

Ronald W. Schnell
Assistant Professor and State Cropping Systems Specialist
Dept. of Soil and Crop Sciences, Texas A&M Extension, College Station, Texas

Education/Training

2010 PhD Agronomy, Texas A&M University
2007 MS Agronomy, Texas A&M University
2002 BS Horticulture and Crop Science, Sam Houston State University

Positions and Employment

2012-Present Assistant Professor and State Cropping Systems Specialist, Texas A&M AgriLife
Research/Extension
2010-2012 Assistant Professor, Cropping Systems Specialist, University of Florida
2005-2010 Graduate Assistant, Agronomy, Texas A&M University

Program Overview

My program provides statewide leadership for sorghum, corn and bioenergy cropping systems. My program conducts dozens of applied research trials statewide and disseminates information to growers through numerous producer meetings, crops tours and Extension publications. My research focuses on precision agriculture, nutrient management, management of emerging pest, crop rotation and crop rotations. I also provide leadership for the State Grain Sorghum and Corn Hybrid Testing Program.

Significant 5 Year Accomplishments

Research: My research activities have generated \$1,341,691 in funding from national, state and local sources with \$1,184,946 going directly to my program during my current appointment. Crop performance trials are conducted at dozens of locations evaluating over 70 unique entries from 12 commercial seed companies. The economic impact of corn and grain sorghum hybrid performance trials is estimated at \$25 million annually. Significant research and Extension efforts have been focused on managing sugarcane aphid in sorghum, including evaluation of resistant and tolerant hybrids, aphid biology and management. The impact of research and Extension efforts for managing sugarcane aphid in grain sorghum is estimated at \$31.8 million since 2013. The collective economic impact of various cropping systems research and Extension activities is \$9.9 million.

Extension: 61 Extension presentations providing training to 5,344 individuals.

Teaching: Supervised 3 MS students and 2 undergraduate research projects.

Publications

1. Campbell, D.N., D.L. Rowland, R.W. Schnell, J.A. Ferrell and A.C. Wilkie. 2014. Developing a castor (*Ricinus communis* L.) production system in Florida, U.S.: Evaluating crop phenology and response to management. *Industrial Crops and Products* 53: 217-227. doi:10.1016/j.indcrop.2013.12.035.
2. Campbell, D.N., D.L. Rowland, R.W. Schnell, J.A. Ferrell and A.C. Wilkie. 2012. Determining the Agronomic and Physiological Characteristics of the Castor Plant (*Ricinus communis* L.): Developing a Sustainable Cropping System for Florida. *Proc. Fla. State Hort. Soc.* 125: 364-365.
3. Schnell R.W., D.M. Vietor, T.L. Vietor, C.L. Munster and S. Capareda. (2012) Capacity of Biochar Application to Maintain Energy Crop Productivity: Soil Chemistry, Sorghum Growth,

and Runoff Water Quality Effects. *J. Environ. Qual.* 41(4), 1044-1051. DOI: 10.2134/jeq2011.0077.

4. Schnell, R.W., D.M. Vietor, C.L. Munster, T.L. Provin and R.H. White. 2012. Waste Streams from Methane Digesters: Exporting Nutrients through Turfgrass and Forage Production Systems. *Agron J* 104(5):1348-1355. DOI: 10.2134/agronj2012.0005.
5. Schnell R., D. Vietor, C. Munster, R. White, T. Provin, S. Mukhtar. (2010) A Preliminary Study on the Potential for Cycling Solids from Geotube Treatment of Dairy Lagoon Wastewater. *American-Eurasian J. Agric. & Environ. Sci.* 8: 695-704.
6. Schnell, R., D. Vietor, C. Munster, R. White, and T. Provin. 2010. Effect of Turfgrass Establishment Practices and Composted Biosolids on Water Quality. *J. Environ. Qual.* 39:1-9.
7. Vietor, D.M., R.W. Schnell, C.L. Munster, T.L. Provin and R.H. White. 2010. Biosolid and Alum effects on runoff losses during turfgrass establishment. *Bioresource Technology* 101: 3246-3252.
8. Vietor, D.M., R.W. Schnell, C.L. Munster, T.L. Provin and R.H. White. 2010. Effect of Alum Treatments on Turfgrass Coverage and Runoff Losses during Establishment. *HortScience* 45 (1): 119-124.

Awards and Honors

- USDA SARE/NACAA Search for Excellence in Sustainable Agriculture. 2012.
- U.S. Senator Phil Gramm Doctoral Fellowship Award, 2010.
- Gerald O. Mott Meritorious Graduate Student Award, Crop Science Society of America, 2008.
- Texas AgriLife Research Conference Graduate Student Poster Contest. 2007, 1st Place.
- Texas A&M Soil & Crop Science Graduate Student Excellence in Research Award, 2007.
- Texas Water Resources Institute Mills Scholarship Recipient, 2006.

Professional Experience

- Advised/co-advised 3 MS students.
- Authored/co-authored 8 peer-reviewed journal articles, 14 refereed Extension, 12 non-refereed Extension, 9 radio/television, 1 book chapters, and 38 scientific abstracts/presentations.
- Acquired \$1,753,658 of which \$1,504,363 went to my research program in current appointment.