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EDUCATION

- Ph.D. Soil Science, University of Kentucky, 2008.
- M.S. Crop and Soil Environmental Science, Virginia Tech, 2002
- B.S. Environmental Science, Virginia Tech, 1999

PROFESSIONAL POSITIONS

Assistant Professor and Extension Specialist, Plant and Soil Sciences Department, University of Delaware, September 2017 to present.

Agent, Agriculture, College of Agriculture and Natural Resources, University of Maryland Extension, Somerset County, January 2014 to August 2017.

Post Doc/Research Soil Scientist, Agricultural Research Service (ARS), United States Department of Agriculture (USDA), Florence, SC, March 2009-February 2013.

Post-doctoral Scholar, Forestry Department, University of Kentucky, Lexington, KY. April 2008-February 2009.

Research Associate, Crop and Soil Environmental Science Department, Virginia Tech, March 2002-November 2003.

AREAS OF SPECILIAZATION

- Agronomy; Precision Agriculture; Nutrient Cycling; Soil Formation

AWARDS and HONORS

2016 *Achievement Award: Communications: Program Promotional Piece. State and Regional Winner.* National Association of County Agricultural Agents. NACAA Annual Meeting, Little Rock, AR.

2015 *Achievement Award: Communications: Program Promotional Piece. State Winner.* National Association of County Agricultural Agents. NACAA Annual Meeting, Rapid City, SD.

2006 *North American Colleges and Teachers of Agriculture Graduate Student Teaching Award.* NACTA Annual Meeting, Vancouver, BC..

PROFESSIONAL CERTIFICATIONS

Public Agency Pesticide Applicator Certificate. Maryland Department of Agriculture, Certificate Number 29255-80913. Received 2014.

Nutrient Management Consultant Certificate. Maryland Department of Agriculture, Certificate Number 4245. Received 2014.

Nutrient Management Consultant Certificate, Delaware Department of Agriculture. Received August 2018.

SCHOLARSHIP

Book Chapters:

1. Miller, J.O. and A.D. Karathanasis. 2014. Biosolids colloids as environmental contaminant carriers *in* The Role of Colloidal Systems in Environmental Protection. M. Fanun (ed).Elsevier. Amsterdam, Netherlands. pp 1-18.

2. Karathanasis, A.D. and J.O. Miller. 2011. Colloid-associated transport and metal speciation at reclaimed mine sites following biosolid application in Dynamics and Availability of Heavy Metals in the Root Zone. H. M. Selim (ed). CRC Press. Boca Raton, FL. pp 129-146.

Journal Articles:

See Google Scholar: <https://scholar.google.com/citations?user=ffsp2-UAAAAJ&hl=en>

Extension Factsheets:

1. Miller, J.O. 2017. Manure to Energy Byproducts Can be Used As Nutrient Sources. UME University of Maryland, College Park, 4pp.
2. Miller, J.O., J. Adkins and K. Tully. 2017. Providing Aerial Images Through UAVs. UME University of Maryland, College Park, 5pp.
3. Miller, J.O. and C.T Yohn. 2017. Precision Soil Sampling: Grid and Zone. Fact Sheet 1046. UME University of Maryland, College Park, 8pp.
4. Miller, J.O. 2016. Soil pH Affects Nutrient Availability. Fact Sheet 1054. UME University of Maryland, College Park, 5pp.
5. Miller, J.O. 2016. Why All Extension Agents Should Consider Attending the PILD Conference. *The County Agent*. The National Association of County Agricultural Agents. Vol LXXVII (2). June 2016. Maroa, IL.
6. Poole, T.E. and J.O. Miller. 2016. Organic Matter is an Essential Component of Soils. Fact Sheet 1045. UME University of Maryland, College Park, 4 pp.
7. Miller, J.O. and J. Moyle. 2014. Manure as a Natural Resource: Alternative Management Opportunities. Extension Bulletin 420. UME University of Maryland, College Park, 8 pp

Recent Extension Articles:

1. Miller, J.O. 2018. Growing Degree Days (GDD) and Rainfall. University of Delaware Weekly Crop Update. *This article is updated weekly through multiple editions:* 26 (10-21).
2. Miller, J.O. 2018. Scouting and Estimating Corn Yields. University of Delaware Weekly Crop Update. 26(21).
3. Miller, J.O. 2018. Pesticide Drift and Temperature Inversions. University of Delaware Weekly Crop Update. 26(16).
4. Miller, J.O., C. Whaley, P. Sylvester. 2018. Corn Reproduction and High Temperatures. University of Delaware Weekly Crop Update. 26(15).
5. Miller, J.O. and A.L. Shober. 2018. Checking mid-season nutrient uptake. University of Delaware Weekly Crop Update. 26 (14).
6. Miller, J.O. and A.L. Shober. 2018. What is denitrification and why should you care? University of Delaware Weekly Crop Update. 26 (11).
7. Shober, A.L., S. Riggi, J.O. Miller, P. Sylvester, and K. Gartley. 2018. Tackling the nitrogen dilemma in corn. University of Delaware Weekly Crop Update. 26 (11).
8. Miller, J.O., C. Whaley, A.L. Shober, P. Sylvester, and R. Taylor. 2018. Sulfur deficiency on field corn. University of Delaware Weekly Crop Update. 26 (10).
9. Shober, A.L., S. Riggi, G. Toor, R. Kratochvil, and J.O. Miller. 2018. Heavy rainfall is making nitrogen management a challenge. University of Delaware Weekly Crop Update. 26 (10).

10. Miller, J.O. 2018. Dealing with salt affected soils. University of Delaware Weekly Crop Update. 26 (9).
11. Miller, J.O., C. Whaley, P. Sylvester. 2018. Warmer temperatures have helped corn along. University of Delaware Weekly Crop Update. 26 (7).
12. Sylvester, P., C. Whaley, J. Adkins, and J.O. Miller 2018. Considerations for irrigating wheat. University of Delaware Weekly Crop Update. 26 (7).
13. Shober, A.L., J.O. Miller, P. Sylvester, C. Whaley. 2018. Corn emergence is expected soon, take time to evaluate stands. University of Delaware Weekly Crop Update. 26 (6).
14. Shober, A, J. Miller, P. Sylvester, C. Whaley, and R. Taylor. 2018. Avoiding compaction now that warmer temperatures have arrived. University of Delaware Weekly Crop Update. 26(5).
15. Shober, A.L., J. O. Miller, C. Whaley, and P. Sylvester. 2018. Starter fertilizer for grain corn. University of Delaware Weekly Crop Update. 26 (4).
16. Shober, A, J. Miller, P. Sylvester, C. Whaley, and R. Taylor . 2018. Now that spring has sprung, is it time to plant corn? University of Delaware Weekly Crop Update. 26 (3).
17. Riggi, S.Y., A.L. Shober, P. Sylvester, and J.O. Miller. 2018. Should you be taking PSNT's right now? University of Delaware Weekly Crop Update. 26 (3).
18. Miller, J.O. and A. L. Shober. 2018. Complete Wheat Tiller Counts Now to Determine the Need for Spring Nitrogen. University of Delaware Weekly Crop Update. 26 (1).
19. J. O. Miller and A.L. Shober. 2018. Spring nitrogen on pastures. University of Delaware Weekly Crop Update. 26 (1).

RECENT FUNDING

1. Miller, J.O., A.L. Shober, J. Nelson. 2018-2021. **\$191,445**. *Evaluation of Cover Crop Timing, Soil Nitrate Availability, and Crop Emergence*. Natural Resources Conservation Service Grant. USDA NRCS DE Conservation Agreements for Implementing Key Conservation Objectives in Delaware.
2. Tully, K.L., K. Gedan, R. Epanchin-Niell, J. Miller. 2018-2020. **\$126, 913 (Co-PI: \$8,412)**. *Building Coastal Resiliency: Adapting Cropping Systems to Saltwater Intrusion to Balance Economic Viability and Environmental Health*. Harry Hughes Center for Agroecology.
3. Tully, K.L., K. Gedan, R. Epanchin-Niell, J. Miller. 2018-2023. **\$1,129,250 (Co-PI: \$196,148)**. *Adapting Agroecosystems to Saltwater Intrusion and Mitigating Nutrient Losses from Coastal Wetlands*. National Institute of Food and Agriculture – Resilient Agroecosystems in a Changing Climate Challenge Area.
4. Tully, K.L., et al. 2018-2020. **\$199,800 (Co-PI: \$23,469)**. *Optimization of starter N fertilizer application for corn planted into a cereal rye cover crop*. Northeast Sustainable Agriculture Research and Education.
5. Miller, J.O., A. Shober, P. Sylvester. 2017-2018. **\$2842**. A Regional Survey of Soil and Tissue Tests to Update Critical Nutrient Levels. Maryland Grain Producers.