

OKLAHOMA STATE UNIVERISTY, Stillwater, Oklahoma

Department of Plant & Soil Sciences

Senior Agriculturalist, July, 2008 – May, 2009

- Responsibilities
 - Personnel Management
 - Coordinate collaborative research efforts
 - 11 graduate students
 - M. Cody Daft, Birehane K. Desta, Matthew D. Edmonds, Brandon B. England, Yumiko Kanke, Jonathan P. Kelly, Jerry L. May, Emily J. Ruto, Guilherme Torres, Jacob P. Vossenkemper, Olga S. Walsh
 - 5 undergraduate students
 - Scott N. Clark, Jared L. Crain, Jonathan P. Kelly, Chester Nobles, Nick R. Rinderer
 - Research Fieldwork
 - Oversaw approximately 75 research trials at 9 locations throughout Oklahoma per year
 - Altus, Chickasha, EFAW, Haskell, Hennessey, Lahoma, Lake Carl Blackwell, Perkins, Stillwater
 - 5 Agronomic Crops
 - Corn, Cotton, Grain Sorghum, Soybeans, Winter Wheat
 - Focus of Research
 - Nitrogen Management
 - Improvement of Nitrogen Use Efficiency
 - By-plant nitrogen fertilization
 - Foliar Phosphorus applications
 - Variable Rate Technologies
 - Evaluation of alternative fertilizer products
 - Sensor-based fertilizer recommendation technologies
 - Development of mid-season nitrogen rate recommendation algorithms
 - Yield potential predictions
 - Collaborative work with 13 research scientists
 - Sample Processing Preparation
 - Approximately 1750 samples per year
 - Extension
- Maintained and Operated Experimental Equipment
 - Full Scale Variable Rate Nitrogen Applicators
 - GreenSeeker™ Active Handheld Sensors
 - Photo-Spectrometer
 - SPAD Chlorophyll Meter
 - Giddings Hydraulic Soil Probe
 - 4-Band Active Handheld Sensor
- Proficiency in Multiple Software Programs
 - SAS
 - N-Tech NCapture
 - N-Ramp Mobile Analysis
 - Microsoft Access, FrontPage, Excel, Word, PowerPoint
 - ArcGIS
- Maintain and Operate Farm Machinery
 - Experimental Plot Combine
 - Tractors and Field Implements
 - Fertilizer / Pesticide Application Equipment
- Soil sampling and processing
- Biomass collection and processing

- Data collection and processing
- Plot Plan Book Compilation
 - Summer 2008 Crops Plot Plan Book
 - Winter 2008-2009 Crop Plot Plan Book
 - Summer 2009 Crops Plot Plan Book

OKLAHOMA STATE UNIVERISTY, Stillwater, Oklahoma
 Department of Plant & Soil Sciences

Graduate Research Assistant, January, 2007 – July, 2008

Master of Science, January, 2007 – May, 2008

Doctorate of Philosophy, June, 2008 – July, 2008

- Responsibilities
 - Research Fieldwork
 - Sample Processing
 - Extension
- Maintained and Operated Experimental Equipment
 - Full Scale Variable Rate Nitrogen Applicators
 - GreenSeeker™ Active Handheld Sensors
 - Photo-Spectrometer
 - SPAD Chlorophyll Meter
 - Giddings Hydraulic Soil Probe
 - 4-Band Active Handheld Sensor
- Proficiency in Multiple Software Programs
 - SAS
 - N-Tech NCapture
 - N-Ramp Mobile Analysis
 - Microsoft FrontPage, Excel, Word, PowerPoint
 - ArcGIS
- Maintain and Operate Farm Machinery
 - Experimental Plot Combine
 - Tractors and Field Implements
 - Fertilizer / Pesticide Application Equipment
- Soil sampling and processing
- Biomass collection and processing
- Data collection and processing
- Plot Plan Book Compilation
 - Summer 2007 Crops Plot Plan Book
 - Winter 2007-2008 Crop Plot Plan Book

C.V. LEDBETTER AND SON, INC., Okmulgee, Oklahoma

Agricultural Machinery Operator, March, 2004 – Present

- Operated, maintained, and repaired tractors and equipment
- Tractor-trailer driver, grain handling and hauling
- Cultivated corn, wheat, and soybean fields
- Fed, vaccinated cattle

UNITED STATES HOUSE of REPRESENTATIVES, Washington, DC

Agriculture Policy Intern, June 5, 2006 – July 14, 2006

- Frank D. Lucas Scholar
- Congressional intern of U.S. Representative Frank D. Lucas
- Legislative Assistant
- Tour guide for guided tours of the U.S. Capitol Building
- Fielded constituent calls and sorted mail
- Attended U.S. Congressional Intern Lecture Series
- Attended U.S. Representative Dan Boren Lecture Series

OKLAHOMA STATE SENATE & HOUSE of REPRESENTATIVES, Oklahoma City, Oklahoma
Agriculture Legislative Intern, February 2, 2006 – May 26, 2006

- Executive Assistant to Senator Daisy Lawler
- Legislative Assistant to Representative Dale DeWitt
- Field constituent calls and respond to letters, emails, survey compilation
- Liaison for Oklahoma State University & Division of Agricultural Sciences and Natural Resources

DIXON FARMS, Okmulgee, Oklahoma

Agricultural Machinery Operator, October, 1998 – August, 2005

- Operated, maintained, and repaired tractors and equipment
- Cultivated wheat, corn, peanut, and soybean fields
- Fed, vaccinated cattle
- Oil and natural gas well maintenance
- Grain truck driver, grain handling and transporting

KING'S LONE TREE FEEDS, Morris, Oklahoma

Customer Sales Representative, March, 2001 – May, 2004

- Weigh master; Feed ration mixtures
- Product ordering and inventorying, promotion sales/displays
- Customer relations/phone inquiries

THE 12 STAR, Morris, Oklahoma

Farm Hand / Partner, ??? – Present

- Family Farming/Ranching Operation

SKILLS:

Class A Commercial Driver's License Permit (Combination, Airbrakes, Passenger)
Computer knowledge in N-Tech N-Capture, Microsoft Word, Works, Excel, Power Point, Front Page, ArcGIS (ArcMap, ArcCatalog, ArcViewer); Prepared Public Speaking; Speech Writing; Database Compilation; Soil sampling, Certified Applicator (Agricultural Plant, Research & Demonstration), Abstract Writing

ACTIVITIES:

MORRIS FFA ALUMNI COUNCIL, Morris, Oklahoma

- Council President, July, 2004 – July, 2005
- Founding Coordinator and member, June 2004

MORRIS PUBLIC SCHOOLS, Morris, Oklahoma

- United Way Campaign Student Coordinator, Fall 2001

MORRIS FFA CHAPTER, Morris, Oklahoma

- President, May 2001-May 2002
- Reporter, May 1999-May 2001
- Washington Leadership Conference, Washington D.C., June 2001
 - Master of Ceremonies
- Youth Leadership Conference, Liberty, Missouri, May 2001
 - Cooperative Chairman and General Manager
- Land Judging Career Development Event Team, Spring 1999-Spring 2000
 - National Southwestern Regional Champions, 5th Overall, May 2000
- Prepared Public Speaking Career Development Event, Spring 2001-Spring 2002
 - State Finalist, 4th Place, Agriculture Business Division
 - Northeast District of Oklahoma Champion-Agriculture Business Division
- Chapter Officer Leadership Training (COLT), September 1999-September 2001
- Advanced Leadership Development (ALD), December 2001

MORRIS NATIONAL HONOR SOCIETY CHAPTER, Morris, Oklahoma

- Secretary, May 2001-May 2002

PROFESSIONAL ACTIVITIES:

AMERICAN SOCIETY OF AGRONOMY, SOIL SCIENCE SOCIETY OF AMERICA, CROP SCIENCE SOCIETY OF AMERICA

Member, August 2003 – Present

- Member, Graduate Student Sub-Committee of the Membership Committee, November 2007- November 2008
- ASA, CSSA, SSSA Annual Meetings, New Orleans, LA, November 2007
 - Oral Presentation: “Extension and Analysis of the Ramp Calibration Strip Fertilization Strategy”
- ASA, CSSA, SSSA Annual Meetings, Houston, TX, October 2008
 - Oral Presentation: “Estimating Nitrogen Use Efficiency (NUE) with the Ramp Calibration Strip Fertilization Strategy and an Update of Oklahoma’s Extension Program”
- ASA, CSSA, SSSA Annual Meetings, Pittsburgh, PA, November 2009
 - Oral Presentation: “Grain Yield Response to By-Plant Nitrogen Fertilization”

NITROGEN USE EFFICIENCY GROUP

Participant, July 2007 – Present

- 2007 NUE Conference; Monmouth, Illinois
- 2008 NUE Conference; Manhattan, Kansas
 - Poster Presentation: “2008 N-Rich Strip and Ramp Update”
- 2009 NUE Conference; West Lafayette, Indiana

OTHER PROFESSIONAL ACTIVITIES

1. Oklahoma Fertilizer Check-Off Board Meeting. Stillwater, OK, May, 2006.
2. Sensor Based Nitrogen Management In-Service Training. Stillwater, OK, January 18-19, 2007.
3. Oklahoma Fertilizer Check-Off Board Meeting. Stillwater, OK, May, 2007.
4. Lahoma Field Day Tour. Lahoma, OK, May, 2007.
5. Oklahoma Fertilizer Check-off Board Meeting and Annual Report. Stillwater, OK, December 18, 2007.
6. Certified Crop Advisor Training Workshop. Stillwater, OK, January 3, 2008.
7. Sensors for Crop Management Conference. Stillwater, OK, January 17, 2008.
8. Oklahoma Fertilizer Check-Off Board Meeting. Stillwater, OK, May, 2008.
9. Sensors for Crop Management Conference. Stillwater, OK, December 16, 2008.
10. Oklahoma Fertilizer Check-off Board Meeting and Annual Report. Stillwater, OK, December 17, 2008.
11. Oklahoma Fertilizer Check-Off Board Meeting. Stillwater, OK. May 22, 2009.
12. Get Motivated Seminar. Norman, OK, June 30, 2009.
 - Speakers included: Laura Bush, Rudy Giuliani, Zig Ziglar, General Colin Powell, Tamara Lowe, Steve Forbes, James Smith, Dr. Robert Schuller, and Bob Stoops

CAMPUS ACTIVITIES:

OKLAHOMA STATE UNIVERSITY AGRONOMY CLUB

Member, August 2003 – May 2007

FARM CREDIT SERVICES OF EAST CENTRAL OKLAHOMA STUDENT BOARD OF DIRECTORS

Student Director, August 2004 – May 2005

- Case Study: Office Locations of FCSECO and the appropriate location for a new office.
- Presented to FCSECO Board of Directors, May 2005

AMERICAN SOCIETY OF AGRICULTURE ENGINEERS (ASAE)

Member- Fall 2002 – December 2004

- Southern Regional Student Branch Vice President, 2003-2004
- Oklahoma State University Student Branch Parliamentarian, 2003-2004
- ASAE International Meeting, Las Vegas, Nevada, July 2003
- Cowboy Motorsports, Oklahoma State University's ¼ Scale Tractor Team
 - Co-Chairman of sponsorships, August 2002 – May 2003
- Fountain Wars, Oklahoma State University's Water Fountain Design Team
 - Participant, August 2002 - May 2003

PUBLICATIONS:

Journal Publications

1. **Edmonds, D.E.**, M.C. Daft, W.R. Raun, J.B. Solie, R.K. Taylor. 2008. Determining mid-season nitrogen rates with ramp calibration strip technology. *Better Crops* 92(1):16-17.
2. Raun, W.R., J. Solie, R.K. Taylor, D.B. Arnall, C.J. Mack, **D.E. Edmonds**. 2008. Ramp Calibration Strip technologies for determining midseason nitrogen rates in corn and wheat. *Agron. J.* 100:1088-1093.
3. Holtz, S., Girma, K., Tubaña, B., Arnall, D., **Edmonds, D.**, Kanke, Y., Solie, J., Raun, W. 2008. Aboveground nitrogen accumulation as a function of time in corn and winter wheat. *J. Plant Nutr.* [In press]
4. Dotson, C.R., M.C. Daft, D.B. Arnall, O.S. Walsh, **D.E. Edmonds**, B.B. England, and W.R. Raun. 2008. Effect of nitrogen fertilizer rate and placement on maize grain yield. *J. Plant Nutr.* [In press]
5. **Edmonds, Daniel E.**, Silvano L. Abreu, Heidi West, Donna R. Caasi, Travis O. Conley, Michael C. Daft, Birehane Desta, Brandon B. England, Chelsea D. Farris, Tia J. Nobles, Nehaben K. Patel, Elliott W. Rounds, Brennan H. Sanders, Samar S. Shawaqfeh, and W.R. Raun. 2008. Cereal nitrogen use efficiency in Sub Saharan Africa. *J. Plant Nutr.* [In press]
6. Walsh, Olga, Yumiko Kanke, **D.E. Edmonds**, and W.R. Raun. 2009. Improving mid-season nitrogen recommendations for winter wheat using soil moisture data. *Better Crops* 93(1):4-5.
7. **Edmonds, D.E.**, B.S. Tubaña, J.P. Kelly, J.L. Crain, M.D. Edmonds, R.K. Taylor, J.B. Solie, and W.R. Raun. 2009. Maize grain yield response to variable row nitrogen fertilization. *J. Plant Nutr.* [In review]

Extension Publications

1. Arnall, Brian, **Daniel Edmonds**, Randy Taylor, Hailin Zhang, and Bill Raun. 2008. Alternative Production Inputs for Wheat and Corn Production PT. Oklahoma Cooperative Extension Service. Oklahoma State University, Stillwater, OK.

Grants

1. **Edmonds, Daniel**, Yumiko Kanke, Brian Arnall, and W.R. Raun. Evaluation of 521G43 and Nitamin 30L Foliar N Products for Winter Wheat Production. Funded for \$19,077, October, 2008.

Abstracts

1. **Edmonds, D.E.**, D.B. Arnall, B. Chung, M.C. Daft, K. Girma, Dotson, B.B. England, S.L. Holtz, C.J. Mack, W.R. Raun, J.B. Solie, R.K. Taylor, B.S. Tubaña, P.L. Turner, O.S. Walsh, D.L. Zavodny. 2007. Extension and analysis of the Ramp Calibration Strip fertilization strategy. In *Agronomy Abstracts*. ASA, Madison, WI.
2. Arnall, D.B., B. Tubaña, K. Girma, S.L. Holtz, B. Chung, C.R. Dotson, P.L. Turner, **D.E. Edmonds**, B.B. England, M.C. Daft, W.R. Raun and R.K. Taylor. 2007. Evaluation of delayed Ramp Calibration Strip application for mid-season N recommendation in winter wheat. In *Agronomy Abstracts*. ASA, Madison, WI.
3. Daft, M.C., D.B. Arnall, B. Tubaña, C.R. Dotson, B.B. England, **D.E. Edmonds**, S.L. Holtz, P.L. Turner, and W.R. Raun. 2007. Nitrogen Responsiveness as a Function of Delayed Emergence in Corn (*Zea mays* L.). In *Agronomy Abstracts*. ASA, Madison, WI.

4. Dotson C.R., D.B. Arnall, B. Tubaña, K. Girma, M.C. Daft, B.B. England, **D. Edmonds**, S.L. Holtz, P.L. Turner, and W.R. Raun. 2007. Effect of Nitrogen Fertilizer Rate and Placement on Corn Grain Yield. In Agronomy Abstracts. ASA, Madison, WI.
5. England, B.B., D.B. Arnall, B.S. Tubaña, S.L. Holtz, C.R. Dotson, C. Daft, **D. Edmonds**. 2007. Stream vs. flat fan topdress application of UAN in winter wheat. In Agronomy Abstracts. ASA, Madison, WI.
6. Girma, K., D.B. Arnall, S.L. Holtz, W.R. Raun, B. Chung, B.S. Tubaña, O. Walsh, P.L. Turner, C.R. Dotson, B.B. England, **D.E. Edmonds**, M.C. Daft and D. Zavodny. 2007. Weather, fertilizer, previous year grain yield and fertilizer response levels affect ensuing year grain yield and fertilizer response of winter wheat. In Agronomy Abstracts. ASA, Madison, WI.
7. Holtz, S.L., B.S. Tubaña, D.B. Arnall, K.W. Freeman, R.K. Teal, B. Chung, O. Walsh, P.L. Turner, K.D. Lawles, C.J. Mack, **D.E. Edmonds**, K. Girma and W.R. Raun. 2007. Response of corn (*Zea mays* L.) grain yields to variable row nitrogen fertilization. In Agronomy Abstracts. ASA, Madison, WI.
8. Tubaña, B.S., D.B. Arnall, K.W. Freeman, R.K. Teal, B. Chung, O. Walsh, **D.E. Edmonds**, S. Holtz, P. Turner, C.R. Dotson, B. England, M.C. Daft, C.J. Mack, K. Lawles, K. Girma and W.R. Raun. 2007. Corn (*Zea mays* L.) grain yield response to by-plant nitrogen fertilization. In Agronomy Abstracts. ASA, Madison, WI.
9. Turner, P.L., B.S. Tubaña, K. Girma, S.L. Holtz, K.D. Lawles, **D.E. Edmonds**, C.R. Dotson, B.B. England, M.C. Daft, D.B. Arnall, R.K. Taylor and W.R. Raun. 2007. Indirect Measurement of Crop Plant Height. In Agronomy Abstracts. ASA, Madison, WI.
10. Arnall, D.B., **D.E. Edmonds**, M.C. Daft, B.B. England, R. Taylor, and W.R. Raun. 2008. Evaluation of the Yield Potential Based Nitrogen Fertilization Optimization Algorithm in Cotton. In Agronomy Abstracts. ASA, Madison, WI.
11. **Edmonds, D.E.**, M.C. Daft, B.B. England, W.R. Raun, J.B. Solie, and R.K. Taylor. 2008. Estimating Nitrogen Use Efficiency (NUE) with the Ramp Calibration Strip Fertilization Strategy and an Update of Oklahoma's Extension Program. In Agronomy Abstracts. ASA, Madison, WI.
12. England, B., B.D. Arnall, P. Turner, C. Dotson, C. Daft, **D. Edmonds**, W.R. Raun, and Y. Kanke. 2008. Stream vs. Flat Fan Topdress Application of UAN in Winter Wheat. In Agronomy Abstracts. ASA, Madison, WI.
13. Kanke, Y., D.B. Arnall, **D. Edmonds**, B. England, B. Desta, and W.R. Raun. 2008. A Visual Method of Calibrating Nitrogen Need, Tied to Season NDVI Values. In Agronomy Abstracts. ASA, Madison, WI.
14. Walsh, O.S., W.R. Raun, J.B. Solie, A.R. Klatt, C.B. Godsey, B.D. Arnall, **D.E. Edmonds**, B.B. England, C.M. Daft, and Y. Kanke. 2008. Use of Soil Moisture Data to Refine GreenSeeker Sensor Based N Recommendations in Winter Wheat. In Agronomy Abstracts. ASA, Madison, WI.
15. **Edmonds, D.E.**, J.P. Kelly, M.D. Edmonds, J.L. Crain, Y. Kanke, R.K. Taylor, J.B. Solie, and W.R. Raun. 2009. Maize (*Zea mays* L.) Grain Yield Response to By-Plant Nitrogen Fertilization. In Agronomy Abstracts. ASA, Madison, WI.
16. Kelly, J.P., M.D. Edmonds, **D.E. Edmonds**, J.L. Crain, Y. Kanke, R.K. Taylor, J.B. Solie, and W.R. Raun. 2009. Refined Methodologies for Detecting Midseason Nitrogen Deficiencies in Maize (*Zea mays* L.) Using Optical Sensors. In Agronomy Abstracts. ASA, Madison, WI.
17. Raun, W.R., **D.E. Edmonds**, J.B. Solie, J. Schepers, R. Mullen, D.B. Arnall, and R. Taylor. 2009. Strategies for Improving Nutrient Use Efficiency in Corn and Small Grains. In Agronomy Abstracts. ASA, Madison, WI.
18. Kanke, Y., B. Desta, **D.E. Edmonds**, J. Solie, M. Stone, and W.R. Raun. 2009. A Visual Method for Calibrating Nitrogen Need, Tied to Seasonal NDVI Values in Corn. In Agronomy Abstracts. ASA, Madison, WI.
19. Vossenkemper, J., Y. Kanke, **D.E. Edmonds**, R.K. Taylor, J.B. Solie, and W.R. Raun. 2009. Maize (*Zea mays* L.) Grain Yield Response to Nitrogen Applied at Different Distances Away From the Row. In Agronomy Abstracts. ASA, Madison, WI.

20. Ruto, E., B. Arnall, **D.E. Edmonds**, Y. Kanke, B. Desta, J.L. May, and W.R. Raun. 2009. Cotton Recovery to Early Season Nitrogen Stress. In *Agronomy Abstracts*. ASA, Madison, WI.
21. Torres, G.M., J. Vossenkemper, Y. Kanke, **D.E. Edmonds**, and W.R. Raun. 2009. Evaluation of Triple Super Phosphate as Foliar Fertilizer. In *Agronomy Abstracts*. ASA, Madison, WI.

Poster

1. **Edmonds, D.E.**, J.P. Vossenkemper, M.C. Daft, B.B. England, B.K. Desta, O.S. Walsh, Y. Kanke, E. Rutto, J.L. May, W.R. Raun, R.K. Taylor, and J.B. Solie. 2008. 2008 N-Rich Strip and Ramp Update. 2008 NUE Conference. Manhattan, KS.

Other Publications

1. **Edmonds, Daniel E.** 2007. OSU Soil Fertility Summer Crops 2007 Plot Plan Book. Soil Fertility Project: Oklahoma State University, Stillwater, OK.
2. **Edmonds, Daniel E.** 2008. OSU Soil Fertility Winter Crop 2007-2008 Plot Plan Book. Soil Fertility Project: Oklahoma State University, Stillwater, OK.
3. **Edmonds, Daniel E.** 2008. OSU Soil Fertility Summer Crops 2008 Plot Plan Book. Soil Fertility Project: Oklahoma State University, Stillwater, OK.
4. **Edmonds, Daniel**, Brain Arnall, Kefyalew Desta, Bill Raun, John Solie, Marvin Stone, Randy Taylor, Hailin Zhang, Birehane Desta, Yumiko Kanke, Jerry May, Emily Ruto, Guilherme Torres, Jacob Vossenkemper, Olga Walsh, Scott Clark, Jared Crain, and Bee Khim. 2008. Oklahoma Precision Agriculture Research Highlights Bulletin. Oklahoma State University, Stillwater, OK.
5. **Edmonds, Daniel E.** 2008. OSU Soil Fertility Winter Crop 2008-2009 Plot Plan Book. Soil Fertility Project: Oklahoma State University, Stillwater, OK.
6. **Edmonds, Daniel E.** 2009. OSU Soil Fertility Summer 2009 Crops Plot Plan Book. Soil Fertility Project: Oklahoma State University, Stillwater, OK.

EXTENSION ACTIVITIES:

International Experiences

1. **Edmonds, D.E.** and M. Cody Daft. Precision Sensing Extension Workshop. Harare, Zimbabwe, Africa, January 5-12, 2008. Travel included stops in Sao Paulo, Brazil; London, United Kingdom; Johannesburg, South Africa; Paris, France.
2. **Edmonds, D. E.** Regional Training Workshop on Optical Sensors (GreenSeeker™) for Monitoring NDVI/biomass – Sustainable Land Management Research Project. Precision Sensing Extension Workshop. Tashkent, Uzbekistan, February 1-9, 2008. Travel included a stop in Moscow, Russia.
3. **Edmonds, D.E.** Precision Sensing Extension Training Workshop (RT 200 Systems). Samara, Russia. June 7-13, 2008. Travel included stops in London, United Kingdom; Frankfurt, Germany.
4. **Edmonds, D.E.**, Yumiko Kanke, Guilherme M. Torres, and Jared L. Crain. Collection of NDVI in Maize. Ciudad Obregón, Mexico. January 4-8, 2009. Travel included a stop in Mexico City, Mexico.

Professional Invitations

1. Sensors for Crop Management Conference, Stillwater, OK, January 17, 2008. Invited Speaker “Evolution of Nitrogen Reference Strips.”
2. Certified Crop Advisor Training, Stillwater, OK, January 3, 2008. Invited Speaker “Extension and Analysis of the Ramp Calibration Strip Fertilization Strategy.”

Teaching Experiences

1. Guest Lecturer. SOIL 4234: Soil Nutrient Management. “Animal manures as a source of fertilizer.” Oklahoma State University. November 5, 2008.
2. Guest Lecturer. SOIL 4234: Soil Nutrient Management Lab. “Soil sampling.” Oklahoma State University. November 5, 2008.

3. Co-Instructor with Regents Professor, Dr. John B. Solie. BAE/SOIL 4213: Precision Agriculture. Spring Semester 2009. Course Description: Introduction to the concepts of precision agriculture including analysis of spatial variability, relationships of fertility and crop response, geographical information systems, variable rate technology, optical sensing, global positioning systems, and yield monitoring. Case studies included for detailed analyses.
4. Guest Lecturer. SOIL 5111: Research Methods in Plant and Soil Sciences. "History of Long-term Experiment #222 and the Magruder Plots." April 9, 2009.

HONORS:

Honor Societies

- Phi Beta Delta Honor Society for International Scholars (Epsilon Upsilon Chapter), Inducted 2008
- Golden Key International Honour Society, Inducted 2008
- The National Scholars Honor Society, Inducted 2008
- Gamma Sigma Delta – The Honor Society of Agriculture, Inducted 2008
- National Society of Collegiate Scholars, Inducted August 2003
- National Honor Society member/Oklahoma Honor Society member, 2000-2002

Scholarships

Scholarship Total: \$44,800

- Sitlington Enriched Graduate Scholarship, \$15,000, 2008-2011
- International Plant Nutrition Institute's (IPNI) International Scholar Scholarship, \$2,000, 2009
- Outstanding Ph.D. Student Scholarship, Department of Plant and Soil Sciences, \$1000, April 2009
- Phoenix Award for Oklahoma State University's Outstanding Master's Student Scholarship, \$750, April 2008.
- Outstanding Master's Student Scholarship, Department of Plant and Soil Sciences, \$1000, March 2008
- H.F. "Pat" Murphy Memorial Graduate Scholarship, \$1000, 2007-2008
- Master's Supplementary Fellowship, \$2700, 2007
- Frank D. Lucas Scholar, \$1000, 2006
- DASNR/CASNR Agricultural Legislative Intern Scholarship, \$3100, 2006
- Robert E. Smith Memorial Scholarship, \$750, 2005-2006
- Dale H. Johnston Memorial Scholarship, \$3000, 2005-2006
- Frank F. Davies Memorial Scholarship in Plant and Soil Sciences, \$1000, 2005-2006
- Roy A. Chessmore Memorial Scholarship, \$1000, 2005-2006
- Joseph Fleming Memorial Continuing Scholarship, \$1500, 2004-2006
- Oklahoma Municipal Power Authority Scholarship, \$1500, 2003-2004
- Oklahoma State University Freshman Excellence Award and Scholarship, \$6000, 2002-2006
- Oklahoma State University Biosystems & Agricultural Engineering Scholarship, \$1000, 2003-2004
- Morris Lion's Club Scholarship, \$250, 2002-2003
- Morris Masonic Lodge No. 271 Scholarship, \$250, 2002-2003
- United States Presidential Freedom Award and Scholarship for Community Service, \$1000, 2002-2003

Awards

- International Plant Nutrition Institute's (IPNI) International Scholar Award, 2009
- Outstanding Ph.D. Student Award, Department of Plant and Soil Sciences, April 2009
- Gerald O. Mott Meritorious Graduate Student Award in Crop Science, 2009

- Phoenix Award for Oklahoma State University's Outstanding Master's Student, April 2008.
- Outstanding Master's Student Award, Department of Plant and Soil Sciences, March 2008
- Oklahoma State University Seniors of Significance Nomination, Fall 2006
- President's Honor Roll, Spring 2004 -- Dean's Honor Roll, Fall 2002, 2004, 2005
- American FFA Degree, November 2003
- State FFA Degree, May 2002
- State FFA Officer Candidate Finalist (Reporter) February 2002-May 2002
- Oklahoma State University Undergraduate Perfect Attendance, 2002-2006
- Presidential Freedom Award for Service, 2002
- Morris Public Schools Thirteen Years Perfect Attendance, 1989-2002

Committees, Panels, etc.

- DASNR/CASNR Agricultural Legislative Internship Selection and Interview Committee, 2006-2008
- Morris FFA Chapter Officer Interview Panel, May 2007
- Plant & Soil Sciences' Department Head Search and Screening Committee, Student Representative, 2006-2007
- Biosystems & Agricultural Engineering Department Recruitment & Retention Committee, 2003

Other Honors

- Gospel Tabernacle United Pentecostal Church Kindergarten/Toddler Sunday School Teacher, April 2006-Present
- Gospel Tabernacle United Pentecostal Church Bulletin Editor & Publisher, December 2006-Present
- Honorary Citizen of Uzbekistan, February 2008