

JOSHUA A. MCGINTY
Assistant Professor and Extension Agronomist
Texas A&M AgriLife Extension – Corpus Christi, TX

Education/Training

2014 Ph.D. Agronomy, Texas A&M University
2012 M.S. Rangeland Ecology and Management, Texas A&M University
2009 B.S. Natural Resource Management, Angelo State University

Positions and Employment

2014- Assistant Professor and Extension Agronomist, Department of Soil and Crop Sciences, Texas A&M AgriLife Extension
2012-2014 Graduate Assistant, Department of Soil and Crop Sciences, Texas A&M AgriLife Extension
2010-2012 Graduate Assistant, Department of Ecosystem Science and Management, Texas A&M AgriLife Research

Program Overview

I provide leadership for Extension programming and applied research in field crops and forages for the Texas Gulf Coast and Lower Rio Grande Valley. These production regions contain approximately 625,000, 900,000, and 350,000 acres of cotton, grain sorghum, and corn, respectively, and a diversity of other row and forage crops. I serve in a coordinating role with scientists at the Corpus Christi AgriLife Research and Extension Center, scientists across the state, county Extension agents, and Regional Program Leaders in developing and implementing educational programs and applied research with particular emphasis on dryland or limited irrigation cropping systems. Research and education programs emphasize weed management, crop variety testing and selection, nutrient management, site-specific management, and other crop management technologies.

Significant 5 Year Accomplishments

Extension: Since hired in September 2014, I have conducted 63 educational programs, reaching over 4,000 stakeholders in 36 Texas counties. Attendees at these events were primarily growers, crop consultants, livestock producers, and agricultural industry personnel. Common topics at these programs were weed management in row crops and forages, crop variety selection, nutrient management, and general agronomic practices for row crops and forages. I currently serve on five county crops committees, which meet regularly to plan and organize Extension programs to address current issues. In order to provide professional development for County Extension Agents, I conducted three training events in 2015 (two in-person, one by distance) reaching agents in 21 counties.

Research: Since hired, I have acquired \$238,310 of which \$135,680 was in direct support of my program. I conducted research on herbicide resistant weeds in Texas, revealing the widespread occurrence of glyphosate-resistant *Amaranthus* species in central and south Texas. These herbicide-resistant weeds represent a significant threat to crop production in south Texas, thus several research efforts were conducted to identify management strategies for controlling these weeds in cotton, corn, and grain sorghum. In cooperation with Extension commodity specialists in College Station, several experiments were conducted across south Texas to evaluate the performance of cotton, corn, and grain sorghum varieties. The results of these experiments were then provided to growers, crop consultants, and industry partners in order to provide high-quality information for selecting crop varieties which perform best in this region's environment. In collaboration with faculty from Texas A&M AgriLife Research, Texas A&M University – Corpus Christi, and Texas A&M University – Kingsville, several research efforts were implemented in 2015 to develop agricultural uses for UAS-based remote sensing technologies. Currently, we are developing methods for using these technologies for high-throughput crop phenotyping,

crop biomass measurements, crop management decision aids, as well as accurate scouting for disease, insect, and weed pests.

Publications

Ten most recent

1. Morgan, G., D. Mott, C. Livingston, R. Alaniz, J. McGinty, B. Cowan, J. Ott, B. McCool, A. Netardus, E. Taylor, S. Biles, M. Hiller, B. Batchelor, C. Bowen, J. Gordy, S. Janak, and J. Grange. 2015. Replicated Agronomic Cotton Evaluation (RACE) South, East, and Central Regions of Texas. Texas A&M AgriLife Extension Service. 36 p.
2. Neely, C., D. Hathcoat, R. Collett, M. Jungman, J. McGinty, S. McLellan, M. Donalson, A. Abrameit, M. Stamm, and S. Dooley. 2015. 2015 Texas Canola Variety Trial Results. Texas A&M AgriLife Extension Service. 14 p.
3. Neely, C., D. Hathcoat, M. MacFarland, D. Drake, C. Trostle, J. Bell, E. Kimura, J. McGinty, J. Ramirez, J. Swart, A. Braley, A. Ibrahim, J. Rudd, R. Sutton, R. Devkota, J. Baker, G. Opena, B. Simoneaux, S. Baker, D. Worrall, G. McCormack, and R. Padilla. 2015. Texas Wheat Uniform Variety Trials. Texas A&M AgriLife Extension Service. 53 p.
4. Neely, C.B., P.A. Baumann, and J.A. McGinty. 2015. Weed Control Recommendations in Wheat. Texas A&M AgriLife Extension Service. 29 p.
5. Trostle, C. and J. McGinty. 2015. Ready On-Line Access to Chemical Labels for Agricultural Producers. Texas A&M AgriLife Extension Service. 3 p.
6. Trostle, C. and J. McGinty. 2015. 2015-2016 Texas Sunflower Weed Control and Desiccation Guide. Texas A&M AgriLife Extension Service. 6 p.
7. McGinty, J.A., P.A. Baumann, and B. McCool. 2015. A Quick Guide to Herbicide Modes of Action. Texas A&M AgriLife Extension Service. 22 p.
8. Morgan, G.D., D. Mott, C. Livingston, R. Alaniz, and J. McGinty. 2014. Replicated Agronomic Cotton Evaluation (RACE) South, East, and Central Regions of Texas. Texas A&M AgriLife Extension Service. 40 p.
9. McGinty, J.A., P.A. Baumann, and G.D. Morgan. 2014. ESC-025 Reduce Spray Drift by Choosing the Right Nozzle. Department of Soil and Crop Sciences. Texas A&M AgriLife Extension Service. 3 p.

Professional Experience

- Special appointment on two M.S. graduate student committees.
- Authored/co-authored 27 extension publications/reports, and 26 scientific abstracts and presentations.
- Acquired \$238,310 of which \$135,680 was in direct support of my program.

Synergistic Activities

- Active member of the Weed Science Society of America, Southern Weed Science Society, Texas Plant Protection Association, Beltwide Cotton Conferences, and Society for Range Management.
- Member of the Texas Department of Agriculture's Scientific Advisory Panel
- Member of the Texas Branched Broomrape Task Force