

# DIRECTOR'S REPORT OF RESEARCH IN KANSAS 2009

JULY 1, 2008 TO JUNE 30, 2009



KANSAS AGRICULTURAL  
EXPERIMENT STATION

## **Letter of Transmittal**

Office of the Director

To the Honorable Mark Parkinson, Governor of Kansas

It is my pleasure to transmit herewith the report of the Agricultural Experiment Station of the Kansas State University of Agriculture and Applied Science for the fiscal year ending June 30, 2009. This report contains the title, author, and publication information for manuscripts published by station scientists. The report was published only in electronic format.

Gary Pierzynski  
Interim Director, K-State Research and Extension  
and Interim Dean, College of Agriculture

## A Message from the Director

We are pleased to provide this 2009 Director's Report of Research in Kansas. The report is intended to inform you about our research programs under way and some of our accomplishments. K-State Research and Extension is dedicated to a safe and sustainable food and fiber system and to strong, healthy communities, families, and youth through integrated research, analysis, and education.

This report is produced and distributed in electronic format only. An annual report distributed via the Internet provides information in a more timely fashion, eliminates printing costs, and makes the report accessible to a broader audience.

The 2009 Director's Report of Research in Kansas provides a list of journal articles, station publications, and other published manuscripts from scientists in our departments, centers, fields, and associated programs.

The Agricultural Experiment Station is the research component of [K-State Research and Extension](#). Our research programs provide the latest information used by our extension programs to address issues facing Kansas citizens.

Gary Pierzynski  
Interim Director, K-State Research and Extension  
and Interim Dean, College of Agriculture



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### Search Tips

To find publications by a particular author, type the surname in the “find” search box in the Acrobat toolbar in this document. Use “Find Next” until all relevant publications are found.

To minimize irrelevant items when searching for common names such as Smith or Johnson, go to the page for the author’s unit (or use the unit bookmark) to start your search.

# Research Components of the Kansas Agricultural Experiment Station\*

(See map, p. 2)

## Academic Departments

### College of Agriculture

Agricultural Economics  
Agronomy  
Animal Sciences and Industry  
Communications  
Entomology  
Grain Science and Industry  
Horticulture, Forestry and Recreation Resources  
Plant Pathology

### College of Arts and Sciences

Biochemistry  
Biology  
Statistics

### College of Engineering

Biological and Agricultural Engineering  
Chemical Engineering

### College of Human Ecology

Apparel, Textiles, and Interior Design  
Hospitality Management and Dietetics  
Human Nutrition

### College of Veterinary Medicine

Anatomy and Physiology  
Clinical Sciences  
Diagnostic Medicine/Pathobiology  
Veterinary Diagnostic Lab

## Research Centers

Agricultural Research Center–Hays  
Horticulture and Forestry Research-Extension Center  
John C. Pair Horticultural Center  
Northwest Research-Extension Center  
Southeast Agricultural Research Center  
Southwest Research-Extension Center

## Experiment Fields

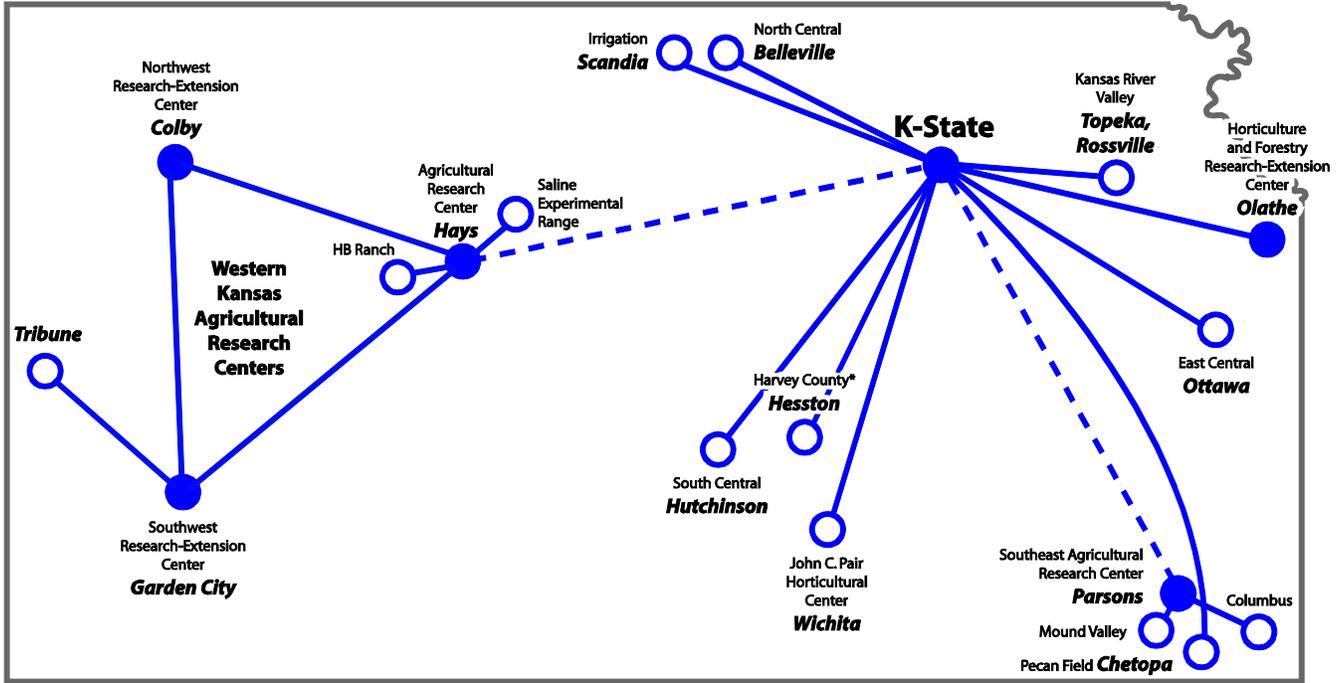
East Central - Ottawa  
Harvey County – Hesston (Closed in Dec. 2009)  
Irrigation - Scandia  
Kansas River Valley - Rossville, Silver Lake  
North Central - Belleville  
Pecan Field - Chetopa  
South Central - Hutchinson

## Associated Programs

Bioprocessing and Industrial Value-Added Program  
Center for Animal Identification  
Center for Biobased Products by Design  
Center for Sustainable Energy  
Food Science Institute  
Great Plains Diagnostic Network  
Great Plains Sorghum Improvement and Utilization Center  
Kansas Ag and Rural Leadership  
Kansas Center for Agricultural Resources and the Environment  
Kansas Center for Sustainable Ag and Alternative Crops  
Kansas Cooperative Development Center  
Kansas Water Resources Institute  
Konza Prairie Biological Station  
International Grains Program  
International Meat and Livestock Program  
Plant Biotechnology Center  
Weather Data Library  
Wheat Genetic and Genomic Resources Center

\* List includes units having faculty with KAES appointments in fiscal year 2009. For a full list of departments and programs of the Kansas State University Agricultural Experiment Station and Cooperative Extension Service and for additional information on K-State Research and Extension, see [www.ksre.ksu.edu](http://www.ksre.ksu.edu), and click on “About Us” in the sidebar.

## Kansas State University Agricultural Research Locations



Current research centers and experiment fields.  
 \*Harvey County Experiment Field closed in December 2009.

## Station Publications

### Reports of Progress

- SRP 999 2008 Kansas Performance Tests with Winter Wheat Varieties
- SRP 1000 2008 Kansas Performance Tests with Corn Hybrids
- SRP 1001 Swine Day 2008 (electronic only)
- SRP 1002 Dairy Research 2008
- SRP 1003 2008 Kansas Performance Tests with Soybean Varieties
- SRP 1004 2008 Kansas Performance Tests with Grain Sorghum Hybrids
- SRP 1006 2008 Kansas Performance Tests with Sunflower Hybrids
- SRP 1007 2009 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
- SRP 1008 2008 Kansas Performance Tests with Cotton Varieties
- SRP 1009 2008 National Winter Canola Variety Trial
- SRP 1010 Beef Cattle Research 2009 (electronic only)
- SRP 1011 Agronomy Field Research 2008 (electronic only)
- SRP 1012 Kansas Fertilizer Research 2008 (electronic only)
- SRP 1013 2009 Agricultural Research, Southeast Agricultural Research Center
- SRP 1014 Field Day 2009, Southwest Research-Extension Center
- SRP 1016 Roundup 2009, Agricultural Research Center-Hays
- SRP 1017 Agronomy Field Research 2009 (electronic only)

### Special Publications

- DRR08 Director's report of research in Kansas 2008 (electronic only)

#### Suffix Letters for Contribution Numbers

- A Proceedings of meeting or symposium
- B Book or book chapter
- C Computer program
- D Department report
- J Journal manuscript
- S Station publication (report of progress, keeping up with research, special publication, or bulletin)
- T Trade publication

Categories are based on information received before manuscripts are published. Type of publication sometimes changes later.

Station publications are available on the World Wide Web at: [www.ksre.ksu.edu/library](http://www.ksre.ksu.edu/library)

Department reports are available only from the appropriate department office. Copies of journal articles or other external publications must be obtained from authors, journals, or a library. Some citations include a digital object identifier (doi) for use in retrieving manuscripts online. To locate an object using its doi, visit <http://dx.doi.org/>.

## Publications of Station Scientists (by unit and contribution number)

Note: Manuscripts are cross listed under all relevant units according to authors' affiliation and appointment (i.e., Kansas Agricultural Experiment Station tenths).

### Administration

DRR08 Director's report of research in Kansas 2008  
May 2009, 209 pp. (electronic only)  
www.ksre.ksu.edu/library/misc2/DirRept08.pdf

### Agricultural Economics

07-295-J Grain sorghum and corn comparisons:  
Yield, economic, and environmental  
responses  
S.A. Staggenborg, K.C. Dhuyvetter, W.B.  
Gordon  
Agronomy Journal, 100:1600-1604, 2008

08-143-J Soybean yield and yield components  
response to plant density in narrow row  
systems  
M. Epler, S. Staggenborg  
Crop Management, 2008  
doi:10.1094/CM-2008-0925-01-RS

08-228-J Economics of reduced-till, no-till and  
opportunity cropping in western Kansas  
R.O. Burton, Jr., R.P. Smith, A.J. Schlegel  
Journal of the American Society of Farm  
Managers and Rural Appraisers, 72:164-  
176, 2009

09-064-D Staff, programs, and publications in  
agricultural economics, Kansas State  
University 2007  
D.L. Foster  
Agricultural Economics Department Staff  
paper no. 09-01, 2008, 36 pp.

09-137-D Irrigated crop-share leasing arrangements in  
Kansas  
J. Schlegel, L.J. Tsoodle  
Agricultural Economics Department Staff  
paper no. 09-02, 2008, 18 pp.

09-143-J The procompetitive effect of demand-  
enhancing check-off programs  
J.M. Crespi, S. Marette  
American Journal of Agricultural  
Economics, 91:389-401, 2009

09-359-D Economic impacts of selected water  
conservation policies in the Ogallala Aquifer  
S. Amosson, L. Almas, B. Golden, B.  
Guerrero, J. Johnson, R. Taylor, E. Wheeler-  
Cook  
Agricultural Economics Department Staff  
paper no. 09-04, 2009, 51 pp.

09-364-D Staff, programs, and publications in  
agricultural economics, Kansas State  
University 2008  
J. Maberry  
Agricultural Economics Department Staff  
paper no. 09-03, 2009, 45 pp.

### Publications without contribution numbers

A stochastic model to compare breeding  
system costs for synchronization of estrus  
and artificial insemination to natural service  
S.K. Johnson, R.D. Jones  
The Professional Animal Scientist, 24:588-  
595, 2008

Consumer responses to new food quality  
information: Are some consumers more  
sensitive than others?  
Z. Gao, T.C. Schroeder  
Agricultural Economics, 40:339-346, 2009

Probabilistic models of yield, price, and  
revenue risks for fed cattle production  
E. Belasco, M. Taylor, B.K. Goodwin, T.C.  
Schroeder  
Journal of Agricultural and Applied  
Economics, 41:91-105, 2009

Valuing fed cattle using objective tenderness  
measures  
J.M. Riley, T.C. Schroeder, T. Wheeler, S.  
Shackelford, M. Koohmaraie  
Journal of Agricultural and Applied  
Economics, 41:163-175, 2009

### Agronomy

04-099-J Starter nitrogen fertilizer management for  
continuous no-till corn production  
B.J. Niehues, R.E. Lamond, C.B. Godsey,  
C.J. Olsen  
Agronomy Journal, 96:1412-1418, 2004

- 04-111-J Comparison of genotype and cultural practices to control iron deficiency chlorosis in soybean  
J.E. Lingenfelter, W.T. Schapaugh, J.P. Schmidt, J.J. Higgins  
Communications in Soil Science and Plant Analysis, 36:1047-1062, 2005
- 04-156-J Comparison of the Weibull model with measured wind speed distributions for stochastic wind generation  
S.J. van Donk, L.E. Wagner, E.L. Skidmore, J. Tatarko  
Transactions of the ASAE, 48(2):503-510, 2005
- 04-189-J On the construction and calibration of dual-probe heat capacity sensors  
J.M. Ham, E.J. Benson  
Soil Science Society of America Journal, 68:1185-1190, 2004
- 04-211-J Carbon and nitrogen mineralization as affected by drying and wetting cycles  
M.M. Mikha, C.W. Rice, G.A. Milliken  
Soil Biology & Biochemistry, 37:339-347, 2005
- 04-256-J Carbon dynamics in tallgrass prairie and wheat ecosystems  
R. Kocyigit, C.W. Rice  
Turkish Journal of Agriculture and Forestry, 28:141-153, 2004
- 04-262-J Lagoon-biogas emissions and carbon balance estimates of a swine production facility  
T.M. DeSutter, J.M. Ham  
Journal of Environmental Quality, 34:198-206, 2005
- 04-332-B Carbon cycle in soils: Dynamics and management  
C.W. Rice  
In: Encyclopedia of soils in the environment, D. Hillel (Ed.). Oxford, UK: Elsevier, pp. 164-169, 2005
- 04-382-J A field-based assessment tool for phosphorus losses in runoff in Kansas  
O. Sonmez, G.M. Pierzynski, L. Frees, B. Davis, D. Leikam, D.S. Sweeney, K.A. Janssen  
Journal of Soil and Water Conservation, 64:212-222, 2009
- 05-019-J Partitioning of nitrogen over five growing seasons in tallgrass prairie  
C.J. Dell, M. A. Williams, C.W. Rice  
Ecology, 86:1280-1287, 2005
- 05-163-J Corn yield response to nitrogen rate and timing in sandy irrigated soils  
R.J. Gehl, J.P. Schmidt, L.D. Maddux, W.B. Gordon  
Agronomy Journal, 97:1230-1238, 2005
- 05-327-J Emerging technologies for *in situ* measurement of soil carbon  
R.J. Gehl, C.W. Rice  
Climate Change, 80:43-54, 2007
- 06-083-J Post-harvest soil nitrate in irrigated corn: Variability among eight field sites and multiple nitrogen rates  
R.J. Gehl, J.P. Schmidt, C.B. Godsey, L.D. Maddux, W.B. Gordon  
Soil Science Society of America Journal, 70:1922-1931, 2006
- 06-112-J Phosphorus source effects on soil organic phosphorus: A <sup>31</sup>P NMR study  
M. Shafqat, G.M. Pierzynski, K. Xia  
Communications in Soil Science and Plant Analysis, 40: 1722-1746, 2009
- 06-141-J Greenhouse gas mitigation in agriculture  
P. Smith, D. Martino, Z. Cai, D. Gwary, H. Janzen, P. Kumar, B. McCarl, F. O'Mara, C. Rice, B. Scholes, O. Sirotenko, M. Howden, T. McAllister, S. Ogle, G. Pan, V. Romanenkov, U. Schneider, S. Towprayoon, M. Wattenbach, J. Smith  
Philosophical Transactions of the Royal Society B, 363:789-813, 2008
- 06-222-J Policy and technological constraints to implementation of greenhouse gas mitigation options in agriculture  
P. Smith, D. Martino, Z. Cai, D. Gwary, H. Janzen, P. Kumar, B. McCarl, F. O'Mara, C. Rice, B. Scholes, O. Sirotenko, M. Howden, T. McAllister, S. Ogle, Pan, V. Romanenkov, U. Schneider, S. Towprayoon.  
Agriculture, Ecosystems and Environment, 118:6-28, 2007
- 06-242-J Modification and validation of GLEAMS for prediction of phosphorus leaching in waste-amended soils  
N.O. Nelson, J.E. Parsons  
Transactions of the ASABE, 49(5):1395-1407, 2006

- 06-287-J Guar tolerance to postemergence herbicides  
B.L.S. Olson, J.W. Sij, T.A. Baughman  
Weed Technology, 21:523-525, 2007
- 06-336-J Soil biological properties following  
additions of bmr mutant grain sorghum  
P.M. White, C.W. Rice, J.A. Baldock, M.R.  
Tuinstra  
Soil Biology & Biochemistry, 39:1518-  
1532, 2007
- 07-036-J Predicting soil pH and pH in situ buffer with  
a real-time sensor  
S.A. Staggenborg, M. Carignano, L. Haag  
Agronomy Journal, 99:854-861, 2007
- 07-085-J Tillage effects on microbial and carbon  
dynamics during plant residue  
decomposition  
P.M. White, C.W. Rice  
Soil Science Society of America Journal,  
73(1):138-145, 2009
- 07-096-J Efficacy of sulfonylurea herbicides when  
tank mixed with mesotrione  
C.L. Schuster, K. Al-Khatib, J.A. Dille  
Weed Technology, 22:222-230, 2008
- 07-112-J Inheritance of resistance of common  
waterhemp (*Amaranthus rudis*) to  
protoporphyrinogen oxidase-inhibiting  
herbicide  
D.E. Shoup, K. Al-Khatib, P.A. Kulakow  
Transactions of the Kansas Academy of  
Science, 111(3 & 4):283-291, 2008
- 07-119-J The early history of wheat improvement in  
the Great Plains  
G.M. Paulsen, J.P. Shroyer  
Agronomy Journal, 100:S-70-S-78, 2008
- 07-174-J Simulation appraisal of the adequacy of  
number of background markers for  
relationship estimation in association  
mapping  
J. Yu, Z. Zhang, C. Zhu, D.A. Tabanao, G.  
Pressoir, M.R. Tuinstra, S. Kresovich, R.J.  
Todhunter, E.S. Buckler  
The Plant Genome, 2:63-77, 2009
- 07-175-J Using temporally limited wind data in the  
wind erosion prediction system  
E.L. Skidmore, C. Liao, S.J. van Donk  
Transactions of the ASABE, 51(5):1585-  
1590, 2008
- 07-189-J Management practices to minimize tan spot  
in a continuous wheat rotation  
M. Carignano, J.P. Shroyer, S.A.  
Staggenborg  
Agronomy Journal, 100:145-153, 2008
- 07-190-J Estimated particulate emissions by wind  
erosion from the Indian Harbor confined  
disposal facility  
L.J. Hagen, P.R. Schroeder, L. Thai  
Practice Periodical of Hazardous Toxic &  
Radioactive Waste Management, 13(1):20-  
28, 2009
- 07-197-J Phosphorus sources and management in  
organic production systems  
N.O. Nelson, R.R. Janke  
HortTechnology, 17:442-454, 2007
- 07-249-J Cotton injury and yield as affected by  
simulated drift of 2,4-D and dicamba  
M.E. Marple, K. Al-Khatib, D.E. Peterson  
Weed Technology, 21:987-992, 2008
- 07-294-J Horizontal root growth: Water uptake and  
stomatal resistance under microgravity  
M.B. Kirkham  
Vadose Zone Journal, 7:1125-1131, 2008
- 07-295-J Grain sorghum and corn comparisons:  
Yield, economic, and environmental  
responses  
S.A. Staggenborg, K.C. Dhuyvetter, W.B.  
Gordon  
Agronomy Journal, 100:1600-1604, 2008
- 08-006-J Determination of endosperm protein  
secondary structure in hard wheat breeding  
lines using synchrotron infrared  
microspectroscopy  
E.S. Bonwell, T.L. Fisher, A.K. Fritz, D.  
Wetzel  
Vibrational Spectroscopy, 48:76-81, 2008
- 08-028-J Modeling runoff and sediment yields from  
combined in-field crop practices using the  
Soil and Water Assessment Tool  
D. Maski, K.R. Mankin, K.A. Janssen, P.  
Tuppad, G.M. Pierzynski  
Journal of Soil and Water Conservation,  
63(4):193-203, 2008

- 08-073-J Efficacy of preemergence application of S-metolachlor plus fomesafen or metribuzin as an element in the control of common waterhemp (*Amaranthus rudis* Sauer) in soybeans  
M.G. Duff, K. Al-Khatib, D.E. Peterson  
Transactions of the Kansas Academy of Science, 111:230-238, 2008
- 08-074-J Relative competitiveness of protoporphyrinogen oxidase-resistant common waterhemp (*Amaranthus rudis*)  
M.G. Duff, K. Al-Khatib, D.E. Peterson  
Weed Science, 57:169-174, 2009
- 08-083-J Soil temperature and planting depth effects on tef emergence  
S. Evert, S. Staggenborg, B.L. Olson  
Journal of Agronomy and Crop Science, 195:232-236, 2009
- 08-143-J Soybean yield and yield components response to plant density in narrow row systems  
M. Epler, S. Staggenborg  
Crop Management, 2008  
doi:10.1094/CM-2008-0925-01-RS
- 08-167-B Linkage disequilibrium and association mapping in the Triticeae  
M.E. Sorrells, J. Yu  
In: Genetics and genomics of the Triticeae, Volume 7, C. Feuillet, G.J. Muehlbauer (Eds.). New York, NY: Springer, pp. 655-684, 2009
- 08-168-J Differential response of grain sorghum hybrids to foliar-applied mesotrione  
M.J.M. Abit, K. Al-Khatib, D.L. Regehr, M.R. Tuinstra, M.M. Claassen, P.W. Greier, P.W. Stahlman, B.W. Gordon, R.S. Currie  
Weed Technology, 23:28-33, 2009
- 08-196-J Impact of nighttime temperature on physiology and growth of spring wheat  
P.V.V. Prasad, S.R. Pisipati, Z. Ristic, U. Bukovnik, A.K. Fritz  
Crop Science, 48:2372-2380, 2008
- 08-213-J Sensitivity of grain sorghum to high temperature stress during reproductive development  
P.V.V. Prasad, S.R. Pisipati, R.N. Mutava, M.R. Tuinstra  
Crop Science, 48:1911-1917, 2008
- 08-217-J Preemergence herbicide efficacy and phytotoxicity in grain sorghum  
P.W. Geier, P.W. Stahlman, D.L. Regehr, B.L. Olson  
Weed Technology, 23:197-201, 2009
- 08-219-J Protection of soil organic C and N in temperate and tropical soils: Effect of native and agroecosystems  
K.P. Fabrizzi, C.W. Rice, T.J.C. Amado, J. Fiorin, P. Barbagelata, R. Melchiori  
Biogeochemistry, 92:129-143, 2009
- 08-237-J Source specific fecal bacteria modeling using source and water assessment tool model  
P.B. Parajuli, K.R. Mankin, P.L. Barnes  
Bioresource Technology, 100:953-963, 2009
- 08-249-J Comparison of AnnAGNPS and SWAT model simulation results in USDA-CEAP agricultural watersheds in south-central Kansas  
P.B. Parajuli, N.O. Nelson, L.D. Frees, K.R. Mankin  
Hydrological Processes, 23:748-763, 2009
- 08-253-J Surface boundary layer of cattle feedlots: Implications for air emissions measurement  
K.A. Baum, J.M. Ham, N.A. Brunsell, P.I. Coyne  
Agricultural and Forest Meteorology, 148:1882-1893, 2008
- 08-265-J Fertilizer management for short-season corn grown in reduced, strip-till, and no-till systems on claypan soil  
D.W. Sweeney, G.L. Kilgore, K.W. Kelley  
Crop Management, 2008  
doi:10.1094/CM-2008-072J-01-RS
- 08-278-B Impact of drought and heat stress on physiological, growth and yield processes  
P.V.V. Prasad, S.A. Staggenborg, Z. Ristic  
In: Modeling water stress effects on plant growth processes, L.H. Ahuja and S.A. Saseendran (Eds.). Madison, WI: ASA – CSSA. Advances in Agricultural Systems Modeling, pp. 301-355, 2009
- 08-284-J Applicability of targeting vegetative filter strips to abate fecal bacteria and sediment yield using SWAT  
P.B. Parajuli, K.R. Mankin, P.L. Barnes  
Agricultural Water Management, 95:1189-1200, 2008

- 08-300-J Influence of tillage, row spacing-population system, and glyphosate herbicide timing on soybean production in the eastern Great Plains  
K.W. Kelley, D.W. Sweeney  
Crop Management, 2008  
doi:10.1094/CM-2008-1114-01-RS
- 08-301-J Soil aggregation and carbon sequestration are tightly correlated with the abundance of arbuscular mycorrhizal fungi: Results from long-term field experiments  
G.W.T. Wilson, C.W. Rice, M.C. Rillig, A. Springer, D.C. Harnett  
Ecology Letters, 12:452-461, 2009
- 08-329-J Efficacy of herbicide seed treatments for controlling *Striga* infestation of sorghum  
M.R. Tuinstra, S. Soumana, K. Al-Khatib, I. Kapran, A. Toure, A. van Ast, L. Bastiaans, N.W. Ochanda, I. Salami, M. Kayentao, S. Dembele  
Crop Science, 49:923-929, 2009
- 08-334-J Exudation of mesotrione from potato roots injures neighboring plants  
R.A. Boydston, K. Al-Khatib  
Weed Science, 56:852-855, 2008
- 08-380-J Phosphate sorption of calcined materials used as components of soilless root media characterized in laboratory studies  
R.A. Ogutu, K.A. Williams, G.M. Pierzynski  
HortScience, 44(2):431-437, 2009
- 08-396-J Assessing intellectual development of horticulture undergraduates using the Perry scheme and learning environment preferences instrument  
C.C. Lavis, K.A. Williams, S.J. Thein  
NACTA Journal, 52(4):25-31, 2008
- 08-402-J Adaptation of a speciation sampling cartridge for measuring ammonia flux from cattle feedlots using relaxed eddy accumulation  
K.A. Baum, J.M. Ham  
Atmospheric Environment, 45:1753-1759, 2009
- 09-006-S 2008 Kansas Performance Tests with Winter Wheat Varieties  
Multiple authors.  
Coordinating author: J. Lingenfelter  
KS Agric. Exp. Stn. Report of Prog. 999, July 2008
- 09-007-J Seed composition, seedling emergence and early seedling vigour of red kidney bean seed produced at elevated temperature and carbon dioxide  
J.M.G. Thomas, P.V.V. Prasad, K.J. Boote, L.H. Allen, Jr.  
Journal of Agronomy and Crop Science, 195:148-156, 2009
- 09-030-J Discovery and mapping single feature polymorphisms in wheat using Affymetrix arrays  
A.N. Bernardo, P.J. Bradbury, H-X. Ma, S-W Hu, R.L. Bowden, E.S. Buckler, G-H. Bai  
BCM Genomics, 2009  
doi:10.1186/1471-2164-10-251
- 09-033-J Lesion mimic associates with adult plant resistance to leaf rust infection in wheat  
T. Li, G. Bai  
Molecular Plant-Microbe Interactions, 119:13-21, 2009
- 09-043-J Influence of fungicide and sowing density on the growth and yield of two groundnut cultivars  
J.B. Naab, K.J. Boote, P.V.V. Prasad, S.S. Seini, J.W. Jones  
Journal of Agricultural Science, 147:179-191, 2009
- 09-051-J Conversion of grassland to coniferous woodland has limited effects on soil nitrogen cycle processes  
D.C. McKinley, C.W. Rice, J.M. Blair  
Soil Biology & Biochemistry, 40:2627-2633, 2008
- 09-093-J Heat tolerance and expression of protein synthesis elongation factors, EF-Tu and EF-1 $\alpha$ , in spring wheat  
U. Bukovnik, J. Fu, M. Bennett, P.V.V. Prasad, Z. Ristic  
Functional Plant Biology, 36:234-241, 2009
- 09-098-J Glyphosate weed control enhancement with ammonium sulfate and commercial water conditioning agents  
D.E. Peterson, C.R. Thompson  
Journal of ASTM International, 6(5), 2009  
doi:10.1520/JAI102147
- 09-107-S 2008 Kansas Performance Tests with Corn Hybrids  
Multiple authors.  
Coordinating author: J. Lingenfelter  
KS Agric. Exp. Stn. Report of Prog. 1000, November 2008

- 09-108-S 2008 Kansas Performance Tests with Soybean Varieties  
Multiple authors.  
Coordinating author: J. Lingenfelter  
KS Agric. Exp. Stn. Report of Prog. 1003, December 2008
- 09-109-S 2008 Kansas Performance Tests with Grain Sorghum Hybrids  
Multiple authors.  
Coordinating author: J. Lingenfelter  
KS Agric. Exp. Stn. Report of Prog. 1004, December 2008
- 09-121-J Grazing effects on yield and quality of hard red and hard white winter wheat  
J. Holman, C. Thompson, R. Hale, A. Schlegel  
Agronomy Journal, 101(4):775-788, 2009
- 09-140-J Selection before backcross during exotic germplasm introgression  
N. Ochanda, J. Yu, P.J. Bramel, A. Menkir, M.R. Tuinstra, M.D. Witt  
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