

**Peter A. Dotray**  
**Professor of Agronomy, Department of Plant and Soil Science,**  
**Texas Tech University; and**  
**Professor and Extension Weed Specialist,**  
**Department of Soil and Crop Science, The Texas A&M University System**

**Education:**

Ph.D. University of Minnesota. 1993. Agronomy. Emphasis: Weed Physiology.  
 M.S. Washington State University. 1989. Agronomy. Emphasis: Weed Science.  
 B.S. University of Minnesota. 1986. Agronomy. Emphasis: Crop Production.

**Professional Experience:**

Professor of Agronomy. Department of Plant and Soil Science. Texas Tech University  
 and Professor and Extension Weed Specialist. Department of Crops and Soil Science.  
 The Texas A&M University System. 2004-present.  
 Associate Professor of Agronomy. 1999-2004.  
 Assistant Professor of Agronomy. 1993-99.  
 Graduate Research Assistant. Department of Agronomy and Plant Genetics. University of  
 Minnesota. 1989-93.  
 Associate in Research/Weed Science--Integrated Pest Management, Department of  
 Agronomy and Soils. Washington State University. 1988-89.  
 Graduate Research Assistant. Department of Agronomy and Soils. Washington State  
 University. 1986-88.

**Program Review:**

Determine effective, profitable, and sustainable weed management systems in cotton and  
 crops grown in rotation with cotton on the Texas Southern High Plains. Best management  
 practices are critical for effective and sustainable crop production in light of the  
 development of herbicide resistant weeds. Rotational crops including corn, sorghum,  
 peanut, and sesame help to break up crop/weed associations and allow the use of a  
 diversity of mechanical, cultural, biological, and chemical practices. Weed biology and  
 ecology is essential to better understand weeds in these production systems.

**Significant 5 year accomplishment:**

Confirmed the development of glyphosate resistant weeds on the Texas Southern High  
 Plains and helped to develop effective weed management systems in cotton that includes  
 preplant, preemergence, and postemergence herbicides in transgenic and non-transgenic  
 cotton. Tolerance and weed management systems were studied in new triple-stacked  
 cotton varieties prior to the anticipated release in 2016 as well as awareness of potential  
 drift on non-target plants. Grower surveys were developed to better understand weed  
 management practices and how these practices change over time. Post-harvest weed  
 seed production was studied at several locations to better understand the weed seed  
 production from late-emerging weeds.

**Ten Recent Publications (career total – 75):**

1. Keeling, J.W., B.A. Brown, J.D. Reed, and P.A. Dotray. 2013. Grain sorghum response

- to saflufenacil applied preemergence. *Crop Protection* 46:1-6.  
<http://dx.doi.org/10.1016/j.cropro.2012.11.007>.
2. Grichar, W.J. and P.A. Dotray. 2013. Smellmelon control and peanut response to flumioxazin and paraquat alone and in combination. *Peanut Science* 40:135-141.
  3. Prostko, E.P., T.M. Webster, M.W. Marshall, R.G. Leon, T.L. Grey, J.A. Ferrell, P.A. Dotray, D.L. Jordan, W.J. Grichar, and B.J. Brecke. 2013. Glufosinate application timing and rate affect peanut yield response. *Peanut Science* 40:115-119.
  4. Grichar, W.J., P.A. Dotray, and D. R. Langham. 2014. Sesame tolerance to herbicides applied postemergence-directed. *American Journal of Experimental Agriculture* 4:162-170.
  5. Reed, J.D., J.W. Keeling, and P.A. Dotray. 2014. Palmer amaranth (*Amaranthus palmeri*) management in GlyTol<sup>7</sup> Plus LibertyLink<sup>7</sup> Cotton. *Weed Technology* 28:592-600.
  6. Grichar, W.J. and P.A. Dotray. 2015. Influence of spray tip and spray volume on the efficacy of imazapic and imazethapyr on selected weed species. *American Journal of Experimental Agriculture* 8:75-86.
  7. Grichar, W.J., P.A. Dotray, and L.M. Etheredge. 2015. Weed control and peanut (*Arachis hypogaea* L.) cultivar response to encapsulated acetochlor. *Peanut Science* 42:1-9.
  8. Grichar, W.J., P.A. Dotray, and C.L. Trostle. 2015. Castor (*Ricinus communis* L.) tolerance and weed control with preemergence herbicides. *Industrial Crops and Products* 76:710-716. <http://dx.doi.org/10.1016/j.indcrop.2015.05.087>
  9. Manuchehri, M.R., J.E. Woodward, T.A. Wheeler, P.A. Dotray, and J.W. Keeling. 2015. First report of Russian-thistle (*Salsola tragus* L.) as a host for the Southern root-knot nematode (*Meloidogyne incognita*) in the United States. *Plant Health Progress* 16:32.
  10. Grichar, W.J., P.A. Dotray, and D.R. Langham. 2015. Sesame (*Sesamum indicum*) response to postemergence-directed herbicide applications *In* *Herbicides* published by InTech - Open Access Publisher. Chapter 2. pp. 31-52. ISBN 978-953-51-4413-7. doi 10.5772/61554. <http://www.intechopen.com/articles/show/title/sesame-sesamum-indicum-response-to-postemergencedirected-herbicide-applications>.

#### **Abbreviated Awards:**

- Weed Science Soc. of America Outstanding Young Weed Scientist Award. 2004.  
 Gamma Sigma Delta Outstanding Service to Agriculture Award. 2007.  
 Outstanding Educator Award. Southern Weed Science Society. 2010.  
 American Peanut Research and Education Society Dow AgroSciences Award for Excellence in Research. 2010.  
 Texas County Agricultural Agents Association Specialist of the Year. 2011.  
 Texas Agricultural Industries Association Outstanding Educator Award. 2012.  
 Extension Award. Soil and Crop Science Department. Texas A&M Univ. 2012.  
 American Peanut Research and Education Society Dow AgroSciences Award for Excellence in Teaching. 2013.  
 Weed Science Society of America Outstanding Teacher Award. 2014.  
 Texas Tech University Integrated Scholar. 2015.  
 Texas Tech University College of Agricultural Sciences and Natural Resources Research Award. 2015.