

DIRECTOR'S REPORT OF RESEARCH IN KANSAS 2011

JULY 1, 2010 TO JUNE 30, 2011



KANSAS AGRICULTURAL
EXPERIMENT STATION

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, 2011. 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 2011 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 2011 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



Contents

Research Components of the Kansas Agricultural Experiment Station.....1	Diagnostic Medicine/Pathobiology.....20
Station Publications3	Entomology.....22
Publications of Station Scientists.....4	Food Science Institute.....25
Administration4	Grain Science and Industry.....25
Agricultural Economics4	Horticulture, Forestry and Recreation
Agronomy4	Resources27
Anatomy and Physiology.....9	Human Nutrition28
Animal Sciences and Industry9	Plant Pathology29
Apparel, Textiles, and Interior Design.....14	Statistics34
Biochemistry14	Agricultural Research Center–Hays35
Biological and Agricultural	Northwest Research-Extension Center37
Engineering16	Southeast Agricultural Research Center37
Biology.....18	Southwest Research-Extension Center38
Clinical Sciences.....19	

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
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

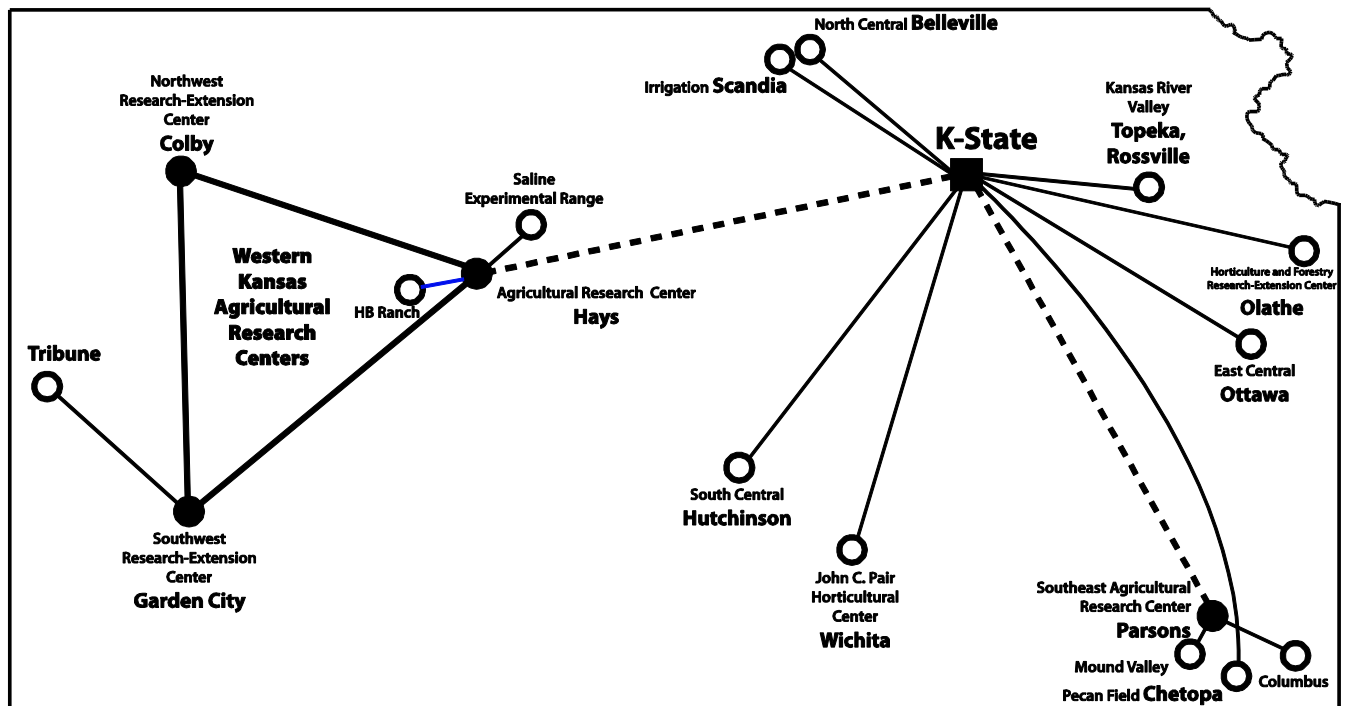
East Central - Ottawa
Kansas River Valley - Rossville, Silver Lake
North Central - Belleville
Pecan Field - Chetopa
South Central - Hutchinson

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 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
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 2011. 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 1035 K-State Turfgrass Research 2010
- SRP 1036 2009 Kansas Performance Tests with Winter Wheat Varieties
- SRP 1037 2009 Kansas Performance Tests with Corn Hybrids
- SRP 1038 Swine Day 2010
- SRP 1039 Dairy Research 2010
- SRP 1040 2010 Kansas Performance Tests with Soybean Varieties
- SRP 1041 2010 Kansas Performance Tests with Grain Sorghum Hybrids
- SRP 1042 2010 Kansas Performance Tests with Sunflower Hybrids
- SRP 1043 2010 Kansas Performance Tests with Alfalfa Varieties
- SRP 1044 2010 National Winter Canola Variety Trial
- SRP 1045 2011 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
- SRP 1046 2010 Kansas Performance Tests with Cotton Varieties
- SRP 1047 Cattlemen's Day 2011
- SRP 1048 Field Research 2011
- SRP 1049 Kansas Fertilizer Research 2010
- SRP 1050 Roundup 2011, ARC-Hays
- SRP 1051 2010 Agricultural Research, Southeast Agricultural Research Center
- SRP 1052 Field Day 2010, Southwest Research-Extension Center

Special Publications

- DRR10 Director's report of research in Kansas 2010

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/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

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).

Administration

DRR10 Director's report of research in Kansas
2010
May 2011, 47 pp. (electronic only)
<http://ksre.ksu.edu/library/p.aspx?tabid=40drr10.pdf>

Agricultural Economics

10-290-J From farm management to agricultural and applied economics: The expansion of a professional society as seen through a census of its dissertations from 1951 to 2005
M. Boland, J. Crespi
Applied Economic Perspectives and Policy, 32(3):456-471, 2010

11-039-D Kansas farm management SAS data bank documentation
M.R. Langemeier
Agricultural Economics Staff Paper no. 11-01, 2010, 110 pp.

11-040-D Comparison of 2007 census and KFMA farms
M. Langemeier
Agricultural Economics Staff Paper no. 11-02, 2010, 17 pp.

11-127-D 2010 fence material and construction cost survey in Kansas
J.B. Schlegel, L.J. Tsoodle
Agricultural Economics Staff Paper no. 11-03, 2010, 4 pp.

11-258-D 2010 pasture leasing arrangements in Kansas
J.B. Schlegel, L.J. Tsoodle
Agricultural Economics Staff Paper no. 11-05, 2011, 14 pp.

11-269-J Productive efficiency in the Middle East and North America
M. Zaher, A.M. Featherstone
Applied Economics, 42(7):899-915, 2010

11-271-J Predicting credit default: Comparative results from an artificial neural network, logistic regression and adaptive neuro-fuzzy inference system
O.O. Odeh, A.M. Featherstone, S. Das
International Research Journal of Finance and Economics, 42:7-18, 2010

11-272-J The genetic and economic impact of the CIMMYT wheat breeding program on local producers in the Yaqui Valley, Sonora Mexico
L.L. Nalley, A.P. Barkley, A.M. Featherstone
Agricultural Economics, 41(5):453-462, 2010

11-273-J Reliability of statistical software
O.O. Odeh, A.M. Featherstone, J.S. Bergtold
American Journal of Agricultural Economics, 92(5):1472-1489, 2010

11-274-J Risk behavior in the presence of government programs
T. Serra, B.K. Goodwin, A.M. Featherstone
Journal of Econometrics, 162(1):18-24, 2011

Agronomy

06-365-J NEXRAD stage III precipitation local bias adjustment for streamflow prediction
P. Tuppad, K.R. Mankin, J.K. Koeliker, J.M.S. Hutchinson, M.C. Knapp
Transactions of the ASABE, 53(5):1511-1520, 2010

08-166-B Water conservation for agriculture
P.W. Unger, M.B. Kirkham, D.C. Nielsen
In: Advances in Soil and Water Conservation, T.M. Zobeck, W.F. Schillinger (Eds.).
Soil Science Society of America Special Publication 60, 2010

09-068-J Primary and residual effects of Abrams tank traffic on prairie soil properties
P.S. Althoff, S.J. Thien, T.C. Todd
Soil Science Society of America Journal, 74(6):2151-2161, 2010

09-083-B Water dynamics in soils
M.B. Kirkham
In: Soil management: Building a stable base for agriculture, J.L. Hatfield, T.J. Sauer (Eds.). Madison, WI: Soil Science Society of America, pp. 53-66, 2011

- 09-161-J Modeling and mapping QTL for senescence-related traits in winter wheat under high temperature
K. Vijayalakshmi, B.S. Gill, A.K. Fritz, G. Bai, S. Pandravada, G.M. Paulsen
Molecular Breeding, 26(2):163-175, 2010
- 09-183-J Longevity and temperature response of pollen as affected by elevated growth temperature and carbon dioxide in peanut and grain sorghum
P.V.V. Prasad, K.J. Boote, L.H. Allen, Jr.
Environmental and Experimental Botany, 70(1):51-57, 2011
- 09-263-B Ethanol from grain crops
R. Zhao, X. Wu, S. Bean, D. Wang
In: *Industrial crops and uses*, B.P. Singh (Ed.).
Cambridge, MA: CAB International, pp. 84-103, 2010
- 09-347-J Features of fermentation performance of sweet sorghum juice after harvest
X. Wu, S. Staggenborg, J.L. Propheter, J. Yu, W.L. Rooney, D. Wang
Journal of Industrial Microbiology and Biotechnology, 101(1):1220-1226, 2010
- 09-345-J Dissection of genetic components of preharvest sprouting resistance in white wheat
S. Liu, G. Bai, S. Cai, C. Chen
Molecular Breeding, 27(4):511-523, 2011
- 10-025-J Simulation of kernel number and yield using CERES-Maize 3.51
A.A. James, R.L. Vanderlip, S. Welch
Agronomy Journal, 2010
- 10-059-J Response of acetolactate synthase-resistant grain sorghum to nicosulfuron plus rimsulfuron
D.S. Hennigh, K. Al-Khatib, M.R. Tuinstra
Weed Technology, 24(4):411-415, 2010
- 10-063-A Optimizing water use with high-transpiration-efficiency plants
P.A. Thevar, M.B. Kirkham, R.M. Aiken, K.D. Kofoid, Z. Xin
Proceedings of the 19th World Congress of Soil Science
Brisbane, Australia, 2010
- 10-075-J Weed control with selected herbicides in acetolactate synthase-resistant sorghum
D.S. Hennigh, K. Al-Khatib, M.R. Tuinstra, R.S. Currie, P.W. Geier, P.W. Stahlman, M.W. Claassen
Crop Protection, 29(8):879-883, 2010
- 10-081-J Response of barnyardgrass (*Echinochloa crus-galli*), green foxtail (*Setaria viridis*), longspine sandbur (*Cenchrus longispinus*), and large crabgrass (*Digitaria sanguinalis*) to nicosulfuron and rimsulfuron
D.S. Hennigh, K. Al-Khatib
Weed Science, 58(3):189-194, 2010
- 10-093-J Impacts of deficit irrigation on carbon sequestration and soil physical properties under no-till
H. Blanco-Canqui, N.L. Klocke, A.J. Schlegel, L.R. Stone, C.W. Rice
Soil Science Society of America Journal, 74(4):1301-1309, 2010
- 10-122-J Continuous cropping systems reduce near-surface maximum compaction in no-till soils
H. Blanco-Canqui, L.R. Stone, A.J. Schlegel, J.G. Benjamin, M.F. Vigil, P.W. Stahlman
Agronomy Journal, 102(4):1217-1225, 2010
- 10-147-A Genetic resources, breeding and production of millets in Ethiopia
E. Degu, A. Adugna, T. Tadesse, T. Tesso
Proceedings of International Workshop on New Approaches to Plant Breeding of Orphan Crops in Africa
Bern, Switzerland, 2007, pp. 43-56
- 10-166-J Genetic diversity, population structure, and linkage disequilibrium in U.S. elite winter wheat
D. Zhang, G. Bai, C. Zhu, J. Yu, B.F. Carver
Plant Genome, 3(2):117-127, 2010
- 10-186-J Field-level targeting using SWAT: Mapping output from HRUs to fields and assessing limitations of GIS input data
P. Daggupati, K.R. Douglas-Mankin, A.Y. Sheshukov, P.L. Barnes, D.L. Devlin
Transactions of the ASABE, 54(2):501-514, 2011
- 10-191-J Effect of tillage on the hydrology of a claypan soil in Kansas
M.E. Buckley, G.J. Kluitenberg, D.W. Sweeney, K.W. Kelley, L.R. Stone
Soil Science Society of America Journal, 74(6):2109-2119, 2010

- 10-219-J Analysis of host plant resistance to multiple *Fusarium* species associated with stalk rot disease in sorghum [*Sorghum bicolor* (L.) Moench]
T.T. Tesso, C.R. Little, N. Ochanda, L. Clafin, M.R. Tuinstra
Field Crops Research, 118(2):177-182, 2010
- 10-232-J Controlled traffic impacts on physical and hydraulic properties in an intensively cropped no-till soil
H. Blanco-Canqui, M.M. Claassen, L.R. Stone
Soil Science Society of America Journal, 74(6):2142-2150, 2010
- 10-246-J Selenium protects sorghum leaves from oxidative damage under high temperature stress by enhancing antioxidant defense system
M. Djanaguiraman, P.V.V. Prasad, M. Seppanen
Plant Physiology and Biochemistry, 48(12):999-1007, 2010
- 10-251-J Stalk strength and reaction to infection by *Macrophomina phaseolina* of brown midrib maize (*Zea mays*) and sorghum (*Sorghum bicolor*)
T. Tesso, G. Ejeta
Field Crops Research, 120(2):271-275, 2011
- 10-253-J Ethylene perception inhibitor 1-MCP decreases oxidative damage of leaves through enhanced antioxidant defense mechanisms in soybean plants grown under high temperature stress
M. Djanaguiraman, P.V.V. Prasad, K. Al-Khatib
Environmental and Experimental Botany, 71(2):215-223, 2011
- 10-256-J Analysis of induction and establishment of dwarf bunt of wheat under marginal climatic conditions
B.J. Goates, G.L. Peterson, R.L. Bowden, L. Maddux
Plant Disease, 95(4):478-484, 2011
- 10-271-J Registration of 34 sorghum germplasm lines resistant to acetolactate synthase inhibitor herbicides
T.T. Tesso, K. Kershner, N. Ochanda, K. Al-Khatib, M.R. Tuinstra
Journal of Plant Registrations, 5(2):215-219, 2011
- 10-276-J Equations for drainage component of the field water balance
L.R. Stone, N.L. Klocke, A.J. Schlegel, F.R. Lamm, D.J. Tomsicek
Applied Engineering in Agriculture, 27(3):345-350, 2011
- 10-283-J Modeling nutrient runoff yields from combined in-field crop management practices using SWAT
K.R. Douglas-Mankin, D. Maski, K.A. Janssen, P. Tuppad, G.M. Pierzynski
Transactions of the ASABE, 53(5):1557-1568, 2010
- 10-284-J Phosphorus adsorption and desorption potential of stream sediments and field soils in agricultural watersheds
S.C. Agudelo, N.O. Nelson, P.L. Barnes, T. Keane, G.M. Pierzynski
Journal of Environmental Quality, 40(1):144-152, 2011
- 10-285-J Dissection and fine mapping of a major QTL for preharvest sprouting resistance in white wheat Rio Blanco
S.B. Liu, G.H. Bai
Theoretical and Applied Genetics, 121(8):1395-1404, 2010
doi:10.1007/s00122-010-1396-4
- 10-303-J Changes in microbial properties after manure, lime, and bentonite application to a heavy metal-contaminated mine waste
L.R. Baker, P.M. White, G.M. Pierzynski
Applied Soil Ecology, 48(1):1-10, 2011
- 10-304-J Wheat gene expression is differentially affected by a virulent Russian wheat aphid biotype
X. Liu, J. Meng, S. Starkey, C.M. Smith
Journal of Chemical Ecology, 37(5):472-482, 2011
- 10-306-J Chromosome size in diploid eukaryotic species centers on the average length with a conserved boundary
X. Li, C. Zhu, Z. Lin, Y. Wu, D. Zhang, W. Song, G. Bai, M. Scanlon, M. Zhang, J. Yu
Molecular Biology and Evolution, 28:1901-191, 2011
- 10-309-J Hydrothermal conversion of corn cobs and crude glycerol
J. Gan, W. Yuan, N.O. Nelson, S.C. Agudelo
Biological Engineering, 2(4):197-210, 2010

- 10-313-J Genetic variability of transpiration response to vapor pressure deficit among sorghum genotypes
M. Gholipoor, P.V.V. Prasad, R.N. Mutava, T.R. Sinclair
Field Crops Research, 119(1):85-90, 2010
- 10-328-J Release of dissolved cadmium and sulfur nanoparticles from oxidizing sulfide minerals
J. de Livera, M.J. McLaughlin, D. Beak, G.M. Hettiarachchi, J. Kirby
Soil Science Society of America Journal, 75(3):842-854, 2011
- 10-344-J Association between morphological traits and yield components in the durra sorghums of Ethiopia
T. Tesso, A. Tirfess, H. Mohammed
Hereditas, 148(3):98-109, 2011
- 10-356-J Cadmium solubility in paddy soils: Effects of soil oxidation, metal sulfides and competitive ions
J. de Livera, M.J. McLaughlin, G.M. Hettiarachchi, J.K. Kirby, D.G. Beak
Science of the Total Environment, 409(8):1489-1497, 2011
- 10-366-B Impacts of high temperature stress and potential opportunities for breeding
R.P. Singh, P.V.V. Prasad, A.K. Sharma, K.R. Reddy
In: Crop Adaptation to Climate Change, S.S. Yadav, J.L. Hatfield, R. Redden, H. Lotze-Campen, A. Hall (Eds.).
West Sussex, UK: John Wiley and Sons, pp. 166-185, 2011
- 10-372-J Pyroxasulfone with and without sulfentrazone in sunflower (*Helianthus annuus*)
B.L.S. Olson, R.K. Zollinger, C.R. Thompson, D.E. Peterson, B. Jenks, M. Moechnig, P.W. Stahlman
Weed Technology, 25(2):217-221, 2011
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
SRP 1036, August 2010
- 11-032-J Single nucleotide polymorphism in wheat chromosome region harboring *Fhb1* for Fusarium head blight resistance
A. Bernado, D. Zhang, H. Ma, G. Bai
Theoretical and Applied Genetics, 29(2):477-488, 2011
doi:10.1007/s11032-011-9565-y
- 11-038-J Physical properties of pellets made from sorghum stalk, corn stover, wheat straw, and big bluestem
K. Theerarattananoon, F. Xu, J. Wilson, R. Ballard, L. Mickinney, S. Staggenborg, P. Vadlani, J.Z. Pei, D. Wang
Industrial Crops and Products, 33(2):325-332, 2011
- 11-041-J Resistance to tan spot and insensitivity to Ptr ToxA in wheat
A.J. Noriel, X. Sun, W. Bockus, G. Bai
Crop Science, 51(3):1059-1067, 2011
- 11-042-J Cobalt distribution and speciation: Effect of aging, intermittent submergence and in situ rice roots
D.G. Beak, J.K. Kirby, G.M. Hettiarachchi, L.A. Wendling, M.J. McLaughlin, R. Khatiwanda
Journal of Environmental Quality, 40(3):679-695, 2010
- 11-045-J Reclamation of abandoned swine lagoon soils using hybrid poplar in a greenhouse soil-column study
K.R. Doulgas-Mankin, K. Precht, M.B. Kirkham, S.L. Hutchinson
International Journal of Agricultural and Biological Engineering, 3(4):44-51, 2010
- 11-050-J A novel quantitative trait locus for Fusarium head blight resistance in chromosome 7A of wheat
D.V. Jayatilake, G.H. Bai, Y.H. Dong
Theoretical and Applied Genetics, 122(6):1189-1198, 2011
- 11-051-J Nitrogen and phosphorus availability in biochar amended soils
N.O. Nelson, S.C. Agudelo, W. Yuan, J. Gan
Soil Science, 176(5):218-226, 2011
doi:10.1097/SS.0b013e3182171eac
- 11-058-J From dawn to dawn – China’s journey to agricultural self-sufficiency
M.B. Kirkham, G.H. Liang
Journal of Environmental Quality, 39(5):1864-1865, 2011

- 11-059-B Elevated carbon dioxide: Impacts on soil and plant water relations
M.B. Kirkham
Boca Raton, Florida: CRC Press, 399 pp., 2011
- 11-073-J Cadmium solubility in paddy soils: effects of soil oxidation, sulfide equilibria and competitive ions
J. de Livera, M.J. McLaughlin, G.M. Hettiarachchi, J.K. Kirby, D.G. Beak
Science of the Total Environment, 409(8):1489-1497, 2011
- 11-111-J Multivariate analysis of maize disease resistances suggests a pleiotropic genetic basis and implicates a glutathione S-transferase gene
R.J. Wisser, J.M. Kolkman, M.E. Patzoldt, J.B. Holland, J. Yu, M. Krakowsky, R.J. Nelson, P.J. Balint-Kurti
Proceedings of National Academy of Sciences, 108(18):7339-7344, 2011
- 11-112-J Evaluation of drought and heat-stressed grain sorghum (*Sorghum bicolor*) for biofuel production
N. Ananda, P.V. Vadlani, P.V. Vara Prasad
Industrial Crops and Products, 33(3):779-782, 2011
- 11-119-J Effects of Planting Date and Tillage on Winter Canola
J. Holman, S. Maxwell, M. Stamm, K. Martin
Crop Management, 2011
doi:10.1094/CM-2011-0324-01-RS
- 11-120-J Utilization of dry distillers grains and charcoal as nitrogen fertilizer in corn
K.J. Shroyer, S.A. Staggenborg, J. Propheter
Agronomy Journal, 103(5):1321-1328, 2011
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelser
SRP 1037, November 2010
- 11-131-S 2011 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
Multiple authors
Coordinating author: C.R. Thompson
KS Agric. Exp. Stn. Report of Prog. 1045, January 2011
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelser
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-165-T 2010 National Winter Canola Variety Trial
Multiple authors
Coordinating author: M. Stamm
KS Agric. Exp. Stn. Report of Prog. 1044, January 2011
- 11-180-J Quantitative trait loci for resistance to fusarium head blight in a Chinese wheat landrace Haiyanzhong
T. Li, G. Bai, S. Wu, S. Gu
Theoretical and Applied Genetics, 122(8):1497-1502, 2011
doi:10.1007/s00122-011-1549-0
- 11-184-S 2010 Kansas Performance Tests with Sunflower Hybrids
Multiple authors
Coordinating author: P. Evans
SRP 1042, January 2011
- 11-190-J Advanced in situ spectroscopic techniques and their applications in environmental biogeochemistry: Introduction to the special section
E. Lombi, G.M. Hettiarachchi, K.G. Scheckel
Journal of Environmental Quality, 40(3):659-666, 2011
- 11-217-J Volunteer glyphosate-tolerant corn reduces soil water storage and winter wheat yields
A. Schlegel, B. Olson, S. Maxwell, K. Martin
Plant Management Network, 2011
- 11-220-J Association study of resistance to soilborne wheat mosaic virus in U.S. winter wheat
D. Zhang, G. Bai, R.M. Hunger, W.W. Bockus, J. Yu, B.F. Carver, G. Brown-Guedira
Phytopathology, 101(11):1322-1329, 2011

- 11-223-S Field Research 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1048,
April 2011
- 11-224-S Kansas Fertilizer Research 2010
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1049,
April 2011
- 11-259-S 2010 Kansas Performance Tests with Cotton
Varieties
Multiple authors
Coordinating author: S. Staggenborg
KS Agric. Exp. Stn. Report of Prog. 1046,
March 2011
- 11-306-S Agricultural Research 2011
Multiple authors
Coordinating author: L. Lomas
KS Agric. Exp. Stn. Report of Prog. 1051,
April 2011
- 11-334-J Influence of precipitation, temperature, and
56 years on winter wheat yields in western
Kansas
J.D. Holman, A.J. Schlegel, C.R. Thompson,
J.E. Lingenfelter
Plant Management Network, 2011
doi:10.1094/CM-2011-1228-01-RS
- 11-377-S 2010 Kansas Performance Tests with Alfalfa
Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1043,
June 2011
- 11-396-J A Farewell to Wilford Gardner
M.B. Kirkham
WISPAS 109:10, 2011
- 11-406-A Deficit irrigation management decision tools
N.L. Klocke, L.R. Stone
Proceedings of the ASABE 5th National
Decennial Irrigation Conference
Phoenix, AZ, 2010

Anatomy and Physiology

- 09-125-J Non-random tissue distribution of human
naïve umbilical cord matrix stem cells
D.K. Maurya, C. Doi, M. Pyle, R.S.
Rachakatla, D. Davis, M. Tamura, D. Troyer
World Journal of Stem Cells, 3(4):34-42,
2011

- 10-361-J Tumor necrosis factor alpha increases P-
glycoprotein expression in a BME-UV *in*
vitro model of mammary epithelial cells
M.M. Al-Bataineh, D. van der Merwe, B.D.
Schultz, R. Gehring
Biopharmaceutics and Drug Disposition,
31(8-9):506-515, 2010
- 11-281-J Swine models of cystic fibrosis reveal male
reproductive tract phenotype at birth
F. Pierucci-Alves, V. Akoyev, J.C. Stewart
III, L-H. Wang, K.S. Janardhan, B.D.
Schultz
Biology of Reproduction, 2011
doi:10.1095/biolreprod.111.090860
- 11-317-J Structural modifications modulate the
biophysical properties of a synthetic
channel-forming peptide: Designing a
clinically relevant anion selective pore
U. Bukovnik, J. Gao, G.A. Cook, L.P.
Shank, M.B. Seabra, J. Chen, B.D. Schultz,
T. Iwamoto, J.M. Tomich

Animal Sciences and Industry

- 07-265-J Use of serum biomarkers to predict the
development and severity of
osteocondrosis lesions in the distal portion
of the femur in pigs
N.Z. Frantz, K.G. Friesen, M.D. Tokach,
J.L. Nelssen, R.D. Goodband, J.M.
DeRouchey, S.S. Dritz, G.A. Andrews, R.M.
Yamka, T.L. Loughin
American Journal of Veterinary Research,
71(8):946-952, 2010
- 08-079-J Dried distillers grains with solubles with
reduced corn silage levels in beef finishing
diets
M.L. May, M.J. Quinn, B.E. Depenbusch,
C.D. Reinhardt, M.L. Gibson, K.K. Karges,
J.S. Drouillard
Journal of Animal Science, 88(7):2456-
2463, 2010
- 08-357-J Evaluation of low molecular weight
fractions and crude enzyme preparation
from a *Trichoderma* cellulase complex as a
treatment for fibrous feeds
D.A. Llewellyn, T.T. Marston, K.L.
Teutemacher, J.J. Higgins, T. Melgarejo
Animal Feed Science and Technology,
160(1-2):39-48, 2010

- 08-373-J Feed depredation by European starlings in a Kansas feedlot
B.E. Depenbusch, J.S. Drouillard, C.D. Lee
Human-Wildlife Interactions, 5(1):58-65, 2011
- 09-125-J Non-random tissue distribution of human naïve umbilical cord matrix stem cells
D.K. Maurya, C. Doi, M. Pyle, R.S. Rachakatla, D. Davis, M. Tamura, D. Troyer
World Journal of Stem Cells, 3(4):34-42, 2011
- 09-274-J Characterization of plasma metabolites in Holstein dairy cows during the periparturient period
A.F. Park, J.E. Shirley, E.C. Titgemeyer, R.C. Cochran, J.M. DeFrain, E.E. Wickersham, D.E. Johnson
International Journal of Dairy Science, 5(4):253-263, 2010
- 09-296-J Real distance performance and variation of 5 low-frequency radio frequency identification panel transceiver manufacturers
S.E. Ryan, D.A. Blasi, C.O. Anglin, A.M. Bryant, B.A. Rickard, M.P. Anderson, K.E. Fike
Journal of Animal Science, 88(7):2514-2522, 2010
- 09-297-J Influence of feed flavors and nursery diet complexity on preweaning and nursery pig performance
R.C. Sulabo, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Animal Science, 88(12):3918-3926, 2010
- 09-298-J Effects of creep feeder design and feed accessibility on preweaning pig performance and the proportion of pigs consuming creep feed
R.C. Sulabo, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Swine Health and Production, 18(4):174-181, 2010
- 09-331-J Effects of lactation feed intake and creep feeding on sow and piglet performance
R.C. Sulabo, J.Y. Jacela, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.L. Nelssen
Journal of Animal Science, 88(9):3145-3153, 2010
- 09-332-J Effects of varying creep feeding duration on the proportion of pigs consuming creep feed and neonatal pig performance
R.C. Sulabo, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.L. Nelssen
Journal of Animal Science, 88(9):3154-3162, 2010
- 10-007-J Near-infrared oximetry of skeletal muscle for following myoglobin redox forms
A. Mohan, M.C. Hunt, T.J. Barstow, T.A. Houser, D.M. Hueber
Food Chemistry, 123(2):456-464, 2010
- 10-023-J Ammonia gas permeability of meat packaging materials
F. Karim, F. Hijaz, C.L. Kastner, J.S. Smith
Journal of Food Science, 76(2):T59-T64, 2011
doi:10.1111/j.1750-3841.2010.01991.x
- 10-024-J Frozen beef contamination after exposure to low levels of ammonia gas
F. Karim, F. Hijaz, C.L. Kastner, J.S. Smith
Journal of Food Science, 75(2):T35-T39, 2010
doi:10.1111/j.1750-3841.2009.01488.x
- 10-044-J Impact of a plant extract on the viability of *Lactobacillus delbrueckii* ssp. *bulgaricus* and *Streptococcus thermophilus* in nonfat yogurt
M. Michael, R.K. Phebus, K.A. Schmidt
International Dairy Journal, 20(10):665-672, 2010
- 10-051-J Occurrence of *tcxB*, a transferable copper resistance gene, in fecal enterococci of swine
R.G. Amachawadi, N. Shelton, M. Jacob, X. Shi, S. Narayanan, L. Zurek, S. Dritz, J.L. Nelssen, M. Tokach, T.G. Nagaraja
Foodborne Pathogens and Disease, 7(9):1089-1097, 2010
- 10-129-J A rapid direct solvent extraction of 2-dodecylcyclobutanone from irradiated ground beef patties using acetonitrile
F. Hijaz, A. Kumar, F. Karim, J.S. Smith
Journal of Food Science, 88(8):2729-2740, 2010
doi:10.2527/jas.2009-2641

- 10-131-J Effect of nitrogen supplementation on urea kinetics and microbial use of recycled urea in steers consuming corn-based diets
D.W. Brake, E.C. Titgemeyer, M.L. Jones, D.E. Anderson
Journal of Animal Science, 88(8):2729-2740, 2010
doi:10.2527/jas.2009-2641
- 10-132-J Effect of nitrogen supplementation and zilpaterol-HCl on urea kinetics in steers consuming corn-based diets
D.W. Brake, E.C. Titgemeyer, M.L. Jones
Journal of Animal Physiology and Animal Nutrition, 95(4):409-16, 2011
doi:10.1111/j.1439-0396.2010.01064.x
- 10-136-J Amino acid digestibility and energy content of deoiled (solvent-extracted) corn dried distillers grains with solubles for swine and effects on growth performance and carcass characteristics
J.Y. Jacela, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband, J.M. Nelssen, R.C. Sulabo, R.C. Thaler, L. Brandts, D.E. Little, K.J. Prusa
Journal of Animal Science, 89(6):1817-1829
- 10-137-J Field evaluation of the effects of a porcine circovirus type 2 vaccine on finishing pig growth performance, carcass characteristics, and mortality rate in a herd with a history of porcine circovirus-associated disease
J.Y. Jacela, S.S. Dritz, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, J.L. Nelssen
Journal of Swine Health and Production, 19(1):10-18, 2011
- 10-143-J Effects of ractopamine and gender on protein turnover in skeletal muscle of implanted steers and heifers
D.K. Walker, E.C. Titgemeyer, D.E. Johnson, S.B. Laudert, B.J. Johnson
South African Journal of Animal Science, 41(1):16-23, 2011
- 10-149-J Effects of feeding increasing levels of wet corn gluten feed on production and ruminal fermentation in lactating cows
C.R. Mullins, K.N. Grigsby, D.E. Anderson, E.C. Titgemeyer, B.J. Bradford
Journal of Dairy Science, 93(11):5329-5337, 2010
- 10-152-J Production methods and product characteristics of jerky produced by small and very small meat processing businesses
S.M. Lonnecker, E.A.E. Boyle, K.J.K. Getty, D.R. Buege, S.C. Ingham, G. Searls, and N.M. Harper
Journal of Muscle Foods, 21(4):826-833, 2010
doi:10.1111/j.1745-4573.2010.00222.x
- 10-155-J Effects of distillers grains with high sulfur concentration on ruminal fermentation and digestibility of finishing diets.
S. Uwituze, G.L. Parsons, K.K. Karges, M.L. Gibson, L.C. Hollis, J.J. Higgins, J.S. Drouillard
Journal of Animal Science, 89(9):2817-2828, 2011
- 10-171-J Amino acid digestibility and energy concentration of high-protein corn dried distillers grains and high-protein sorghum dried distillers grains with solubles for swine
J.Y. Jacela, H.L. Frobose, J.M. DeRouchey, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Animal Science, 88(11):3617-3623, 2010
- 10-179-J Effects of supplemental enzymes in diets containing dried distillers grains with solubles on finishing pig growth performance
J.Y. Jacela, S.S. Dritz, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, J.L. Nelssen
Professional Animal Scientist, 26:412-424, 2010
- 10-181-J Levels of 2-dodecylcyclobutanone in ground beef patties irradiated by low-energy X-ray and gamma rays
F. Hijaz, J.S. Smith
Journal of Food Science, 75(9):T156-T160, 2010
doi:10.1111/j.1750-3841.2010.01869.x
- 10-187-J Effects of running time of a cattle-cooling system on core body temperature of cows on dairy farms in an arid environment
X.A. Ortiz, J.F. Smith, B.J. Bradford, J.P. Harner, A. Oddy
Journal of Dairy Science, 93(10):4949-4954, 2010
- 10-188-J Effect of complementation of cattle cooling systems with feedline soakers on lactating dairy cows in a desert environment
X.A. Ortiz, J.F. Smith, B.J. Bradford, J.P. Harner, A. Oddy
Journal of Dairy Science, 94(2):1026-1031, 2011

- 10-189-J A comparison of the effects of 2 cattle-cooling systems on dairy cows in a desert environment
X.A. Ortiz, J.F. Smith, B.J. Bradford, J.P. Harner, A. Oddy
Journal of Dairy Science, 93(10):4955-4960, 2010
- 10-193-J Package systems and storage times serve as post-lethality treatments for listeria monocytogenes on whole muscle beef jerky
A. Sulabo, T. Axman, K. Getty, E. Boyle, N. Harper, K. Uppal, B. Berry, and J. Higgins
Journal of Food Protection, 74(2):188-192, 2011
- 10-201-J Efficacy of different commercial phytase enzymes and development of an available phosphorus release curve for *Escherichia coli*-derived phytases in nursery pigs
C.K. Jones, M.D. Tokach, S.S. Dritz, B.W. Ratliff, N.L. Horn, R.D. Goodband, J.M. DeRouche, R.C. Sulabo, J.L. Nelssen
Journal of Animal Science, 88(11):3631-3644, 2010
doi:10.2527/jas.2010-2936
- 10-208-J Effects of distillers dried grains with solubles on carcass fat quality of finishing pigs
J.M. Benz, S.K. Linneen, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouche, R.D. Goodband, R.C. Sulabo, K.J. Prusa
Journal of Animal Science, 88(11):3666-3682, 2010
- 10-260-J Effects of dietary iodine value product on growth performance, carcass characteristics, and carcass fat quality of finishing pigs
J.M. Benz, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouche, R.D. Goodband, R.C. Sulabo
Journal of Animal Science, 89:1419-1428, 2011
doi:10.2527/jas.2010-3126
- 10-261-J Effects of increasing choice white grease in corn- and sorghum-based diets on growth performance, carcass characteristics, and fat quality characteristics of finishing pigs
J.M. Benz, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouche, R.D. Goodband, R.C. Sulabo
Journal of Animal Science, 89(3):773-782, 2011
doi:10.2527/jas.2010-3033
- 10-316-J Alternative protocols to presynchronize estrous cycles in dairy cattle before a timed artificial insemination program
J.S. Stevenson
Journal of Dairy Science, 94(1):205-217, 2011
- 10-356-J Cadmium solubility in paddy soils: Effects of soil oxidation, metal sulfides and competitive ions
J. de Livera, M.J. McLaughlin, G.M. Hettiarachchi, J.K. Kirby, D.G. Beak
Science of the Total Environment, 409(8):1489-1497, 2011
- 10-362-J Effects of extended Zilpaterol-HCl withdrawal on performance and carcass traits of finishing beef heifers
G.L. Parsons, B.E. Deppenbusch, C.D. Reinhardt, D.A. Yates, J.P. Hutcheson, J.S. Drouillard
Journal of Animal Science, 69-73, 2010
- 10-364-J Viable cell yield from active dry yeast products and effects of storage temperature and diluent on yeast cell viability
M.L. Sullivan, J. Miranda, B.J. Bradford
Journal of Dairy Science, 94(1):526, 2011
- 10-378-J Bilingual, digital, audio-visual training modules improve technical knowledge of feedlot and dairy workers
C.D. Reinhardt, D.U. Thomson, D.D. Retzlaff, B. Butler, J.A. Valles
Online Journal of Rural Research and Policy, 5(7):461-465, 2011
- 10-386-J Heterocyclic amine content in commercial ready to eat meat products
K. Puangsombat, P. Gadgil, T.A. Houser, M.C. Hunt, J.S. Smith
Meat Science, 88(2):227-233, 2011
- 10-387-J Comparing the mannitol-egg yolk-polymyxin agar plating method to the three-tube most probable number method for enumeration of *Bacillus cereus* spores in raw and high-temperature-short-time pasteurized milk
N.M. Harper, K.J.K. Getty, K.A. Schmidt, A.L. Nutsch, R.H. Linton
Journal of Food Protection, 74(3):461, 2011

- 11-003-J Administration of human chorionic gonadotropin to embryo transfer recipients increased ovulation, progesterone, and transfer pregnancy rates
L.D. Wallace, C.A. Breiner, R.A. Breiner, G.C. Lamb, J.S. Stevenson
Theriogenology, 75:1506-1515, 2010
- 11-016-S Swine Day 2010
Multiple authors
Coordinating author: R. Goodband
KS Agric. Exp. Stn. Report of Prog. 1038, November 2010
- 11-025-A Forage selection preferences by multiparous and primiparous beef cows grazing native tallgrass range during winter
N. A. Sproul, L.W. Murray, J.R. Jaeger, D.A. Blasi, L.N. Edwards, G.J. Eckerle, L.A. Pacheco, KC Olson
Proceedings of the Western Section, American Society of Animal Science 2010, pp. 15-20
- 11-026-A The relative importance of weaning management and vaccination history on performance by ranch-direct beef calves during weaning and receiving
M.J. Macek, KC Olson, J.R. Jaeger, T.B. Schmidt, J.W. Iliff, D.U. Thomson, L.A. Pacheco
Proceedings of the Western Section, American Society of Animal Science 2010, pp. 25-29
- 11-027-A Effects of sun-curing and harvest maturity on concentration and protein-binding capacity of condensed tannins in sericea lespedeza (*Lespedeza cuneata*)
G.J. Eckerle, KC Olson, J.R. Jaeger, J.L. Davidson, T.K. Kraft, L.A. Pacheco
Proceedings of the Western Section, American Society of Animal Science 2010, pp. 30-34
- 11-028-A The relative importance of weaning management and vaccination history on finishing performance and carcass characteristics of beef calves
M.J. Macek, J.W. Iliff, KC Olson, J.R. Jaeger, T.B. Schmidt, D.U. Thomson, L.A. Pacheco
Proceedings of the Western Section, American Society of Animal Science 2010, pp. 186-189
- 11-029-A Effects of degree of respiratory disease vaccination on health and growth performance of ranch-direct beef calves during weaning and receiving
M.J. Macek, J.R. Jaeger, T.B. Schmidt, D.U. Thomson, J.W. Bolte, L.A. Pacheco, N.A. Sproul, L.R. Hibbard, G.J. Eckerle, KC Olson
Proceedings of the Western Section, American Society of Animal Science 2010, pp. 190-193
- 11-030-A Effects of prepartum ruminally protected choline supplementation on performance of beef cows and calves
L.A. Pacheco, J.R. Jaeger, L.R. Hibbard, M.J. Macek, N.A. Sproul, G.J. Eckerle, E.A. Bailey, J.W. Bolte, KC Olson
Proceedings of the Western Section, American Society of Animal Science 2011, pp. 62-64
- 11-088-J A comparison of methodologies for measuring glucose concentrations in the equine
T.L. Slough, C.D. Gunkel, L.W. Murray, J.S. Drouillard
Professional Animal Scientist, 27(3):204-214, 2011
- 11-145-J Dietary Monensin level, supplemental urea, and ractopamine on fecal shedding of *Escherichia coli* O157:H7 in feedlot cattle
Z.D. Paddock, C.E. Walker, D.G. Renter, J.S. Drouillard, T.G. Nagaraja
Journal of Animal Science, 89(9):2829-2835, 2011
doi:10.2527/jas.2010-3793
- 11-152-J Technical Note: Validation of an ELISA for measurement of tumor necrosis factor alpha in bovine plasma
J.K. Farney, L.K. Mamedova, B.J. Bradford
Journal of Dairy Science, 94(7):3504-3509, 2011
- 11-167-J Effects of mineral-supplement delivery system on frequency, duration, and timing of supplement use by beef cows grazing topographically rugged native rangeland in the Kansas Flint Hills
N.A. Aubel, KC Olson, J.S. Drouillard, J.R. Jaeger, M.D. Schlegel, L.A. Pacheco, D.R. Linden, J.W. Bolte, J.J. Higgins
Journal of Animal Science, 89(11):3699-3706, 2011
doi:10.2527/jas.2010-3808

- 11-208-J Effects of pharmacological amounts of nicotinic acid on lipolysis and feed intake in cattle
E.C. Titgemeyer, B.J. Bradford, L.K. Mamedova, K.S. Spivey
International Journal of Dairy Science, 6(2):134-141, 2011
doi:10.3923/ijds.2011.134.141
- 11-212-J Viable cell yield from active dry yeast products and effects of storage temperature and diluent on yeast cell viability
M.L. Sullivan, B.J. Bradford
Journal of Dairy Science, 94(1):526-531, 2011
- 11-237-S Roundup 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1050, April 2011
- 11-243-J Selection of fecal enterococci exhibiting *tcpB*-mediated copper resistance in pigs fed diets supplemented with copper
R.G. Amachawadi, N.W. Shelton, X. Shi, J. Vinasco, S.S. Dritz, M.D. Tokach, J.L. Nelssen, H.M. Scott, T.G. Nagaraja
Applied and Environmental Microbiology, 77(16): 5597-5603, 2011
doi:10.1128/AEM.00364-11
- 11-394-J Meta-analyses describing the variables that influence the backfat, belly fat, and jowl fat iodine value of pork carcasses
J.R. Bergstrom, J.L. Nelssen, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, T.A. Houser
Journal of Animal Science, 88(11):119-135, 2010
- 11-402-J Effects of wheat middlings and choice white grease in diets on the growth performance, carcass characteristics, and carcass fat quality in growing-finishing pigs
J.A. Barnes, J.M. DeRouchey, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Animal Science, 88(11):104-114, 2010

Apparel, Textiles, and Interior Design

- 09-154-J Exploring consumers' perceptions of eco-conscious apparel acquisition behaviors
K.Y. Hiller Connell
Social Responsibility Journal, 7(1):61-73, 2011

Biochemistry

- 09-381-J Metalloprotease-disintegrin ADAM12 expression is regulated by Notch signaling via MicroRNA-29
H. Li, E. Solomon, D. Sun, A. Zolkiewska
Journal of Biological Chemistry, 286:21500-21510, 2011
- 10-043-J *Tyrosine hydroxylase* is required for cuticle sclerotization and pigmentation in *Tribolium castaneum*
M.J. Gorman, Y. Arakane
Insect Biochemistry and Molecular Biology, 40(3):267-273, 2010
- 10-057-J Morphology and structural properties of pH-responsive amphiphilic peptides
J.N. Shera, D. Takahashi, A.I. Herrera, O. Prakash, X.S. Sun
Journal of Nanoscience and Nanotechnology, 10(12):7981-7987, 2010
- 10-068-J Mechanical properties of elytra from *Tribolium castaneum* wild-type and body color mutant strains
J. Lomakin, Y. Arakane, K.J. Kramer, R.W. Beeman, M.R. Kanost, S.H. Gehrke
Journal of Insect Physiology, 56(12):1901-1906, 2010
- 10-099-J Model reactions for insect cuticle sclerotization: Participation of amino groups in the cross-linking of *Manduca sexta* cuticle protein MsCP36
R.J. Suderman, N.T. Dittmer, K.J. Kramer, M.R. Kanost
Insect Biochemistry and Molecular Biology, 40(3):252-258, 2010
- 10-104-J Identification, mRNA expression and functional analysis of several yellow family genes in *Tribolium castaneum*
Y. Arakane, N.T. Dittmer, K.J. Kramer, S. Muthukrishnan, R.W. Beeman, M.R. Kanost
Insect Biochemistry and Molecular Biology, 40(3):259-266, 2010
- 10-115-J Genes encoding proteins with peritrophin A-type chitin-binding domains in *Tribolium castaneum* are grouped into three distinct families based on phylogeny, expression and function
S. Jasrapuria, Y. Arakane, G. Osman, K.J. Kramer, R.W. Beeman, S. Muthukrishnan
Insect Biochemistry and Molecular Biology, 40(3):214-227, 2010

- 10-117-J The role of SnoN in transforming growth factor β 1-induced expression of Metalloprotease-Disintegrin ADAM12
E. Solomon, H. Li, E. Syta, A. Zolkiewska
Journal of Biological Chemistry, 285:21969-21977, 2010
doi:10.1074/jbc.M110.133314
- 10-146-J A gut-specific chitinase gene essential for regulation of chitin content of peritrophic matrix and growth of *Ostrinia nubilalis* larvae
C. Khajuria, L.L. Buschman, M-S. Chen, S. Muthukrishnan, K.Y. Zhu
Insect Biochemistry and Molecular Biology, 40(8):621-629, 2010
- 10-156-J Insect multicopper oxidases: Diversity, properties, and physiological roles
N.T. Dittmer, M.R. Kanost
Biochemistry and Molecular Biology, 40(3):179-88, 2010
- 10-180-J Field study of biostimulation and bioaugmentation for remediation of tetrachloroethene in groundwater
S. Santharam, J. Ibbini, L.C. Davis, L.E. Erickson
Remediation Journal, 21(2):51-68, 2011
- 10-199-J Study of octenyl succinic anhydride-modified waxy maize starch by nuclear magnetic resonance spectroscopy
Y. Bai, Y-C. Shi, A. Herrera, O. Prakash
Carbohydrate Polymers, 83(2):407-413, 2011
- 10-211-J GIPC1 interacts with MyoGEF and promotes MDA-MB-231 breast cancer cell invasion
D. Wu, A. Haruta, Q. Wei
Journal of Biological Chemistry, 285(38):28643-28650, 2010
- 10-258-J Analysis of mutually exclusive alternatively spliced serpin-1 isoforms and identification of serpin-1 proteinase complexes in *Manduca sexta* hemolymph
E.J. Ragan, C. An, C. Yang, M.R. Kanost
Journal of Biological Chemistry, 285(38):29642-29650, 2010
- 10-269-J Structural characterization of two pore-forming peptides: Consequences of introducing a C-terminal tryptophan
A.I. Herrera, A. Al-Rawi, G.A. Cook, J. Gao, T. Iwamoto, O. Prakash, J.M. Tomich, J. Chen
Proteins: Structure, Function, and Bioinformatics, 78(10):2238-2250, 2010
- 10-273-J Both UDP *N*-acetylglucosamine pyrophosphorylases of *Tribolium castaneum* are critical for molting, survival and fecundity
Y. Arakane, M.C. Baguion, S. Jasrapuria, S. Chaudhari, A. Doyungan, K.J. Kramer, S. Muthukrishnan, R.W. Beeman
Insect Biochemistry and Molecular Biology, 41(1):42-50, 2011
- 10-287-J Infrared monitoring of dinitrotoluenes in sunflower and maize roots
K.M. Dokken, L.C. Davis
Journal of Environmental Quality, 40(3):719-730, 2011
- 10-334-J Role of a novel coiled-coil domain-containing protein CCDC69 in regulating central spindle assembly
D. Pal, D. Wu, A. Haruta, F. Matsumura, Q. Wei
Cell Cycle, 9(20):4117-4129, 2010
- 10-338-J Leureptin: A soluble, extracellular leucine-rich repeat protein from *Manduca sexta* that binds lipopolysaccharide
Y. Zhu, E.R. Ragan, M.R. Kanost
Insect Biochemistry and Molecular Biology, 40(10):713-22, 2010
- 10-368-J Characterization of a regulatory unit that controls melanization and affects longevity of mosquitoes
C. An, A. Budd, M.R. Kanost, K. Michel
Cellular and Molecular Life Sciences, 68(11):1929-1939, 2011
doi:10.1007/s00018-010-0543-z
- 11-007-J Effective approximation of molecular volume using atom-centered dielectric functions in generalized Born models
J. Chen
Journal of Chemical Theory and Computation, 6(9):2790-2803, 2010
doi:10.1021/ct100251y

- 11-008-J Topology-based modeling of intrinsically disordered proteins: Balancing intrinsic folding propensities and intermolecular interactions
D. Ganguly, J. Chen
Proteins: Structure, Function, and Bioinformatics, 79(4):1251-1266, 2011
doi:10.1002/prot.22960
- 11-146-J Predicted effector molecules in the salivary secretome of the pea aphid (*Acyrtosiphon pisum*): A dual transcriptomic/proteomic approach
J.C. Carolan, D. Caragea, K.T. Reardon, N.S. Mutti, K. Pappan, N. Dittmer, F. Cui, M. Castaneto, J. Poulain, C. Dossat, D. Tagu, J.C. Reese, G.R. Reeck, T.L. Wilkinson, O. Edwards
Journal of Proteome Research, 10(4):1505-1518, 2011
- 11-155-J Metalloprotease-Disintegrin ADAM12 expression is regulated by Notch signaling via microRNA-29
H. Li, E. Solomon, S. Duhachek Muggy, D. Sun, A. Zolkiewska
Journal of Biological Chemistry, 286:21500-21510, 2011
doi:10.1074/jbc.M110.207951
- 11-174-J Intrinsically disordered proteins in a physics-based world
T. Click, D. Ganguly, J. Chen
International Journal of Molecular Sciences, 11(12): 5292-5309, 2010
doi:10.3390/ijms11125292
- 11-179-J Crystal structure of native *Anopheles gambiae* serpin-2, a negative regulator of melanization in mosquitoes
C. An, S. Lovell, M.R. Kanost, K.P. Battaile, K. Michel
Proteins: Structure, Function, and Bioinformatics, 79(6):1999-2003, 2011
doi:10.1002/prot.2300
- 11-239-J Comparative genomic analysis of chitinase and chitinase-like genes in the African malaria mosquito (*Anopheles gambiae*)
J. Zhang, X. Zhang, Y. Arakane, S. Muthukrishnan, K.J. Kramer, E. Ma, K.Y. Zhu
PLoS ONE, 6(5):e19899, 2011
doi:10.1371/journal.pone.0019899
- 11-317-J Structural modifications modulate the biophysical properties of a synthetic channel-forming peptide: Designing a clinically relevant anion selective pore
U. Bukovnik, J. Gao, G.A. Cook, L.P. Shank, M.B. Seabra, J. Chen, B.D. Schultz, T. Iwamoto, J.M. Tomich
Biochemistry, 1818(4):1039-48, 2011
- 11-366-J Knickkopf protein protects and organizes chitin in the newly synthesized insect exoskeleton
S.S. Chaudhari, Y. Arakane, C.A. Specht, B. Moussian, D. Boyle, Y. Park, K.J. Kramer, R.W. Beeman, S. Muthukrishnan
Proceedings of the National Academy of Sciences, 108(41):17028-17033, 2011
doi:10.1073/pnas.1112288108
- Biological and Agricultural Engineering**
- 06-355-J Strategic targeting of cropland management using watershed modeling
P. Tuppad, K.R. Mankin, K.A. McVay
Agricultural Engineering International: The CIGR Journal, 12(3-4):12-24, 2010
- 06-365-J NEXRAD stage III precipitation local bias adjustment for streamflow prediction
P. Tuppad, K.R. Mankin, J.K. Koeliker, J.M.S. Hutchinson, M.C. Knapp
Transactions of the ASABE, 53(5):1511-1520, 2010
- 09-263-B Ethanol from grain crops
R. Zhao, X. Wu, S. Bean, D. Wang
In: Industrial crops and uses, B.P. Singh (Ed.).
Cambridge, MA: CAB International, pp. 84-103, 2010
- 09-347-J Features of fermentation performance of sweet sorghum juice after harvest
X. Wu, S. Staggenborg, J.L. Propheter, J. Yu, W.L. Rooney, D. Wang
Journal of Industrial Microbiology and Biotechnology, 101(1):1220-1226, 2010
- 10-092-J Material and interaction properties of selected grains and oilseeds for modeling discrete particles
J.M. Boac, M.E. Casada, R.G. Maghirang, J.P. Harner, III
Transactions of the ASABE, 53(4):1201-1216, 2010

- 10-283-J Modeling nutrient runoff yields from combined in-field crop management practices using SWAT
K.R. Douglas-Mankin, D. Maski, K.A. Janssen, P. Tuppad, G.M. Pierzynski
Transactions of the ASABE, 53(5):1557-1568, 2010
- 10-284-J Phosphorus adsorption and desorption potential of stream sediments and field soils in agricultural watersheds
S.C. Agudelo, N.O. Nelson, P.L. Barnes, T. Keane, G.M. Pierzynski
Journal of Environmental Quality, 40(1):144-152, 2011
- 10-186-J Field-level targeting using SWAT: Mapping output from HRUs to fields and assessing limitations of GIS input data
P. Daggupati, K.R. Douglas-Mankin, A.Y. Sheshukov, P.L. Barnes, D.L. Devlin
Transactions of the ASABE, 54(2):501-514, 2011
- 10-187-J Effects of running time of a cattle-cooling system on core body temperature of cows on dairy farms in an arid environment
X.A. Ortiz, J.F. Smith, B.J. Bradford, J.P. Harner, A. Oddy
Journal of Dairy Science, 93(10):4949-4954, 2010
- 10-188-J Effect of complementation of cattle cooling systems with feedline soakers on lactating dairy cows in a desert environment
X.A. Ortiz, J.F. Smith, B.J. Bradford, J.P. Harner, A. Oddy
Journal of Dairy Science, 94(2):1026-1031, 2011
- 10-189-J A comparison of the effects of 2 cattle-cooling systems on dairy cows in a desert environment
X.A. Ortiz, J.F. Smith, B.J. Bradford, J.P. Harner, A. Oddy
Journal of Dairy Science, 93(10):4955-4960, 2010
- 10-295-J Particulate control efficiency of a water sprinkler system at a beef cattle feedlot in Kansas
H. Bonifacio, R.G. Maghirang, E.B. Razote, B.W. Auvermann, J.P. Harner, J.P. Murphy, L. Guo, J.M. Sweeten, W.L. Hargrove
Transactions of the ASABE, 54(1):295-304, 2011
- 10-302-J Ethanol fermentation performance of grain sorghum (*Sorghum bicolor*) with modified endosperm matrices
X. Wu, B. Jampala, A. Robbins, D. Hays, S. Yan, F. Xu, W. Rooney, Y-C. Shi, D. Wang
Journal of Agricultural and Food Chemistry, 58(17):9556-9562, 2010
- 10-309-J Hydrothermal conversion of corn cobs and crude glycerol
J. Gan, W. Yuan, N.O. Nelson, S.C. Agudelo
Biological Engineering, 2(4):197-210, 2010
- 10-369-J Functional, physiochemical and rheological properties of duckweed (*Spirodela polyrhiza*) protein
G. Yu, H. Liu, K. Venkateshan, S. Yan, J.J. Cheng, D. Wang, X.S. Sun
Transactions of the ASABE, 54(2):555-561, 2011
- 11-038-J Physical properties of pellets made from sorghum stalk, corn stover, wheat straw, and big bluestem
K. Theerarattananoon, F. Xu, J. Wilson, R. Ballard, L. Mickinney, S. Staggenborg, P. Vadlani, J.Z. Pei, D. Wang
Industrial Crops and Products, 33(2):325-332, 2011
- 11-044-J Soil and water assessment tool (SWAT) model: Current developments and applications
K.R. Douglas-Mankin, R. Srinivasan, J.G. Arnold
Transactions of the ASABE, 53(5):1423-1431, 2011
- 11-045-J Reclamation of abandoned swine lagoon soils using hybrid poplar in a greenhouse soil-column study
K.R. Douglas-Mankin, K. Precht, M.B. Kirkham, S.L. Hutchinson
International Journal of Agricultural and Biological Engineering, 3(4):44-51, 2010
- 11-046-J Field assessment of bacteria and nutrient removal by vegetative filter strips
K.R. Douglas-Mankin, C.G. Okoren
International Journal of Agricultural and Biological Engineering, 4(2):43-49, 2011
- 11-051-J Nitrogen and phosphorus availability in biochar amended soils
N.O. Nelson, S.C. Agudelo, W. Yuan, J. Gan
Soil Science, 176(5):218-226, 2011
doi:10.1097/SS.0b013e3182171eac

- 11-131-S 2011 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
Multiple authors
Coordinating author: C.R.Thompson
KS Agric. Exp. Stn. Report of Prog. 1045, January 2011
- 11-302-J Cellobiose hydrolysis using acid functionalized nanoparticles
L. Peña, M. Ikenberry, B. Ware, K.L. Hohn, D. Boyle, X.S. Sun, and D. Wang
Biotechnology and Bioprocessing Engineering, 16(6):1214-1222, 2011
- Publications without contribution numbers
- Concentrations of particulate matter emitted from large cattle feedlots in Kansas
L. Guo, R.G. Maghirang, E.B. Razote, S.L. Trabue, L. McConnell
Journal of Air and Waste Management, 61:1026-1035, 2011
- Biology**
- 07-297-J High propagule production and reproductive fitness homeostasis contribute to the invasiveness of *Lespedeza cuneata* (*Fabaceae*)
T.M. Woods, D.C. Harnett, C.J. Ferguson
Biological Invasions, 11:1913-1927, 2009
- 09-113-J Response of a complex foraging phenotype to artificial selection on its component traits
P. Nachappa, D.C. Margolies, J.R. Nechols, T.J. Morgan
Evolutionary Ecology, 24(4):631-655, 2010
- 09-132-J Evaluation of macrophage plasticity in brown and white adipose tissue
M. Teresa Ortega, L. Xie, S. Mora, S.K. Chapes
Cellular Immunology, 271(1):124-133, 2011
- 09-283-J A caspase-like decoy molecule enhances the activity of a paralogous caspase in the yellow fever mosquito, *Aedes aegypti*
B. Bryant, M.C. Ungerer, R.M. Waterhouse, R.J. Clem, Q. Liu
Insect Biochemistry and Molecular Biology, 40(7):516-523, 2010
- 10-139-J The meadow jumping mouse on Konza Prairie Biological Station, Kansas
G.A. Kaufman, D.W. Kaufman
Transactions of the Kansas Academy of Science, 113(3 and 4):209-216, 2010
- 10-140-J Treated versus new traps: Does chronic application of disinfectant to live traps reduce trappability of rodents?
G.A. Kaufman, D.M. Kaufman, D.W. Kaufman
The Southwestern Naturalist, 56(2):224-230, 2011
- 10-207-B Freshwater ecology: Concepts and environmental applications of limnology, second edition
W.K. Dodds, M.R. Whiles
Burlington, MA: Elsevier, 2010, 829 pp.
- 10-217-J Divergent host plant adaptation drives the evolution of sexual isolation in the grasshopper *Hesperotettix viridis* (Orthoptera: *Acrididae*) in the absence of reinforcement
T. Grace, S.M. Wisely, S. Brown, F.E. Dowell, A. Joern
Biological Journal of the Linnean Society, 100(4):866-878, 2010
- 10-218-J Comparative genome scan detects host-related divergent selection in the grasshopper *Hesperotettix viridis*
J.L. Apple, T. Grace, A. Joern, P. St. Amand, S. Wisely
Molecular Ecology, 19(18):4012-4028, 2010
- 10-233-J Small mammals as winter prey of long-eared owls in Kansas
D.W. Kaufman, G.A. Kaufman, D.E. Brillhart
Transactions of the Kansas Academy of Science, 113(4):217-222, 2010
- 10-234-J The least weasel on Konza Prairie Biological Station, Kansas
D.W. Kaufman, G.A. Kaufman
Transactions of the Kansas Academy of Science, 113(4):206-208, 2010
- 10-245-J Retrospective analysis of fish community change during a half-century of land-use and streamflow changes
K.B. Gido, W.K. Dodds, M.E. Eberle
Journal of the North American Benthological Society, 29(3):970-987, 2010
- 10-275-J Dynamic influences of nutrients and grazing fish on periphyton during recovery from flood
J.N. Murdock, W.K. Dodds, K.B. Gido, M.R. Whiles
Journal of the North American Benthological Society, 30(2):331-345, 2011

- 10-311-J Vegetation responses to an animal-generated disturbance (bison wallows) in tallgrass prairie
B.R. McMillan, K.A. Pfeiffer, D.W. Kaufman
American Midland Naturalist, 165(1):60-73, 2011
- 10-342-J Defining the core apoptosis pathway in the mosquito disease vector *Aedes aegypti*: the roles of *iap1*, *ark*, *dronc*, and effector caspases
Q. Liu, R. Clem
Apoptosis, 16(2):105-113, 2011
- 10-343-J The role of IAP antagonist proteins in the core apoptosis pathway of the mosquito disease vector *Aedes aegypti*
H. Wang, R. Clem
Apoptosis, 16(3):235-248, 2011
- 10-365-J Retrospective analysis of fish community change during a half-century of landuse and streamflow changes
K.B. Gido, W.K. Dodds, M.E. Eberle
Journal of the North American Benthological Society, 29(3):970-987, 2010
- 10-368-J Characterization of a regulatory unit that controls melanization and affects longevity of mosquitoes
C. An, A. Budd, M.R. Kanost, K. Michel
Cellular and Molecular Life Sciences, 68(11):1929-1939, 2011
doi:10.1007/s00018-010-0543-z
- 10-388-J *Autographa californica* multiple nucleopolyhedrovirus Ac92 (ORF92, P33) is required for budded virus production and multiply enveloped occlusion-derived virus formation
W. Wu, A.L. Passarelli
Journal of Virology, 84(23):12351-12361, 2010
- 10-391-J Nutrient loading and grazing by the minnow *Phoxinus erythrogaster* shift periphyton abundance and stoichiometry in mesocosms
T.J. Kohler, J.N. Murdock, K.B. Gido, W.K. Dodds
Freshwater Ecology, 56(6):1133-1146, 2011
- 11-081-J Observation of porcupine in Geary County, Kansas
D.W. Kaufman, G.A. Kaufman
Transactions of the Kansas Academy of Science, 114(2):142-143, 2011
- 11-082-J The least shrew on Konza Prairie Biological Station, Kansas
G.A. Kaufman, D.W. Kaufman
Transactions of the Kansas Academy of Science, 114(2):47-58, 2011
- 11-107-J *Rhus glabra* responses to season and intensity of fire in tallgrass prairie
K.M. Hajny, D.C. Hartnett, G.W.T. Wilson
International Journal of Wildland Fire, 20(5):709-720, 2011
- 11-135-J Recovery of native plant community characteristics on a chronosequence of restored prairies seeded into pastures in west-central Iowa
D.L. Carter, J.M. Blair
Restoration Ecology, 2011
doi:10.1111/j.1526-100X.2010.00760.x
- 11-179-J Crystal structure of native *Anopheles gambiae* serpin-2, a negative regulator of melanization in mosquitoes
C. An, S. Lovell, M.R. Kanost, K.P. Battaile, K. Michel
Proteins: Structure, Function, and Bioinformatics, 79(6):1999-2003, 2011
doi:10.1002/prot.2300
- 11-192-J Barriers to success: How baculoviruses establish efficient systemic infections
A.L. Passarelli
Virology, 41(2):1:383-392, 2011
- Clinical Sciences**
- 10-149-J Effects of feeding increasing levels of wet corn gluten feed on production and ruminal fermentation in lactating cows
C.R. Mullins, K.N. Grigsby, D.E. Anderson, E.C. Titgemeyer, B.J. Bradford
Journal of Dairy Science, 93(11):5329-5337, 2010
- 10-361-J Tumor necrosis factor alpha increases P-glycoprotein expression in a BME-UV *in vitro* model of mammary epithelial cells
M.M. Al-Bataineh, D. van der Merwe, B.D. Schultz, R. Gehring
Biopharmaceutics and Drug Disposition, 31(8-9):506-515, 2010
- 10-378-J Bilingual, digital, audio-visual training modules improve technical knowledge of feedlot and dairy workers
C.D. Reinhardt, D.U. Thomson, D.D. Retzlaff, B. Butler, J.A. Valles
Online Journal of Rural Research and Policy, 5(7):461-465, 2011

- 11-100-J Prevalence and persistence of *Salmonella* in cohorts of feedlot cattle
C.C. Dodd, D.G. Renter, X. Shi, T.G. Nagaraja, M.J. Alam, M.W. Sanderson
Foodborne Pathogens and Disease, 8(7):781-789, 2011
- 11-237-S Roundup 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1050, April 2011

Diagnostic Medicine/Pathobiology

- 07-265-J Use of serum biomarkers to predict the development and severity of osteochondrosis lesions in the distal portion of the femur in pigs
N.Z. Frantz, K.G. Friesen, M.D. Tokach, J.L. Nelssen, R.D. Goodband, J.M. DeRouchey, S.S. Dritz, G.A. Andrews, R.M. Yamka, T.L. Loughin
American Journal of Veterinary Research, 71(8):946-952, 2010
- 09-297-J Influence of feed flavors and nursery diet complexity on preweaning and nursery pig performance
R.C. Sulabo, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Animal Science, 88(12):3918-3926, 2010
- 09-298-J Effects of creep feeder design and feed accessibility on preweaning pig performance and the proportion of pigs consuming creep feed
R.C. Sulabo, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Swine Health and Production, 18(4):174-181, 2010
- 09-331-J Effects of lactation feed intake and creep feeding on sow and piglet performance
R.C. Sulabo, J.Y. Jacela, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.L. Nelssen
Journal of Animal Science, 88(9):3145-3153, 2010
- 09-332-J Effects of varying creep feeding duration on the proportion of pigs consuming creep feed and neonatal pig performance
R.C. Sulabo, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.L. Nelssen
Journal of Animal Science, 88(9):3154-3162, 2010

- 09-363-J Stored-product insects carry antibiotic-resistant and potentially virulent enterococci
H.C. Lakshmikantha, B. Subramanyam, L. Zurek
FEMS Microbiology Ecology, 74(2):464-47, 2010
doi:10.1111/j.1574-6941.2010.00949.x
- 10-051-J Occurrence of TcrB, a transferable copper resistance gene, in fecal enterococci of swine
R.G. Amachawadi, N. Shelton, M. Jacob, X. Shi, S. Narayanan, L. Zurek, S. Dritz, J.L. Nelssen, M. Tokach, TG Nagaraja
Foodborne Pathogens Disease, 7(9):1089-1097, 2010
- 10-094-J Evaluation of the effects of a commercially available *Salmonella* Newport siderophore receptor and porin protein vaccine on fecal shedding of *Salmonella* bacteria and health and performance of feedlot cattle
C.C. Dodd, D.G. Renter, D.U. Thomson, T.G. Nagaraja
American Journal of Veterinary Research, 72(2):239-247, 2011
- 10-136-J Amino acid digestibility and energy content of deoiled (solvent-extracted) corn dried distillers grains with solubles for swine and effects on growth performance and carcass characteristics
J.Y. Jacela, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband, J.M. Nelssen, R.C. Sulabo, R.C. Thaler, L. Brandts, D.E. Little, K.J. Prusa
Journal of Animal Science, 89(6):1817-1829
- 10-137-J Field evaluation of the effects of a porcine circovirus type 2 vaccine on finishing pig growth performance, carcass characteristics, and mortality rate in a herd with a history of porcine circovirus-associated disease
J.Y. Jacela, S.S. Dritz, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, J.L. Nelssen
Journal of Swine Health and Production, 19(1):10-18, 2011
- 10-169-J A multiplex PCR procedure for the detection of six major virulence genes in *Escherichia coli* O157:H7
J. Bai, X. Shi, T.G. Nagaraja
Journal of Microbiological Methods, 82(1):85-89, 2010

- 10-171-J Amino acid digestibility and energy concentration of high-protein corn dried distillers grains and high-protein sorghum dried distillers grains with solubles for swine
J.Y. Jacela, H.L. Frobose, J.M. DeRouche, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.L. Nelssen
Journal of Animal Science, 88(11):3617-3623, 2010
- 10-179-J Effects of supplemental enzymes in diets containing dried distillers grains with solubles on finishing pig growth performance
J.Y. Jacela, S.S. Dritz, J.M. DeRouche, M.D. Tokach, R.D. Goodband, J.L. Nelssen
Professional Animal Scientist, 26:412-424, 2010
- 10-201-J Efficacy of different commercial phytase enzymes and development of an available phosphorus release curve for *Escherichia coli*-derived phytases in nursery pigs
C.K. Jones, M.D. Tokach, S.S. Dritz, B.W. Ratliff, N.L. Horn, R.D. Goodband, J.M. DeRouche, R.C. Sulabo, J.L. Nelssen
Journal of Animal Science, 88(11):3631-3644, 2010
doi:10.2527/jas.2010-2936
- 10-208-J Effects of distillers dried grains with solubles on carcass fat quality of finishing pigs
J.M. Benz, S.K. Linneen, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouche, R.D. Goodband, R.C. Sulabo, K.J. Prusa
Journal of Animal Science, 88(11):3666-3682, 2010
- 10-231-J Temporal distributions of respiratory disease events within cohorts of feedlot cattle and associations with cattle health and performance indices
A.H. Babcock, D.G. Renter, B.J. White, S.R. Dubnicka, H.M. Scott
97(3-4):198-219, 2010
- 10-260-J Effects of dietary iodine value product on growth performance, carcass characteristics, and carcass fat quality of finishing pigs
J.M. Benz, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouche, R.D. Goodband, R.C. Sulabo
Journal of Animal Science, 89:1419-1428, 2011
doi:10.2527/jas.2010-3126
- 10-261-J Effects of increasing choice white grease in corn-and sorghum-based diets on growth performance, carcass characteristics, and fat quality characteristics of finishing pigs
J.M. Benz, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouche, R.D. Goodband, R.C. Sulabo
Journal of Animal Science, 89(3):773-782, 2011
doi:10.2527/jas.2010-3033
- 10-318-J Inclusion of dried or wet distillers' grains at different levels in diets of feedlot cattle affects fecal shedding of *Escherichia coli* O157:H7
M.E. Jacob, Z.D. Paddock, D.G. Renter, K.F. Lechtenberg, T.G. Nagaraja
Journal of Applied and Environmental Microbiology, 76(21):7238-7242, 2010
- 10-361-J Tumor necrosis factor alpha increases P-glycoprotein expression in a BME-UV *in vitro* model of mammary epithelial cells
M.M. Al-Bataineh, D. van der Merwe, B.D. Schultz, R. Gehring
Biopharmaceutics and Drug Disposition, 31(8-9):506-515, 2010
- 11-100-J Prevalence and persistence of *Salmonella* in cohorts of feedlot cattle
C.C. Dodd, D.G. Renter, X. Shi, T.G. Nagaraja, M.J. Alam, M.W. Sanderson
Foodborne Pathogens and Disease, 8(7):781-789, 2011
- 11-121-J Insects in confined swine operations carry a large antibiotic-resistant and potentially virulent enterococcal community
A. Ahmad, A. Ghosh, C. Schal, L. Zurek
Microbiology, 11(1):23, 2011
doi:10.1186/1471-2180-11-23
- 11-145-J Dietary Monensin level, supplemental urea, and ractopamine on fecal shedding of *Escherichia coli* O157:H7 in feedlot cattle
Z.D. Paddock, C.E. Walker, D.G. Renter, J.S. Drouillard, T.G. Nagaraja
Journal of Animal Science, 89(9):2829-2835, 2011
doi:10.2527/jas.2010-3793

- 11-243-J Selection of fecal enterococci exhibiting *tcpB*-mediated copper resistance in pigs fed diets supplemented with copper
R.G. Amachawadi, N.W. Shelton, X. Shi, J. Vinasco, S.S. Dritz, M.D. Tokach, J.L. Nelssen, H.M. Scott, T.G. Nagaraja
Applied and Environmental Microbiology, 77(16):5597-5603, 2011
doi:10.1128/AEM.00364-11
- 11-283-J Isolation and characterization of *Ehrlichia chaffeensis* RNA polymerase and its use in evaluating p28 outer membrane protein gene promoters
B. Faburay, H. Liu, L. Peddireddi, R.R. Ganta
BMC Microbiology, 11(1):83, 2011
- 11-394-J Meta-analyses describing the variables that influence the backfat, belly fat, and jowl fat iodine value of pork carcasses
J.R. Bergstrom, J.L. Nelssen, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, T.A. Houser
Journal of Animal Science, 88(11):119-135, 2010
- 11-402-J Effects of wheat middlings and choice white grease in diets on the growth performance, carcass characteristics, and carcass fat quality in growing-finishing pigs
J.A. Barnes, J.M. DeRouchey, M.D. Tokach, S.S. Dritz, R.D. Goodband, and J.L. Nelssen
Journal of Animal Science, 88(11):104-114, 2010
- Publications without contribution numbers
- Effects of supplemental enzymes in diets containing distillers dried grains with solubles on finishing pig growth performance
J.Y. Jacela, S.S. Dritz, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, J.L. Nelssen
Professional Animal Scientist, 26:412-424, 2010
- Food and agriculture security: an historical, multidisciplinary approach
J. Kastner (Ed.)
Santa Barbara, California: ABC-CLIO and Praeger Security International, 162 pp., 2010

Entomology

- 08-150-J Effects of intra-and inter-patch host density on egg parasitism by three species of *Trichogramma*
M.J. Grieshop, P.W. Flinn, J.R. Nechols
Journal of Insect Science, 10(99): 2010
- 09-061-J *PiggyBac*-like elements in the pink bollworm, *Pectinophora gossypiella*
J. Wang, E.D. Miller, G.S. Simmon, T.A. Millar, Y. Park
Insect Molecular Biology 19(2):177-184, 2010
doi:10.1111/j.1365-2583.2009.00964.x
- 09-113-J Response of a complex foraging phenotype to artificial selection on its component traits
P. Nachappa, D.C. Margolies, J.R. Nechols, T.J. Morgan
Evolutionary Ecology, 24(4):631-655, 2010
- 09-149-J Ant mimicry by an aphid parasitoid, *Lysiphlebus fabarum*
A. Rasekh, J.P. Michaud, A. Kharazi-Pakdel, H. Allahyari
Journal of Insect Science, 10(126): 2010
- 09-166-J Mating behavior differences and the cost of mating in *Allonemobius fasciatus* and *A. socius*
L.M. Birge, A.L. Hughes, J.L. Marshall, D.J. Howard
Journal of Insect Behavior, 23(4):268-289, 2010
- 09-245-B Disease Management
M.M. Kennelly, R.A. Cloyd
In: Greenhouse operation and management, P.V. Nelson (Ed.)
Upper Saddle River, NJ: Prentice Hall, pp. 691, 2011
- 09-265-J The gut transcriptome of a gall midge, *Mayetiola destructor*
S. Zhang, R. Shukle, O. Mittapalli, Y.C. Zhu, J.C. Reese, B-Z. Hua, H. Wang, M-S. Chen
Journal of Insect Physiology, 56(9):1198-1206, 2010
- 09-287-J Variation in fitness of the longhorned beetle *Dectes texanus* as a function of host plant
J.P. Michaud, A.K. Grant
Journal of Insect Science, 10(206):1-14, 2010

- 09-333-B Advances and prospects of RNAi technologies in insect pest management
X. Zhang, J. Zhang, K.Y. Zhu
In: Recent Advances in Entomological Research: From Molecular Biology to Pest Management.
Beijing: Higher Education Press, pp. 211-217, 2010
- 09-363-J Stored-product insects carry antibiotic-resistant and potentially virulent enterococci
H.C. Lakshmikantha, B. Subramanyam, L. Zurek
FEMS Microbiology Ecology, 74(2):464-47, 2010
doi:10.1111/j.1574-6941.2010.00949.x
- 09-384-J Relative toxicity of three wheat herbicides to two species of Coccinellidae
J.P. Michaud, G. Vargas
Insect Science, 17(5):434-438, 2010
- 09-386-J Pest status and distribution of the Dectes stem borer, *Dectes texanus*
L.L. Buschman, P.E. Sloderbeck
Journal of Insect Science, 10(198): 2010
- 10-051-J Occurrence of tcrB, a transferable copper resistance gene, in fecal enterococci of swine
R.G. Amachawadi, N. Shelton, M. Jacob, X. Shi, S. Narayanan, L. Zurek, S. Dritz, J.L. Nelssen, M. Tokach, T.G. Nagaraja
Foodborne Pathogens and Disease, 7(9):1089-1097, 2010
- 10-082-J Comparative analysis of expressed sequence tags from three castes and two life stages of the termite *Reticulitermes flavipes*
M. Steller, S. Kambhampati, D. Caragea
BMC Genomics, 11:463-474, 2010
- 10-118-J *Copidosoma howardi*, a new name for *Parapsilophrys gelechia*
G. Zolnerowich, R.L. Zuparko
Pan-Pacific Entomologist, 86(4):135-138, 2010
doi:10.3956/2009-29.1
- 10-106-J Transmission blocking vaccines to control insect-born diseases
M. Ramalho-Ortigao, I. Coutinho-Abreu
Memorias de Instituto Oswaldo Cruz, 105(1):1-12, 2010
- 10-128-J Development and validation of node-based sample units for estimating soybean aphid (Hemiptera: *Aphididae*) densities in field cage experiments
A.C. Costamagna, B.P. McCornack, D.W. Ragsdale, D. Landis
Journal of Economic Entomology, 103(4):1483-1492, 2010
- 10-146-J A gut-specific chitinase gene essential for regulation of chitin content of peritrophic matrix and growth of *Ostrinia nubilalis* larvae
C. Khajuria, L.L. Buschman, M-S. Chen, S. Muthukrishnan, K.Y. Zhu
Insect Biochemistry and Molecular Biology, 40(8):621-629, 2010
- 10-174-J Efficacy of miticides applied at pre-tassel stage for control of spider mites, 2009A
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F4), 2010
- 10-175-J Efficacy of miticides applied at tassel stage for control of spider mites, 2009B
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F5), 2010
- 10-176-J Efficacy of miticides applied at pre- and post-tassel stage for control of spider mites, 2009C
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F6), 2010
- 10-177-J Efficacy of insecticides for managing Dectes stem borer in soybean, 2009A
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F49), 2010
- 10-178-J Efficacy of insecticides for managing head moth and stem borer in sunflower, 2009A
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F61), 2010
- 10-235-J Aerial insecticide treatments of management of the Dectes stem borer, *Dectes texanus*, in soybean
P.E. Sloderbeck, L.L. Buschman
Journal of Insect Science, 11(49):1-10, 2011

- 10-239-J Comparative proteomics uncovers the signature of natural selection acting on the ejaculate proteomes of two cricket species isolated by postmating, prezygotic phenotypes
J.L. Marshall, D.L. Huestis, D.J. Howard, C. Garcia, Y. Hiromasa, S. Wheeler, S. Noh, J.M. Tomich
Molecular Biology and Evolution, 28(1):423-435, 2010
- 10-286-J Sand fly-Leishmania interactions: Long relationships are not necessarily easy
M. Ramalho-Ortigao, E.M. Saraiva, Y.M. Traub-Cseko
The Open Parasitology Journal, 4:195-204, 2010
- 10-304-J Wheat gene expression is differentially affected by a virulent Russian wheat aphid biotype
X. Liu, J. Meng, S. Starkey, C.M. Smith
Journal of Chemical Ecology, 37(5):472-482, 2011
- 10-337-J Ecological genomics of sand fly salivary gland genes: An overview
I.V. Coutinho-Abreu, M. Ramalho-Ortigao
Journal of Vector Ecology, 36(s1):S58-S63, 2011
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelser
KS Agric. Exp. Stn. Report of Prog. 1036, August 2010
- 11-076-J Characterization of six antibacterial response genes from the European corn borer (*Ostrinia nubilalis*) larval gut and their expression in response to bacterial challenge
C. Khajuria, L.L. Buschman, M-S. Chen, L. Zurek, K.Y. Zhu
Journal of Insect Physiology, 57(3):345-355, 2011
- 11-098-J Response of *Tribolium castaneum* and *T. confusum* adults to vertical black shapes and its potential to improve trap capture
A.A. Semeao, J.F. Campbell, R.J. Whitworth, P.E. Sloderbeck
Journal of Stored Products Research, 47(2):88-94, 2011
- 11-116-J Global variation in the piggyback-like element of pink bollworm, *Pectinophora gossypiella*
J.Wang, G.S. Simmons, T.A. Miller, B.E. Tabashnik, Y. Park
Journal of Asian Pacific Entomology, 14(1):131-135, 2011
- 11-121-J Insects in confined swine operations carry a large antibiotic resistant and potentially virulent enterococcal community
A. Ahmad, A. Ghosh, C. Schal, L. Zurek
BMC Microbiology, 11(1):23
doi:10.1186/1471-2180-11-23
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelser
KS Agric. Exp. Stn. Report of Prog. 1037, November 2010
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010
- 11-142-J Immature insects: Ecological roles of mobility
D.W. Hagstrum, B. Subramanyam
American Entomologist, 56(4):230-241, 2010
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelser
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-146-J Predicted effector molecules in the salivary secretome of the pea aphid (*Acyrtosiphon pisum*): A dual transcriptomic/proteomic approach
J.C. Carolan, D. Caragea, K.T. Reardon, N.S. Mutti, K. Pappan, N. Dittmer, F. Cui, M. Castaneto, J. Poulain, C. Dossat, D. Tagu, J.C. Reese, G.R. Reeck, T.L. Wilkinson, O. Edwards
Journal of Proteome Research, 10(4):1505-18, 2011

- 11-168-J Evidence for D1 dopamine receptor activation by a paracrine signal of dopamine in tick salivary glands
L. Šimo, J. Koci, D. Žitnan, Y. Park
PLoS ONE, 6(1): e16158, 2011
doi:10.1371/journal.pone.0016158
- 11-239-J Comparative genomic analysis of chitinase and chitinase-like genes in the African malaria mosquito (*Anopheles gambiae*)
J. Zhang, X. Zhang, Y. Arakane, S. Muthukrishnan, K.J. Kramer, E. Ma, K.Y. Zhu
PLoS ONE, 6(5):e19899, 2011
doi:10.1371/journal.pone.0019899
- 11-366-J Knickkopf protein protects and organizes chitin in the newly synthesized insect exoskeleton
S.S. Chaudhari, Y. Arakane, C.A. Specht, B. Moussian, D. Boyle, Y. Park, K.J. Kramer, R.W. Beeman, S. Muthukrishnan
Proceedings of the National Academy of Sciences, 108(41):17028-17033, 2011
doi:10.1073/pnas.1112288108
- 11-373-J Zoysiagrass genotypes differ in susceptibility to the bluegrass billbug, *Sphenophorus parvulus*
J.D. Fry, R.A. Cloyd
HortScience, 46(9):1314-1316, 2011
- Publications without contribution numbers
- Aerial insecticide treatments for management of *Dectes* stem borer, *Dectes texanus*, in soybean
P. E. Sloderbeck and L.L. Buschman
Journal of Insect Science, 11(49): 2011
- Food Science Institute**
- 10-152-J Production methods and product characteristics of jerky produced by small and very small meat processing businesses
S.M. Lonnecker, E.A.E. Boyle, K.J.K. Getty, D.R. Buege, S.C. Ingham, G.A. Searls, N.M. Harper
Journal of Muscle Foods, 21(4):826-833, 2010
- Grain Science and Industry**
- 08-356-J Extrusion as a thermo-mechanical pre-treatment for lignocellulosic ethanol
B.P. Lamsal, K. Brijwani, J. Yoo, S. Alavi
Biomass and Bioenergy, 34(12):1703-1710, 2010
- 08-376-J Recent advances in biopolymers and biopolymer-based nanocomposites for food packaging materials
X.Z. Tang, P. Kumar, S. Alavi, K.P. Sandeep
Critical Reviews in Food Science and Nutrition
2011
- 09-235-J Effect of water absorption and mungbean middlings content on mungbean-durum semolina composite pasta quality
J. Li, C.E. Walker
Getreidetechnologie, 63(4):26-36, 2010
- 09-244-J Ethanol production from banana peels using statistically optimized simultaneous saccharification and fermentation process
H. Singh Oberoi, P.V. Vadlani, L. Saida, S. Bansal, J.D. Hughes
Waste Management, 31(7):1576-1584, 2011
- 09-363-J Stored-product insects carry antibiotic-resistant and potentially virulent enterococci
H.C. Lakshmikantha, B.H. Subramanyam, L. Zurek
FEMS Microbiology Ecology, 74(2):464-47, 2010
doi:10.1111/j.1574-6941.2010.00949.x
- 09-371-J Volume, texture, and molecular mechanism behind the collapse of bread made with different levels of hard waxy wheat flours
S.K. Garimella Purna, R.A. Miller, P.A. Seib, R.A. Graybosch, Y-C. Shi
Journal of Cereal Science, 54(1):37-43, 2011
- 10-017-J Enhanced ethanol production via fermentation of rice straw with hydrolysate-adapted *Candida tropicalis* ATCC 13803
H.S. Oberoi, P.V. Vadlani, K. Brijwani, V.K. Bhargav, R.T. Patil
Process Biochemistry, 45(8):1299-1306, 2010
- 10-036-J InSb focal plane array imaging enables assessment of unit process efficiency for milling operation
D.L. Wetzel, E.S. Posner, H. Dogan
Vibrational Spectroscopy, 64(12):1320-1324, 2010
- 10-042-J Peel adhesion properties of modified soy protein adhesive on glass panel
G. Qi, X.S. Sun
Journal of Industrial Crops and Products, 32(3):208-212, 2010

- 10-057-J Morphology and structural properties of pH-responsive amphiphilic peptides
J.N. Shera, D. Takahashi, A.I. Herrera, O. Prakash, X.S. Sun
Journal of Nanoscience and Nanotechnology, 10(12):7981-7987, 2010
- 10-067-B Insitute FT-IR microspectroscopy and imaging of wheat kernels and other grains
D.L. Wetzel, L.R. Brewer
In: Applications of vibrational spectroscopy for food science, E. Li-Chan, J.M. Chalmers, P. Griffiths (Eds.).
West Sussex, England: Wiley, 2010
- 10-127-J Rational design of responsive self-assembling peptides from native protein sequences
H. Huang, X.S. Sun, J. Shi
Biomacromolecules, 11(12):3390-3394, 2010
- 10-195-B Thermodynamic and microscopy studies of urea-soy protein composites
K. Venkateshan, X.S. Sun
In: Green Polymer Chemistry: Biocatalysis and Biomaterials, ACS Symposium Series, H.N. Cheng, R.A. Gross (Eds.).
ACS, pp. 59-70, 2011
- 10-197-J Rice-shaped extruded kernels: Physical, sensory, and nutritional properties
J. Yoo, S. Alavi, K. Adhikari, M.D. Haub, R.A. Aberle, G. Huber
International Journal of Food Properties, 2011
doi:10.1080/10942912.2010.495042
- 10-199-J Study of octenyl succinic anhydride-modified waxy maize starch by nuclear magnetic resonance spectroscopy
Y. Bai, Y-C. Shi, A. Herrera, O. Prakash
Carbohydrate Polymers, 83(2):407-413, 2011
- 10-200-J Structure and preparation of octenyl succinic esters of granular starch, microporous starch and soluble maltodextrin
Y. Bai, Y-C. Shi
Carbohydrate Polymers, 83(2):520-527, 2010
- 10-209-J Acidulant and oven type affect total anthocyanin content of blue corn cookies
J. Li, C.E. Walker, J.M. Faubion
Journal of the Science of Food and Agriculture, 91(1):38-43, 2011
- 10-225-J Lipase-mediated hydrolysis of corn DDGS oil: Kinetics of linoleic acid production
K. Brijwani, P.V. Vadlani
Biochemical Engineering Journal, 52(2-3):289-295, 2010
- 10-264-J Susceptibility of *Lasioderma serricorne* (Coleoptera: *Anobiidae*) life stages to elevated temperatures used during structural heat treatments
C. Yu, B. Subramanyam, P.W. Flinn, J.A. Gwartz
Journal of Economic Entomology, 104(1):317-324, 2011
- 10-265-J Susceptibility of various life stages of *Rhyzopertha dominica* (Coleoptera: *Bostrichidae*) to flameless catalytic infrared radiation
M. Khamis, B. Subramanyam, P.W. Flinn, H. Dogan, A. Jager, J.A. Gwartz
Journal of Economic Entomology, 103(4):1508-1516, 2010
- 10-301-J Cellulolytic enzymes production via solid-state fermentation: Effect of pretreatment methods on physicochemical characteristics of substrate
K. Brijwani, P.V. Vadlani
Enzyme Research, 2011
doi:10.4061/2011/860134
- 10-302-J Ethanol fermentation performance of grain sorghum (*Sorghum bicolor*) with modified endosperm matrices
X. Wu, B. Jampala, A. Robbins, D. Hays, S. Yan, F. Xu, W. Rooney, Y-C. Shi, D. Wang
Journal of Agricultural and Food Chemistry, 58(17):9556-9562, 2010
- 10-314-J Rice bran is an effective substitute for yeast extract in ethanol fermentation
N. Ananda, P.V. Vadlani, R.L. Madl
Journal of Biobased Materials and Bioenergy, 5(1):70-74, 2011
- 10-331-J Susceptibility of *Tribolium castaneum* (Herbst) (Coleoptera: *Tenebrionidae*) life stages to flameless catalytic infrared radiation
M. Khamis, B. Subramanyam, P.W. Flinn, H. Dogan, J.A. Gwartz
Journal of Economic Entomology, 104(1):325-330, 2011

- 10-354-J Carotenoid value addition of cereal products by monoculture and mixed-culture fermentation of *Phaffia rhodozyma* and *Sporobolomyces roseus*
N. Ananda, P.V. Vadlani
Journal of Cereal Science, 88(5):467-472, 2011
- 10-369-J Functional, physiochemical and rheological properties of duckweed (*Spirodela polyrhiza*) protein
G. Yu, H. Liu, K. Venkateshan, S. Yan, J.J. Cheng, D. Wang, X.S. Sun
Transactions of the ASABE, 54(2):555-561, 2011
- 10-371-J Enhanced ethanol production from Kinnow mandarin (*Citrus reticulata*) waste using statistically optimized simultaneous saccharification and fermentation process
H.S. Oberoi, P.V. Vadlani, A.Nanjundaswamy, S. Bansal, S. Singh, S. Kaur, N. Babbar
Bioresource Technology, 102(2):1593-601, 2011
doi:http://dx.doi.org/10.1016/j.biortech.2010.08.111
- 10-377-J Soy protein adhesive blends with synthetic latex on wood veneer
G. Qi, X.S. Sun
Journal of American Oil Chemists' Society, 88(2):271-281, 2011
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog 1036, August 2010
- 11-124-J Susceptibility of *Tribolium castaneum* (Coleoptera: *Tenebrionidae*) life stages to flameless catalytic infrared radiation
M. Khamis, B. Subramanyam, P.W. Flinn, H. Dogan, J.A. Gwartz
Journal of Economic Entomology, 104(1):325-330, 2011
doi:10.1603/EC10074
- 11-125-J Susceptibility of *Lasioderma serricorne* (F.) life stages to elevated temperatures used during structural heat treatments
C. Yu, B. Subramanyam, P. W. Flinn, J. A. Gwartz
Journal of Economic Entomology, 104(1):317-324, 2011
doi:10.1603/EC10067
- 11-038-J Physical properties of pellets made from sorghum stalk, corn stover, wheat straw, and big bluestem
K. Theerarattananoon, F. Xu, J. Wilson, R. Ballard, L. Mickinney, S. Stagenborg, P. Vadlani, J.Z. Pei, D. Wang
Industrial Crops and Products, 33(2):325-332, 2011
- 11-139-J Recent advances in starch, polyvinyl alcohol based polymer blends, nanocomposites and their biodegradability
X. Tang, S. Alavi
Carbohydrate Polymers, 85(1):7-16, 2011
doi:10.1016/j.carbpol.2011.01.030
- 11-142-J Immature insects: Ecological roles of mobility
D.W. Hagstrum, Bh. Subramanyam
American Entomologist, 56(4):230-241, 2010
- 11-143-J Increased yield of bread containing citrus peel fiber
R.A. Miller
Cereal Chemistry, 88(2):174-178, 2011
doi:10.1094/CCHEM-11-10-0161
- 11-153-J Synthesis and characterization of bionanocomposites of poly(lactic acid) and TiO₂ nanowires by in situ polymerization
Y. Li, C. Chen, J. Li, X.S. Sun
Polymer, 52(11):2367-2375, 2011

Horticulture, Forestry, and Recreation Resources

- 09-383-J Cottonwood seed source trials in central Kansas
W.A. Geyer, K.D. Lynch
Transactions of the Kansas Academy of Science, 113(3-4):227-230, 2010
- 09-390-J Relationships between normalized difference vegetation index and visual quality in turfgrasses: Effects of mowing height
H. Lee, D.J. Bremer, K. Su, S.J. Keeley
Crop Science, 51(1):323-332, 2011
- 10-038-J Cut-stump treatment of saltcedar (*Tamarix ramosissima*)
W.H. Fick, W.A. Geyer
Transactions of the Kansas Academy of Science, 113(3-4), 2010

- 10-148-J Antioxidant phytochemicals in lettuce grown in high tunnels and open field
M.M. Oh, E.E. Carey, C.B. Rajshekar
Horticulture, Environment, and Biotechnology, 52(2):133-139, 2011
- 10-161-T Native pecans respond to weather extremes
W. Reid
Pecan South, December 2009
- 10-281-J Student confidence as a measure of learning in an introductory horticultural science course
C.A. Shoemaker
HortTechnology, 20(4):683-688, 2010
- 10-346-S Turfgrass Research 2010
Multiple authors
Coordinating author: J. Fry
KS Agric. Exp. Stn. Report of Prog. 1035, July 2010
- 10-390-B The birds of the Cimarron National Grassland
T.T. Cable, S. Seltman
Washington D.C.: U.S. Dept. of Agriculture Forest Service, 152 pp., 2010
- 11-052-T Native timbre – A walk in the grove
W. Reid
Pecan South, April 2010
- 11-053-T Native timbre – Disease management
W. Reid
Pecan South, August 2010
- 11-175-J Freezing tolerance and seasonal color of experimental zoysiagrasses
D. Okeyo, J. Fry, D. Bremer, C. Rajashekar, M. Kennelly, A. Chandra, D. Genovesi, M. Engelke
Crop Science, 51:2858-2863, 2011
- 11-373-J Zoysiagrass genotypes differ in susceptibility to the bluegrass billbug, *Sphenophorus parvulus*
J.D. Fry, R.A. Cloyd
HortScience, 46(9):1314-1316, 2011

Human Nutrition

- 06-210-J Decreases in bone mineral content by dietary all-trans retinoic acid precede decreases in bone mineral density in a weanling rat model of cigarette smoke-induced lung injuries
Y. Xue, M.D. Haub, B.W. Smith, R.C. Baybutt
International Journal for Vitamin and Nutrition Research, 81(1):5-11, 2011
- 08-357-J Evaluation of low molecular weight fractions and crude enzyme preparation from a *Trichoderma* cellulase complex as a treatment for fibrous feeds
D.A. Llewellyn, T.T. Marston, K.L. Teutemacher, J.J. Higgins, T. Melgarejo
Animal Feed Science and Technology, 160(1-2):39-48, 2010
- 10-197-J Rice-shaped extruded kernels: Physical, sensory, and nutritional properties
J. Yoo, S. Alavi, K. Adhikari, M.D. Haub, R.A. Aberle, G. Huber
International Journal of Food Properties, 2011
doi:10.1080/10942912.2010.495042
- 11-087-J Consumer acceptance for green tea by consumers in the United States, Korea, and Thailand
J. Lee, E. Chambers IV, D.H. Chambers, S.S. Chun, C. Oupadissakoon, D.E. Johnson
Journal of Sensory Studies, 25(S1):109-132, 2010
- 11-089-J The cardiac copper chaperone proteins Sco 1 and CCA are up-regulated, but Cox 1 and Cox 4 are down-regulated by copper deficiency
J. Getz, D. Lin, D. Medeiros
Biological Trace Element Research 143(1):368-377, 2011
doi:10.1007/s12011-010-8858-z
- 11-090-J Managing dysphagia through diet modifications
J. Garcia, E. Chambers IV
American Journal of Nursing, 110(11):26-33, 2010
- 11-091-J Development and application of a lexicon to describe the flavor of pomegranate juice
K. Joppel, E. Chambers IV
Journal of Sensory Studies, 25(6):819-837, 2010

- 11-092-J Sensory characteristics of commercial lactose-free milks manufactured in the United States
K. Adhikari, L.M. Dooley, E. Chambers IV, N. Bhumiratana
LWT-Food Science and Technology, 43(1):113-118, 2010
- 11-093-J Effect of organic production and fertilizer variables on the sensory properties of pac choi (*Brassica rapa* var. Mei Qing Choi) and Tomato (*Solanum lycopersicum* var. Bush Celebrity)
M. Talavera-Bianchi, E. Chambers IV, E.E. Carey, D.H. Chambers
Journal of the Science of Food and Agriculture, 90(6):981-988, 2010
- 11-094-J Lexicon to describe flavor of fresh leafy vegetables
M. Talavera-Bianchi, E. Chambers IV, D.H. Chambers
Journal of Sensory Studies, 25(2):163-183, 2010
- 11-095-J Sensory properties and consumer acceptance of sweet tamarind varieties grown in Thailand C. Oupadissakoon, E. Chambers IV, V. Konpensook, S. Suwonsichon, R. Yenket, A. Retiveau
Journal of the Science of Food and Agriculture, 90(6):1081-1088, 2010
- 11-097-J Instrumental and sensory aroma profile of pomegranate juices from the U.S.: Differences between fresh and commercial juice
L. Vázquez-Araújo, K. Koppel, E. Chambers IV, K. Adhikari, A.A. Carbonell-Barrachina
Flavor and Fragrance Journal, 26(2):129-138, 2011
- 11-263-T Sorghum-the forgotten grain
D.M. Medeiros, L. Vazques-Araujo, E. Chambers IV
Food Technology 65(6):52-60, 2011
- Plant Pathology**
- 07-142-B Compendium of wheat diseases and insects: Third edition
W.W. Bockus, R.L. Bowden, R.M. Hunger, W.L. Morrill, T.D. Murray, R.W. Smiley
St. Paul, MN: APS Press, 171 pp., 2010
- 09-002-J Mapping QTL main and interaction influences on milling quality in elite U.S. rice germplasm
J.C. Nelson, A.M. McClung, R.G. Fjellstrom, K.M. Moldenhauer, E. Boza, F. Jodari, J.H. Oard, S. Linscombe, B. Scheffler, K. Yeater
Theoretical and Applied Genetics, 122(2):291-309, 2011
- 09-068-J Primary and residual effects of Abrams tank traffic on prairie soil properties
P.S. Althoff, S.J. Thien, T.C. Todd
Soil Science Society of America Journal, 74(6):2151-2161, 2010
- 09-161-J Modeling and mapping QTL for senescence-related traits in winter wheat under high temperature
K. Vijayalakshmi, B.S. Gill, A.K. Fritz, G. Bai, S. Pandravada, G.M. Paulsen
Molecular Breeding, 26(2):163-175, 2010
- 09-182-J Variation and transgression of aggressiveness among two *Gibberella zeae* crosses developed from highly aggressive parental isolates
H-H. Voss, R.L. Bowden, J.F. Leslie, T. Miedaner
Phytopathology, 100(9):904-912, 2010
- 09-245-B Disease Management
M.M. Kennelly, R.A. Cloyd
In: Greenhouse operation and management, P.V. Nelson (Ed.)
Upper Saddle River, NJ: Prentice Hall, pp. 691, 2011
- 09-325-B Grasses of south Texas: A guide to their identification and value
J.H. Everitt, D.L. Drawe, C.R. Little, R.I. Lonard
Lubbock, TX: Texas Tech University Press, 336 pp., 2011
- 09-390-J Relationships between normalized difference vegetation index and visual quality in turfgrasses: Effects of mowing height
H. Lee, D.J. Bremer, K. Su, S.J. Keeley
Crop Science, 51(1):323-332, 2011
- 10-064-J Nitrogen, phosphorus, and potassium effects on grain sorghum production and stalk rot following alfalfa and birdsfoot trefoil
D.W. Sweeney, J.L. Moyer, D.J. Jardine, D.A. Whitney
Journal of Plant Nutrition, 34(9):1330-1340, 2011

- 10-090-J Fate of *Aegilops speltoides*-derived repetitive DNA sequences in diploid *Aegilops* species, wheat-*Aegilops* amphiploids and derived chromosome addition lines
S. Kumar, B. Friebe, B.S. Gill
Chromosome Research Professor, 129(1-3):47-54, 2010
- 10-102-J Quantitative trait loci analysis of drought tolerance in a spring wheat population using amplified fragment length polymorphism and diversity array technology markers
L.M. Alexander, F.M. Kirigwi, A.K. Fritz, J.P. Feller
Crop Science, 52(1): 253-261, 2011
doi:10.2135/cropsci2011.05.0267
- 10-119-J *Pseudomonas syringae* two-component response regulator RhpR regulates promoters carrying an inverted repeat element
X. Deng, L. Lan, Y. Xiao, M. Kennelly, X. Tang
Molecular Plant-Microbe Interactions, 23(7):927-939, 2010
doi:10.1094/MPMI-23-7-0927
- 10-219-J Analysis of host plant resistance to multiple *Fusarium* species associated with stalk rot disease in sorghum [*Sorghum bicolor* (L.) Moench]
T.T. Tesso, C.R. Little, N. Ochanda, L. Claflin, M.R. Tuinstra
Field Crops Research, 118(2):177-182, 2010
- 10-236-J Host-derived suppression of nematode reproductive and fitness genes decreases fecundity of *Heterodera glycines* Ichinohe
J. Li, T.C. Todd, T.R. Oakley, J. Lee, H.N. Trick
Planta, 232(3):775-785, 2010
doi:10.1007/s00425-010-1209-7
- 10-255-J Development and characterization of two new *Triticum aestivum*-*Dasypyrum villosum* Robertsonian translocation lines T1DS 1V#3L and T1DL 1V#3S and their effect on grain quality
W. Zhao, L. Qi, G. Zhang, X. Gao, B. Friebe, B.S. Gill
Euphytica, 175(3):343-350, 2010
doi:10.1007/s10681-010-0177-0
- 10-282-J Compact *Brachypodium* genome conserves centromeres of a common ancestor with wheat and rice
L.L. Qi, B. Friebe, Y.Q. Gu, J.J. Wu, C. Qian, B.S. Gill
Functional and Integrated Genomics, 10(4):477-492, 2010
doi:10.1007/s10142-010-0190-3
- 10-294-J Phospholipid and triacylglycerol profiles modified by PLD suppression in soybean seed
J. Lee, R. Welti, W.T. Schapaugh, H.N. Trick
Plant Biotechnology Journal, 9(3):359-372, 2011
- 10-308-J Sheath-blight resistance QTLs and interactions in U.S. Japonica rice germplasm
J.C. Nelson, J.H. Oard, D. Groth, H. Utomo, Y. Jia, G. Liu, K.A.K. Moldenhauer, F.J. Correa-Victoria, R.G. Fjellstrom, B. Scheffler, G.A. Prado
Euphytica, 2011
doi:10.1007/s10681-011-0475-1
- 10-332-J A Tal-PhI wheat genetic stock facilitates efficient alien introgression
H. Li, B.S. Gill, X. Wang, P.D. Chen
Euphytica, 58(5):667-668, 2011
- 10-339-J Analysis of expressed sequence tags from *Maize mosaic rhabdovirus*-infected gut tissues of *Peregrinus maidis* reveals the presence of key components of insect innate immunity
A.E. Whitfield, D. Rotenburg, V. Aritua, S.A. Hogenhout
Insect Molecular Biology, 20(2):225-242, 2011
- 10-341-J Expression of lignin biosynthetic genes in wheat during development and upon infection by fungal pathogens
C. Bi, F. Chen, L. Jackson, B.S. Gill, W. Li
Plant Molecular Biology Reporter, 29(1):149-161, 2011
- 10-346-S Turfgrass Research 2010
Multiple authors
Coordinating author: J. Fry
KS Agric. Exp. Stn. Report of Prog. 1035, July 2010

- 10-357-J Detection of salt toxicity and nitrogen deficiency in *Cucumis sativus* L. using spectroradiometry and CIR imagery
S. Yousef, K.R. Summy, C.R. Little
Journal of Plant Nutrition, 34(8):1236-1244, 2011
- 10-358-J Tetrazolium violet staining of naturally and artificially molded sorghum (*Sorghum bicolor* (L.) Moench) caryopses
L.W. Noll, D.N. Butler, C.R. Little
Seed Science and Technology, 38(3):741-756, 2010
- 10-381-J A practical guide to econological modelling using R as a simulation platform by Soetaert
K.A. Garrett
Quarterly Review of Biology, 85(4):492-493, 2010
- 10-382-J Members of soil bacterial communities sensitive to tillage and crop rotation
C. Yin, K.L. Jones, D.E. Peterson, K.A. Garrett, S.H. Hulbert, T.C. Paulitz
Soil Biology and Biochemistry, 42(12):2111-2118, 2010
- 11-002-J Centromere inactivation and epigenetic modifications of a plant chromosome with three functional centromeres
W. Zhang, B. Friebe, B.S. Gill, J. Jiang
Chromosoma, 19(5):553-563, 2010
doi:10.1007/s00412-010-0278-5
- 11-011-J Effects of high temperature after anthesis on starch granules in grains of wheat (*Triticum aestivum* L.)
P. Liu, W. Guo, Z. Jiang, H. Pu, C. Feng, X. Zhu, Y. Peng, A. Kuang, C.R. Little
Journal of Agricultural Science, 149(2):159-169, 2010
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1036, August 2010
- 11-015-J Biogeography and phylogeography of Fusarium: A review
B.A. Summerell, M. Laurence, E.C.Y. Liew, J.F. Leslie
Fungal Diversity, 44(1):3-13, 2010
doi:10.1007/s13225-010-0060-2
- 11-023-D Annual wheat newsletter
W.J. Raupp
Plant Pathology Staff Paper No. 56, 2010
- 11-032-J Single nucleotide polymorphism in wheat chromosome region harboring Fhb1 for Fusarium head blight resistance
A. Bernado, D. Zhang, H. Ma, G. Bai
Theoretical and Applied Genetics
doi:10.1007/s11032-011-9565-y
- 11-041-J Resistance to tan spot and insensitivity to Ptr ToxA in wheat
A.J. Noriel, X. Sun, W. Bockus, G. Bai
Crop Science, 51(3):1059-1067, 2011
- 11-048-J Biofortification of soybean meal: Immunological properties of the 27 kDa Y-Zein
H.B. Krishnan, S. Jang, W-S. Kim, M.S. Kerley, M.J. Oliver, H.N. Trick
Journal of Agricultural and Food Chemistry, 59(4):1223-1228, 2011
- 11-060-J Complexity in climate change impacts: A framework for analysis of effects mediated by plant disease
K.A. Garrett, G.A. Forbes, S. Savary, P. Skelsey, A.H. Sparks, C. Valdivia, A.H.C. van Bruggen, L. Willocquet, A. Djurle, E. Duveiller, H. Eckersten, S. Pande, C. Vera Cruz, J. Yuen
Plant Pathology, 60(1):15-30, 2011
doi:10.1111/j.1365-3059.2010.02409.x
- 11-117-J Linkage analysis in unconventional mating designs in line crosses
J.C. Nelson
Theoretical and Applied Genetics, 123:897-906, 2011
doi:10.1007/s00122-011-1635-3
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1037, November 2010
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010

- 11-140-J Fusarium species associated with plants in Australia
B.A. Summerell, J.F. Leslie, E.C.Y. Liew, M.H. Laurence, S. Bullock, T. Petrovic, A.R. Bentley, C.G. Howard, S.A. Peterson, J.L. Walsh, and L.W. Burgess
Fungal Diversity, 46(1):1-27, 2011
doi:10.1007/s13225-010-0075-8
- 11-141-J Biotechnological application of functional genomics towards plant-parasitic nematode control
J. Li, T.C. Todd, and H.N. Trick
Plant Biotechnology Journal, 9(9):936-944, 2011
doi:10.1111/j.1467-7652.2011.00601.x
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-148-J Development and characterization of wheat-*Ae. searsii* Robertsonian translocation conferring resistance to stem rust
W. Liu, M. Pumphrey, Y. Jin, M. Rouse, B. Friebe, B. Gill
Theoretical and Applied Genetics, 122:1537-1545, 2011
doi:10.1007/s00122-011-1553-4
- 11-159-J Disease severity and microsclerotium properties of the sorghum sooty stripe pathogen, *Ramulispora sorghi*
C. Brady, L. Noll, A. Saleh, C.R. Little
Plant Disease, 95:853-859, 2011
- 11-160-J Screening exotic sorghum germplasm, hybrids and elite lines for resistance to a new virulent pathotype (P6) of *Peronosclerospora sorghi* causing downy mildew
G.L. Radwan, T. Isakeit, C.W. Magill, R. Perumal, L.K. Prom, and C.R. Little
Plant Health Progress, 2011
doi:10.1094/PHP-2011-0323-01-RS
- 11-161-J Detection of incipient pest infestations on glasshouse crops using multispectral imagery and a common vegetation index
K.R. Summy, C.R. Little, J.H. Everitt, R.A. Mazariegos, J.V. French, M. Setamou, J. Mata
Subtropical Plant Science, 62:56-62, 2010
- 11-175-J Freezing tolerance and seasonal color of experimental zoysiagrasses
D. Okeyo, J. Fry, D. Bremer, C. Rajashekar, M. Kennelly, A. Chandra, D. Genovesi, M. Engelke
Crop Science, 51:2858-2863, 2011
- 11-180-J Quantitative trait loci for resistance to fusarium head blight in a Chinese wheat landrace Haiyanzhong
T. Li, G. Bai, S. Wu, S. Gu
Theoretical and Applied Genetics, 122(8):1497-1502, 2011
doi:10.1007/s00122-011-1549-0
- 11-195-J Genetic compensation abilities of *Aegilops speltoides* chromosomes for homoeologous B-genome chromosomes of polyploid wheat in disomic S(B) chromosome substitution lines
B. Friebe, L.L. Qi, C. Liu, B.S. Gill
Cytogenetic Genome Research, 134(2):144-150, 2011
doi:10.1159/000326764
- 11-198-J Population- and genome-specific patterns of linkage disequilibrium and SNP variation in spring and winter wheat (*Triticum aestivum* L.)
S. Chao, J. Dubcovsky, J. Dvorak, M.C. Luo, S.P. Baenziger, R. Matnyazov, D.R. Clark, L.E. Talbert, J.A. Anderson, S. Dreisigacker, K. Glover, J. Chen, K. Campbell, P.L. Bruckner, J.C. Rudd, S. Haley, B.F. Carver, S. Perry, M.E. Sorrells, E.D. Akhunov
BMC Genomics, 11(1):727, 2010
doi:10.1186/1471-2164-11-727
- 11-199-J Nucleotide diversity maps reveal variation in diversity among wheat genomes and chromosomes
E.D. Akhunov, A.R. Akhunova, O.D. Anderson, J.A. Anderson, N. Blake, M.T. Clegg, D. Coleman-Derr, E.J. Conley, C.C. Crossman, K.R. Deal, J. Dubcovsky, B.S. Gill, Y.Q. Gu, J. Hadam, H.Y. Heo, G.R. Lazo, M.C. Luo, Y.Q. Ma, D.E. Matthews, P.E. McGuire, P. Morrell, C.O. Qualset, J. Renfro, D. Tabanao, L.E. Talbert, C. Tian, D. Tolen, M. Warburton, F.M. You, W. Zhang, J. Dvorak
BMC Genomics, 11(1):702, 2010
doi:10.1186/1471-2164-11-702

- 11-200-J Homoeolog-specific transcriptional bias in allopolyploid wheat
A.R. Akhunova, R.T. Matniyazov, H. Liang, E.D. Akhunov
BMC Genomics, 11(1):505, 2010
doi:10.1186/1471-2164-11-505
- 11-202-J Genetic maps of stem rust resistance gene *Sr35* in diploid and hexaploid wheat
W. Zhang, E. Olson, C. Saintenac, M. Rouse, Z. Abate, Y. Jin, E.D. Akhunov, M. Pumphrey, J. Dubcovsky
Crop Science, 50(6):2464-2474, 2010
- 11-204-J Sugar transporters for intercellular exchange and nutrition of pathogens
L-Q. Chen, B-H. Hou, S. Lalonde, H. Takanaga, M.L. Hartung, X-Q. Qu, W-J. Guo, J-G. Kim, W. Underwood, B. Chaudhuri, D. Chermak, G. Antony, F.F. White, S.C. Somerville, M. Mudgett, W.B. Frommer
Nature, 468(7323):527-532, 2010
doi:10.1038/nature09606
- 11-214-J Effects of integrating cultivar resistance and fungicide application on Fusarium head blight and deoxynivalenol in winter wheat
S.N. Wegulo, W.W. Bockus, J.H. Nopsa, E.D. De Wolf, K.M. Eskridge, K.H.S. Peiris, F.E. Dowell
Plant Disease, 95(5):554-560, 2011
- 11-220-J Association study of resistance to soilborne wheat mosaic virus in U.S. winter wheat
D. Zhang, G. Bai, R.M. Hunger, W.W. Bockus, J. Yu, B.F. Carver, G. Brown-Guedira
Phytopathology, 101(11):1322-1329, 2011
- 11-260-J *Triticum mosaic* virus isolates in the southern Great Plains
I. Fuentes-Bueno, J.A. Price, C.M. Rush, D.L. Seifers, J.P. Fellers
Plant Disease, 95(12):1516-1519, 2011
- 11-265-J A compensating Wheat-*Thinopyrum* intermedium Robertsonian translocation conferring resistance to *Wheat streak mosaic virus* and *Triticum mosaic virus*
W. Liu, D.L. Seifers, L.L. Qi, B. Friebe, B.S. Gill
Crop Science, 51(6):2382, 2011
- 11-285-J Discovery and molecular mapping of a new gene conferring resistance to stem rust, *Sr53*, derived from *Aegilops geniculata* and characterization of spontaneous translocation stocks with reduced alien chromatin
W. Liu, Y. Jin, M. Rouse, B. Friebe, B. Gill, M.O. Pumphrey
Chromosome Research, 19(5):669-682, 2011
doi:10.1007/s10577-011-9226-3
- 11-286-J Genomic and resistance gene homolog diversity of the dominant tallgrass prairie species across the U.S. Great Plains precipitation gradient
M.N. Rouse, A.A. Saleh, A. Seck, K.H. Keeler, S.E. Travers, S.H. Hulbert, K.A. Garrett
PLoS ONE, 6(4):e17641, 2011
doi:10.1371/journal.pone.0017641
- 11-293-J Development of a set of compensating *Triticum aestivum*-*Dasypyrum villosum* Robertsonian translocation lines
C. Liu, L. Qi, W. Liu, W. Zhao, J. Wilson, B. Friebe, B.S. Gill
Genome, 54(10):1-9, 2011
- 11-306-S Agricultural Research 2011
Multiple authors
Coordinating author: L. Lomas
KS Agric. Exp. Stn. Report of Prog. 1051, April 2011
- 11-318-B Climate change and micro-organism genetic resources for food and agriculture: State of knowledge, risks and opportunities
F. Beed, A. Benedetti, G. Cardinali, S. Chakraborty, T. Dubois, K. Garrett, M. Halewood
Food and Agriculture Organization of the United Nations, 2011
<http://www.fao.org/docrep/meeting/022/mb392e.pdf> 2011
- 11-322-J Multiple translocation of the *AVR-Pita* effector gene among chromosomes of the rice blast fungus *Magnaporthe oryzae* and related species
I. Chuma, C. Isobe, Y. Hotta, K. Ibaragi, N. Futamata, M. Kusaba, K. Yoshida, R. Terauchi, Y. Fujita, H. Nakayashiki, B. Valent, Y. Tosa
PLoS Pathogens, 7(7):e1002147, 2011
doi:10.1371/journal.ppat.1002147

- 11-333-A Alien introgressions represent a rich source of genes for crop improvement
B.S. Gill, B.R. Friebe, F.F. White
Proceedings of the National Academy of Sciences USA, 108(19):7657-7658, 2011
doi:10.1073/pnas.1104845108
- 11-372-J A metamodeling framework for extending the application domain of process-based ecological models
A.H. Sparks, G.A. Forbes, R.J. Hijmans, K.A. Garrett
Ecosphere, 2(8):art90, 2011
doi:10.1890/ES11-00128.1
- 11-388-J Multiple reference genomes and transcriptomes for *Arabidopsis thaliana*
X. Gan, O. Stegle, J. Behr, J.G. Steffen, P. Drewe, K.L. Hildebrand, R. Lyngsoe, S.J. Schultheiss, E.J. Osborne, V.T. Sreedharan, A. Kahles, R. Bohnert, G. Jean, P. Derwent, P. Kersey, E. Belfield, N. Harberd, E. Kemen, P. Kover, C. Toomajian, R.M. Clark, G. Raetsch, R. Mott
Nature, 477(7365):419-423, 2011
doi:10.1038/nature10414
- 11-389-J Adaptation to climate across the *Arabidopsis thaliana* genome
A.M. Hancock, B. Brachi, N. Faure, M.W. Horton, L.B. Jarymowycz, F.G. Sperone, C. Toomajian, F. Roux, J. Bergelson
Science, 334(6052):83-86
doi:10.1126/science.1209244
- 11-398-J Single-nucleotide polymorphism discovery by high-throughput sequencing in sorghum
J.C. Nelson, S. Wang, Y. Wu, X. Li, G. Antony, F.F. White, J. Yu
BMC Genomics, 12(1): 2011
doi:10.1186/1471-2164-12-352
- Statistics**
- 08-357-J Evaluation of low molecular weight fractions and crude enzyme preparation from a *Trichoderma* cellulase complex as a treatment for fibrous feeds
D.A. Llewellyn, T.T. Marston, K.L. Teutemacher, J.J. Higgins, T. Melgarejo
Animal Feed Science and Technology, 160(1-2):39-48, 2010
- 09-274-J Characterization of plasma metabolites in Holstein dairy cows during the periparturient period
A.F. Park, J.E. Shirley, E.C. Titgemeyer, R.C. Cochran, J.M. DeFrain, E.E. Wickersham, D.E. Johnson
International Journal of Dairy Science, 5(4):253-263, 2010
- 09-296-J Real distance performance and variation of 5 low-frequency radio frequency identification panel transceiver manufacturers
S.E. Ryan, D.A. Blasi, C.O. Anglin, A.M. Bryant, B.A. Rickard, M.P. Anderson, K.E. Fike
Journal of Animal Science, 88(7):2514-2522, 2010
- 10-155-J Effects of distillers grains with high sulfur concentration on ruminal fermentation and digestibility of finishing diets
S. Uwituze, G.L. Parsons, K.K. Karges, M.L. Gibson, L.C. Hollis, J.J. Higgins, J.S. Drouillard
Journal of Animal Science, 89(9):2817-2828, 2011
- 10-265-J Susceptibility of various life stages of *Rhyzopertha dominica* (Coleoptera: Bostrichidae) to flameless catalytic infrared radiation
M. Khamis, B. Subramanyam, P.W. Flinn, H. Dogan, A. Jager, J.A. Gwirtz
Journal of Economic Entomology, 103(4):1508-1516, 2010
- 10-306-J Chromosome size in diploid eukaryotic species centers on the average length with a conserved boundary
X. Li, C. Zhu, Z. Lin, Y. Wu, D. Zhang, W. Song, G. Bai, M. Scanlon, M. Zhang, J. Yu
Molecular Biology and Evolution, 28:1901-191, 2011
- 11-088-J A comparison of methodologies for measuring glucose concentrations in the equine
T.L. Slough, C.D. Gunkel, L.W. Murray, J.S. Drouillard
Professional Animal Scientist, 27(3):204-214, 2011
- 11-169-J Grazing and finishing performance of steers that grazed nontoxic endophyte-infected tall fescue
L.W. Lomas, J.L. Moyer, G.A. Milliken
Forage and Grazinglands, 2011
doi:10.1094/FG-2011-0628-01-RS

Agricultural Research Center–Hays

- 10-063-A Optimizing water use with high-transpiration-efficiency plants
P.A. Thevar, M.B. Kirkham, R.M. Aiken, K.D. Kofoid, Z. Xin
Proceedings of the 19th World Congress of Soil Science
Brisbane, Australia, 2010
- 10-075-J Weed control with selected herbicides in acetolactate synthase-resistant sorghum
D.S. Hennigh, K. Al-Khatib, R.S. Currie, M.R. Tuinstra, P.W. Geier, P.W. Stahlman, M.M. Claassen
Crop Protection, 29(8):879-883, 2010
- 10-093-J Impacts of deficit irrigation on carbon sequestration and soil physical properties under no-till
H. Blanco-Canqui, N.L. Klocke, A.J. Schlegel, L.R. Stone, C.W. Rice
Soil Science Society of America Journal, 74(4):1301-1309, 2010
- 10-122-J Continuous cropping systems reduce near-surface maximum compaction in no-till soils
H. Blanco-Canqui, L.R. Stone, A.J. Schlegel, J.G. Benjamin, M.F. Vigil, P.W. Stahlman
Agronomy Journal, 102(4):1217-1225, 2010
- 10-232-J Controlled traffic impacts on physical and hydraulic properties in an intensively cropped no-till soil
H. Blanco-Canqui, M.M. Claassen, L.R. Stone
Soil Science Society of America Journal, 74(6):2142-2150, 2010
- 10-252-J An experimental host range for *Triticum mosaic virus*
D.L. Seifers, T.J. Martin, J.P. Fellers
Plant Disease, 94(9):1125-1131, 2010
April 2011
- 10-288-J Occurrence and yield effects of wheat infected with *Triticum mosaic virus* in Kansas
D.L. Seifers, T.J. Martin, J.P. Fellers
Plant Disease, 95(2):183-188, 2011
- 10-372-J Pyroxasulfone with and without sulfentrazone in sunflower (*Helianthus annuus*)
B.L.S. Olson, R.K. Zollinger, C.R. Thompson, D.E. Peterson, B. Jenks, M. Moechnig, P.W. Stahlman
Weed Technology, 25(2):217-221, 2011
- 11-009-J Winter wheat and weed response to postemergence saflufenacil alone and in mixtures
J.C. Prihauf, P.W. Stahlman, P.W. Geier
Weed Technology, 24(3):262-268, 2010
- 11-010-J Winter annual broadleaf weeds and winter wheat response to postemergence application of two saflufenacil formulations
J.C. Frihauf, P.W. Stahlman, P.W. Geier, D.E. Peterson
Weed Technology, 24(4):416-424, 2010
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1036, August 2010
- 11-013-J Saflufenacil absorption and translocation in winter wheat (*Triticum aestivum* L.)
J.C. Frihauf, P.W. Stahlman, K. Al-Khatib
Pesticide Biochemistry and Physiology, 98(2):243-247, 2010
- 11-025-A Forage selection preferences by multiparous and primiparous beef cows grazing native tallgrass range during winter
N.A. Sproul, L.W. Murray, J.R. Jaeger, D.A. Blasi, L.N. Edwards, G.J. Eckerle, L.A. Pacheco, KC Olson
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 15-20
- 11-026-A The relative importance of weaning management and vaccination history on performance by ranch-direct beef calves during weaning and receiving
M.J. Macek, KC Olson, J.R. Jaeger, T.B. Schmidt, J.W. Iliff, D.U. Thomson, L.A. Pacheco
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 25-29
- 11-027-A Effects of sun-curing and harvest maturity on concentration and protein-binding capacity of condensed tannins in sericea lespedeza (*Lespedeza cuneata*)
G.J. Eckerle, KC Olson, J.R. Jaeger, J.L. Davidson, T.K. Kraft, L.A. Pacheco
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 30-34

- 11-028-A The relative importance of weaning management and vaccination history on finishing performance and carcass characteristics of beef calves
M.J. Macek, J.W. Iliff, KC Olson, J.R. Jaeger, T.B. Schmidt, D.U. Thomson, L.A. Pacheco
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 186-189
- 11-029-A Effects of degree of respiratory disease vaccination on health and growth performance of ranch-direct beef calves during weaning and receiving
M.J. Macek, J.R. Jaeger, T.B. Schmidt, D.U. Thomson, J.W. Bolte, L.A. Pacheco, N.A. Sproul, L.R. Hibbard, G.J. Eckerle, KC Olson
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 190-193
- 11-030-A Effects of prepartum ruminally protected choline supplementation on performance of beef cows and calves
L.A. Pacheco, J.R. Jaeger, L.R. Hibbard, M.J. Macek, N.A. Sproul, G.J. Eckerle, E.A. Bailey, J.W. Bolte, KC Olson
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 62-64
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1037, November 2010
- 11-131-S 2011 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
Multiple authors
Coordinating author: C.R. Thompson
KS Agric. Exp. Stn. Report of Prog. 1045, January 2011
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-167-J Effects of mineral-supplement delivery system on frequency, duration, and timing of supplement use by beef cows grazing topographically rugged native rangeland in the Kansas Flint Hills
N.A. Aubel, KC Olson, J.S. Drouillard, J.R. Jaeger, M.D. Schlegel, L.A. Pacheco, D.R. Linden, J.W. Bolte, J.J. Higgins
Journal of Animal Science, 89(11):3699-3706, 2011
doi:10.2527/jas.2010-3808
- 11-184-S 2010 Kansas Performance Tests with Sunflower Hybrids
Multiple authors
Coordinating author: P. Evans
KS Agric. Exp. Stn. Report of Prog. 1042, January 2011
- 11-223-S Field Research 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1048, April 2011
- 11-237-S Roundup 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1050, April 2011
- Publications without contribution numbers
- Effects of grazing pressure on efficiency of grazing on North American Great Plains rangeland
A.J. Smart, J.D. Derner, J.R. Hendrickson, R.L. Gillen, B.H. Dunn, E.M. Mousel, P.S. Johnson, R.N. Gates, K.K. Sedivec, K.R. Harmony, J.D. Volesky, KC Olson
Rangeland Ecology and Management, 63(4):397-406, 2010
- Effects of wet distillers grain and a direct-fed microbial on finishing performance and carcass characteristics of beef steers fed a sorghum-based finishing diet
J.R. Jaeger, J.W. Waggoner, KC Olson, J.W. Bolte, S.R. Goodall
Proceedings of the Western Section, American Society of Animal Science
Denver, CO, 2010, pp. 279-282

Northwest Research–Extension Center

- 10-063-A Optimizing water use with high-transpiration-efficiency plants
P.A. Thevar, M.B. Kirkham, R.M. Aiken, K.D. Kofoid, Z. Xin
Proceedings of the 19th World Congress of Soil Science
Brisbane, Australia, 2010
- 10-276-J Equations for drainage component of the field water balance
L.R. Stone, N.L. Klocke, A.J. Schlegel, F.R. Lamm, D.J. Tomsicek
Applied Engineering in Agriculture, 27(3):345-350, 2011
- 10-372-J Pyroxasulfone with and without sulfentrazone in sunflower (*Helianthus annuus*)
B.L.S. Olson, R.K. Zollinger, C.R. Thompson, D.E. Peterson, B. Jenks, M. Moechnig, P.W. Stahlman
Weed Technology, 25(2):217-221, 2011
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1036, August 2010
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1037, November 2010
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-184-S 2010 Kansas Performance Tests with Sunflower Hybrids
Multiple authors
Coordinating author: P. Evans
KS Agric. Exp. Stn. Report of Prog. 1042, January 2011

- 11-217-J Volunteer glyphosate-tolerant corn reduces soil water storage and winter wheat yields
A. Schlegel, B. Olson, S. Maxwell, K. Martin
Crop Management, Plant Management Network, 2011
doi:10.1094/CM-2011-0629-01-RS,
- 11-223-S Field Research 2011
Multiple authors
SRP 1048, April 2011
- 11-237-S Roundup 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1050, April 2011
- 11-377-S 2010 Kansas Performance Tests with Alfalfa Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1043, June 2011

Southeast Agricultural Research Center

- 05-109-J A workshop report on wheat genome sequencing: International genome research on wheat consortium
B.S. Gill, R. Appels, A. Botha-Oberholster, C.R. Buell, J.L. Bennetzen, B. Chalhouh, F. Chumley, J. Dvorak, M. Iwanaga, B. Keller, W. Li, W.R. McCombie, Y. Ogihara, F. Quetier, T. Sasaki
- 10-064-J Nitrogen, phosphorus, and potassium effects on grain sorghum production and stalk rot following alfalfa and birdsfoot trefoil
D.W. Sweeney, J.L. Moyer, D.J. Jardine, D.A. Whitney
Journal of Plant Nutrition, 34(9):1330-1340, 2011
- 10-191-J Effect of tillage on the hydrology of a claypan soil in Kansas
M.E. Buckley, G.J. Kluitenberg, D.W. Sweeney, K.W. Kelley, L.R. Stone
Soil Science Society of America Journal, 74(6):2109-2119, 2010
- 10-215-J Long-term crop rotation and tillage affects wheat and double-crop soybean and selected soil properties
K.W. Kelley, D.W. Sweeney
Crop Management, 2010
doi:10.1094/CM-2010-0707-01-RS

- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1036, August 2010
- 11-022-J Switchgrass cultivar establishment, iron chlorosis, and biomass yield in southwest and southeast Kansas
J.D. Holman, J.L. Moyer, S.R. Maxwell
Forage and Grazinglands, 2011
doi:10.1094/FG-2011-0126-02-RS
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1037, November 2010
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-169-J Grazing and finishing performance of steers that grazed nontoxic endophyte-infected tall fescue
L.W. Lomas, J.L. Moyer, G.A. Milliken
Forage and Grazinglands, 2011
doi:10.1094/FG-2011-0628-01-RS
- 11-184-S 2010 Kansas Performance Tests with Sunflower Hybrids
Multiple authors
Coordinating author: P. Evans
KS Agric. Exp. Stn. Report of Prog. 1042, January 2011
- 11-224-S Kansas Fertilizer Research 2010
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1049, April 2011
- 11-259-S 2010 Kansas Performance Tests with Cotton Varieties
Multiple authors
Coordinating author: S. Staggenborg
KS Agric. Exp. Stn. Report of Prog. 1046, March 2011
- 11-306-S Agricultural Research 2011
Multiple authors
Coordinating author: L. Lomas
KS Agric. Exp. Stn. Report of Prog. 1051, April 2011
- 11-377-S 2010 Kansas Performance Tests with Alfalfa Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1043, June 2011
- Southwest Research–Extension Center**
- 09-286-J Assessment of the nitrogen management strategy using an optical sensor for irrigated wheat
B. Singh, R.K. Sharma, J. Kaur, M.L. Jat, K.L. Martin, Y. Singh, V. Singh, P. Chandna, O.P. Choudhary, R.K. Gupta, H.S. Thind, J. Singh, H.S. Uppal, H.S. Khurana, A. Kumar, R.K. Uppal, M. Vashistha, W.R. Raun, R. Gupta
Agronomy for Sustainable Development, 31:589-603, 2011
- 10-093-J Impacts of deficit irrigation on carbon sequestration and soil physical properties under no-till
H. Blanco-Canqui, N.L. Klocke, A.J. Schlegel, L.R. Stone, C.W. Rice
Soil Science Society of America Journal, 74(4):1301-1309, 2010
- 10-122-J Continuous cropping systems reduce near-surface maximum compaction in no-till soils
H. Blanco-Canqui, L.R. Stone, A.J. Schlegel, J.G. Benjamin, M.F. Vigil, P.W. Stahlman
Agronomy Journal, 102(4):1217-1225, 2010
- 10-174-J Efficacy of miticides applied at pre-tassel stage for control of spider mites, 2009A
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F4), 2010

- 10-175-J Efficacy of miticides applied at tassel stage for control of spider mites, 2009B
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F5), 2010
- 10-176-J Efficacy of miticides applied at pre- and post-tassel stage for control of spider mites, 2009C
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F6), 2010
- 10-177-J Efficacy of insecticides for managing *Dectes* stem borer in soybean, 2009A
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F49), 2010
- 10-178-J Efficacy of insecticides for managing head moth and stem borer in sunflower, 2009A
A. Joshi, L.L. Buschman
Arthropod Management Tests, AMT35(F61), 2010
- 10-276-J Equations for drainage component of the field water balance
L.R. Stone, N.L. Klocke, A.J. Schlegel, F.R. Lamm, D.J. Tomsicek
Applied Engineering in Agriculture, 27(3):345-350, 2011
- 11-012-S 2010 Kansas Performance Tests with Winter Wheat Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1036, August 2010
- 11-022-J Switchgrass cultivar establishment, iron chlorosis, and biomass yield in southwest and southeast Kansas
J.D. Holman, J.L. Moyer, S.R. Maxwell
Forage and Grazinglands, 2011
doi:10.1094/FG-2011-0126-02-RS
- 11-076-J Characterization of six antibacterial response genes from the European corn borer (*Ostrinia nubilalis*) larval gut and their expression in response to bacterial challenge
C. Khajuria, L.L. Buschman, M-S. Chen, L. Zurek, K.Y. Zhu
Journal of Insect Physiology, 57(3):345-355, 2011
- 11-098-J Response of *Tribolium castaneum* and *T. confusum* adults to vertical black shapes and its potential to improve trap capture
A.A. Semeao, J.F. Campbell, R.J. Whitworth, P.E. Sloderbeck
Journal of Stored Products Research, 47(2):88-94, 2011
- 11-119-J Effects of planting date and tillage on winter canola
J. Holman, S. Maxwell, M. Stamm, K. Martin
Crop Management, 2011
doi:10.1094/CM-2011-0324-01-RS
- 11-130-S 2010 Kansas Performance Tests with Corn Hybrids
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1037, November 2010
- 11-134-S 2010 Kansas Performance Tests with Soybean Varieties
Multiple authors
Coordinating author: W.T. Schapaugh
KS Agric. Exp. Stn. Report of Prog. 1040, December 2010
- 11-144-S 2010 Kansas Performance Tests with Grain Sorghum
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1041, December 2010
- 11-184-S 2010 Kansas Performance Tests with Sunflower Hybrids
Multiple authors
Coordinating author: P. Evans
KS Agric. Exp. Stn. Report of Prog. 1042, January 2011
- 11-217-J Volunteer glyphosate-tolerant corn reduces soil water storage and winter wheat yields
A. Schlegel, B. Olson, S. Maxwell, K. Martin
Crop Management, Plant Management Network, 2011
doi:10.1094/CM-2011-0629-01-RS
- 11-223-S Field Research 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1048, April 2011

- 11-224-S Kansas Fertilizer Research 2010
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1049,
April 2011
- 11-237-S Roundup 2011
Multiple authors
KS Agric. Exp. Stn. Report of Prog. 1050,
April 2011
- 11-259-S 2010 Kansas Performance Tests with Cotton
Varieties
Multiple authors
Coordinating author: S. Staggenborg
KS Agric. Exp. Stn. Report of Prog. 1046,
March 2011
- 11-334-J Influence of precipitation, temperature, and
56 years on winter wheat yields in western
Kansas
J.D. Holman, A.J. Schlegel, C.R. Thompson,
J.E. Lingenfelter
Plant Management Network-Crop
Management, 2011
doi:10.1094/CM-2011-1228-01-RS
- 11-377-S 2010 Kansas Performance Tests with Alfalfa
Varieties
Multiple authors
Coordinating author: J. Lingenfelter
KS Agric. Exp. Stn. Report of Prog. 1043,
June 2011
- 11-404-J Corn yield response to limited irrigation
N.L. Klocke, R.S. Currie, D.J. Tomsicek, J.
Koehn
Proceedings of the American Society of
Agricultural and Biological Engineers,
54(3):931-940, 2011
- 11-405-A Corn yield response to deficit irrigation
N.L. Klocke, R.S. Currie
Proceedings of the 2011 World
Environmental and Water Resources
Congress
Palm Springs, CA, 2011
- 11-406-A Deficit irrigation management decision tools
N.L. Klocke, L.R. Stone
Proceedings of the ASABE 5th National
Decennial Irrigation Conference
Phoenix, AZ, 2010
- 11-407-A Corn production with limited water supplies
Proceedings of the Central Plains Irrigation
Conference and Exposition
Burlington, CO, 2011, pp. 19-24
- 11-409-A Corn response to irrigation in Central Great
Plains
N.L. Klocke, R.S. Currie
Proceedings of the University Council on
Water Resources
Boulder, CO, 2011, pp. 1

DIRECTOR'S REPORT OF RESEARCH IN KANSAS 2011

Copyright 2012 Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Director's Report of Research in Kansas 2010, Kansas State University, April 2012.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available at: www.ksre.ksu.edu

KANSAS STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION
AND COOPERATIVE EXTENSION SERVICE