

Jeanine Marie Davis

Associate Professor and Extension Specialist

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Education/Training

Washington State University, Ph.D., Horticulture, 1987

Washington State University, M.S., Horticulture, 1983

Delaware Valley College, B.S., Horticulture, 1980

Montgomery County Community College, A.A., Fine Arts, 1975

Academic Positions and Employment

Associate Professor & Extension Specialist, 1994-present, NC State University, Dept. of Horticultural Science

N.C. Specialty Crops Program Coordinator, 1999-2007, NC State University, Dept. of Horticultural Science

Assistant Professor & Extension Specialist, 1988-1994, NC State University, Dept. of Horticultural Science

Graduate Research & Teaching Assistantships, 1981-1987, Washington State Univ., Dept. of Hort. Science & LA

Peer-Reviewed Publications (Last 4 Years)

Cech, N.B., V. Kandhi, J.M. Davis, A. Hamilton, D. Eads, and S.M. Laster. 2010. Echinacea and its alkylamides: Effects on the influenza A-induced secretion of cytokines, chemokines, and PGE₂ from RAW 264.7 macrophage-like cells. *Int Immunopharmacol* 10:1268-1278.

Davis, J., S. Johnson, and K. Jennings. 2010. Herbicide carryover in hay, manure, compost, and grass clippings. NC Cooperative Extension Service, AG-727W.

Chamberlain, J.L., D. Mitchell, T. Brigham, T. Hobby, L. Zabek, and J. Davis. 2009. Forest Farming Practices. Chapter 9, *North American Agroforestry: An Integrated Science and Practice*. 2nd Edition, H.E. Garrett, Ed. American Society of Agronomy, Madison, WI.

Graf, T.N., K.E. Levine, M.E. Andrews, J.M. Perlmutter, S.J. Nielson, J.M. Davis, M.C. Wani, and N.H. Oberlies. 2007. Variability in the yield of benzophenanthridine alkaloids in wildcrafted vs. cultivated bloodroot (*Sanguinaria canadensis* L.). *J. Agric. Food Chem.* 55(4):1205 - 1211.

McCoy, J., J.M. Davis, N.D. Camper, I. Khan, and A. Bharathi. 2007. Influence of rhizome propagule size on yields and triterpene glycoside concentrations of black cohosh [*Actaea racemosa* L. syn. *Cimicifuga racemosa* (L.) Nuttall]. *HortScience* 42(1):61-64.

Davis, J.M. 2007. Growing and marketing woodland botanicals. *Issues in New Crops and New Uses*, J. Janick and A. Whipkey (eds). ASHS Press, Alexandria, VA, p. 274-279.

Davis, J.M. R.O. Evans, G. Grabow, W.R. Jester, B. Little, A.C. Thornton, and J.R. Schultheis. 2007. Offsetting drought for small-scale vegetable production in North Carolina. AG-519-4. NC Coop. Ext. Service, 8 pp.

Selected Technical Publications (Not peer-reviewed)

Davis, J.M. 2010. Herbicides in manure: How does it get there and why should I care? Proceedings of the 8th Annual Mid-Atlantic Nutrition Conference, Zimmerman, N.G., ed., Univ. of Maryland, College Park, MD., p. 155-160.

Davis, J.M. 2010. New crops and agricultural enterprises decision assistance tools. 71 pages. <http://www.ces.ncsu.edu/fletcher/programs/herbs/prosperity/tools/FPP-2009-new-ag-enterprise-decision-tool.pdf>.

Davis, J.M., T. Elmore, J. Bonham, and W. Hamilton. 2010. What growers can expect from farmland protection tools. 12 pages. <http://www.ces.ncsu.edu/fletcher/programs/herbs/prosperity/tools/FFP-2010-protection-tools.pdf>.

Davis, J.M. 2010. How to pick a high-value crop: evaluating your resources and personal considerations. 4 pages. <http://www.ces.ncsu.edu/fletcher/programs/herbs/prosperity/opportunities/FPP-2009-pick-high-value-crop.pdf>.

Davis, J.M. D. Panthee, and R. Gardner. 2009. Opportunities with heirloom tomatoes. 6 pages. <http://www.ces.ncsu.edu/fletcher/programs/herbs/prosperity/opportunities/FPP-2009-opportunities-tomatoes.pdf>

Ivors, K. and D. Sanders, ed. 2010. Commercial production of staked tomatoes in the Southeast. (JMD was one of 22 contributors from NC, AL, SC, GA, LA, and MS), NC Cooperative Extension Service, Raleigh, NC. AG-405. 44 pgs.

Major Extension Activities

Outreach program is focused on sustainable and organic agriculture, herbs, vegetables, and a wide range of specialty crops. Current major efforts on hops, truffles, and organic vegetables.

Emphasis on use of electronic media: websites (nherb.org, ncorganic.org, ncspecialtycrops.org), blog (ncalternativecropsandorganics.blogspot.com), Facebook (facebook.com/people/Jeanine-Davis/1442912228), Twitter (twitter.com/JeanineNCSU), and multiple listservs.

Recently provided in-service training on organic horticulture to extension agents from NC, SC, AL, and AR.

Give an average of 26 invited presentations each year at conferences in NC and throughout the eastern US.

External and Internal Research Support (Last 4 Years)

Raker, M. \$235,000. Realizing the Potential of the WNC Natural Products Industry. GoldenLeaf Foundation. J. Davis, cooperator, \$47,500. 1/11-12/11.

Bjorkman, T. \$3.2 million. Developing an Eastern Broccoli Industry. USDA-SCRI. J. Davis, cooperator, \$282,660. 9/10-8/15.

Davis, J. \$93,784. Evaluating Hop Production in North Carolina. USDA Specialty Crops Block Grant via NCDA& CS. 11/10-11/12.

Townley, R., Land of Sky Regional Council. \$1.9 million. WNC Forest Products Cooperative Marketing. Federal stimulus funds through USDA Southern Forest Research Station. J. Davis, cooperator, \$100,000. 12/09-3/12.

Osmond, D., J. Davis, and R. Austin. \$28,500. Improving Market Opportunities for North Carolina with Locally Grown Hops through Evaluation of Yield and Quality. GoldenLeaf Foundation. 2/10-1/11.

Davis, J. \$43,000. Creating an Organic Research Program for the WNC Research Stations. NC Dept. of Agriculture & Consumer Services, USDA Specialty Crops Block Grant. 2/10-1/11.

Cech, N., UNC-Greensboro. \$363,846. Production of *Echinacea* with Optimal Bioactivity: Improving Market Value of a NC Crop. UNC- Admin, Research Competitiveness Fund. J. Davis, co-PI, \$47,928. 12/7-3/09.

Garcia, E., Univ. of Arkansas. \$195,000. Building Organic Agriculture Training Capacity in the Southeast. Southern SARE. J. Davis, co-PI, \$40,000. 5/07-1/09.

Davis, J. \$499,395. Improved Farm Profit with Farmland Protection and High Value Crops. NRI-USDA, Small and Mid-Sized Farm Program. 6/05-5/09.

Davis, J. \$5,000. Organic tomato research. Brandt Consolidated. 2009.

Davis, J. \$5,000. Biochar research on tomatoes. Jon Nilsson. 2009.

Davis, J. \$80,000. Herb Project. Rural Center Grant through Land of Sky Regional Council. 6/05-9/08.

Davis, J. \$5,000. Tomato research. Brandt Consolidated. 2008.

Davis, J. & J. McGuinn. \$10,000. Evaluation of specialty crops. N.C. Specialty Crops Program. 2008.

Davis, J. & R. Gardner. \$6,800. Opportunities with organic & heirloom tomatoes. N.C. Spec. Crops Prog. 2008.

Toth, S. & J. Davis. \$20,000. EPA Staff Training: Specialty Vegetable & Herb Prod. in NC. EPA. 1/06-12/06.

Davis, J. and J. Burton. \$5,750. Binary catalyst analysis. Fraser Fir Seedling Co. 2006.

Laster, S.M. and J.M. Davis. \$75,321 Identification of anti-inflammatory pharmaceuticals from North Carolina botanical species. N.C. Agricultural Foundation. Ph.D. assistantship for three years. \$75,321. 2006-2009.

Recent Honors/Awards

Amer. Society for Horticultural Science, Extension Materials Reward, Category: Book, 2009 (multiple authors)

NC Biotechnology Center, Western Office, Science in the Mtns Collaborator Award, 2008

North Carolina Vegetable Growers Association, Support Award, 2006

Special Appreciation Award, Advisory Committee for Biotechnology in WNC (NC Biotechnology Center), 2006

Recent Graduate Training Experience (Last 4 Years)

Jennifer Torgerson, M.S. Western Carolina University. Committee member. Goldenseal project. 2010-present.

Chad Cecil. Ph.D. NCSU. Committee member. Microbiology. Goldenseal. 2007-present.

Maria Onofrietti, M.S. NC State Univ. Co-advisor. Bloodroot project. 2002-2007.