

Crop Production Systems Research Unit USDA-ARS, Stoneville, Mississippi, USA

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2013 Publications

1. Abbas, H., R. Zablotowicz, M. Weaver, W. Shier, H.A. Bruns, N. Bellaloui, C. Accinelli, and C.A. Abel. 2013. Implications of Bt traits on mycotoxin contamination in maize: Overview and recent experimental results in southern United States. *Journal of Agricultural and Food Chemistry*. 61:11759-11770. [PDF](#)
2. Fisher, D.K. and H.C. Pringle. 2013. Evaluation of alternative methods for estimating reference evapotranspiration. *Agricultural Sciences*. 4(8A):51-60. [PDF](#)
3. Fisher, D.K. and R. Sui. 2013. An inexpensive open-source ultrasonic sensing system for monitoring fluid levels. *Agricultural Engineering International*. 15(4):328-334. [PDF](#)
4. Bellaloui, N., A.M. Gillen, A. Mengistu, H.A. Kebede, D.K. Fisher, J.R. Smith, K.N. Reddy. 2013. Responses of nitrogen metabolism and seed nutrition to drought stress in soybean genotypes differing in slow-wilting phenotype. *Frontiers in Plant Physiology*. 4. Article 498:1-13. Doi:10.3389/fpls.2013.00498. [PDF](#)
5. Hoagland, R.E., R.H. Jordan, and N.D. Teaster. 2013. Bioassay and characterization of several Palmer amaranth biotypes with varying tolerances to glyphosate. *American Journal of Plant Sciences*. 4(5): 1029-1037. [PDF](#)
6. Hoagland, R.E., N.D. Teaster and C.D. Boyette. 2013. Bioherbicidal effects of *Myrothecium verrucaria* on glyphosate-resistant and -susceptible Palmer amaranth biotypes. *Allelopathy Journal*. 31(2):367-376. [PDF](#)
7. Boyette, C.D. and R.E. Hoagland. 2013. Adjuvant and refined corn oil formulation effects on conidial germination, appressorial formation and virulence of the bioherbicide, *Colletotrichum truncatum*. *Plant Pathology Journal*. 12(2):50-60. [PDF](#)
8. Boyette, C.D. and R.E. Hoagland. 2013. Influence of epidemiological factors on the bioherbicidal efficacy of a *Xanthomonas campestris* isolate on common cocklebur (*Xanthium strumarium*). *Journal of Experimental Biology and Agricultural Sciences*. 1(4):209-216. [PDF](#)
9. Boyette, C.D. and R.E. Hoagland. 2013. Bioherbicidal potential of a strain of *Xanthomonas* spp. for control of common cocklebur (*Xanthium strumarium*). *Biocontrol Science and Technology*. 23(2):183-196. [PDF](#)
10. Teaster, N.D. and R.E. Hoagland. 2013. Varying tolerance to glyphosate in a population of Palmer amaranth with low epsps copy number. *American Journal of Plant Sciences*. 4:2400-2408. [PDF](#)
11. Huang, Y., R. Sui, S.J. Thomson, and D.K. Fisher. 2013. Estimation of cotton yield with varied irrigation and nitrogen treatments using aerial multispectral imagery. *International Journal of Agricultural and Biological Engineering*. 6(3):37-41. [PDF](#)
12. Huang, Y., S.J. Thomson, W.C. Hoffmann, Y. Lan, and B.K. Fritz. 2013. Development and prospect of unmanned aerial vehicle technologies for agricultural production management. *International Journal of Agricultural and Biological Engineering*. 6(3):1-10. [PDF](#)

13. Deng, W., Y. Huang, C. Zhao, X. Wang, and J. Liu. 2013. Spatial distribution visualization of PWM continuous variable-rate spray. *International Journal of Agricultural and Biological Engineering*. 6(4):1-8. [PDF](#)
14. Jin, X., Y. Huang, S.J. Thomson, and R.B. Elliott. Effects of conidial densities and spray volume of *Metarhizium anisopliae* and *Beauveria bassiana* fungal suspensions on conidial viability, droplet size and deposition coverage in bioassay using a novel bioassay spray system. *Biocontrol Science and Technology*. 23:362-366. [PDF](#)
15. Bianconi, A., T. Dalgaard, B.F. Manly, J.J. Govone, M.J. Watts, G. Habermann, Y. Huang, and A.B. Serapiao. 2013. Methodological difficulties of conducting agroecological studies from a statistical perspective. *Agroecology and Sustainable Food Systems*. 37(4):485-506. [PDF](#)
16. Zhang, H., Y. Lan, C.P.-C. Suh, J. Westbrook, W.C. Hoffmann, C. Yang, and Y. Huang. 2013. Fusion of remotely sensed data from airborne and ground-based sensors to enhance detection of cotton plants. *Computers and Electronics in Agriculture*. 93:55-59. [PDF](#)
17. Molin, W.T. and S.R. Stetina. 2013. Responses of reniform nematode and browntop millet to tillage, cover crop, and herbicides in cotton. *Crop Management*. 28 May 2013/doi:10.1094/CM-2013-0428-01-RS. 11 pgs. [PDF](#)
18. Molin, W.T., A.A. Wright, and V.K. Nandula. 2013. Glyphosate-resistant goosegrass from Mississippi. *Agronomy*. 3:474-487. [PDF](#)
19. Bethke, R.K., W.T. Molin, C. Sprague, and D. Penner. 2013. Evaluation of the interaction between glyphosate and glufosinate. *Weed Science*. 61(1):41-47, [PDF](#)
20. Gaines, T.A., A.A. Wright, W.T. Molin, L. Lorentz, C.W. Riggins, P.J. Tranel, R. Beffa, P. Westra, and S.B. Powles. 2013. Identification of genetic elements associated with EPSPS gene amplification. *PLoS One*. 8(6):e65819. doi:10.1371/journal.pone.0065819. 10 pgs. [PDF](#)
21. Nandula, V.K., J.D. Ray, D.N. Ribeiro, Z. Pan, and K.N. Reddy. 2013. Glyphosate resistance in tall waterhemp (*Amaranthus tuberculatus*) from Mississippi is due to both altered target-site and nontarget-site mechanisms. *Weed Science*. 61:374-383. [PDF](#)
22. Eubank, T.W., V.K. Nandula, K.N. Reddy, D.H. Poston, and D.R. Shaw. 2013. Saflufenacil efficacy on horseweed and its interaction with glyphosate. *Weed Biology and Management*. 13:135-143. [PDF](#)
23. Riar, D.S., J.K. Norsworthy, V. Srivastava, V.K. Nandula, J.A. Bond and R.C. Scott. 2013. Physiological and molecular basis of acetolactate synthase-inhibiting herbicide resistance in barnyardgrass (*Echinochloa crus-galli*). *Journal of Agricultural and Food Chemistry*. 61(2):278-289. [PDF](#)
24. Pettigrew, W.T., W.R. Meredith, and L. Zeng. 2013. Response of obsolete and modern cotton genotypes to varying plant densities. *Journal of Cotton Science*. 17:254-262. [PDF](#)
25. Reddy, K.N., R.M. Zablotowicz, and L.J. Krutz. 2013. Corn and soybean rotation under reduced tillage management: Impacts on soil properties, yield, and net return. *American Journal of Plant Sciences*. 4: 10-17. [PDF](#)
26. Mengistu, A, K.N. Reddy, N. Bellaloui, E.R. Walker, and H.M. Kelly. 2013. Effect of glyphosate on *Macrophomina phaseolina* in vitro and its effect on disease severity of soybean in the field. *Crop Protection*. 54:23-28. [PDF](#)

27. Bellaloui, N., X. Yin, A. Mengistu, A.M. McClure, D.D. Tyler, and K.N. Reddy. 2013. Soybean seed protein oil, fatty acids, and isoflavones altered by potassium fertilizer rates in the midsouth. *American Journal of Plant Sciences*. 4(5):976-988. [PDF](#)
28. Locke, M.A., R.M. Zablotowicz, R.W. Steinriede, Jr., S. Testa, and K.N. Reddy. 2013. Conservation management in cotton production: Long-term soil biological, chemical, and physical changes. *Soil Science Society of America Journal*. 77: 974-984. [PDF](#)
29. P.B. Parajuli, P. Jayakody, G.F. Sassenrath, Y. Ouyangc, J.W. Pote. 2013. Assessing the impacts of crop-rotation and tillage on crop yields and sediment yield using a modeling approach. *Agricultural Water Management*. 119 (2013) 32– 42.
30. Sui, R., D.K. Fisher, and K.N. Reddy. 2013. Cotton yield assessment using plant height mapping system. *Journal of Agricultural Science*. 5(1):23-31. [PDF](#)