

Curriculum Vitae

Michael D. Mullen, PhD, CPSS

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EDUCATION

- **Doctor of Philosophy in Soil Science**, North Carolina State University, Raleigh, NC, 1987
- **Master of Science in Soil Science**, Purdue University, West Lafayette, IN, 1984
- **Bachelor of Science in Natural Resources and Environmental Science**, Purdue University, West Lafayette, IN, 1981
- **ESCOPE/ACOP Leadership Development Program**, Class 10, 2000-01
- **Certified Professional Soil Scientist (CPSS)**, Soil Science Society of America, 1998

EXPERIENCE IN HIGHER EDUCATION

- **Associate Dean for Academic Programs**, June 2004 to present. College of Agriculture, University of Kentucky. Responsibility and oversight for undergraduate and graduate curricula, undergraduate advising, recruitment and retention, scholarship management, career and internship activities, student organizations, and academic program reviews.
- **Acting Director**, May –August 2005. School of Human Environmental Sciences, College of Agriculture. Responsibilities for School oversight and administration duties.
- **Associate Professor**, June 2002 to 2004. Department of Plant and Soil Sciences, University of Kentucky. Teaching in areas of soil sciences, environmental sciences. Research interests in soil microbial diversity and soil quality in terrestrial ecosystems, impacts of agricultural management practices on soil productivity.
- **Adjunct Professor**, June 2002 to August 2004. Department of Biosystems Engineering and Environmental Science, University of Tennessee, Knoxville. Served on graduate committees and planning/conducting cooperative research with faculty.
- **Associate Professor**, July 2001 to May 2002. Department of Biosystems Engineering and Environmental Science, University of Tennessee, Knoxville. Teaching in areas of soil sciences, environmental sciences. Research activities in nutrient cycling in manured soils, impacts of manure applications on water quality, soil biology and biochemistry in soils under various management practices.
- **Academic Program Coordinator**, September 2000 to June 2001. Department of Plant and Soil Sciences, University of Tennessee, Knoxville. Responsible for curriculum and advising issues, course scheduling, recruiting, and student club.
- **Acting Assistant Dean**, August 1999 to September 2000. College of Agricultural Sciences and Natural Resources. Responsibilities for College undergraduate curriculum and advising issues,

articulations with community colleges, recruiting activities, and placement activities, including Career Fair, other duties related to student and faculty development.

- **Associate Professor**, July 1995 to June 2001. Department of Plant and Soil Sciences, University of Tennessee, Knoxville. Teaching in areas of soil sciences, environmental sciences. Research activities in nutrient cycling in manured soils, impacts of manure applications on water quality, soil biology and biochemistry in soils under various management practices.
- **Assistant Professor**, June 1993 to June 1995. Department of Plant and Soil Sciences, University of Tennessee, Knoxville.
- **Assistant Professor**, July 1989 to May 1993. University of Tennessee at Martin. Appointed 50% teaching, Department of Agriculture and Natural Resources, UTM, and 50% research in the Department of Plant and Soil Science, UT-Knoxville.
- **Post-doctoral Research Associate**, July 1987 to June 1989. Department of Agronomy, University of Arkansas.

HONORS AND AWARDS

- Career Award in Education, Southern Branch of the American Society of Agronomy, Feb. 2003.
- Teaching Fellow, North American Colleges and Teachers of Agriculture, June 2002.
- UT National Alumni Association Outstanding Teacher Award, April 1998.
- University of Tennessee Nominee for the USDA Food and Agricultural Sciences Excellence in College and University Teaching Award, 1998, 1999, 2000.
- Fellow to the Center for Undergraduate Excellence, Undergraduate Academic Affairs, University of Tennessee, September 1997.
- W.F. and Golda Moss Outstanding Teacher Award from the College of Agricultural Sciences and Natural Resources, April 1996.
- Early-Career Award in Education from the Southern Branch of the American Society of Agronomy, February 1996.
- TN Assoc. of Colleges and Teachers of Agriculture Outstanding Teacher Award, March 1996.
- Elected to American Society of Agronomy Board of Directors, representing the Agronomic Resident Education division, 1998-2001.

ADMINISTRATIVE ACHIEVEMENTS

College of Agriculture Contributions

Curriculum and Teaching Program Initiatives

- Guided reorganization of College Vocational Education degree programs, Fall 2004 through Summer 2006, resulting in the approval of the BS in Career and Technical Education which combined the Agricultural Education and Family and Consumer Sciences Education programs.
- Helped to initialize development of two new and innovative undergraduate degree programs – ***Equine Science and Management*** and ***Sustainable Agriculture***, both submitted for curriculum review in September 2006.

- Initiated a College Honors Program with approval expected in 2006-07. This will provide a systematic way for University Honors students to finish their research with concurrent achievement of College Honors, and, will allow rising Juniors with the opportunity to enter the College program without participating in the University program during their freshman and sophomore years.
- Secured a recurring \$20,000 fund to address teaching needs in the interdisciplinary and interdepartmental ***Agricultural Biotechnology*** and ***Natural Resource Conservation and Management*** BS degree programs. These programs were dependent on departments participating in the degrees for funding prior to the 2005-06 academic year.
- Cultivation of relationship between UK College of Agriculture and the Maejo University Faculty of Agricultural Production. Students from Maejo were hosted by the College during the summers of 2005 and 2006. Three students from the College were hosted for internships by Maejo for the summer of 2006. Working on opportunities for study abroad in conjunction with Maejo.
- Continued cultivation of relationship between UK College of Agriculture and the Établissement National d'Enseignement Supérieur Agronomique de Dijon (ENESAD – A National Institute for Agricultural Education in Dijon, France). Several students travel to the Burgundy region of France each May, hosted by faculty at ENESAD.

Teaching Facility Improvements

- Initiated classroom renovations for Barnhart 227, Erikson 202, and Erikson 203.
- Procured N11 Agricultural Science Bldg North as a teaching laboratory for the Introductory Animal Science courses.
- Initiated conversion of A6 Agricultural Science Bldg North to Smart classroom, to be done fall 2006.

Student and Faculty Development and Recognition

- Initiated Outstanding Sophomore, Junior and Senior awards, through Student Council, with first awards given in Spring 2006.
- Secured a new fund (currently \$25,000) for Student Activities to be administered from the Office of Academic Programs in the 2006-07 academic year.
- Co-coordination, with the Office of the Associate Dean for Research, of College-wide Teaching and Research Assistant Orientation, each August, 2004-2006.
- Initiated an Annual College Teaching and Learning Workshop with the inaugural workshop on August 16, 2006.
- Initiated three faculty awards for the College through Student Council – the Loys L. Mather Career Outstanding Teaching Award; the Joe T. Davis Outstanding Advisor Award, and the Outstanding Young Teacher Award. First awards presented in Spring 2005.
- Organized and hosted USDA Southern Region Teaching Workshop with attendees from 13 states. August 7-9, 2005.

Office of Academic Programs Structure and Function

- Secured new space in N8 Agricultural Science North for expansion of Office of Academic Programs personnel offices, spring 2005.

- Created Scholarship Program Coordinator position in February 2005 to provide consistent oversight for our large and growing scholarship program. Awards are in the \$530,000 range for 2006-07.
- Initiated procurement of renovated space for the School of Human Environmental Sciences Student Services office, summer 2006.

University of Kentucky Contributions:

- Submitted successful application to the National Academy of Sciences for a team from UK to attend and participate in “A Leadership Summit to Effect Change in Teaching and Learning.” This will be a two-day event bringing educators and employers from across the country together to explore how “universities can more successfully attract, retain, and prepare a diverse student population for careers at the intersections of agriculture, environmental and life sciences” (<http://dels.nas.edu/banr/summit/index.shtml>). The team is composed of me, Dr. Czar Crofcheck from the College of Agriculture, Dr. Ernie Yanarella, representing Arts and Sciences and our General Education Reform efforts, and Richard Greissman from the Provost’s office
- Chellgren Chair Search Committee. Appointed by Provost Nietzel, serving from April 2005 to present. Goal is to find an outstanding candidate to serve as the Chellgren Chair for Undergraduate Excellence.
- E-Learning Advisory Committee. Serving from September 2005 to present. Committee is to evaluate current efforts in E-learning across campus and make recommendations to the Provost concerning future directions for teaching and learning with technology for the University.
- Senate *Ad Hoc* committee on Graduation Writing Requirement. Appointed by Dr. Yanarella, serving from Nov 2004 through March 2005. The outcome of this committee was the new procedure for developing and approving courses that may be used in programs outside of English to satisfy the University Graduation Writing Requirement.
- University Honors Program Committee. Appointed to this Committee by Provost Nietzel, serving from September 2004 through April 2005. This interdisciplinary committee produced the proposal for the current University Honors program which now includes courses from across the UK campus, including the College of Agriculture in the World Food Track.

COURSES TAUGHT

University of Kentucky – Undergraduate Courses

- GEN 100 Issues in Agriculture, Spring 2005, Spring 2007 (3 cr)
- GEN 300 French Agriculture, Spring 2004 and Spring 2005 (3 cr)
- NRC 320 Wetland Delineation module, each summer, 2002 – 2006
- PLS 366 Fundamentals of Soil Science – 4 cr lec/lab course, Fall 2003 & Spring 2004
- PLS 366 Fundamentals of Soil Science – 3 cr lecture course, Fall 2002 & Spring 2003
- PLS 367 Soil and Water Analysis Laboratory, Fall 2002, Spring 2003 (1 cr)
- Invited Lectures in PLS 104, Every semester, Fall 2002 – Fall 2003

University of Kentucky – Graduate Courses

- PLS 566 Soil Microbiology, Spring 2004 (3 cr)
- PLS 772 Soil Science Seminar, Fall 2003, Spring 2004 (1 cr – coordinator)

University of Tennessee – Undergraduate Courses

- ANR 317 Agriculture and Natural Resources Honors Seminar, Fall 1999 (1 cr)
- ANR 333 Food, Forests, and the Environment, every Spring 1996-2002 (3 cr)
- PSS 200 Current Topics in Environmental Science, every Fall 1993-99 (1 cr)
- PSS 210 Introduction to Soil Science, Fall 1993, 2000-01 Spring 1995-98, 2000-02 (3-4 cr)
- PSS 211 Soil Science Laboratory, Each semester, 1994-Spring 1998 (1 cr)
- PSS 310 Soil Science, Spring 1999-2002 (3 cr)
- PSS 315 Soil and Water Conservation, Spring 1994, 1995 (3 cr)
- PSS 411 Soil Microbiology, every Fall 1993-98 (3 cr)

University of Tennessee – Graduate Courses

- PSS 509 Scientific Communication, Fall 1998 (1 cr)
- PSS 501 Seminar Prep, each semester 1993 - 1995, Fall Sem. 1996-98 (1 cr)
- PSS 503 Seminar, involved each semester since 1993 (1 cr)
- PSS 516 Soil Biology and Biochemistry, Fall 1999, 2001, 2002 (3 cr)
- PSS 601 Spec. Topic: Advanced Soil Biochemistry, Sp. 1995 (3 cr)
- PSS 601 Spec. Topic: Soil Biology and Biochemistry, Fall 1996 (3 cr)
- PSS 614 Adv. Topics in Soil Biology and Biochemistry, Fall 2000 (2 cr)

University of Tennessee at Martin – Undergraduate Courses

- SSC 210 Introduction to Soil Science, 1990-1992, taught four times (4 cr)
- SSC 250 Soil and Landscape Evaluation, Fall 1991-1992, taught twice (2 cr)
- SSC 315 Soil and Water Conservation, 1989-1993, taught five times (3 cr)
- SSC 321 Soil Genesis, Classification, Morphology, 1991-1993, taught twice (3 cr)
- SSC 412 Soil Chemistry and Fertility, 1990 - 1992, taught twice (3 cr)
- SSC 420 Soil Microbiology and Biochemistry, 1991-1993, taught twice (3 cr)

STUDENT ADVISING

Undergraduate Advising – University of Kentucky

- Advisor to UK College of Agriculture Student Council, Fall 2004 – present
- Faculty Advisor to UK College of Agriculture Ambassadors, August 2003 - May 2005
- Academic advising for approximately 10-15 undergraduates in Natural Resource Conservation and Management and Plant and Soil Science programs at UK, Fall 2002 – Spring 2005.
- Academic Advising for five undergraduates in Natural Resource Conservation and Management, Fall 2005 – present.

Undergraduate Advising – University of Tennessee

- Academic advisor for 15 to 40+ students per year at UT, 1989-2002
- Faculty advisor to UTK Plant and Soil Science Club, 1993-96 and 1999-2002
- Faculty advisor to UT-Martin Agronomy Club, 1989-93
- Advisor to one UT College Scholar, 1994-1996.

- Advisor for three University Scholars Students at UT – Martin, 1990-1993

Graduate Student Committees – University of Kentucky

PhD Students

- William Andrews – Geology (Graduate School outside Examiner – May 2005)
- Audrey Horrall – Crop Science (2003 - present)
- Bunjirtluk Jintaridith – Soil Science (Chair until June 2004; 2003 - present)
- Shawn Lucas – Crop Science (2006 to present)
- Wensui Luo – Soil Science (completed; 2002 - 2005)
- Edwin Ritchey – Soil Science (2002 – present)
- Kamruz Zaman – Chemistry (2004 – present)

MS Student:s

- Daniel Kischnick – Plant and Soil Science (completed; 2003-2006; Chair until June 2004)
- David Lyon – Forestry (completed; 2002-2004)
- Delia Scott – Plant and Soil Science (2005 – present)
- Julia Ter Beest – Forestry (completed; 2003-2005)

Graduate Student Committees – University of Tennessee

Successfully directed two Ph.D. and ten M.S. students from 1993 to August 2002.

PhD Students:

Dr. Warren Devine, graduated 2001. Now a Research Scientist with the US Forest Service in Olympia Washington

Dr. Rebecca Gilfillen, graduated 1998. Now Associate Professor in the Department of Agriculture at Western Kentucky University.

Served on five Ph.D. and 23 M.S. committees from 1993 to 2003. Students represented five departments in the College of Agricultural Sciences and Natural Resources and the Department of Ecology at UT-Knoxville and the Agronomy and Soils Department at Auburn University.

SCHOLARLY CONTRIBUTIONS

Articles Submitted for Review

- Law, D.M., V. Bhavsar, J. Snyder, M.D. Mullen and M. Williams. 2006. Evaluating solarization and cultivated fallow for Johnsongrass (*Sorghum halepense*) control and nitrogen cycling on an organic farm. Submitted to Biological Agriculture and Horticulture.
- Kischnick, D., M.S. Coyne, M. Williams, and M.D. Mullen. 2006. Organic ideas and scientific evidence: A review of companion planting concepts in the scientific literature. Submitted to Renewable Agriculture and Food Systems.

Refereed Journal Publications

- Devine, W.D., Tyler, D.D., Mullen, M.D., Houston, A.E., Joslin, J.D., Hodges, D.G., Tolbert, V.R. and Walsh, M.E. 2005. Conversion from an American Sycamore (*platanus occidentalis* L.) biomass crop to a no-till corn (*Zea mays* L.) system: crop yields and management implications. *Soil and Tillage Research*, 87:101-111.
- Devine, W.D., M.D. Mullen, D.D. Tyler, A.E. Houston, J.D. Joslin, D.G. Hodges, V.R. Tolbert, and M.E. Walsh. 2004. Conversion from a Sycamore Biomass Crop to a No-till Corn System: Effects on Soils. *Soil Science Society of American Journal*, 68: 225-233.
- Raman, D.R., E.L. Williams, A.C. Layton, R.T. Burns, J.P. Easter, A.S. Daugherty, M.D. Mullen, and G.S. Sayler. 2004. Estrogen Content of Dairy and Swine Wastes. *Environmental Science and Technology*, 38: 3567-3573.
- Abbott, D.E., M.E. Essington, M.D. Mullen, and J.T. Ammons. 2001. Fly ash and lime-stabilized biosolid mixtures in mine spoil reclamation: simulated weathering. *Journal of Environmental Quality*, 30: 608-616.
- Chang, Y-J., A. K. M. Anwar Hussain, J. R. Stephens, M.D. Mullen, D. C. White and A. D. Peacock. 2001. Impact of herbicides on the abundance and structure of indigenous β -subgroup ammonia oxidizer communities in soil microcosms. *Environmental Toxicology and Chemistry*, 20:2462-2468.
- Howard, D.D., C.O. Gwathmey, M.E. Essington, R.K. Roberts, and M.D. Mullen. 2001. Nitrogen fertilization of no-till cotton produced on loess-derived soils. *Agronomy Journal*, 93:157-163.
- Kubikova E., J.L. Moore, B.H. Ownley, M.D. Mullen, and R.M. Augé. 2001. Mycorrhizal impact on osmotic adjustment in *Ocimum basilicum* during a lethal drying episode. *Journal of Plant Physiology* 158: 1227-1230.
- Marshall, S.B., M.D. Mullen, M.L. Cabrera, C.W. Wood, L.C. Braun, and E.A. Guertal. 2001. Nitrogen budget for fescue pastures fertilized with broiler litter in Major Land Resource Areas of the southeastern U.S. *Nutrient Cycling in Agroecosystems*, 59:75-83.
- Peacock, A.D., M.D. Mullen, D.B. Ringelberg, D.D. Tyler, D.B. Hedrick, P.M. Gale, and D.C. White. 2001. Soil Microbial Community Response to Dairy Manure or Ammonium Nitrate Applications. *Soil Biology and Biochemistry*, 33:1011-1019.
- Raman, D. R., A. C. Layton, L. B. Moody, J. P. Easter, G. S. Sayler, R. T. Burns, and M. D. Mullen. 2001. Degradation of estrogens in dairy waste solids: Storage methods and temperature effects. *Transactions of the American Society of Agricultural Engineers*, 44: 1881-1888.
- Gale, P.M., M.D. Mullen, M. Kirchner, B.N. Duck, D.D. Tyler, C. Cieslik and J. McClure. 2000. Phosphorus Distribution and Availability in Response to Dairy Manure Applications. *Communications in Soil Science and Plant Analysis*, 31:553-565.
- Marshall, S.B., M.L. Cabrera, C.W. Wood, L.C. Braun, M.D. Mullen and E.A. Guertal. 1999. Denitrification from Fescue Pastures Fertilized with Broiler Litter. *Journal of Environmental Quality*, 28:1978-1983.
- Mullins, C.A., R.A. Straw, B. Pitt, Jr., D.O. Onks, M.D. Mullen, J. Reynolds, and M. Kirchner. 1999. Response of selected sweet corn cultivars to nitrogen fertilization. *HortTechnology*, 9:32-35.
- Marshall, S.B., C.W. Wood, L.C. Braun, M.L. Cabrera, M.D. Mullen, and E.A. Guertal. 1998. Ammonia Volatilization from Tall Fescue Pastures Fertilized with Broiler Litter. *Journal of Environmental Quality*, 27:1125-1129.

- Mullen, M.D., C.G. Melhorn, D.D. Tyler, and B.N. Duck. 1998. Biological and biochemical soil properties in no-till corn with different cover crops. *Soil and Water Conservation*, 53:219-224
- Hartel, P.G., J.J. Fuhrmann, W.F. Johnson, Jr., E. Lawrence, C.S. Lopez, M.D. Mullen, H.D. Skipper, T.E. Staley, D.C. Wolf, A.G. Wollum II, and D.A. Zuberer. 1994. Survival of a lacZY-containing *Pseudomonas putida* strain under stressful abiotic soil conditions. *Soil Science Society of America Journal*, 58:770-776.
- Howard, D.D. and M.D. Mullen. 1991. Evaluation of in-furrow and banded starter N-P-K nutrient combinations for no-tillage corn production on soils fertilized with four rates of phosphate and potash. *Journal of Fertilizer Issues*, 8:34-39.
- Mullen, M.D., D.W. Israel, and A.G. Wollum II. 1988. Effects of *Bradyrhizobium japonicum* and soybean (*Glycine max* (L.) Merr.) phosphorus nutrition on nodulation and dinitrogen fixation. *Applied and Environmental Microbiology*, 54:2387-2392.
- Mullen, M.D., D.C. Wolf, T.J. Beveridge, and G.W. Bailey. 1992. Sorption of heavy metals by the soil fungi *Aspergillus niger* and *Mucor rouxii*. *Soil Biology and Biochemistry*, 24:129-135.
- Mullen, M.D., D.C. Wolf, F.G. Ferris, T.J. Beveridge, C.A. Fleming, and G.W. Bailey. 1989. Bacterial sorption of heavy metals. *Applied and Environmental Microbiology*, 55:3143-3149.
- Mullen, M.D. and A.G. Wollum, II. 1989. Variation among different cultures of *Bradyrhizobium japonicum* strains USDA 110 and 122. *Canadian Journal of Microbiology*, 35:583-588.

Peer-Reviewed Book Chapters (all invited)

- Mullen, M.D. 2004. Phosphorus in soils: Biological interactions. 2004 In, (D. Hillel, ed.), *Encyclopedia of Soils in the Environment*. Elsevier Ltd., Oxford, UK. Vol. 3: 210-215.
- Mullen, M.D. 2004. Transformations of phosphorus and other elements. In, (D. Sylvia et al., ed.) *Principles and Applications of Soil Microbiology*, 2e. Prentice Hall, Upper Saddle, NJ. Pp. 463-488.
- Mullen, M.D. 1998. Transformations of other elements. In, (D. Sylvia et al., ed.) *Principles and Applications of Soil Microbiology*. Prentice Hall, Upper Saddle, NJ. pp. 369-386.

Refereed Conference Proceedings

- Devine, W., M. Mullen, D. Tyler, A. Houston, D. Joslin, D. Hodges, V. Tolbert and M. Walsh. 2002. Integrating woody biomass crops and row crops in rotation. II. Effects on soils. In Transactions of the 17th World Congress of Soil Science: Paper 785, pages 1-9. Bangkok, Thailand, Aug. 14-21, 2002.
- Devine, W., D. Tyler, M. Mullen, A. Houston, D. Joslin, D. Hodges, V. Tolbert and M. Walsh. 2002. Integrating woody biomass crops and row crops in rotation. I. Management implications. In Transactions of the 17th World Congress of Soil Science: Paper 786, pages 1-9. . Bangkok, Thailand, Aug. 14-21, 2002.
- Tyler, D., E. Ritchey, M. Essington, M. Mullen, and A. Saxton. 2002. Cover crop and tillage effects on soil acidity and liming. In Proceedings of the 5th Annual National Soil Conservation Tillage Cotton and Rice Conference: 20-21. Tunica, MS Jan. 24-25, 2002.
- Mahajanashetti, S.B., B.C. English, R.K. Roberts, M. Mullen, and S. Slinsky. 1998. An economic analysis of carryover effects of manure nitrogen on corn silage. In, *Animal Production Systems and the Environment*, Proceedings Volume II, Iowa State University Extension Service, July 19-22 1998, pp 717-722.
- Bandaranayake, W.M., D.D. Tyler, A.E. Houston, M. Shiers, B.C. Bock, J.D. Joslin, F.C. Thornton, and M.D. Mullen. 1996. Vegetative cover effects on infiltration and other soil

physical parameters in a no-till loess soil. In Proceedings of the Seventh National Bioenergy Conference II:785-792. The Southern Regional Biomass Energy Program, Nashville, TN Sept. 15-20, 1996.

- Mullen, M.D., K.E. Simmons, D.D. Tyler, B.N. Duck, M.B. Daniels, G.V. Wilson, and J.K. Bernard. 1993. Water quality in no-tillage systems with no prior manure applications. In, (Patrick K. Bollich, ed.) Proceedings of the 1993 Southern Conservation Tillage Conference for Sustainable Agriculture. Monroe, Louisiana, June 15-17, 1993. Louisiana State University Agricultural Experiment Station. pp. 135-140.
- Mullen, M.D., D.D. Tyler, B.N. Duck, and G.V. Wilson. 1993. Impacts of short-term manure applications on silage yields, water quality, and soil N and P concentrations. Proceedings of the 1993 Southern Soil Fertility Conference. Memphis, TN, October 12-13, 1993. Sam Roberts Noble Foundation, Inc., Ardmore, OK. pp 9-15.
- Simmons, K.E., M.B. Daniels, M.D. Mullen, D.D. Tyler, B.N. Duck, G.V. Wilson, and J.K. Bernard. 1993. Water quality in no-tillage systems following long-term manure applications. In, (Patrick K. Bollich, ed.) Proceedings of the 1993 Southern Conservation Tillage Conference for Sustainable Agriculture. Monroe, Louisiana, June 15-17, 1993. Louisiana State University Agricultural Experiment Station. pp. 141-144.
- Mullen, M.D., and D.D. Howard. 1992. Horizontal and vertical distributions of soil C, N, P, K and pH in continuous no-tillage corn production. In, M.D. Mullen and B.N. Duck (eds.), Proceedings of the 1992 Southern Conservation Tillage Conference: Conservation Tillage for Profitable Farming and Environmental Quality. Special Publication 92-01, Tennessee Agricultural Experiment Station, Institute of Agriculture, The University of Tennessee, Knoxville. July 1992. pp. 6-10.

Research Bulletins and Reports

- Coburn, C.B., R.D. Hudgens, and M.D. Mullen. 1999. Environmental effects of engine coolant additives. In, Engine Coolants and Cooling Systems, Publication SP-1456, SAE Technical Paper Series. Society of Automotive Engineers, Warrendale PA
- Mullen, M.D., and B.N. Duck, editors. 1992. Proceedings of the 1992 Southern Conservation Tillage Conference: Conservation Tillage for Profitable Farming and Environmental Quality. Special Publication 92-01, Tennessee Agricultural Experiment Station, Institute of Agriculture, The University of Tennessee, Knoxville. 137 pp.
- Mullen, M.D., T.J. Beveridge, F.G. Ferris, D.C. Wolf, and G.W. Bailey. 1990. Sorption of heavy metals by intact microorganisms, cell walls, and clay-wall composites. Environmental Research Brief EPA/600/M-90/004, July 1990. U.S. Environmental Protection Agency, Athens, GA.
- Tyler, D.D., M.D. Mullen, and B.N. Duck. 1994. Soil management research in Tennessee. Tennessee Farm and Home Science. No. 172, Fall 1994. p. 10-13

Published Abstracts of Presentations since 2000 (see appendix for complete listing)

- Cabrera, M.L. C.W. Wood, and M.D. Mullen. 2001. Ammonia Volatilization from Field-Applied Dry Manures. Agronomy Abstracts, CD ROM. American Society of Agronomy, Madison, WI.
- Franks, L.R. and M.D. Mullen. 2000. Comparison of Phosphorus Extractants on Manured Soils Across Tennessee. Abstracts of Technical Papers, 2000 Annual Meeting of the Southern Branch of the American Society of Agronomy. 27:4.

- Kirchner, M.J., M.D. Mullen, D.D. Tyler, G.S. Saylor, D.C. White. 2000. Changes in microbial community structure over time after conversion from annual row crops to short-rotation woody crops. *Agronomy Abstracts*, p. 340.
- Kittrell, K., V.M. Bhavsar, M.D. Mullen, and E.M. D'Angelo. 2004. Descriptors of Soil Productivity in Organic Farm Systems. *Agronomy Abstracts*, CD ROM. American Society of Agronomy, Madison, WI.
- Logan, J. and M.D. Mullen. 2003. Learning Objects to Teach Soil and Environmental Sciences. *Agronomy Abstracts CD-ROM*.
- Mullen, M.D. Reflections on Eight Years as an E-Teacher. 2004. *Agronomy Abstracts CD-ROM*. American Society of Agronomy.
- Mullen, M.D. and J. Logan. 2001. Incorporation of Streaming Video Technology into Soil Biology and Biochemistry Courses. *Agronomy Abstracts CD-ROM*.
- Mullen, M.D. and J. Logan. 2001. Using Streaming Video Technology in Online and Face-to-face Agriculture and Natural Resource Courses. NACTA Annual Conference, University of Saskatchewan, Saskatoon, Saskatchewan, June 2001.
- Mullen, M.D., D.O. Ostermeier, and J.L. Pavey. 2004. Trade-offs in Agriculture and Natural Resources: An Issues Course Designed for Non-Majors. NACTA Annual Conference, University of Florida, Gainesville, FL, June 2004.
- Mullen, M.D., D.R. Tracy, J. Balogh, S. Feagley, M. Milford, J. Kleiss, and I. Fernandez. 2003. Licensure and Certification of Soil Science Professionals: Promoting the Profession. *Agronomy Abstracts CD-ROM*.
- Mullen, M., M. Williams, V. Bhavsar, L. Grabau, and M. Keating. 2006. Development of an Innovative Sustainable Agriculture Curriculum. NACTA Annual Conference, University of British Columbia, Vancouver, British Columbia, June 2006.
- Ritchey, E.L., D.D. Tyler, M.E. Essington, and M.D. Mullen. 2000. The influence of N-rate, cover crop, and tillage practices on liming in cotton. *Abstracts of Technical Papers, Southern Branch of American Society of Agronomy*, 27:4.
- Schwab, G.J. and M.D. Mullen. Monoliths Made Easy. 2004. *Agronomy Abstracts CD-ROM*. American Society of Agronomy.

INVITED PRESENTATIONS

- Incorporation of Streaming Video Technology into Soil Biology and Biochemistry Courses. S-3/A-1 Session on Teaching Innovations in Soil Microbiology, Charlotte, NC ASA Meetings, Nov. 2001
- Using Instructional Technology Resources. Invited seminar presented to the UT Graduate Teaching Assistant Seminar Series, Feb. 23, 2001. Univ. of Tennessee.
- Technology in the Soil Science Classroom: Using a Course Management System. 1999 UT Statewide Continuing Education Conference, Oct. 27, Dickson TN.
- Soil Ecology Research at UT. Presented to Dept. of Agronomy and Soils, Auburn University, February, 1999
- Integrating Information Technology in the Classroom, GTA Seminar Series, March 22, 1999. University of Tennessee, Knoxville

- Environmental Science Graduates: Where are they Employed? Dept. of Agronomy, Univ. of Arkansas, July 13, 1998.
- Information Technology: Tools for Teaching. Dept. of Agronomy, Univ. of Arkansas, July 14, 1998.

Grantsmanship

Funded Proposals – University of Kentucky (\$218,240)

- M.A. Williams, L. Grabau, V. Bhavsar, M.D. Mullen, 2005. Engaging Agricultural and Non-Agricultural Students in an Interdisciplinary Curriculum for Sustainable Agriculture. USDA Higher Education Challenge Grant, September 2005 – August 2008. \$141,274.
- M.A. Williams, M.D. Mullen, B. Rowell, V.M. Bhavsar, 2003. Transitioning to Organic Vegetable Production: Crop and Soil Quality Impacts. USDA/New Crops Opportunity Center Grant Competition. \$76,966.

Funded Proposals – University of Tennessee (\$856,300)

- M.D. Mullen and J. Logan. 2000. Development of rich content for undergraduate courses in Plant and Soil Sciences. USDA Higher Education Challenge Grant, \$81,123.
- D. Raman, M. Mullen, A. Layton, R. Burns, G. Sayler. 1999. Quantifying and minimizing 17 β -estradiol discharges from dairy and swine waste. USDA-NRI. \$215,000.
- D.D. Tyler, W. Bandaranayake, A. Houston, M. Walsh, M. Mullen, D. Joslin, and V. Tolbert. 1998. Integrating annual row crops with short rotation woody crops. USDA-NRI. \$191,488.
- Wood, C.W., M.L. Cabrera, E.A. Guertal, and M.D. Mullen. 1995. Broiler litter management in major land resource areas of the southeast: N loss and water quality. USDA-NRI. \$80,432 (UT portion).
- Mullen, M.D., B.N. Duck, J.K. Bernard, H.P. Denton, L. Johnson, K. Simmons, D.D. Tyler. 1992. Utilization of dairy manure in low-input, conservation tillage animal feed production systems. Submitted to the Southern Region Sustainable Agriculture Research and Education/Agriculture in Concert with the Environment Program. \$90,635.
- Mullen, M.D., K.E. Simmons, D.D. Tyler, B.N. Duck, D.C. Yoder, M.B. Daniels, and G.V. Wilson. 1992. Impacts of dairy manure on surface and subsurface water quality. USDA-CSRS Special Grants-Water Quality Program. \$149,592.
- Mullen, M.D. 1992. Mineralization of N and P from Animal wastes and comparative impacts of animal wastes and commercial fertilizers on water quality in conservation tillage systems. Tennessee Water Resources Research Center. \$14,010.
- Mullen, M.D., K. Simmons, D. Tyler, G. Wilson, J. Bernard, M. Daniels, W. Bennett. Effect of dairy manure application in silage production systems on subsurface water quality. Cooperative Research Agreement between Univ. of Tennessee and TVA, May 1, 1992 through April 30, 1995. For research conducted at Dairy Experiment Station, Lewisburg. \$23,000.
- Mullen, M.D., and K. Simmons. 1992. Impact of dairy manure on water quality in no-tillage systems. Cooperative Research Agreement between Univ. of Tennessee and TVA, March 1, 1992 through February 28, 1993. \$10,000.

- Mullen, M.D. 1992. Impact of dairy manure on water quality in no-tillage systems. Submitted to the University of Tennessee at Martin Office of Faculty Research and Development, Faculty Research Grant Competition. Requested \$1020 and was awarded \$1020.

Recent Unfunded Grant Proposals

- Mullen, M.D., C. Hanley, D. Hildebrand. 2005. Addressing Kentucky's Critical Technologies: Integrating Biotechnology into the P-12 Education System. Submitted to US Dept of Education – FIPSE. Requested \$464,487. Highly rated, but not funded because competition cancelled after review due to insufficient funds.
- Mullen, M.D., M.A. Williams, V. Bhavsar. 2004. Effects of horse manure compost and no-tillage on productivity and soil quality in organic vegetable rotations. USDA-Sustainable Agriculture Research and Education program. Requested \$216,004.
- Williams, M.A., M.D. Mullen, V. Bhavsar, B. Rowell. 2003. Weed Management and Soil Quality in Transitions from Fallow to Organic Vegetable Production. USDA Organic Transitions Program. Requested \$318,493.

SERVICE TO THE UNIVERSITY

University of Kentucky

University Committees:

- *Ad Hoc* Committee on University Writing Requirements, 2004 – 2005
- Chellgren Endowed Chair Search Committee, Spring 2005 - present
- University Honors Program Committee, 2004 - 2005
- Undergraduate Council, 2003 – 2004
- Tracy Farmer Center for the Environment Steering Committee, 2002 – July, 2004

College of Agriculture Activities and Committees:

- Equine Initiative committee, 2005 – Present
- Equine Initiative Education Subcommittee Chair, 2005 - present
- Food Systems Innovation Center coordinating committee, 2005 - present
- Chair of College Undergraduate Curriculum Committee, 2004 - present
- Co-Chair of College Graduate Curriculum Committee, 2004 - present
- NRCM BS Degree Steering Committee, 2002 – present
- Director of Undergraduate Studies for NRCM program, Spring 2004

Department of Agronomy Committees:

- Graduate Seminar Committee - Chair, 2003-2004
- Soil Science Curriculum Committee, Sept 2002 – May 2004

University of Tennessee, Knoxville

University Activities and Committees:

- Advising Committee, 1999 – 2001

- Undergraduate Council, 1999 - 2002
- Teaching and Learning with Technology Roundtable, 1999 - 2002 - *CHAIR 2001-02*. Campus-wide group of faculty, staff and administrators examining information technology in the classroom and serving to recommend “Good Practices” in teaching with technology.
- Graduate Teaching Seminars - presented sessions on lab teaching in 1996, 1997. Panelist for discussion of teaching excellence, 1998. Invited speaker on use of Information Technology in the classroom, 1999-2001.
- Center for Undergraduate Excellence, 1997-2002. Served as resource person for teaching activities across campus.
- College of Arts and Sciences Environmental Studies Advisory Board, 1998 - 2002
- Advisory committee for Course Management System Acquisition, Fall 1998.
- Natural Sciences Curriculum Committee, 1997 - 2002
- General Education Reform Committee, 1997- 1998
- Faculty Counselor to President Johnson, 1996 - 1998

Institute of Agriculture Committees:

- UTIA Administrative Council, 1999 - 2000
- UTIA Information Technology Task Force, 1998 - 2001

College of Agricultural Sciences and Natural Resources Committees:

- CASNR Information Technology Task Force, 1999 - 2000
- CASNR Undergraduate Council, 1998 - 2001
- Student/Faculty Development Committee, 1998 - 1999
- College World Wide Web Committee, 1997 - 1998
- Systems Improvement Committee for Recruiting, 1993-94
- Committee to develop new course for Environmental Studies BA in College of Arts and Sciences, 1994

Agricultural Experiment Station Committees:

- Task Force on the Martin Agricultural Experiment Station Renovation, 1993-96

Department of Biosystems Engineering and Environmental Science Committees:

- Chair, Environmental Science Curriculum Development Committee, 2001-02
- Environmental and Soil Science Student Activities Committee Chair, 2001 - 02

Department of Plant and Soil Science Committees:

- Administrative Council, Sept. 2000 - June 2001
- Student Activities Committee Chair, 1993-96 and 1999 - 2001
- Curriculum Committee, 1992-present, Chair, 1997 - 2001
- Academic Program Review Committee, Soil Science Section Chair
- Awards Committee, 1997 - 1999
- Search committee: Plant and Soil Science Dep. Chair search, 1995
- Chair, ESNR program sub-committee, 1993-96
- Equipment Committee, 1990-93

- Computer Committee, 1991, 1993-2001 (Chair for 1994-97)
- International Committee, 1990-2001
- Graduate Seminar Committee, 1995 - 2001
- Five search committees for faculty positions
- Chaired three search committees for Research Associate positions

University of Tennessee, Martin

University Committees:

- Library Committee, 1989-1993
- Task Force on Library Relocation, 1992-93
- Administrative Committee on Committees, 1992-3
- Faculty Research and Development Committee, 1990-1992
- Teaching Effectiveness Center Advisory Committee, 1990-92

School of Agriculture and Home Economics Committees:

- Co-Chair, Awards Banquet Committee, 1992-93
- Recruitment and Retention Committee, 1989-91 (Chair in 1991)

Department of Agriculture and Natural Resources Committees:

- Chair, Departmental Self-study: Support Evaluation Sub-committee
- Departmental Self-study: Academic Program Review Sub-committee
- Curriculum Committee

PROFESSIONAL AND HONORARY MEMBERSHIPS

- American Society of Agronomy
- Gamma Sigma Delta
- National Association of State Universities and Land-Grant Colleges
- North American Colleges and Teachers of Agriculture
- Sigma Xi
- Soil Science Society of America
- Southern Branch of the American Society of Agronomy

SERVICE TO THE PROFESSION

Offices and Committees in Professional Groups and Organizations

American Society of Agronomy

- Board of Directors representing Resident Education Division, 1998-2001
- Program Chair, Resident Education (Div. A-1), for 1999 Annual Meeting of ASA

- Agronomic Education Award Selection Committee, 1999-2002.
- National Membership Committee (ASC 233), 1997-2000.
- Student Manuscript Contest Committee (A449.2), ASA 1997-1999

Soil Science Society of America

- Chair, Council of Soil Science Examiners, 2005 - 2008
- Vice-Chair, Council of Soil Science Examiners, 2003 - 2005
- Council of Soil Science Examiners, 1996-present
- Committee S584, Soil Science Visibility and Identity Committee, 1999-2003
- Committee S579 (Proficiencies for Soil Science Graduates). 1994-96

Southern Branch of the American Society of Agronomy

- Past-President, 2004-2005
- President, 2002 - 2004
- Vice-President, 2001
- Program Chair, 2000
- Secretary-Treasurer, 1999

National Association of State Universities and Land-Grant Colleges – Board on Agriculture

- Southern Region representative to the Academic Committee on Organization and Programs (ACOP) for the Academic Programs Section, 2004 - Present
- Chair, Southern Academic Programs Section, 2005 – 2006
- Chair-elect, Southern Academic Programs Section, 2004 – 2005
- CREATE-21 (Creating Research, Extension and Teaching Excellence for the 21st Century) Representative for ACOP, November 2005 – present
- USDA Teaching Excellence Awards Selection Committee, 2005

North American Colleges and Teachers of Agriculture

- Eastern Region Director, 2004-2007
- Eastern Region Director-elect, 2003
- Manuscript Review Board, 2001-present
- Journal Award Committee, 1999-2004t
- Teaching Innovations Committee, 2000-present

Other Activities

- Chair, Technical Committee, USDA Regional Research Project S-262. 1995
- Secretary, USDA Southern Region Research Project S226, 1991-1994
- Reporter for UTM Chapter of Phi Kappa Phi, 1992-93

Editorial Activities

- Manuscript Review Board, NACTA Journal, North American Colleges and Teachers of Agriculture, 2001 to present
- Special Associate Editor for Journal of Environmental Quality, 2003
- Associate Editor for Journal of Natural Resources and Life Science Education, 1996-1999

- Associate Editor for Agronomy Journal, 1998 - 1999
- USDA-NRI Watershed Processes Grant Review Panel Member, May 2000
- Invited Reviewer for Agronomy Journal, Environmental Science and Technology, Journal of Environmental Quality, Journal of Natural Resources and Life Science Education, NACTA Journal, Soil Science Society of America Journal, Soil Science
- Grant Reviewer for: USDA-National Research Initiative Competitive Grants Program, USDA-CSRS Special Grants Program in Water Quality; USDA-Sustainable Agriculture Research and Education Grant Program

INTERNATIONAL ACTIVITIES

- *Thailand*, December 2005. Official visit to Maejo University in Chiang Mai to discuss opportunities for student and faculty activities.
- *France*, May 2005. Accompanied eight University of Kentucky students on trip to France to study agriculture of the Burgundy Region.
- *France*, May 2004. Accompanied five University of Kentucky students on trip to France to study agriculture of the Burgundy Region.
- *Mexico*, August 9-19, 2001. Accompanied 12 University of Tennessee students on a tour of agriculture, food processing and marketing in central Mexico as part of an exchange program with Monterrey Institute of Technology, Querétaro, Mexico.
- *Thailand*, June 1 to June 29, 2000. Accompanied two other faculty and 10 students from the University of Tennessee College of Agricultural Sciences and Natural Resources on a 28-day study tour of agriculture, natural resources, and culture of Thailand.
- *Guatemala*, June 1 to June 15, 1995. Travel to the Peten region of Guatemala to collect soil samples for research project. Final evaluation of landscapes and geomorphology for project started in June 1994.
- *Thailand*, October 13 to November 4, 1994. Visited Thailand as guest of Kasetsart University in Bangkok with six other professors from UT Institute of Agriculture. Tour of agriculture and natural resources in the northeast and north of Thailand.
- *Guatemala*, June 3 to June 18, 1994. Travel to the Peten region of Guatemala to collect soil samples for research project. Characterization and evaluation of soil resources in the Peten.
- *Ecuador*, June 30 to July 16, 1991. Visited with farmers and educators in Ecuador to explore the potential for establishing linkages for both educational and research purposes. Conducted informational presentations with other professors concerning agricultural problems.
- *Guatemala*, June 9 to June 19, 1990. Observational tour to become familiar with Guatemalan agricultural practices and problems. Visited farms, agri-businesses, and the Agricultural Science Faculty at Rafael Landivar University.

PUBLIC SERVICE

- President, Lexington Sunrise Toastmasters, July 2006-present
- Vice-President for Education, Lexington Sunrise Toastmasters, July 2005-Jun 2006
- Board of Directors, American Youth Soccer Organization, Knox County, TN 1996-99

- Coach, Knoxville AYSO Soccer, Fall 1994 to 2001
- Regional Referee, Knoxville AYSO Soccer, Spring 1995 to 2001
- Judge for State 4-H Round-Up 1992 - 94, 1996-98
- Judge, Weakley County TN High School Science Fair, Feb. 1990 and 1991
- Judge, Farm Bureau Collegiate Debate Contest, April 10, 1990, UT-Martin
- Host and Judge, State FFA/4H Land Judging Contest, April 2, 1990
- Judge, Weakley County High School Science Fair, Feb. 7, 1990

APPENDIX – ABSTRACTS 1986-1999

- Gehl, R.J., D.D. Tyler, H.P. Denton, J.B. Wilkerson, M.D. Mullen, and A.M. Saxton. 1999. Soil resource evaluation using precision farming techniques for selected sites in Tennessee. *Agronomy Abstracts*, p. 290.
- Kirchner, M.J., M.D. Mullen, D.D. Tyler, G.S. Sayler, D.C. White. 1999. A comparison of methods of measuring soil microbial biomass. *Abstracts of Technical Papers, 1999 Annual Meeting of the Southern Branch of the American Society of Agronomy*. Memphis, TN.
- Phillips, D.H. and M.D. Mullen. 1999. Teaching basic concepts of soil biota using soil micromorphology. *Agronomy Abstracts*, p. 4.
- Gilfillen, R.A., M.D. Mullen, and R.A. Straw. 1998. Microbial properties of vegetables and soils after application of municipal biosolids. *Abstracts of Technical Papers, 1998 Annual Meeting of the Southern Branch of the American Society of Agronomy*. Little Rock, AR.
- Hardison, G.B., W. Bandaranayake, D. Tyler, M. Mullen, B. Bock, J.D. Joslin, F.C. Thornton, H. Fribourg, and G.R. Wells. 1998. Soil physical properties as influenced by short rotation woody crop production. *Abstracts of Technical Papers, 1998 Annual Meeting of the Southern Branch of the American Society of Agronomy*. Little Rock, AR.
- Kirchner, M.J., M.D. Mullen, J.D. Joslin, D.D. Tyler, G.S. Sayler, D.C. White. 1998. Influence of short-rotation woody crops on soil microbial community structure. *Agronomy Abstracts*, p. 290.
- Kirchner, M.J., M.D. Mullen, D.D. Tyler, J.D. Joslin and D.C. White. 1998. Changes in soil microbial community structure resulting from conversion from annual row crops to short-rotation woody crop production. *Abstracts of Technical Papers, 1998 Annual Meeting of the Southern Branch of the American Society of Agronomy*. Little Rock, AR.
- Marshall, S.B., C.W. Wood, M.L. Cabrera, E.A. Guertal, M.D. Mullen. 1998. Non-gaseous pathways for nitrogen flux following amendment of fescue pastures with broiler litter.
- Marshall, S.B., C.W. Wood, M.L. Cabrera, M.D. Mullen, and E.A. Guertal. 1998. Nitrogen budget for fescue pastures fertilized with broiler litter. *Agronomy Abstracts*, p. 30.
- Mullen, M.D., G.B. Hardison, D.D. Tyler, and P.M. Gale. 1998. Phosphorus dynamics in manured soils. *Agronomy Abstracts*, p. 222.
- Ritchey, E.L., D.D. Tyler, M.E. Essington, and M.D. Mullen. 1998. Cover crops and tillage effects on liming in cotton. *Abstracts of Technical Papers, Southern Branch of American Society of Agronomy*, p. 4.
- Tyler, D.D., E.L. Ritchie, M.E. Essington, and M.D. Mullen. 1998. No-tillage and cover crop effects on soil acidity and liming. *Agronomy Abstracts*, p. 281.
- Bandaranayake, W.M., D.D. Tyler, A.E. Houston, M.D. Mullen, F.C. Thornton, J.D. Joslin, and B.R. Bock. 1997. Hydrologic water balance evaluations under corn and sycamore. *Agronomy Abstracts*, p. 268.
- Gilfillen, R.A., M.D. Mullen, R.A. Straw, N.S. Eash, and C.A. Mullins. 1997. Yield response of tomatoes and snap beans from application of municipal biosolids. *Abstracts of Technical Papers, 1997 Annual Meeting of the Southern Branch of the American Society of Agronomy*. Birmingham, AL, February 2-5, 1997. p. 7.

- Gilfillen, R.A., M.D. Mullen, R.A. Straw, D.S. Walker, N.S. Eash, G.V. Wilson, and G.B. Hardison. 1997. Leachate quality after application of municipal biosolids. *Agronomy Abstracts*, p. 35.
- Lessman, G.M., J.H. Reynolds, and M.D. Mullen. Environmental science graduates: Where are they employed? 1997. *Agronomy Abstracts*, p. 3.
- Marshall, S.B., C.W. Wood, M.L. Cabrera, E.A. Guertal, and M.D. Mullen. 1997. Abstracts of Technical Papers, 1997 Annual Meeting of the Southern Branch of the American Society of Agronomy. Birmingham, AL, February 2-5, 1997. p. 8.
- Peacock, A, J. Carley, M.D. Mullen, D. Ringelberg, and D.C. White. 1997. Characterization of microbial biomass and community structure in manure amended soils. Abstracts of Technical Papers, 1997 Annual Meeting of the Southern Branch of the American Society of Agronomy. Birmingham, AL, February 2-5, 1997. p. 15
- Gilfillen, R.A., M.D. Mullen, and G.L. Lessman. 1996. Performance in introductory soil science lecture as affected by laboratory instruction. *Agronomy Abstracts*, p. 5
- Marshall, S.B., C.W. Wood, M.L. Cabrera, E.A. Guertal, and M.D. Mullen. 1996. Ammonia volatilization from fescue pastures fertilized with broiler litter. *Agronomy Abstracts*, p. 34.
- Bandaranayake, W.M., D.D. Tyler, A.E. Houston, M. Shiers, B.C. Bock, J.D. Joslin, F.C. Thornton, and M.D. Mullen. 1996. Vegetative cover effects on infiltration and other soil physical parameters in a no-till loess soil. The Seventh National Bioenergy Conference. Nashville, TN Sept. 15-20, 1996.
- Bandaranayake, W.M., D.D. Tyler, G.V. Wilson, A.E. Houston, M.D. Mullen, J.D. Joslin, B.C. Bock, and F.C. Thornton. 1996. Soil hydraulic properties after twelve years of sycamore. *Agronomy Abstracts*, p. 303.
- Gale, P.M., M.D. Mullen, B.N. Duck, C. Cieslik. 1996. Phosphorus distribution in response to dairy manure applications. *Agronomy Abstracts*, p. 287.
- Kirchner, M.J., M.D. Mullen, D.D. Tyler, B.N. Duck, P.M. Gale, G.V. Wilson, and D.C. Yoder, 1996. Impacts of Manure Applications in Silage Corn on Leachate and Runoff Water Quality. *Agronomy Abstracts*, p. 287.
- Tyler, D.D., N.J. Storck, J.T. Ammons, M.D. Mullen, H.P. Denton, and G.V. Wilson. 1996. *Agronomy Abstracts*, p. 288.
- Bock, B.R., J.D. Joslin, F.C. Thornton, D.E. Pettry, S.H. Shoenholtz, D.D. Tyler, M.D. Mullen, A. Houston, and T.H. Green. 1995. Changes in soil chemical, physical, and biological properties resulting from conversion of cropland to woody bioenergy crops. *Agronomy Abstracts*, p. 306.
- Brinker, E.J., B.N. Duck, M.J. Kirchner, J.D. McClure, M.D. Mullen, and D.D Tyler. 1995. Effects of differential rates of manure application on available nutrients and corn silage yields. *Agronomy Abstracts*, p. 323.
- Cabrera, M.L., M.D. Mullen, E.A. Guertal, and C.W. Wood. 1995. Denitrification losses from pastures fertilized with poultry litter. *Agronomy Abstracts*, p. 353.
- Donado, L.C., J.T. Ammons, J.L. Branson, E.J. Brinker, J.E. Foss, and M.D. Mullen. 1995. Characteristics of selected soil profiles in the Peten region of Guatemala. *Agronomy Abstracts*, p. 281.
- Logan, J. and M.D. Mullen. 1995. Using the Internet as a multimedia tool in the classroom: Applications for agriculture. *Agronomy Abstracts*, p. 4.

- Mayfield, M.D., M.D. Mullen, and D.D. Tyler. 1995. Biological properties in soil receiving different rates of dairy manure. *Agronomy Abstracts*, p. 248.
- Melhorn, C.G., M.D. Mullen, and D.D. Tyler. 1995. Cover crop effects on soil biological properties. *Abstracts of Technical Papers, 1995 Annual Meeting of the Southern Branch of American Society of Agronomy*. New Orleans, LA Jan. 30-Feb. 1, 1995. Volume 22, p. 12.
- Wood, C.W., M.L. Cabrera, M.D. Mullen, and E.A. Guertal. 1995. Field measurement of NH₃ volatilization over land-applied poultry litter. 1995. *Agronomy Abstracts*, p. 341.
- Allen, F.L., M.E. Essington, J.E. Foss, D.L. Coffey, M.D. Mullen, and G.M. Lessman. 1994. A holistic approach to curriculum revision. *Agronomy Abstracts*, p. 6.
- Melhorn, C.G., M.D. Mullen, and D.D. Tyler. 1994. Biological properties under different cover crops in no-till corn. *Agronomy Abstracts*, p. 284.
- Mullen, M.D., K.E. Rylant, B.N. Duck, D.D. Tyler, M.B. Daniels, and G.V. Wilson. 1994. Dairy Manure management in no-till silage corn and grass forage systems. *Abstracts of Technical Papers, 1994 Annual Meeting of the Southern Branch of American Society of Agronomy*. Nashville, TN Feb. 7-9, 1994. Volume 21, p. 15
- Mullen, M.D., D.C. Wolf, T.J. Beveridge, and G.W. Bailey. 1994. Removal of heavy metals from aqueous solution by intact microbial cells and cell walls. *Abstracts of the Annual Meeting of the Society for Industrial Microbiology*. Boston, MA, July 31-August 5, 1994. p. 93.
- Mullen, M.D., D.D. Tyler, B.N. Duck, and G.V. Wilson. 1993. Impacts of short-term manure applications on water quality under no-till silage corn. *Agronomy Abstracts*, p. 323.
- Bernard, J.K., M.D. Mullen, B.R. Hathcock, R.A. Smith, J.L. Byford, L.W. Keisling, R.M. Thomsen, and E.W. Counce. 1992. Dairy production in Ecuador: Problems and opportunities. *J. Dairy Sci.* 75(Suppl. 1):303.
- Howard, D.D., M.D. Mullen, and M.A. Revelle. 1992. Inhibition of urea hydrolysis by N-(n-butyl) thiophosphoric triamide. *Agronomy Abstracts*, p. 259.
- Mullen, M.D., B.N. Duck, D.D. Tyler, G.V. Wilson, and J.K. Bernard. 1992. Water quality and no-till silage corn production as affected by dairy manure. *Agronomy Abstracts*, p. 333.
- Mullen, M.D., and M.A. Revelle. 1992. Inhibition of urea hydrolysis and ammonia volatilization by the urease inhibitor N-(n-butyl) thiophosphoric triamide. *Abstracts of Technical Papers, 1992 Annual Meeting of the Southern Branch of American Society of Agronomy*. Volume 19, p. 19.
- Mullen, M.D., D.D. Howard, and J.M. McClure. 1991. Effect of N-(n-butyl)thiophosphoric triamide on urea hydrolysis in high residue soil systems. *Agronomy Abstracts*, p. 362.
- Wagner, S.C., and M.D. Mullen. 1991. Growth and survival of a genetically altered pseudomonad in rhizosphere and bulk soils. *Agronomy Abstracts*, p. 280.
- Mullen, M.D., B.N. Duck, B.H. Hathcock, and J.K. Bernard. 1990. Internationalizing the agricultural curriculum: Faculty development. *Agronomy Abstracts*, p. 6.
- Mullen, M.D., F.G. Ferris, C. Flemming, and D.C. Wolf. 1989. Differential sorption of four metals by *Bacillus cereus*. *Amer. Soc. Microbiol. Abstracts*, p. 360.
- Mullen, M.D., and D.C. Wolf. 1989. Biosorption of cadmium and copper by soil fungi. *Agronomy Abstracts*, p. 223.
- Mullen, M.D., and D.C. Wolf. 1988. Sorption of heavy metals from aqueous solution by representative soil bacteria. *Agronomy Abstracts*, p. 43.
- Mullen, M.D., and D.C. Wolf. 1988. Effects of temperature, growth medium pH, and matrix cation on adsorption of cadmium by *Bacillus cereus*. *Amer. Soc. Microbiol. Abstracts*, p. 311.

- Mullen, M.D., and A.G. Wollum II. 1987. Effect of Bradyrhizobium japonicum phosphorus nutrition on nodulation competition. Agronomy Abstracts, p. 188.
- Mullen, M.D., and A.G. Wollum II. 1987. Effect of Bradyrhizobium japonicum phosphorus nutrition on soybean plant parameters. Amer. Soc. Microbiol. Abstracts, p. 255.
- Mullen, M.D., and A.G. Wollum II. 1986. Variation amongst laboratory cultures of Bradyrhizobium japonicum strains USDA 110 and 122. Agronomy Abstracts, p. 185.