



# DIRECTOR'S REPORT OF RESEARCH IN KANSAS 2013

JULY 1, 2012–JUNE 30, 2013



Kansas State University Agricultural Experiment Station and Cooperative Extension Service



# Letter of Transmittal

Office of the Director

To the Honorable Sam Brownback, 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, 2013. This report contains the title, author, and publication information for manuscripts published by station scientists. The report was published only in electronic format.

John D. Floros, Ph.D.  
Director, K-State Research and Extension  
and Dean, College of Agriculture

## A Message from the Director

We are pleased to provide this 2013 Director's Report of Research in Kansas. The report is intended to inform you about our research programs underway 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 2013 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 the grand challenges facing Kansas citizens.

John D. Floros, Ph.D.  
Director, K-State Research and Extension  
and 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, 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, next page)

## **Academic Departments**

### **College of Agriculture**

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

### **College of Arts and Sciences**

Biochemistry and Molecular Biophysics  
Biology  
Sociology, Anthropology, and Social Work  
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

## **Research Centers**

Agricultural Research Center–Hays  
John C. Pair Horticultural Center (Haysville)  
K-State Research and Extension Center for Horticultural Crops (Olathe)  
Northwest Research-Extension Center (Colby)  
Southeast Agricultural Research Center (Parsons, Columbus, Mound Valley)  
Southwest Research-Extension Center (Garden City)  
Southwest Research-Extension Center–Tribune

## **Experiment Fields**

East Central – Ottawa  
Kansas River Valley – Rossville, Topeka  
North Central and Irrigation – Belleville, Scandia  
Pecan Field – Chetopa  
South Central – Hutchinson

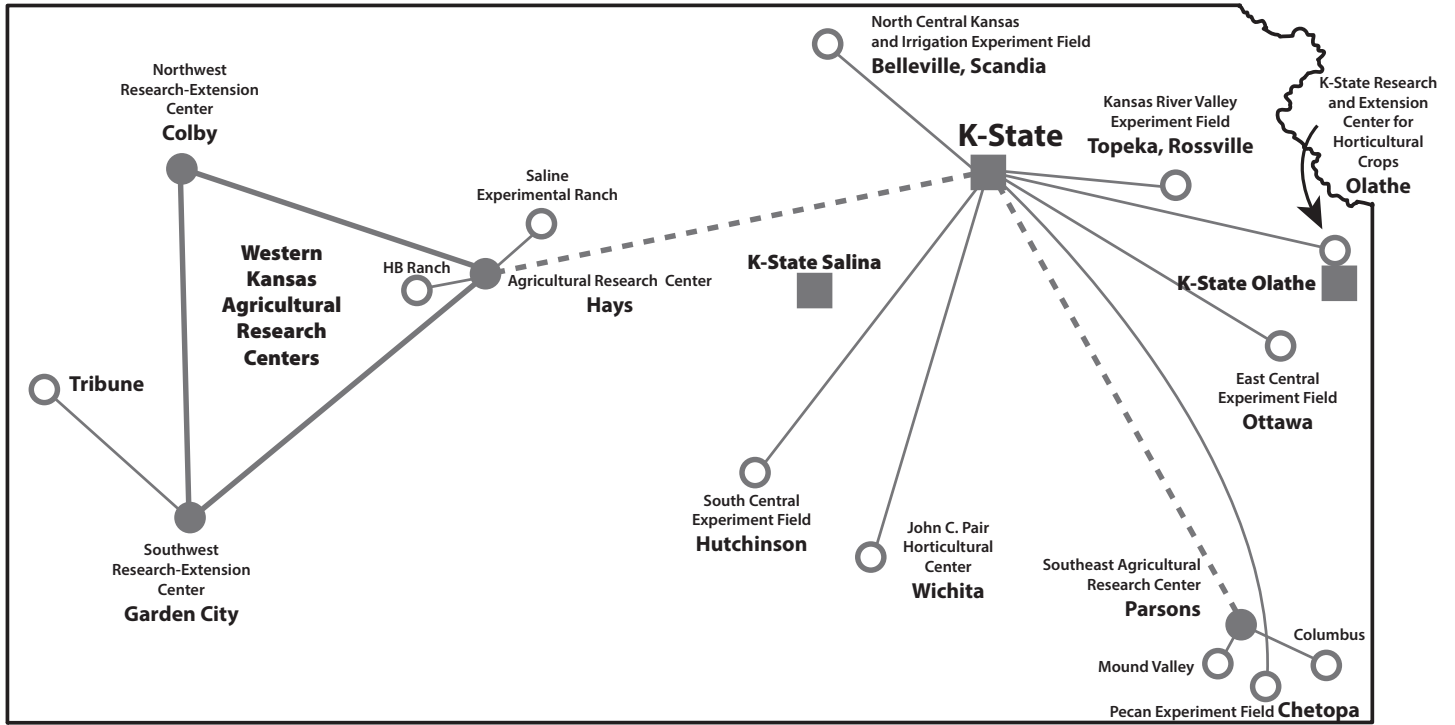
## **Associated Programs**

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  
IGP Institute  
International Meat and Livestock Program  
K-State Libraries  
Kansas Agriculture and Rural Leadership  
Kansas Center for Agricultural Resources and the Environment  
Kansas Center for Sustainable Agriculture and Alternative Crops  
Kansas Water Resources Institute  
Konza Prairie Biological Station  
Plant Biotechnology Center  
Veterinary Diagnostic Lab  
Weather Data Library  
Wheat Genetics Resource Center

\* List includes units having faculty with KAES appointments in fiscal year 2013. 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





# Station Publications

## Reports of Progress

SRP 1071	K-State Turfgrass Research 2012
SRP 1072	2012 Kansas Performance Tests with Winter Wheat Varieties
SRP 1073	2012 Kansas Performance Tests with Corn Hybrids
SRP 1074	Swine Day 2012
SRP 1075	Dairy Research 2012
SRP 1076	2012 Kansas Performance Tests with Soybean Varieties
SRP 1077	2012 Kansas Performance Tests with Grain Sorghum Hybrids
SRP 1078	2012 Kansas Performance Tests with Sunflower Hybrids
SRP 1079	2012 Kansas Performance Tests with Alfalfa Varieties
SRP 1080	2012 National Winter Canola Variety Trial
SRP 1081	2013 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
SRP 1082	2012 Kansas Performance Tests with Cotton Varieties
SRP 1083	Cattlemen's Day 2013
SRP 1084	Field Research 2013
SRP 1085	Kansas Fertilizer Research 2012
SRP 1086	Roundup 2013, Agricultural Research Center-Hays
SRP 1087	2013 Agricultural Research, Southeast Agricultural Research Center
SRP 1088	Field Day 2013, Southwest Research-Extension Center

## Special Publications

DRR12	Director's Report of Research in Kansas 2012
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## 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 at:  
[www.ksre.ksu.edu/bookstore](http://www.ksre.ksu.edu/bookstore)

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

Manuscripts are listed by unit and contribution number, and are cross-listed under all relevant units according to authors' affiliations and appointments (i.e., Kansas Agricultural Experiment Station tenths).

### **Agricultural Economics**

- |          |  |          |   |
|----------|--|----------|---|
| 12-007-J | Determining the probability of default of agricultural loans in a French bank<br>A. Joualt, A.M. Featherstone<br>Journal of Applied Finance and Banking<br>1(1):1-30, 2011   | 12-119-D | Staff, programs, and publications in Agricultural Economics-Kansas State University 2009<br>J. Maberry<br>Agricultural Economics Department Staff Paper no. 10-3, 2010, 47 pp.  |
| 12-008-J | Labor productivity convergence in the Kansas farm sector: A three-stage procedure using data envelopment analysis and semiparametric regression analysis<br>A. Muger, M. Langemeier, A. Featherstone<br>Journal of Productivity Analysis<br>38(1):63-79, 2012<br>doi:10.1007/s11123-011-0235-1, 2011 | 12-213-J | Measuring the benefits to advertising under monopolistic competition<br>Boland, M.A., J.M. Crespi, J. Silva, T. Xia<br>Journal of Agricultural and Resource Economics<br>37(1):144-155, 2012  |
| 12-035-J | On the relationship between openness to trade and efficiency levels in low income countries: Evidence from the Latin American and the Caribbean countries<br>A. Chacon-Cascante, A.M. Featherstone<br>International Research Journal of Finance and Economics<br>74:169-87, 2011                     | 12-236-D | 2011 Nonirrigated Crop-Share Leasing Arrangements in Kansas<br>J.B. Schlegel, L.J. Tsoodle<br>Agricultural Economics Department Staff Paper no. 12-02, 2012, 22 pp.   |
| 12-082-D | Impact of tillage system on input demands for farms<br>E. Yeager, M. Langemeier, T. Xia<br>Agricultural Economics Department Staff Paper no. 12-01, 2011, 19 pp.   | 12-272-J | Fixed effects estimation of the intensive and extensive margins of irrigation water demand<br>N.P. Hendricks, J.M. Peterson<br>Journal of Agricultural & Resource Economics<br>37(1):1-19, April 2012                                 |
| 12-118-D | Staff, programs, and publications in Agricultural Economics-Kansas State University 2010<br>J. Maberry<br>Agricultural Economics Department Staff Paper no. 11-04, 2011, 55 pp.  | 12-285-A | Do men and women perform differently on different types of test questions?<br>A.S. Thompson, A.L. Jager, R.O. Burton, Jr.<br>Proceedings of SAEA (Southern Agricultural Economics Association) annual meeting<br>Birmingham, AL, 2012 |
|          |  | 12-365-D | Staff, programs, and publications in Agricultural Economics-Kansas State University 2011<br>Agricultural Economics Staff Paper no. 12-03, 2012, 73 pp.  |
|          |  | 12-396-J | A stochastic production function analysis of maize hybrids and yield variability in drought-prone areas of Kenya<br>A.D. Jones, T.J. Dalton, M. Smale<br>Tegemeo Institute of Agricultural Policy and Development<br>WPS 49, 2012     |

- 12-459-J Japanese consumers' valuation of rice and pork from domestic, U.S., and other origins  
H.H. Peterson, J.C. Bernard, J.A. Fox, J.M. Peterson  
Journal of Agricultural and Resource Economics  
38(1):93-106, 2013
- 12-472-J Impact of rainfall, sales method and time on land prices in southwest Kansas  
S. Stephen, B. Schurle  
Journal of the American Society of Farm Managers and Rural Appraisers  
76(1):1-7, 2013
- 12-474-J Land prices during periods of rapid change  
B. Schurle, A.M. Featherstone, C.A. Wilson, D. Crosson  
Journal of the American Society of Farm Managers and Rural Appraisers  
76(1):61-73, 2013
- 13-132-J Effects of credit constraints on household productivity in rural China  
F. Dong, J. Lu, A.M. Featherstone  
Agricultural Finance Review  
72(3), 2012
- 13-133-J Keeping ARMS relevant: Extracting additional information  
A.M. Featherstone, T.A. Park, J.G. Weber  
Agricultural Finance Review  
72(2): 233-246, 2012
- 13-134-J Multiple Entity Farms: A Growing and Challenging Phenomenon  
A.M. Featherstone, M.A. Wood, K.L. Herbel, M.R. Langemeier  
Agricultural Finance Review  
72(2): 210-221, 2012
- 13-135-J Review of the financial data provided by the agricultural resource management survey  
C.B. Moss, A.M. Featherstone, C.A. Wilson  
Agricultural Finance Review  
72(2), 2012
- 13-136-J Measuring the financial health of U.S. production agriculture  
B.E. Brewer, C.A. Wilson, A.M. Featherstone, J.M. Harris, K. Erickson, C. Hallahan  
Journal of the American Society of Farm Managers and Rural Appraisers  
75(1):178-193, 2012
- 13-137-J Impact of changes in energy input prices on ethanol importation and prices  
E.A. Yeagerm, A.M. Featherstone  
Journal of Agribusiness  
29:2, Fall 2011
- 13-145-D Staff, programs, and publications in Agricultural Economics-Kansas State University 2012  
Agricultural Economics Department Staff  
Paper no. 13-01, 2013, 53 pp.
- 13-149-J Ecosystem characteristics of remnant, headwater tallgrass prairie streams  
D.M. Larson, W.K. Dodds, K.E. Jackson, M.R. Whiles, K.R. Winders  
Journal of Environmental Quality  
42(1): 239-249, 2013  
doi:10.2134/jeq2012.0226
- 13-159-J Economic feasibility of methoprene applied as a surface treatment and as an aerosol alone and in combination with two other insecticides  
E.A. Fontenot, F.H. Arthur, J.R. Nechols, M.R. Langemeier  
Journal of Economic Entomology  
106(3):1503-1510, 2013  
doi:10.1603/EC12420
- 13-195-J Consumer attitudes toward farm animal welfare: the case of laying hens  
Y. Heng, H.H. Peterson, X. Li  
Journal of Agricultural and Resource Economics  
38(3):418-434, 2013
- 13-251-J In pursuit of safe foods: Chinese preferences for soybean attributes in soymilk  
Y. Zheng, X. Li, H.H. Peterson  
Agribusiness: An International Journal  
29(3):377-391, 2013  
doi:10.1002/agr.21342

## **Agricultural Research Center–Hays**

- 12-090-J Comparing morphological development and nutritive value of Caucasian old world bluestem and native grasses  
K.R. Harmony, K.R. Hickman  
Forage and Grazinglands  
2012  
doi:10.1094/FG-2012-0127-01-RS
- 12-096-J Effects of a new herbicide (Aminocyclopyrachlor) on buffalograss and forbs in shortgrass prairie  
K.R. Harmony, P.W. Stahlman,  
P.W. Geier, R. Rupp  
Weed Technology  
26(3):455-459, 2012
- 12-184-J Summer cover crops fix nitrogen, increase crop yield and improve soil-crop relationships  
H. Blanco-Canqui, M.M. Claassen,  
D.R. Presley  
Agronomy Journal  
104:137-147, 2012
- 12-259-J Multi-location study of soil enzyme activities as affected by types and rates of manure application and tillage practices  
V. Acosta-Martinez, M.M. Mikha,  
K.R. Sistani, P.W. Stahlman,  
J.G. Benjamin, M.F. Vigil, R. Erickson  
Agriculture  
1:4-21 2011  
doi:10.1039/agriculture1010004
- 12-333-J New sources of resistance in Sorghum [*Sorghum bicolor* (L.) Moench] ‘Minicor’ Germplasm are effective against a diverse array of potyvirus species  
D.L. Seifers, R. Perumal, C. Little  
Plant Disease  
96:1775-1779, 2012
- 13-012-S 2012 Kansas Performance Tests with Winter Wheat Varieties  
Multiple authors  
Coordinating author: J. Lingenfelser  
KS Agric. Exp. Stn. Report of Prog. 1072,  
August 2012
- 13-050-J Analyses of sorghum [*Sorghum bicolor* (L.) Moench] lines and hybrids in response to early-season planting and cool conditions  
M.H. Kapanigowda, R. Perumal, R. Aiken,  
T Herald, S. Bean, C.R. Little  
Canadian Journal of Plant Science  
93(5):773-784, 2013  
doi:10.4141/CJPS2012-311
- 13-061-J Registration of ‘Tiger’ wheat  
T.J. Martin, G. Zhang, A.K. Fritz,  
R. Miller, M.-S. Chen  
Journal of Plant Registrations  
7(2):201-204, 2013  
doi:10.3198/jpr2012.09.0032crc
- 13-069-J Reducing water inputs with subsurface drip irrigation may improve alfalfa nutritive value  
K.R. Harmony, F.R. Lamm, S.K. Johnson,  
A.A. Aboukheira  
Forage and Grazinglands  
2013  
doi:10.1094/FG-2013-117-01-RS
- 13-094-J Variants of Triticum mosaic virus isolated from wheat in Colorado show divergent biological behavior  
D.L. Seifers, S. Tatineni, R. French  
Plant Disease  
97(7):903-911, 2013  
doi:10.1094/PDIS-10-12-0925-RE
- 13-130-J Temperature-sensitive resistance to wheat streak mosaic virus in CO960333 and KS06HW79 wheat  
D. L. Seifers, T.J. Martin, S. Haber,  
S.D. Haley  
Plant Disease  
97(7):983-987, 2013  
dx.doi.org/10.1094/PDIS-10-12-0971-RE
- 13-161-S 2013 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland  
Multiple authors  
Coordinating author: D. Peterson  
KS Agric. Exp. Stn. Report of Prog. 1081,  
January 2013

- 13-163-J New sources of temperature-sensitive resistance to wheat streak mosaic virus in wheat  
D.L. Seifers, S. Haber, T.J. Martin, G. Zhang  
Plant Disease  
97(8):1051-1056, 2013
- 13-174-J Broadleaf weed control and crop safety with premixed pyrasulfotole and bromoxynil in winter wheat  
S.S. Reddy, P.W. Stahlman, P.W. Geier, D.E. Peterson  
American Journal of Plant Sciences  
3:1613-1618, 2012  
doi:10.4236/ajps.2012.311195
- 13-175-J Weed control and crop safety with premixed S-metolachlor and sulfentrazone in sunflower  
S.S. Reddy, P.W. Stahlman, P.W. Geier, C.R. Thompson  
American Journal of Plant Science  
3:1625-1631, 2012  
doi:10.4236/ajps.2012.311197
- 13-177-J Pyroxsulam and chlorpyrifos applied the same day injures wheat  
S.S. Reddy, P.W. Stahlman, P.W. Geier  
Crop Management  
11(1): 2012  
doi:10.1094/CM-2012-1211-01-RS
- 13-186-S 2012 Kansas Performance Tests with Alfalfa Varieties  
Multiple authors  
Coordinating author: J. Lingenfelter  
KS Agric. Exp. Stn. Report of Prog. 1079, April 2013
- 13-204-J Efficacy of tribenuron alone and following preemergence herbicides in tribenuron-resistant sunflower  
A.S. Godar, P.W. Stahlman, J.A. Dille  
Crop Management  
12(1):2013  
doi:10.1094/CM-2013-0621-01-RS
- 13-242-S 2012 Kansas Fertilizer Research  
Multiple authors  
KS Agric. Exp. Stn. Report of Prog. 1085, May 2013
- 13-243-S 2013 Field Research  
Multiple authors  
KS Agric. Exp. Stn. Report of Prog. 1084, April 2013
- 13-247-S Roundup 2013  
Multiple authors  
Coordinating author: K. Harmony  
KS Agric. Exp. Stn. Report of Progress 1086, April 2013
- 13-282-S Field Day 2013 — SWREC  
Multiple authors  
KS Agric. Exp. Stn. Report of Prog. 1088, June 2013
- 13-285-J Maternal effects shape dynamic trajectories of reproductive allocation in the ladybird *Coleomegilla maculata*  
G. Vargas, J.P. Michaud, J.R. Nechols  
Bulletin of Entomological Research  
Cambridge University Press, 2012  
doi:10.1017/S000748531200020X
- 13-296-J Wheat lines with temperature-sensitive resistance as differential hosts of isolates of wheat streak mosaic virus  
D.L. Seifers, S. Haber, R. French, D.C. Stenger  
Plant Disease  
97(7):983-987, 2013  
doi:10.1094/PDIS-10-12-0971-RE
- 13-300-J Downy brome (*Bromus tectorum* L.) and broadleaf weed control in winter wheat with acetolactate synthase-inhibiting herbicides  
S.S. Reddy, P.W. Stahlman, P.W. Geier  
Agronomy  
3(2):340-348, 2013
- 13-348-J Associations of volatile compounds with sensory aroma and flavor: The complex nature of flavor  
E. Chambers IV, K. Koppel  
Molecules  
18(5):4887-4905, 2013  
doi:10.3390/molecules18054887



- 13-381-J Weed control and crop safety with pre-mixed pyrasulfotole and bromoxynil in grain sorghum  
S.S. Reddy, P.W. Stahlman, P.W. Geier, C.R. Thompson, R.S. Currie, A.J. Schlegel, B.L. Olson, N.G. Lally  
Weed Technology  
27:64-670, 2013
- Agronomy**
- 12-005-J Interpreting relationships between soil variables and soybean iron deficiency using factor analysis  
A.M. Liesch, D.A. Ruiz Diaz  
Soil Science Society of America Journal  
76(4):1311-1318, 2012  
doi:10.2136/sssaj2011.0379
- 12-031-J Dryland and Irrigated Corn Yield with Climate, Management, and Hybrid Changes from 1939 through 2009  
Y. Assefa, K.L. Roozeboom, S.A. Staggenborg, J. Du  
Agronomy Journal  
104(2):473-482, 2012
- 12-066-J Speciation of phosphorus in a fertilized, reduced till soil system: In-field treatment incubation study  
R. Khatiwada, G.M. Hettiarachchi, D.B. Mengel  
Soil Science Society of America Journal  
76(6):2006-2018, 2012  
doi:10.2136/sssaj2011.0299
- 12-068-J Genotypic variation within sorghum in transpiration response to drying soil  
M. Gholipoor, T. R. Sinclair, P.V. Vara Prasad  
Plant Soil  
357(1-2):35-40, 2012
- 12-072-J High-iron biosolids compost-induced changes in lead and arsenic speciation and bioaccessibility in co-contaminated soils  
S.L. Brown, I. Clausen, M.A. Chappell, K.G. Scheckel, M. Newville, G.M. Hettiarachchi  
Journal of Environmental Quality  
41(5):1612-1622, 2012  
doi:10.2134/jeq2010.0139
- 12-085-J High day- or nighttime temperature alters leaf assimilation, reproductive success, and phosphatidic acid of pollen grain in soybean [*Glycine max* (L.) Merr.]  
P.V.V. Prasad, M. Djanaguiraman, W.T. Schapaugh  
Crop Science  
53:1594-1604, 2013  
doi:10.2135/cropsci2012.07.0441
- 12-093-J Quantitative trait loci responsible for Fusarium head blight resistance in Chinese landrace Baishanyuehuang  
X. Zhang, H. Pan, G. Bai  
Theoretical and Applied Genetics  
125(3):495-502, 2012  
doi:10.1007/s00122-012-1848-0
- 12-175-J Registration of 'Riley' Winter Canola  
M. Stamm, A. Berrada, J. Buck, P. Cabot, M. Claassen, G. Cramer, C. Godsey, W. Heer, J. Holman, J. Johnson, R. Kochenower, J. Krall, D. Ladd, J. Moore, M.K. O'Neill, C. Pearson, C.L. Rife, D. Santra, R. Sidwell, J. Sij, W.D. Spradlin, D. Starner, W. Wiebold  
Journal of Plant Registrations  
6(3), 2012
- 12-199-B Computer simulation in plant breeding  
X. Li, C. Zhu, J. Wang, J. Yu  
Advances in Agronomy  
116:219-264, 2012
- 12-200-J Genic and non-genic contributions to natural variation of quantitative traits in maize  
X. Li, C. Zhu, C-T. Yeh, W. Wu, E.M. Takacs, K.A. Petsch, F. Tian, G. Bai, E. S. Buckler, G.J. Muehlbauer, M.C.P. Timmermans, M.J. Scanlon, P.S. Schnable, J. Yu  
Genome Research  
22:2436-2444, 2012

- 12-201-J Parallel domestication of the SHATTERING1 genes in cereals  
Z. Lin, X. Li, L.M. Shannon, C-T. Yeh, M.L. Wang, G. Bai, Z. Peng, J. Li, H.N. Trick, T.E. Clemente, J. Doebley, P.S. Schnable, M.R. Tuinstra, T.T. Tesso, F. White, J. Yu  
Nature Genetics  
44:720-724, 2012 doi:10.1038/ng.2281
- 12-210-J Effect of drought and high temperature stress on synthetic hexaploid wheat  
G.P. Pradhan, P. V.V. Prasad, A.K. Fritz, M. B. Kirkham, B.S. Gill  
Functional Plant Biology  
39(3):190-198, 2012
- 12-217-B Research needs for agriculture under elevated carbon dioxide  
M.B. Kirkham  
In: Agriculture's contribution to climate change solutions: Mitigation and adaptation at global and regional scales, D. Hillel and C. Rosenzweig (Eds.)  
London: Imperial College Press, pp. 225-234, 2013
- 12-228-J Internationalization of soil physics from an American perspective  
M.B. Kirkham  
International Agrophysics  
26(2):181-185, 2012  
doi:10.2478/v10247-012-0026-6
- 12-239-J Cold temperature episode at seedling and flowering stages reduces growth and yield components in sorghum  
F. Maulana, T. Tesso  
Crop Science  
53(2):564-574, 2013  
doi:10.2135/cropsci2011.12.0649
- 12-247-J Residual poultry manure nitrogen supply to corn the second and third years after application  
D.A. Ruiz Diaz, J.E. Sawyer, D.W. Barker  
Soil Science Society of America Journal  
76(6): 2289-2296, 2012  
doi:10.2136/sssaj2012.0075
- 12-257-J Assessing the educational needs of urban gardeners and farmers on the subject of soil contamination  
A.M. Raes Harms, D.R. Presley, G. Hettiarachchi, S.J. Thien  
Journal of Extension  
51(1), 2013
- 12-284-J Lysimetric evaluation of SEBAL using high resolution airborne imagery from BEAREX08  
G. Paul, P.H. Gowda, P.V.V. Prasad, T.A. Howell, S.A. Staggenborg, C.M.U. Neale  
Advances in Water Resources  
59:157-168, 2013
- 12-286-J Soil quality after eight years under high tunnels  
S.J.B. Knewtson, R. Janke, M.B. Kirkham, and E.E. Carey  
HortScience  
47(11):1630-1633, 2012
- 12-287-J Analysis of juice yield, sugar content and biomass accumulation in sorghum  
J. Godoy, T. Tesso  
Crop Science  
53(4):1288-1297, 2013  
doi:10.2135/cropsci2012.04.0217
- 12-302-J Presence of tannins in sorghum grains is conditioned by different natural alleles of Tannin1  
X. Li, W. Xiang, C. Zhu, Z. Lin, Y. Wu, J. Li, S. Pandravada, D.D. Ridder, G. Bai, M.L. Wang, H.N. Trick, S.R. Bean, M.R. Tuinstra, T.T. Tesso, and J. Yu  
Proceedings of the National Academy of Sciences  
109:10281-10286, 2012
- 12-319-J Spatial application of WEPS for estimating wind erosion in the Pacific Northwest  
J. Gao, L.E. Wagner, F. Fox, S.H. Chung, J.K. Vaughan, B.K. Lamb  
Transactions of the ASABE  
56(2):613-624, 2013
- 12-322-J Overview of the management submodel in the Wind Erosion Prediction System  
L.E. Wagner, F.A. Fox  
Applied Engineering in Agriculture  
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