

**Amy L. Shober**

Professor and Extension Specialist  
Department of Plant and Soil  
Sciences University of Delaware  
531 South College  
Avenue Newark, DE  
19716-2103  
<https://sites.udel.edu/canr-nmeq/>  
<http://orcid.org/0000-0002-5490-6284>

**Education and Training**

Ph.D., Plant and Soil Sciences, University of Delaware, 2006  
M.S., Soil Science, Pennsylvania State University, 2002  
B.S., Environmental Science, Virginia Polytechnic Institute & State University, 1998  
B.A., Chemistry, Virginia Polytechnic Institute & State University, 1998

**Research and Professional Experience**

Professor and Extension Specialist, Department of Plant and Soil Sciences, University of Delaware, 2019-present  
Associate Professor and Extension Specialist, Department of Plant and Soil Sciences, University of Delaware, 2014-2019  
Assistant Professor and Extension Specialist, Department of Plant and Soil Sciences, University of Delaware, 2012-2014  
Associate Professor and Extension Specialist, Soil and Water Science Department, Gulf Coast Research and Education Center, University of Florida, 2011-2012  
Assistant Professor and Extension Specialist, Soil and Water Science Department, Gulf Coast Research and Education Center, University of Florida, 2006-2011

**Workload Appointment**

Extension (75%); Research (20%); Service (5%)

**Grants and Contracts**

Total Career: \$7,546,249 (\$3,719,324 directly to my program)  
PI: \$2,914,475 (\$2,535,148 directly to my program)  
Co-PI: \$4,631,774 (\$1,184,176 directly to my program)

**Refereed Publications** (11 since tenure at UD; 43 total) \*i indicates graduate student under my advisement

Duncan, E.W., D.L. Osmond, **A.L. Shober**, L. Starr, P. Tomlinson, J.L. Kovar, T.B. Mooreman, H.M. Peterson, N.M. Fiorellino, and K. Reid. 2019. Phosphorus and soil health management practices. *Agricultural and Environmental Letters* 4:190014.  
<https://doi.org/10.2134/ael2019.04.0014>

Osmond, D.L., **A.L. Shober**, A.N. Sharpley, E.W. Duncan, D.L.K. Hoag. 2019. Increasing the

effectiveness and adoption of agricultural phosphorus management strategies to minimize water quality impairment. *Journal of Environmental Quality*.

<https://doi.org/10.2134/jeq2019.03.0114>

\*Qin, Z., **A.L. Shober**, K. Scheckel, C. Penn, and K. Turner. 2018. Mechanisms of phosphorus removal by phosphorus sorbing materials. *Journal of Environmental Quality* doi: 10.2134/jeq2018.02.0064 (Posted JEQ First Look: July 07, 2018)

Wyngaard, N., M. Cabrerra, **A.L. Shober**, and R. Kanwar. 2018. Fertilization history can affect the estimation of nitrogen mineralization potential with chemical methods. *Plant and Soil*. <https://doi.org/10.1007/s11104-018-3786-3>

Zhang, T.Q., Z.M. Zheng, R. Lal, A.N. Sharpley, **A.L. Shober**, D. Smith, C.S. Tan, and P. Cappellen. 2018. Environmental indicator principum with case references to agricultural soil, water, and air qualities and model-derived indicators. *Journal of Environmental Quality* 47(2):191–202. doi:10.2134/jeq2017.10.0398

**Shober, A.L.**, A.R. Buda, K.C. Turner\*, N.M. Fiorellino, A.S. Andres, J.M. McGrath, and J.T. Sims. 2017. Assessing coastal plain risk indices for subsurface phosphorus loss. *Journal of Environmental Quality* 46(6):1270–1286. doi: 10.2134/jeq2017.03.0102

**Shober, A.L.**, A.K. Koeser, D.C. McLean, G. Hasing, and K.A. Moore. 2017. Nitrogen fertilizer rate, timing, and application method affects growth of sweet viburnum and nitrogen leaching from simulated planting beds. *HortScience* 52:146–153. doi: 10.21273/hortsci11114-16

Moore, K.A., **A.L. Shober**, G.S. Hasing, C. Wiese, and N.C. West. 2014. Effect of soil type and nitrogen rate on growth of annual and perennial landscape plants in Florida. *HortTechnology* 24:724-730.

Moore, K.A., **A.L. Shober**, G.S. Hasing, C. Wiese, G.C. Denny, and G.W. Knox. 2014. Effects of nitrogen fertilization rate on aesthetic quality of landscape-grown annuals and perennials. *HortTechnology* 24:597-603.

Pearson, B.J., R.C. Beeson, **A. Shober**, C. Reinhart-Adams, G.W. Knox, and M. Olexa. 2014. Influence of soil, precipitation, and antecedent moisture on stormwater runoff and leachate from runoff boxes containing simulated urban landscape soils. *Florida Scientist* 77(3):109-125.

**Shober, A.L.**, K.A. Moore, G.S. Hasing, C. Wiese, G.C. Denny, and G.W. Knox. 2014. Effect of nitrogen fertilization rate on aesthetic quality of landscape-grown vines and groundcovers. *HortTechnology* 24:604-609.

**Shober, A.L.**, G. Hasing, C. Wiese, N.G. West, G.C. Denny, K.A. Moore, and G.W. Knox. 2013. Growth and quality response of woody shrubs to nitrogen fertilization during landscape establishment in Florida. *HortTechnology* 23: 898-904.

**Peer-reviewed Extension Publications** (17 since tenure at UD: 54 total)

**Shober, A.L.**, K.L. Gartley, J.O. Miller, and J.T. Sims. 2019. Nutrient management recommendations – Alternative and miscellaneous crops. University of Delaware, Newark, DE.

**Shober, A.L.**, K.L. Gartley, J.O. Miller, R.W. Taylor, and J.T. Sims. 2019. Nutrient management recommendations – Agronomic crops. University of Delaware, Newark, DE.

- Shober, A.L.**, K.L. Gartley, and J.T. Sims. 2019. Measurement and management of soil pH for crop production in Delaware. University of Delaware, Newark, DE.
- Shober, A.L.**, K.L. Gartley, and J.T. Sims. 2019. Calculating the lime recommendation using the Adams-Evans Soil buffer. University of Delaware, Newark, DE.
- Riggi, S.Y., G. Cartanza, and **A.L. Shober**. 2018. Temporary mortality management on new poultry farms. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/temporary-mortality-management-on-new-poultry-farms/>
- Shober, A.L.** and G.C. Denny. 2017. Identifying nutrient deficiencies in ornamental plants. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/identifying-nutrient-deficiencies-in-ornamental-plants/>
- Shober, A.L.**, R.W. Taylor, K.L. Gartley, and J.T. Sims. 2017. Nutrient management recommendations - Agronomic crops. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/agronomic-crops/>
- Taylor, R.W., K.L. Gartley, **A.L. Shober**, and J.T. Sims. 2017. Nutrient management recommendations - Forage and hay crops. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/forage-and-hay-crops/>
- Shober, A.L.** and R. Rothweiler. 2016. Basic tips for using the web soil survey to retrieve information for nutrient management planning. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/web-soil-survey/>
- Sims, J.T., **A.L. Shober**, K.L. Clark, A.B. Leytem, and F.J. Coale. 2016. The Delaware phosphorus site index technical guidance manual. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/de-phosphorus-site-index-technical-guidance-manual/>
- Shober, A.L.** and R.W. Taylor. 2016. Estimating yield goal for crops. University of Delaware, Newark, DE. <http://extension.udel.edu/factsheets/estimating-yield-goal-for-crops/>
- Shober, A.L.** 2015. Phosphorus cycling in agriculture. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/phosphorus-cycling-in-agriculture/>
- Shober, A.L.** 2015. Nitrogen cycling in agriculture. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/nitrogen-cycling-in-agriculture/>
- Shober, A.L.** 2015. Delaware gardener's guide to lawn and landscape fertilizers. University of Delaware, Newark, DE.  
<http://extension.udel.edu/factsheets/delaware-gardeners-guide-to-lawn-and-landscape-fertilizers/>
- Shober, A.L.**, S. Riggi, and R. Rothweiler. 2015. Temporary field storage of poultry litter. University of Delaware, Newark, DE. <http://extension.udel.edu/factsheets/temporary-field-storage-of-poultry-litter/>
- Shober, A.L.**, C. Wiese, and G.C. Denny. 2015. Delaware gardener's guide to soil pH. University of Delaware, Newark, DE. <http://extension.udel.edu/factsheets/delaware-gardeners-guide-to-soil-ph/>
- Shober, A.L.** and R. W. Taylor. 2014. Nitrogen management for soybean. University of Delaware, Newark, DE.

<http://extension.udel.edu/factsheet/nitrogen-management-for-soybean/>

McLean, D., A. Koeser, **A.L. Shober**, Z. Qin, G. Hasing, and R. Beeson. 2014. Incorporating woody ornamentals into residential landscapes to reduce nutrient leaching. University of Florida IFAS. <http://edis.ifas.ufl.edu/ep503>

### **Professional Affiliations**

American Society of Agronomy (ASA)

- Board representative – Environmental Quality Section (2019-present)
- Associate editor – Journal of Environmental Quality (2010-2015)
- Chair - Nutrient Loss and Assessment Community (2012-013)

American Society of Horticultural Sciences (ASHS)

Northeastern Coordinating Committee on Soil Testing (NECC1312)

Mid-Atlantic Soil Testing and Plant Analysis Workgroup

- Chair (2016-2018)

Soil Science Society of America (SSSA)

Southern Extension Research Activity (SERA-17) – Innovative Solutions to Minimize Phosphorus Losses from Agriculture

- Incoming chair (2016); Chair (2017); Past chair (2018)
- Annual meeting organizer (2011, 2016, 2017, 2018)
- Best management practice workgroup member (2007-present)
- Soil/manure testing workgroup member (2003-2007)

### **Honors and Awards**

ASA Environmental Quality Section Inspiring Young Scientist Award (2011)

Florida State Horticultural Society (FSHS) Ornamental, Garden & Landscape Best Paper Award (2010)

Editor's Citation for Excellence in Manuscript Review, Journal of Environmental Quality, ASA-CSSA-SSSA (2008)

Presidential Management Fellowship Finalist, US Office of Personnel Management (2006)

Outstanding Graduate Student Award, American Society of Agronomy – Northeastern Branch (2006)

J. Fielding Reed/Potash and Phosphate Institute (PPI) Fellowship (2005)

Hazel Burgett Endowed Philanthropic Education Organization (P.E.O.) Scholar Award (2004 – 2005)