

2007 Publications:

1426. Archer, D.W. **A.A. Jaradat, J.M-F. Johnson, S. Lachnicht Weyers, R.W. Gesch, F. Forcella**, and H.K. Kludze. 2007. Crop Productivity and Economics during the Transition to Alternative Cropping Systems. *Agronomy Journal* 99:1538-1547. ([134 K](#))
1453. Berti, M., B. Johnson, **R. Gesch** and **F. Forcella**. 2007. Cuphea plant nitrate content and seed yield response to nitrogen fertilizer. p. 111-119. *IN: J. Janick and A. Whipkey (ed.) Issues in new crops and new uses.* ASHS Press, Alexandria, VA.
1419. Cardina, J., C.P. Herms, D.A. Herms, and **F. Forcella**. 2007. Evaluating phenological indicators for predicting giant foxtail (*Setaria faberi*) emergence. *Weed Sci.* 55:455-464. ([248 K](#))
1416. **Forcella, F.**, D. Archer and **K. Spokas**. 2007. Canada thistle phenology: Emergence, growth, anthesis, and death of shoots. *Weed Sci. Soc. Am. Abstracts.* Weed Sci. Soc., Champaign, IL. [PDF: 26 K](#).
1404. **Forcella, F.** and **S. Lachnicht Weyers**. 2007. Mid-continent fall temperatures at the 10-cm soil depth. *Agronomy Journal* 99:862-866. ([137 K](#))
1401. **Forcella, F.**, **K. Spokas, R.W. Gesch**, T.A. Isbell and D.W. Archer. 2007. Swathing and windrowing as harvest aids for cuphea. *Agron. J.* 99: 415-418. ([90 K](#))
1436. Franzluebbers, A.J. and **J. Johnson**. 2007. Crop residues: A resource for whom? American Society of Agronomy Abstract. [CD-ROM computer file] ASA, Madison, WI.
1390. **Gesch, R.W.** and **F. Forcella**. 2007. Differential sensitivity to temperature of cuphea vegetative and reproductive growth. *Industrial Crops and Products* 25:305-309. ([160 K](#))
1460. **Gesch, R.W.**, D. Palmquist and J.V. Anderson. 2007. Seasonal photosynthesis and partitioning of nonstructural carbohydrates in leafy spurge (*Euphorbia esula*). *Weed Sci.* 55:346-351. ([369 K](#))
1355. **Gesch, R.W.**, **D.C. Reicosky**, R.A. Gilbert and D.R. Morris. 2007. Influence of tillage and plant residue management on respiration of a Florida Everglades Histosol. *Soil Tillage Res.* 92:156-166. ([580 K](#))
1418. Gonzalez-Diaz, L., E. Leguizamón, **F. Forcella** and J.L. Gonzalez-Andujar. 2007. Short

- communication. Integration of emergence and population dynamics models for long term weed management using wild oat (*Avena fatua* L.) as an example. Spanish J. Agric. Res. 5(2):199-203. [PDF: 71 K](#).
1428. **Jaradat, A.A.** 2007. Predictive grain yield models based on canopy structure and structural plasticity. Communications in Biometry and Crop Science. 2(2):74-89. ([1418 K](#))
1482. **Jaradat, A.A.** 2007. Strategies to restore fragmented meta-populations of Fertile Crescent wheat landraces. Restory Ancient Wheat. p. 6.
1481. **Jaradat, A.A.** 2007. The genetic structure of wheat landraces and the challenge to conserve them on the farm. Restoring Ancient Wheat. p. 5.
1435. **Jaradat, A., J. Johnson, S. Weyers and N. Barbour.** 2007. Dynamics of crop residue composition-decomposition: Temporal modeling of multivariate carbon sources and processes. American Society of Agronomy Abstract. [CD-ROM computer file] ASA, Madison, WI.
1391. **Jaradat, A.A., D. Surek and D.W. Archer.** 2007. Phenotypic plasticity and fractal dimension are strong determinants of grain yield in soybean. In: Proceedings of PMA06: The Second International Symposium on Plant Growth Modeling, Simulation, Visualization and Applications, November 13-17, 2006, Beijing, China. 6 pp. [PDF: 319 K](#).
1447. **Jaradat, A.A., D. Surek and D.W. Archer.** 2007. Structural and fractal dimensions are reliable determinants of grain yield in soybean. P. 153-158. In T. Fourcaud, X-P Zhang. (ed.) Proc. Second Intl. Symp. Plant Growth Modeling, Simulation, Visualization and Applications, Beijing, China 13-17 Nov. 2006. The Institute of Electrical and Electronics Engineers, Inc., Los Alamitos, CA. ([266 K](#))
1422. **Johnson, J.M-F.** 2007. Biomass production and soil carbon. Soil Quality: The Foundation for Natural Resource Conservation Abstracts. Soil and Water Conservation Society. P. 10. [PDF: 13 K](#).
1433. **Johnson, J., D. Archer and N. Barbour.** 2007. Three years of greenhouse gas flux from contrasting management scenarios in the northern Corn Belt. American Society of Agronomy Abstract. [CD-ROM computer file] ASA, Madison, WI.
1374. **Johnson, J.M., N.W. Barbour, and S.L. Lachnicht Weyers.** 2007. Chemical composition of crop biomass impacts its decomposition. Soil Sci. Soc. of Am. J. 71(1):155-162. ([551 K](#))

1413. **Johnson, J. M-F.**, M.D. Coleman, **R. Gesch, A. Jaradat**, R. Mitchell, **D. Reicosky**, W.W. Wilhelm. 2007. Biomass-Bioenergy crops in the United States: A changing paradigm. The Americas Journal of Plant Science and Biotechnology. 1(1): 1-28. [PDF: 1,257 K.](#)
1427. **Johnson, J.M.**, A.J. Franzluebbers, **S.L. Lachnicht Weyers, D.C. Reicosky**. 2007. Agricultural opportunities to mitigate greenhouse gas emissions. Environmental Pollution. 150:107-124. ([615 K](#))
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1434. **Johnson, J.** and W.W. Wilhelm. 2007. Can we balance biomass harvest for bioenergy and protecting soil quality? American Society of Agronomy Abstract. [CD-ROM computer file] ASA, Madison, WI.
1411. Karlen, D.L., **J.M. Johnson**, W.W. Wilhelm, and R.F.Follet. 2007. Balancing crop biomass for bioenergy and conservation. Soil and Water Conservation Society, Ankeny, IA. p. 64. [PDF: 98 K.](#)
1438. Koskinen, W.C., T.B. Moorman, J.C. Anhalt, **S.K. Papiernik** and L. Cox. 2007. Characterization of imidacloprid availability in subsurface soils. Proc. XIII Symposium in Pesticide Chemistry: Environmental Fate and Human Health. Sept. 3-6, 2007, Piacenza, Italy. p. 88-91.
1455. La Scala, Jr., N., A. Lopes, K. Spokas, D. Bolohezi, D.W. Archer and **D.C. Reicosky**. 2007. Short-term temporal changes of bare soil CO₂ fluxes after tillage described by a first-order decay model. Proc. International Symposium on Organic Matter Dyanmics in Agro Ecosystems. July 16-19, 2007, Poitiers, France. I: 98-99.
1403. Lal, R., **D.C. Reicosky** and J.D. Hanson. 2007. Evolution of the plow over 10,000 years and the rationale for no-till farming. Soil Tillage Res. 93:1-12. ([849 K](#))
1405. Li, S. D.A. Lobb and **M.J. Lindstrom**. 2007. Tillage and water erosion on different landscapes in the northern North American Great Plains evaluated using ¹³⁷Cs technique and soil erosion models. Catena. 70:493-505. [PDF: 1343 K.](#)
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1429. Martinson, K., B. Durgan, **F. Forcella**, J. Wiersma, K.A. Spokas, D.W. Archer. 2007. An emergence model for wild oat (*Avena fatua*). *Weed Science.* 55:584-591. ([539 K](#))
1400. **Papiernik, S. K.**, Lindstrom, M. J., Schumacher, T. E., Schumacher, J. A., Farenhorst, A., Malo, D. A., Stephens, K. D. and Lobb, D. A. 2007. Variability of soil properties and crop yield in landscapes affected by long-term tillage. p. 31-40 *In: Proc. 50th Manitoba Soil Science Society Meetings, February 8-9, 2007, Winnipeg, MB, Canada.*
1387. **Papiernik, S.K.**, M.J. Lindstrom, T.E. Schumacher, J.A. Schumacher, D.D. Malo and D.A. Lobb. 2007. Characterization of soil profiles in a landscape affected by long-term tillage. *Soil Tillage Res.* 93:335-345. ([526 K](#))
1423. **Papiernik, S.K.**, S.R. Yates, W.C. Koskinen and B. Barber. 2007. Processes affecting the dissipation of the herbicide Isoxaflotole and its diketonitrile metabolite in agricultural soils under field conditions. *Journal of Agriculture and Food Chemistry.* 55(21): 8630-8639. ([788 K](#))
1397. **Reicosky, D.C.** 2007. Carbon is the "C" that starts "C"onservation. *Proceedings of the South Dakota No-Till Association.* p. 17-23. [PDF: 299 K](#).
1421. **Reicosky, D.C.** 2007. Conservation agriculture: Environmental benefits of reduced tillage and soil carbon management in water-limited areas of Central Asia. *IN: Lal, R., Suleimenov, M., Steward, B.A., Hansen, D.O., Doraiswamy, P., editors. Climate Change and Terrestrial Carbon Sequestration in Central Asia.* New York, NY: Taylor & Francis. P. 199-209. ([1028 K](#))
1412. **Reicosky, D.C.** and D.W. Archer. 2007. Economic performance of alternative tillage systems in the northern Corn Belt. *Soil Water Conserv. Soc. Abstracts. Soil Water Conserv. Soc., Ankeny, IA.* p. 66. [PDF: 113 K](#).
1389. **Reicosky, D.C.** and **D.W. Archer**. 2007. Moldboard plow tillage depth and short-term carbon dioxide release. *Soil Tillage Res.* 94: 109-121. ([811 K](#))

1399. **Reicosky, D.C., S.K. Papiernik** and M.J. Lindstrom. 2007. Tillage-induced CO₂ loss across an eroded and restored landscape. 50th Annual Manitoba Soil Science Society Meeting, Using Soil Science to Manage An Increasingly Variable Ecosystem. February 8-9, 2007, Winnipeg, Manitoba, Canada. 1p. [abstract] [PDF: 18 K](#).
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1415. Riedell, W.E., S.L. Osborne and **A.A. Jaradat**. 2007. Crop mineral nutrient and yield responses to aphids or barley yellow dwarf virus in spring wheat and oat. Crop Sci. 47:1553-1560. ([963 K](#))
1424. Sainju, U., H.H. Schomberg, B.P. Singh, W.F. Whitehead, P.G. Tillman, and **S.L. Lachnicht Weyers**. 2007. Cover crop effect on soil carbon fractions under conservation tillage cotton. Soil Tillage Res. 96 (2):205-218. ([343 K](#))
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1409. Schutte, B.J., E.E. Regnier, S.K. Harrison, J.T. Schmoll, **F. Forcella**, and **K.A. Spokas**. 2007. Predicting late-season emergence for improved giant ragweed (*Ambrosia trifida*) management in Ohio [abstract]. Weed Science Society of America. [PDF: 27 K](#).
1394. Scursoni, J.A., **F. Forcella**, J. Gunsolus. 2007. Weed escapes and delayed weed emergence in glyphosate-resistant soybean. Crop Protection 26: 212-218. [PDF: 181 K](#)
1408. **Spokas, K.A.** 2007. Methane: Signs of progress along the road. (Editorial) Waste Management 27:(4):459-460. ([88 K](#))
1417. **Spokas, K., F. Forcella**, D. Archer, **D. Peterson** and **S. Miller**. 2007. Improving weed germination models by incorporating seed microclimate and translocation by tillage. Weed Sci. Soc. Am. Abstracts. Weed Sci. Soc., Champaign, IL. [PDF: 26 K](#).

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1431. Spokas, K., J. King, D. Wang and **S. Papiernik.** 2007. Effects of soil fumigants on methanotrophic activity. *Atmos. Environ.* 41:8150-8162. ([557 K](#))
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1437. Wilhelm, W.W., **J. M.F. Johnson,** D.L. Karlen and D.T. Lightle. 2007. Corn stover to sustain soil organic carbon further constrains biomass supply. *Agron. J.* 99:1665-1667. ([108 K](#))
1432. Wilhelm, W.W., **J. Johnson,** D. Karlen and D. Lightle. 2007. Soil carbon needs limit biomass ethanol feedstock supply. *American Society of Agronomy Abstract.* [CD-ROM computer file] ASA, Madison, WI.
1420. Zheng, W., J.Gan, **S.K. Papiernik,** and S.R. Yates. 2007. Identification of volatile/semivolatile products derived from chemical remediation of cis-1,3-Dichloropropene by Thiosulfate. *Environmental Science & Technology* 41: 6454-6459.