 10% teaching. Extension activities are centered around consumer (home) horticulture and include development and maintenance of electronic and print publications and other materials, assistance in various county programming needs, and coordination of the Kentucky Master Gardener Program. Teaching activities have included PLS 220, Introduction to Plant Identification, during fall semesters and development of plant-related on-line resource materials for K-12 teachers. For the past two years I have taught PLS 490, Capstone Horticulture. I also contribute national leadership to Extension consumer horticulture and Master Gardener activities as former chair and current member of the Consumer Horticulture National Committee, as immediate past vice president of the American Society for Horticulture Science Extension Division, and as the project leader for the eXtension Consumer Horticulture Community of Practice (responsible for the www.extension.org/horticulture Web site).

Education:

Ph.D. University of Florida. 1990. Horticulture.
M.S. University of Florida. 1986. Horticulture.
B.S. University of Kentucky. 1983. Horticulture.

Professional Experience:

Extension Professor of Horticulture. University of Kentucky. 2010 to present.
Associate Extension Professor of Horticulture. University of Kentucky. 2005 to 2010.
Assistant Extension Professor of Horticulture. University of Kentucky. 1999 to 2005.
Assistant Professor of Horticulture. Texas Tech University. 1993 to 1999.
Visiting Postdoctoral Research Associate. University of Illinois. 1992-93.
Postdoctoral Research Associate. University of Georgia. 1990-92.

Books and Book Chapters:

Peffley, E., R. Durham, C. McKenney and J. Wilmington. 2008. Introductory Horticulture Laboratory Manual, Forth Edition. Kendall/Hunt Publishing, Dubuque, IA. 113 p. First Edition, 1999, Second Edition, 2002, Third Edition, 2007.
Peffley, E. B., C. B. McKenney, and R. E. Durham. 1998. Principles of Horticulture. Correspondence course guide. Distance Learning. Texas Tech University. Lubbock, TX. 127 p.
Parrott, W. A., R. E. Durham, and M. A. Bailey. 1995. Somatic embryogenesis in legumes. *In: Biotechnology in Agriculture and Forestry*. Vol. 31. Somatic Embryogenesis and Synthetic Seed II. Y. P. S. Bajaj (ed.). Springer-Verlag, Berlin, Heidelberg. p. 199-227.
Moore, G. A. and R. E. Durham. 1992. Molecular markers. *In: Biotechnology of Perennial Fruit Crops*. R. Litz and F. A. Hammerschlag (eds.). CAB International, Wellington, Oxon, UK. p. 105-139.

Refereed Publications:

- Durham, R. E. 2012. Workshop--The Growing Involvement of Horticulture in eXtension: Updates and Opportunities: An Introduction to the Proceedings. *HortTechnology* 22:574-575.
- Durham, R. E. and C. Harker. 2012. Multistate Efforts to Answer Consumer Horticulture Questions in eXtension. *HortTechnology* 22:593-594.
- Graham, J. H., D. T. Montague, R. E. Durham, and A. D. Herring. 2002. Root-zone refrigeration delays budbreak and reduces growth of two containerized, greenhouse grown grape cultivars. *Texas Journal of Agriculture and Natural Resources* 15:71-80.
- Basinger, A. and R. E. Durham. 2000. In vitro rooting of *Vitis* species native to Texas and New Mexico. *Small Fruits Review* 1:29-34.
- Kenworthy, K. E., D. L. Auld, D. B. Wester, R. E. Durham, and C. B. McKenney. 1999. Evaluation of buffalograss for induction of fall dormancy and spring greenup. *Journal of Turfgrass Management* 3:23-42.
- Baker, C. M., R. E. Durham, J. A. Burns, W. A. Parrott, and H. T. Wetzstein. 1995. High frequency somatic embryogenesis in peanut (*Arachis hypogaea* L.) using mature dry seed. *Plant Cell Reports* 15:38-42.
- Durham, R. E. and S. S. Korban. 1994. Effects of explant size, pretreatment, and light intensity on shoot regeneration from in-vitro-grown apple leaves. *In: Progress in Temperate Fruit Breeding*. H. Schmidt and M. Kellerhals (eds.). Kluwer Academic Publishers. Netherlands. p. 355-359.
- Durham, R. E. and S. S. Korban. 1994. Evidence of gene introgression in apple using RAPD markers. *Euphytica* 79:109-114.
- Durham, R. E., P. C. Liou, F. G. Gmitter, and G. A. Moore. 1992. Linkage of restriction fragment length polymorphisms and isozymes in Citrus. *Theoretical and Applied Genetics* 84:39-48.
- Durham, R. E. and W. A. Parrott. 1992. Repetitive somatic embryogenesis from peanut cultures in liquid medium. *Plant Cell Reports* 11:122-125.
- Durham, R. E., G. A. Moore, D. Haskell, and C. L. Guy. 1991. Cold acclimation induced changes in freezing tolerance and translatable RNA content in *Citrus grandis* and *Poncirus trifoliata*. *Physiologia Plantarum* 82:519-522.
- Gray, D. J., J. A. Mortensen, C. M. Benton, R. E. Durham, and G. A. Moore. 1990. Ovule culture to obtain progeny from hybrid seedless bunch grapes. *J. American Society for Horticultural Science* 115:1019-1024.
- Durham, R. E., G. A. Moore, D. J. Gray, and J. A. Mortensen. 1989. The use of leaf PGI and IDH isozymes to examine the origin of polyembryony in cultured ovules of seedless grapes. *Plant Cell Reports* 7:669-672.
- Chaparro, J. X., R. E. Durham, G. A. Moore, and W. B. Sherman. 1987. Use of isozyme techniques to identify peach X 'Nonpareil' almond hybrids. *HortScience* 22:300-302.
- Durham, R. E., G. A. Moore, and W. B. Sherman. 1987. Isozyme banding patterns and their usefulness as genetic markers in peach. *J. American Society for Horticultural Science* 112:1013-1018.

Electronic Media (selected examples):

- Durham, R.E. (2013). Installing Rain Gardens at County Extension Offices. In T. Rhodus (Ed.), *Changing the Pace - Adopting a Pecha Kucha Approach to Presentations* [iBooks 3.0 or later]. Retrieved 1/28/2013 from <https://itunes.apple.com/us/book/changing-pace-adopting-pecha/id594201341?ls=1>
- Durham, R.E. 2008-13. www.extension.org/horticulture. National Web site featuring home horticulture information and a FAQ database with Ask an Expert application. The program was first promoted nationally in February 2008. Durham serves as the project leader for this national eXtension program.

- Durham, R.E. 2005. www.gardendata.org. Interactive FAQ database with ~700 questions and answers in home horticulture and related disciplines with Ask the Expert interface for question submission by clients. Materials were developed by the Horticulture Quick Response Team, Durham was the project leader.
- Durham, R., C. Cassady and C. Kaiser. 2001. Butterfly Gardening. (www.uky.edu/Ag/Horticulture/butterflypages/). Department of Horticulture Instructional Activities Web Page.
- Durham, R. E., J. R. Hartman, M. P. Johnson, and W. M. Fountain. 2001. Integrated Pest Management in the Home Landscape – Trees and Shrubs. University of Kentucky Cooperative Extension Service. Instructional Video. 35 minutes.

Extension Publications (recent activity only):

Kentucky Master Gardener Manual. Most chapters are adaptations from the Oregon/Washington Master Gardener Manual. Original authors are listed first followed by Kentucky specialist(s) involved in the adaptation. All chapters are available on-line and are catalogued at: <http://www.ca.uky.edu/ANR/Master%20Gardener%20Publication.htm>.

- Bale, S. and R. Durham. 2011. The Kentucky Extension Master Gardener Program: An Introduction to the Kentucky Master Gardener Manual (unnumbered publication). 10 pages.
- Cogger, C., D. M. Sullivan, J. A. Kroph, B. Lee, and R. Durham. 2011. Composting: Kentucky Master Gardener Manual, Chapter 5 (ID-192). 8 pages.
- McNeillan, R., and R. Durham. 2011. Plant Propagation: Kentucky Master Gardener Manual, Chapter 3 (HO-98). 16 pages.
- VanDerZanden, A. M., and R. E. Durham. 2011. Basic Botany: Kentucky Master Gardener Manual, Chapter 1 (HO-96). 30 pages.
- Wingate, M., and R. Durham. 2011. Plant Identification: Kentucky Master Gardener Manual, Chapter 2 (HO-97). 4 pages.
- Bobbit, V., R. Fox, H. Kennell, C. Moulton, G. Pinyuh, M. Robson, B. Lee and R. Durham. 2012. Your Yard and Water Quality: Kentucky Master Gardener Manual, Chapter 5 (ID-201). 8 pages.
- Maleike, R., R. Durham and W. Fountain. 2012. Selecting and Planting Woody Ornamental Plants: Kentucky Master Gardener Manual, Chapter 21 (HO-107). 18 pages.
- McNeilan, J., A. M. VanDerZanden and R. Durham. 2012. Landscape Design: Kentucky Master Gardener Manual, Chapter 17 (HO-102). 20 pages.
- McNeillan, R. and R. Durham. 2012. Care of Woody Plants: Kentucky Master Gardener Manual, Chapter 12 (HO-101). 20 pages.
- Robson, M., S. Bale and R. Durham. 2012. Annual and Perennial Flowers: Kentucky Master Gardener Manual, Chapter 13 (HO-102). 14 pages.

Updated Extension Publications:

- Bale, S. and R. Durham. 2012. Annual Flowers (HO-65). 10 pages.
- Bale, S., R. Durham, T. Phillips, L. Townsend and N. A. Ward. 2012. Roses (ID-118). 16 pages.
- Durham, R., T. Cooling, J. Strang, M. Williams, S. Wright, R. Bessin, K Seebold and N. Ward. 2012. Home Vegetable Gardening in Kentucky (ID-128). 50 pages.
- Durham, R. E., J. G. Strang, N. Ward and R. Bessin. 2012. Disease and Insect Control Programs for Home Grown Fruit in Kentucky (ID-21). 20 pages.

Other activity:

- Updated numbered publications: total of 10 publication with updates, 1999-2013.
- Departmental and UK Arboretum factsheets: total of 26 factsheets released 1999-2013
- Electronic PowerPoint Presentations Released to County Extension Agents: total of 16 presentations released 2002-2013

Technical Publications and Popular Articles: total of 29 released 1999-2011
Radio scripts: over 250 scripts recorded 1999-2012

Formal Courses Taught:

University of Kentucky (1999-2011)

PLS 220, Introduction to Plant Identification. 18 sections taught, total of 456 students.

PLS 490. Capstone Horticulture. 4 section taught, total of 14 students.

Texas Tech University (1994-1999)

IS 1100, Tech Transition. Four sections taught, total of 78 students.

PSS 1411, Principles of Horticulture. Eight sections taught, total of 635 students.

PSS 2312, Propagation Methods. Three sections taught, total of 105 students.

PSS 3311, Fruit and Nut Culture. Two sections taught, total of 48 students.

PSS 4411, Principles of Floriculture. Three sections taught, total of 58 students.

PSS 5311, Greenhouse Management. One section taught, total of 7 students.

PSS 5315, Advanced Floriculture. Two sections taught, total of 9 students.

Graduate Students Directed (Texan Tech University):

Ph.D.: 2, M.S.: 3, and 1 Non-Thesis, served on the graduate committee of 9 additional students.

External Support (Recent Activity):

Johnson, D. (Co-PI & PD), P. Lucas, T. Coolong, R. Durham, A. Fulcher, C. Lee and L. Murdock.

2010. IPM in Kentucky: Integrated Development and Delivery. USDA-NIFA. (Three years - \$280,934 Funded). National-Competitive, PI Durham portion ~\$44,000.

Durham, R. E. 2009. eXtension Consumer Horticulture Certified Leadership Funds 2009. \$15,000.

USDA eXtension Initiative. National-Competitive, Recurring. lead PI.

Durham, R. E. 2008. eXtension Consumer Horticulture Certified Leadership Funds 2008. \$14,800.

USDA eXtension Initiative. National-Competitive, Recurring. lead PI.

Durham, R. E. 2006-2008. Progress and Continuation Plans for the eXtension Consumer Horticulture

Community of Practice. \$20,000. USDA eXtension Initiative. National-Competitive, Recurring. lead PI.

Durham, R. E. and M. Meyer. 2005-2008. Assembling the Consumer Horticulture Community of

Practice to Develop a FAQ Database and Ask the Expert Interface for the Consumer Horticulture Community of Interest. \$135,000. USDA eXtension Initiative. National-Competitive, lead PI.