

DAVID L. JORDAN

Professor and Extension Specialist, Department of Crop Science
North Carolina State University
4207 Williams, 100 Derieux Place, Campus Box 7620
Raleigh, NC 27695-7620
david_jordan@ncsu.edu
919-515-4068

Document last revised on December 5, 2008

EDUCATION:

PhD Agronomy, University of Arkansas, 1988-1993; MS Crop Science, North Carolina State University, 1986-1988; BS Agronomy, North Carolina State University, 1983-1985; AS, Chowan College, 1982-1983.

ACADEMIC AND PROFESSIONAL APPOINTMENTS:

Professor and Crop Science Extension Specialist, North Carolina State University (2007-present), Associate Professor and Crop Science Extension Specialist, North Carolina State University (2002-2007), Assistant Professor and Crop Science Extension Specialist, North Carolina State University (1996-2002), Adjunct Assistant Professor, Department of Plant Pathology and Crop Physiology, Louisiana State University (1994-1996), Assistant Professor, Northeast Research Station, Louisiana State University Agricultural Center (1993-1996).

Current Appointment and Description: 59% Extension, 20% Research, 21% Academic

PRESENT PROGRAM EMPHASIS AND GOALS:

Research

Areas of research include: evaluation of plant growth regulators; develop and refine integrated pest management strategies for peanuts in cooperation with other faculty in the College of Agriculture and Life Sciences; develop weed management strategies with emphasis on new weed control technologies; evaluate irrigation systems that include subsurface drip and overhead sprinkler irrigation; evaluate interactions among planting patterns, seeding rates, and varieties; evaluate interactions among agrichemicals; evaluate relationships of soil fertility and pod yield and quality characteristics; evaluate carryover potential of herbicides applied to rotation crops; evaluate economic and biological implications of peanut-based cropping systems; evaluate tillage systems; develop management strategies for efficient kenaf production; and currently managing many of the weed science responsibilities previously under the direction of Dr. John Wilcut in the Department of Crop Science. A major emphasis of the weed science research is developing strategies and understanding mechanisms of weed resistance to herbicides and evaluating viability of weed management systems that include glyphosate. In doing so he will work closely with Dr. Scott Clewis in continuing a large multi-state field program evaluating the sustainability of cropping systems associated with glyphosate-resistant crops that includes 29 growers across North Carolina (2006-2009.) Dr. Jordan is also directing one MS student previously under the direction of Dr. Michael Burton in the Department of Crop Science. This student's project is associated with movement and viability of Palmer amaranth pollen and ecology of species in the nightshade family of weeds.

Academic

Instructor for CS 052 (*Weed Control in Field Crops*) (1999-present) and CS 063 (*Peanut Production*)

(1996-present), and co-instructor for CS 590B/795B (*Cotton, Peanut, and Tobacco Production Systems*) (2002-present) and CS/SSC 462 (*Soil-Crop Management Systems*) (2008-present). guest lecturer in graduate level (CS/HS 717, CS 620C) and undergraduate (CS 213, CS 411, CS 415, STS 323, STS 323Q, MLS 601) courses; advisor or co-advisor of 5 MS and 7 PhD graduate students; and member of 15 MS and 16 PhD graduate committees.

Extension

Areas of extension involvement include: direct statewide educational programs related to weed management and production principles of peanut; assist Cooperative Extension field faculty with their county programs as related to peanut production and pest management issues; present pertinent findings and recommendations at county production meetings, plot tours, and field days; establish on-farm tests, provide updated resources on production and pest management practices, and assisting with problem solving situations; coordinate publication of *Peanut Information* (AG-331) and other appropriate Extension publications; contribute to production and pest management issues related to kenaf production; and serve as the agronomist and weed scientist on USAID Peanut CRSP projects.

AWARDS AND HONORS (Career):

Outstanding Extension Service Award, North Carolina State University (2007), Academy of Outstanding Faculty Engaged in Extension, North Carolina State University (2007), Epsilon Sigma Phi XI Chapter Early Career Award (2004); Outstanding Young Weed Scientist, Southern Weed Science Society (2004); Outstanding Young Scientist (Early Career Award), Weed Science Society of America (2003); Gamma Sigma Delta (1991); Outstanding Graduate Student Teaching Assistant, Department of Crop Science, North Carolina State University (1987).

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Association for the Advancement of Science (1994), American Peanut Research and Education Society (1997-present), American Peanut Council (1997-present), American Society of Agronomy (1987-present), Arkansas Agricultural Pesticide Association (1988-1992), Council for Agricultural Science and Technology (1990-2000; 2007-present), Crop Protection Association of North Carolina (1997-present), Crop Science Society of America (1987-1997, 2007), Gamma Sigma Delta (1991-present), International Weed Science Society (1992-present), Louisiana Plant Protection Association (1993-1996), National Association of County Agricultural Agents (2004-2005), North American Colleges and Teachers of Agriculture (2003-2005), Northeast District Association of County Agricultural Agents (2003-2005), Plant Pathology Society of North Carolina (2001-2005), Rice Technical Working Group (1993-1996); Soil Science Society of America (1987-1997), Southern Weed Science Society (1987-present), Weed Science Society of America (1987-present), Weed Science Society of North Carolina (1987-1990; 1997-present).

APPOINTMENTS AND SERVICE:

Associate Editor, *Journal Crop Management* (2006-2008); Associate Editor, *Peanut Science* (1999-2001; 2006-2008); Associate Editor, *Weed Technology* (2002-2004); Associate Editor, *Agronomy Journal* (1999-2001); Associate Editor, *Journal of Production Agriculture* (1997-1999).

OFFICES AND BOARD OF DIRECTORS

Representative to the Weed Science Society of America Board of Directors for the Southern Weed Science Society (2005-2007); State Agency Representative to the Board of Directors, American Peanut Research and Education Society (2001-2003); Advisor to the North Carolina Crop Protection Association (2000-2006); President, Weed Science Society of North Carolina (1999-2000); Representative from Academia to the Board of Directors, Southern Weed Science Society (1997-1999); Regional Representative to the Rice Technical Working Group (1995).

COMMITTEES

Strategic Planning Study Group, College of Agriculture and Life Science (2008-2009), Search Committee Member, Weed Science Research and Academic Position in the Department of Crop Science (2008-2009), Ad-Hoc Committee, Advances in *Arachis* Through Genomics and Biotechnology (2007-present); Topic Co-organizer, Integrated Weed Management, 5th International Weed Science Congress, Vancouver, BC Canada (2007-2008); Pesticide Minor Use and Registration Committee (2007-present); State Extension Conference Planning Committee (2006-2007); Search Committee Member, Forage Position, Department of Crop Science (2006-2007); Search Committee Member, Extension Soils Specialist, Department of Soil Science (2005-2006); Program Chair for the 2005 Crop Protection School; Program Committee for the 1999, 2000, 2005-2008 Crop Protection School; Cooperative Extension Service representative, Peanut Variety and Quality Evaluation Committee (1997-present); Steering Committee, Southern Conservation Tillage Systems Conference (SERA IEG-020) (2002-2006); The Peanut Farm Press Profitability Award Advisory Board (2001-present); Chair, Virginia-Carolina Peanut Advisory Committee (2000).

INTERNATIONAL ACTIVITIES

USAID Peanut CRSP, *Improved Production Efficiency Through Standardized, Integrated, and Enhanced Research and Technology Transfer Approaches* (2002-2007); USAID Peanut CRSP, *Improved West African Peanut Production for Enhanced Health and Socio-Economic Status Through the Delivery of Research-Based Production System in Ghana* (2008-2012); CLUSA (Cooperative League of the United States of America) and USAID, *Farmer to Farmer Exchange Program* assessing peanut production, pest management, storage, and marketing; informal working group involving UNC-Chapel Hill, Duke University, and North Carolina State University developing a Gates Foundation proposal entitled: *A Collaborative Approach to Improving Childhood Nutrition in the Developing World*, and informal working group with other faculty at North Carolina State University regarding involvement in development projects in Malawi through the Clinton-Hunter Initiative.

PUBLICATION RECORD AND GRANTS

Publications: Book or Encyclopedia Chapters 4, Peer-reviewed publications 150 [80 as senior author or graduate student as senior author. Distribution of peer-reviewed publications: *Weed Technology* (67), *Peanut Science* (39), *J. of Cotton Science* (12), *Agronomy J.* (10), *Weed Science* (8), *J. of Crop Management* (5), *Plant Disease* (2), *J. Economic Entomology* (2); *Tobacco Science* (2), *Applied Agricultural Engineering* (1), *Plant Pathology J. of the Asian Network for Scientific Information* (1), *Transactions of the ASABE* (1)], Abstracts and Proceedings 336, Presentations at Professional Conferences 135, Extension Publications and Revisions 88, Formal Extension Presentations and Certified Crop Advisor Program 252, Field Days and Tours 48, Extension Agent In-Service Training Sessions 29, Invited Presentations 28, Non-referred Bulletins 39, Popular Press 117. Grants: Louisiana State University Agricultural Center – Research (\$442,502; 1993-1996), North Carolina State University – Research and Extension combined (\$2,675,867; 1997-present).

COMMUNITY ACTIVITIES AND ORGANIZATIONS

Raleigh Civitan Club (2003-2007); Associate Member, Civitan International (2008-present); established and maintains the *Mildred Lewis Jordan Science Scholarship* (1994-present), Edenton Holmes High School, Edenton, NC and the *Bessie Smith Harrell Science Scholarship* (2007-present), Perquimans County High School, Hertford, NC; sponsorship programs through local churches in Honduras and Christian Children's Fund (1998-present); disaster relief and recovery projects in Armenia, El Salvador, Honduras, Gulf Coast of US, Mozambique, New York, Sri Lanka, and North Carolina through the North

Carolina Baptist Men, North Carolina State Convention, Cary, NC; Member, Forest Hills Baptist Church, involved in youth activities; invited speaker, Campbell University Baptist Student Union (2005), Campbell University Campus Crusade for Christ (2006), North Carolina State University Baptist Student Union (2005) and Chowan University Perspectives (2007); ACLU, Human Rights Watch, Amnesty International, Friend of the Southern Poverty Law Center (2008-present); Assistant Baseball Coach, Fuqua-Varina Athletic Association (1997-1999, 2003).

ENCYCLOPEDIA AND BOOK CHAPTERS

Jordan, D. and J. Spears. 2007. Peanut Industry. Pages 189-190 in W.A. Darity, E. Bonilla-Silva, P. Costanzo, P.L. Mason, P. McClain, D. Scott, and T. Singleton, eds. International Encyclopedia of the Social Sciences, 2nd Edition. Macmillan References USA, Farmington Hills, MI.

Voysest-Voysest, O., M. Black, K. Downey, J. Spears, and **D.L. Jordan**. 2006. Peanut. Pages 478-480 in M. Black, J.D Bewley, and P. Halmer, eds. The Encyclopedia of Seed: Science, Technology, and Uses. CAB International, London, UK.

Spears, J.F. and **D.L. Jordan**. 2006. Peanut – cultivation. Pages 480-482 in M. Black, J.D Bewley, and P. Halmer, eds. The Encyclopedia of Seed: Science, Technology, and Uses. CAB International, London, UK.

Wilcut, J.W., A.C. York, and **D.L. Jordan**. 1995. Weed management systems for oil seed crops. Pages 343-400 in A. E. Smith, ed. Handbook of Weed Management Systems. Marcel Dekker, Inc., New York.

REPRESENTATIVE PEER-REVIEWED PUBLICATIONS

Jordan, D.L., B.B. Shew, J.S. Barnes, T. Corbett, J. Alston, P.D. Johnson, W. Ye, and R.L. Brandenburg. 2008. Pest reaction, yield, and economic return of peanut based cropping systems in the North Carolina coastal plain. J. Crop Management. doi:10.1094/CM-2008-1008-01-RS.

Jordan, D.L., J.S. Barnes, T. Corbett, C.R. Bogle, P.D. Johnson, B.B. Shew, S.R. Koenning, W. Ye, and R.L. Brandenburg. 2008. Crop response to rotation and tillage in peanut-based cropping systems. Agron. J. 100:1580-1586.

Carley, D.S., **D.L. Jordan**, L.C. Dharmasri, T.B. Sutton, R.L. Brandenburg, and M.G. Burton. 2008. Peanut (*Arachis hypogaea* L.) response to planting date and potential of canopy reflectance as an indicator of pod maturation. Agron. J. 100:376-380.

Bolfrey-Arku, G., M. Owusu-Akyaw, J.V.K. Afun, J. Adu-Mensah, F.O. Anno-Nyako, E. Moses, K. Osei, S. Osei-Yeboah, M.B. Mochiah, I. Adama, A.A. Dankyi, R.L. Brandenburg, and **D.L. Jordan**. 2006. Survey of weed management in peanut (*Arachis hypogaea* L.) fields in southern Ghana, West Africa. Peanut Sci. 33:90-96.

Partridge, D.E., T.B. Sutton, **D.L. Jordan**, V.L. Curtis, and J.E. Bailey. 2006. Management of Sclerotinia Blight of peanut with the biological control agent, *Coniothyrium minitans*. Plant Disease. 90:957-963.

Dankyi, A.A., M. Owusu-Akyaw, V.M. Anchirinah, J. Adu-Mensah, M.B. Mochiah, E. Moses, J.F.K. Afun, G. Bolfrey-Arku, K. Osei, S. Osei-Yeboah, I. Adama, R.L. Brandenburg, J.E. Bailey, and **D.L. Jordan**. 2005. Survey of production and pest management practices for peanut (*Arachis hypogaea* L.) in selected villages in Ghana, West Africa. Peanut Sci. 32:91-97.

Jordan, D.L., J.S. Barnes, C.R. Bogle, T.M. Marshall, T. Corbett, C.R. Crozier, B. McLawhorn, and L. Fisher. 2005. Influence of cultural practices and crop rotation on kenaf yield in North Carolina. Online Crop Management.

doi-10.1094/CM-2005-0913-01-RS.

Lancaster, S.H., **D.L. Jordan**, J.F. Spears, A.C. York, J.W. Wilcut, D.W. Monks, R.B. Batts, and R.L. Brandenburg. 2005. Sicklepod (*Senna obtusifolia*) control and seed production following 2,4-DB applied alone and with fungicides or insecticides. *Weed Technol.* 19:451-455.

Lancaster, S.H., **D.L. Jordan**, A.C. York, I.C. Burke, F.T. Corbin, Y.S. Sheldon, J.W. Wilcut, and D.W. Monks. 2005. Influence of selected fungicides on efficacy of clethodim and sethoxydim. *Weed Technol.* 19:397-403.

Lanier, J.E., **D.L. Jordan**, J.F. Spears, R. Wells, and P.D. Johnson. 2005. Peanut response to inoculation and nitrogen fertilizer. *Agron. J.* 97:79-84.

Hurt, C.A., R.L. Brandenburg, **D.L. Jordan**, G.G. Kennedy, and J.E. Bailey. 2004. Cultural management practices to manage tomato spotted wilt virus in virginia market type peanut. *Peanut Sci.* 31:100-106.

Hurt, C.A., R.L. Brandenburg, **D.L. Jordan**, G.G. Kennedy, and J.E. Bailey. 2005. Management of tomato spotted wilt virus vector *Frankliniella fusca* (Thysanoptera:Thripidae) in virginia market type peanut. *J. Econ. Entomol.* 98:1435-1440.

Lanier, J.E., **D.L. Jordan**, J.F. Spears, R. Wells, P.D. Johnson, J.S. Barnes, C.A. Hurt, and R.L. Brandenburg. 2004. Peanut response to planting pattern, row spacing, and irrigation. *Agron. J.* 96:1066-1072.

Lanier, J.E., **D.L. Jordan**, J.S. Barnes, J. Matthews, G.L. Grabow, W.J. Griffin, Jr., J.E. Bailey, P.D. Johnson, J.F. Spears, and R. Wells. 2004. Disease management in overhead sprinkler and subsurface drip irrigation systems for peanut. *Agron. J.* 96:1058-1065.

Jordan, D.L., A.S. Culpepper, W.J. Grichar, J. Tredaway-Ducar, B.J. Brecke, and A.C. York. 2003. Weed control with combinations of selected fungicides and herbicides applied postemergence to peanut (*Arachis hypogaea*). *Peanut Sci.* 30:1-7.

Jordan, D.L., G.G. Wilkerson, and D.W. Krueger. 2003. Evaluation of scouting methods in peanut (*Arachis hypogaea*) using theoretical net returns from HADSSTM. *Weed Technol.* 17:358-365.

Jordan, D.L., J.S. Barnes, C.R. Bogle, R.L. Brandenburg, J.E. Bailey, P.D. Johnson, and A.S. Culpepper. 2003. Peanut response to cultivar selection, digging date, and tillage intensity. *Agron. J.* 95:380-385.

Jordan, D.L., J.E. Bailey, J.S. Barnes, C.R. Bogle, S.G. Bullen, A.B. Brown, K.L. Edmisten, E.J. Dunphy, and P.D. Johnson. 2002. Yield and economic return of ten peanut-based cropping systems. *Agron. J.* 94:1289-1294.

Beam, J.B., **D.L. Jordan**, A.C. York, T.G. Isleib, J.E. Bailey, T.E. McKemie, J.F. Spears, and P.D. Johnson. 2002. Influence of prohexadione calcium on pod yield and pod loss of peanut. *Agron. J.* 94:331-336.

Jordan, D.L., J.S. Barnes, C.R. Bogle, G.C. Naderman, G.T. Roberson, and P.D. Johnson. 2001. Peanut response to tillage and fertilization. *Agron. J.* 93:1125-1130.

Jordan, D.L., P.K. Bollich, M.P. Braverman, and D.E. Sanders. 1999. Influence of tillage and *Triticum aestivum* cover crop on efficacy of herbicide programs in *Oryza sativa*. *Weed Sci.* 47:332-337.

Jordan, D. L., P.K. Bollich, A.B. Burns, and D.M. Walker. 1998. Rice (*Oryza sativa*) response to clomazone. *Weed Sci.* 46:374-380.

Jordan, D.L. 1997. Efficacy of reduced-rate herbicide combinations in dry-seeded rice (*Oryza sativa*) on alluvial clay soil. *Weed Sci.* 45:151-157.

Jordan, D.L., R.E. Frans, and M.R. McClelland. 1993. Total postemergence herbicide programs in cotton (*Gossypium hirsutum*) with sethoxydim and DPX-PE350. *Weed Technol.* 7:196-201.

Jordan, D.L., A.C. York, M.R. McClelland, and R.E. Frans. 1993. Clomazone as a component in cotton (*Gossypium hirsutum*) herbicide programs. *Weed Technol.* 7:202-211.

Jordan, D.L. and A.C. York. 1989. Effects of ammonium fertilizers and BCH 81508 S on antagonism with sethoxydim plus bentazon mixtures. *Weed Technol.* 3:450-454.

Jordan, D.L., A.C. York, and F.T. Corbin. 1989. Effect of ammonium sulfate and bentazon on sethoxydim absorption. *Weed Technol.* 3:674-677.

REPRESENTATIVE COOPERATIVE EXTENSION PUBLICATIONS

Bullen, S.G. and **D.L. Jordan**. 2008. Peanut production budgets. Pages 6-15 in 2008. Peanut Information. North Carolina Cooperative Extension Service Publication AG-331. 134 pp. Available at www.peanut.ncsu.edu.

Jordan, D.L. 2008. Peanut production practices. Pages 21-44 in 2008 Peanut Information. North Carolina Cooperative Extension Service Publication AG-331. 134 pp. Available at www.peanut.ncsu.edu.

Jordan, D.L. 2008. Peanut weed management. Pages 45-72 in 2008 Peanut Information. North Carolina Cooperative Extension Service Publication AG-331. 134 pp. Available at www.peanut.ncsu.edu.

Jordan, D., E. Prostko, P. Dotray, J. Wilcut, T. Baughman, B. Brecke, J. Chapin, J. Faircloth, W. Faircloth, J. Ferrell, T. Grey, J. Grichar, G. MacDonald, and C. Medlin. 2007. Managing herbicide-resistant weeds in peanuts in the United States. North Carolina Cooperative Extension Service Publication AG-692. 7 pp. Available at www.peanut.ncsu.edu.

Lancaster, S., **D. Jordan**, R. Brandenburg, B. Royals, B. Shew, J. Bailey, V. Curtis, A. York, J. Wilcut, J. Beam, E. Prostko, S. Culpepper, T. Grey, C. Johnson, III, R. Kemerait, J. Grichar, T. Baughman, P. Dotray, B. Brecke, G. MacDonald, J. Tredaway-Ducar, and B. Walls. 2005. Tank mixing chemicals applied to peanut: are the chemicals compatible? North Carolina Cooperative Extension Service Publication AG-W-653R. Available at www.peanut.ncsu.edu.

Jordan, D., D. Johnson, J. Spears, B. Penny, B. Shew, R. Brandenburg, J. Faircloth, P. Phipps, A. Herbert, Jr., D. Coker, and J. Chapin. 2005. Determining peanut pod maturity and estimating the optimal digging date: using pod mesocarp color for digging Virginia market type peanut. North Carolina Cooperative Extension Service Publication AG-633.

Jordan, D., R. Brandenburg, B. Shew, G. Naderman, S. Barnes, and C. Bogle. 2004. Advisory index for transitioning from conventional to reduced tillage peanut production in North Carolina. North Carolina Cooperative Extension Service Publication AG-644.

Hurt, C., R. Brandenburg, **D. Jordan**, B. Shew, T. Isleib, M. Linker, A. Herbert, P. Phipps, C. Swann, and W. Mazingo. 2003. Managing tomato spotted wilt virus in peanuts in North Carolina and Virginia. North Carolina Cooperative Extension Service Publication AG-638.

Linker, M., A. Herbert, **D. Jordan**, P. Phipps, R. Brandenburg, C. Swann, and J. Bailey. 2001. Integrated pest management scouting manual. North Carolina Coop. Ext. Ser., AG-461.

Jordan, D., J. Bailey, R. Brandenburg, S. Marlow, M. Linker, M. Rayburn, J. Spears, and G. Naderman. 2001. Knowing your field: a guide to on-farm testing for peanut growers. North Carolina Coop. Ext. Ser., AG-615.

Available at www.peanut.ncsu.edu.

REPRESENTATIVE NON-PEER REVIEWED PUBLICATIONS

Beasley, J., **D. Jordan**, and R. Lemons. 2002. Agricultural practices for peanut growing and harvesting. Pages 1-12 *in* Peanut Voluntary Code for Good Management Practices. American Peanut Council. Available at: <http://www.peanutusa.com>.

Jordan, D.L. and P.D. Johnson. 2006. Reduced tillage research with peanut in North Carolina (1997-2005). Southern Tillage Systems Conf. Pages 134-140 *in* R.C. Schartz, R.L. Baumhardt, and J.M. Bell, (eds.) Proc. Southern Conservation Tillage Systems Conf., 28. Amarillo, TX. June 26-28, 2006. USDA-ARS Conservation and Production Research Laboratory Report No. 06-1. Available at: <http://www.ag.auburn.edu/aux/nsdl/sctcsa/>.