Director's Report of Research in Kansas 2013

July 1, 2012–June 30, 2013

K-STATE Research and Extension

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.

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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

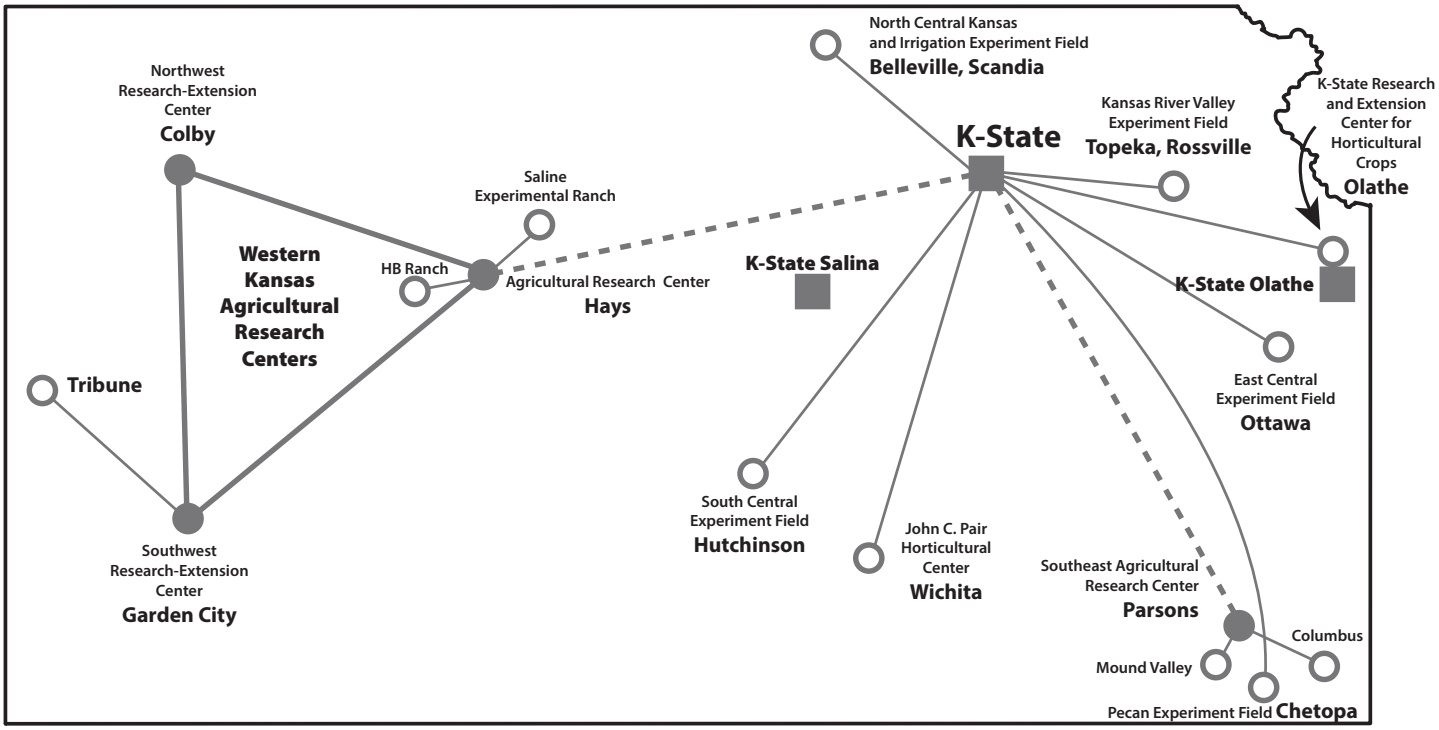
East Central – Ottawa
Kansas River Valley – Rossville, Topeka
North Central and Irrigation – Belleville, Scandia
Pecan Field – Chetopa
South Central – Hutchinson

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, 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

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

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
A. Joualt, A.M. Featherstone
Journal of Applied Finance and Banking
1(1):1-30, 2011

12-008-J Labor productivity convergence in the Kansas farm sector: A three-stage procedure using data envelopment analysis and semiparametric regression analysis
A. Mugera, M. Langemeier,
A. Featherstone
Journal of Productivity Analysis
38(1):63-79, 2012
doi:10.1007/s11123-011-0235-1, 2011

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
A. Chacon-Cascante, A.M. Featherstone
International Research Journal of Finance and Economics
74:169-87, 2011

12-082-D Impact of tillage system on input demands for farms
E. Yeager, M. Langemeier, T. Xia
Agricultural Economics Department Staff Paper no. 12-01, 2011, 19 pp.

12-118-D Staff, programs, and publications in Agricultural Economics-Kansas State University 2010
J. Maberry
Agricultural Economics Department Staff Paper no. 11-04, 2011, 55 pp.

12-119-D Staff, programs, and publications in Agricultural Economics-Kansas State University 2009
J. Maberry
Agricultural Economics Department Staff Paper no. 10-3, 2010, 47 pp.

12-213-J Measuring the benefits to advertising under monopolistic competition
Boland, M.A., J.M. Crespi, J. Silva, T. Xia
Journal of Agricultural and Resource Economics
37(1):144-155, 2012

12-236-D 2011 Nonirrigated Crop-Share Leasing Arrangements in Kansas
J.B. Schlegel, L.J.Tsoodle
Agricultural Economics Department Staff Paper no. 12-02, 2012, 22 pp.

12-272-J Fixed effects estimation of the intensive and extensive margins of irrigation water demand
N.P. Hendricks, J.M. Peterson
Journal of Agricultural & Resource Economics
37(1):1-19, April 2012

12-285-A Do men and women perform differently on different types of test questions?
A.S. Thompson, A.L. Jager, R.O. Burton, Jr.
Proceedings of SAEA (Southern Agricultural Economics Association) annual meeting
Birmingham, AL, 2012

12-365-D Staff, programs, and publications in Agricultural Economics-Kansas State University 2011
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
A.D. Jones, T.J. Dalton, M. Smale
Tegemeo Institute of Agricultural Policy and Development
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. Harmoney, 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. Harmoney, 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:10:10.3390/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. Harmoney, 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 mosiac 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. Lingenfelser
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. Harmoney
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 premixed 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
29(3): 361-372, 2013

12-328-J Selenate-enriched urea granules are a highly effective fertilizer for selenium biofortification of paddy rice grain
L. Premarathna, M. McLaughlin, J. Kirby, G. Hettiarachchi, S. Stacey, D. Chittleborough
Journal of Agricultural and Food Chemistry
60(23):6037–6044, 2012
doi:10.1021/jf3005788

12-332-B Association mapping of genetic resources: Achievements and future perspectives
S. Sukumaran and J. Yu
2nd International Symposium on Genomics of Plant Genetic Resources
Bologna, Italy, 2010

12-336-J A history of wind erosion prediction in the United States Department of Agriculture
J. Tatarko, M.A. Sporcic, E.L.Skidmore
Aeolian Research
doi:10.1016.j/aeolia.2012.08.004

12-348-J Evaluation of bulk density and vegetation as affected by military vehicle traffic at Fort Riley, Kansas
A. Retta , L.E. Wagner, J. Tatarko, T.C. Todd
Transactions of the ASABE
56(2):653-665, 2013

12-372-J Roles of protein synthesis elongation factor EF-Tu in heat tolerance in plants
J. Fu, I. Momcilovic, P.V. Vara Prasad
Journal of Botany
doi:10.1155/2012/835836

12-378-J Cadmium contamination and its risk management in rice ecosystems
N.S. Bolan, T. Makino, A. Kunhikrishnan, P.-J. Kim, S. Ishikawa, M. Murakami, M.B. Kirkham
Advances in Agronomy
119:183-273, 2013
doi:10.1016/B978-0-12-407247-3.00004-4

12-381-J Validation of molecular markers for new stem rust resistance genes in U.S. hard winter wheat
A.N. Bernardo, R.L. Bowden, G. Bai, M.N. Rouse, M.S. Newcomb, D.S. Marshall
Crop Science
53(3):755-764, 2013
doi:10.2135/cropsci2012.07.0446

12-385-B Effects of salinity on ion transport, water relations and oxidative damage
M. Djanaguiraman, P.V.V. Prasad
In: Ecophysiology and responses of plants under salt stress
P. Ahmad et al. (Eds.)
Springer Science+Business Media, pp. 89-114, 2013
doi:10.1007/978-1-4614-4747-4_3

12-405-J Impacts of changing climate and climate variability on seed production and seed industry
R.P. Singh, P.V. Vara Prasad, K.R.Reddy
Advances in Agronomy
118:49-110, 2013

12-408-J Changes in stomatal conductance along grass blades reflect changes in leaf structure
T.W. Ocheltree, J.B. Nippert, P.V.V. Prasad
Plant Cell and Environment
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