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Director's Report of Research in Kansas, 2016

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Director's Report of Research in Kansas, 2016

Abstract
The 2016 Director's Report of Research in Kansas includes a list of journal articles, station publications, and other published manuscripts from scientists in our departments, research-extension centers, and associated programs.

Keywords
Agriculture

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Director’s Report of Research in Kansas 2016

July 1, 2015–June 30, 2016

K-State
Research and Extension

Kansas State University Agricultural Experiment Station and Cooperative Extension Service
Letter of Transmittal

Office of the Director

To the Honorable Sam Brownback, Governor of Kansas

It is my pleasure to transmit herewith the report of the Agricultural Experiment Station of the Kansas State University of Agriculture and Applied Science for the fiscal year ending June 30, 2016. This report contains the title, author, and publication information for manuscripts published by station scientists. The report was published only in electronic format.

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

It is a pleasure to provide the 2016 Director’s Report of Research in Kansas. The report documents our current research programs and some of our accomplishments. K-State Research and Extension provides trusted, practical education to help individuals, businesses and communities solve problems, develop skills, and build a better future.

This report is produced and distributed in electronic format. This reduces printing costs and makes the report accessible to a broader audience.

The 2016 Director’s Report of Research in Kansas includes a list of journal articles, station publications, and other published manuscripts from scientists in our departments, research-extension centers, and associated programs.

The Kansas Agricultural Experiment Station was established in 1887 to conduct research vital to the success of Kansas. In 1914, the Kansas Cooperative Extension Service was created to disseminate research-based information to the public. During our strategic planning process, we received input from 5,000 stakeholders to determine five grand challenges facing Kansans — global food systems, water, health, developing tomorrow’s leaders, and community vitality. Our research programs provide the latest information through our statewide network to address those challenges.

John D. Floros, Ph.D.
Director, K-State Research and Extension
Dean, College of Agriculture
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A Message from the Associate Director of Research

The Hatch Act established the Kansas Agricultural Experiment Station in 1887 as the food, agriculture, and natural resources research component of Kansas State University, the state’s only land-grant university.

Our statewide network of centers and experiment fields allows our faculty to evaluate crop and livestock production systems across a wide range of environmental conditions. Southeast Kansas is approximately 2,000 feet lower in elevation, receives almost 25 inches more precipitation per year, and the temperature averages about six degrees warmer than northwest Kansas. To be successful, producers must have access to crop varieties and management strategies developed for their local climate and soil conditions. Researchers work closely with farmers and ranchers to ensure that projects directly relate to local needs.

K-State’s Agricultural Experiment Station funds research in 20 academic departments across five colleges on two campuses. In addition to long-term research projects on livestock and crop breeding, scientists are looking at new ways to control pests and diseases, emerging technologies to save water and energy, food safety, postharvest storage, weed control, and more.

As Kansas’ largest employer, agriculture contributes 43 percent of the state’s economy. More than 234,000 people are involved in the production, distribution, and transportation of agricultural products. Our research focuses on the agricultural industry and helping it grow in a sustainable manner.

Kansas Agricultural Experiment Station research expenditures — all funds used to produce research outcomes — represent the majority of Kansas State University’s total research effort. Funds are usually awarded through a highly competitive federal grant system.

J. Ernest Minton
Associate Director, Research, K-State Research and Extension
Associate Dean, Research and Graduate Programs, College of Agriculture

Agricultural Experiment Station and University Research Expenditures (in millions)
Making a State Impact

Wheat-breeding expertise assures quality year after year

“With a name befitting its place at the summit of Kansas agriculture, the K-State-produced wheat variety called Everest just completed its fourth year as the top variety planted across the state — and the fifth time out of the last six years that a K-State variety has held the top spot. Everest was first released in 2009, and to have so many years of successful use is almost unheard of,” according to Gary Pierzynski, head of the agronomy department.

“Wheat varieties don’t last that long as their resistance to disease breaks down, and they have to be replaced continually,” Pierzynski said. “We wouldn’t expect Everest to remain the top variety for an extended period, but we’re confident what we’ve released recently will be tops in a couple years’ time.”

In fact, Pierzynski says two new varieties of hard red winter wheat released in 2016, Larry and Zenda, have the potential to replace Everest.

K-State partners with the Kansas Wheat Alliance to continually ensure producers have access to seed that gives them the best yields and quality while keeping resources and research capacity within the state.

The long continuum of successful wheat breeding comes from K-State’s decades of commitment to research and development. Guarong Zhang, wheat breeder at the K-State Agricultural Research Center in Hays, says each successful variety is released to the public only after years of proving its quality.

“Every year we develop and test about 1,000 new breeding lines,” Zhang said. “Before releasing a line, it would have been tested for about 6 to 7 years. A breeding cycle, from start to end, takes 10 to 12 years.”

Larry and Zenda are not the only varieties likely to win favor among producers over the next few years. Zhang expects the new hard red variety, Tatanka, to take the place of Joe, which won the 2016 wheat yield competition in western Kansas and set a record for state yield completion. Zenda is a descendant of Everest.

Tatanka and Larry are derived from Jagger, one of the most successful wheat breeds in the state’s history. Though it is not seen much in Kansas fields anymore, Jagger marked 22 years of productivity in 2016.

The Kansas Wheat Alliance noted that at one point, Jagger was planted on virtually every acre in south-central Kansas and has gone on to be productive in 12 countries. Meanwhile, Jagger continues to have an impact as new varieties are developed from it.

Larry and Joe were named for longtime members of the K-State breeding team Larry Patton and T. Joe Martin. Everest was developed by Martin and Allan Fritz, a K-State alumnus who leads the wheat breeding team.

With a system of experts that spans the state, the breeding team carries forward the legacy of developing the right combinations of yield, drought tolerance, disease resistance and processing qualities.

10 years average wheat breeding cycle

622,530 seeds in Wheat Genetics Resource Center
Research Components of the Kansas Agricultural Experiment Station
(see map, next page)

**Academic Departments**

**College of Agriculture**
- Agricultural Economics
- Agronomy
- Animal Sciences and Industry
- Communications and Agricultural Education
- Entomology
- Grain Science and Industry
- Horticulture and Natural Resources
- Plant Pathology

**College of Arts and Sciences**
- Biochemistry and Molecular Biophysics
- Biology
- Sociology, Anthropology, and Social Work
- Statistics

**College of Engineering**
- Biological and Agricultural Engineering
- Chemical Engineering

**College of Human Ecology**
- Apparel, Textiles, and Interior Design
- Hospitality Management
- Food, Nutrition, Dietetics and Health

**College of Veterinary Medicine**
- Anatomy and Physiology
- Clinical Sciences
- Diagnostic Medicine/Pathobiology

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

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

**Associated Programs**
- Bioprocessing and Industrial Value Added Products Innovation Center
- Center for Biobased Products by Design
- Center for Sorghum Improvement
- Center for Sustainable Energy
- Food Science Institute
- Fungal Genetics Stock Center
- Great Plains Diagnostic Network
- IGP Institute
- K-State Libraries
- Kansas Agriculture and Rural Leadership
- Kansas Center for Agricultural Resources and the Environment
- Kansas Center for Sustainable Agriculture and Alternative Crops
- Kansas Water Resources Institute
- Konza Prairie Biological Station
- Large Animal Research Center
- National Science Foundation Industry/University Cooperative Research for Wheat Genetics
- Plant Biotechnology Center
- Veterinary Diagnostic Laboratory
- Weather Data Library
- Wheat Genetics Resource Center

**USAID Feed the Future Innovation Labs**
- Applied Wheat Genomics
- Reduction of Post-Harvest Loss
- Sorghum and Millet
- Sustainable Intensification
Understanding Contribution Numbers

Contribution numbers have three parts:
- The first two digits denote the year (state fiscal) of assignment.
- The second set of digits identifies the manuscript (numbered consecutively throughout the year).
- The suffix letter identifies the type of publication.

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:
http://newprairiepress.org/kaesrr/
http://www.bookstore.ksre.ksu.edu/

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, simply paste the doi into your browser or visit http://dx.doi.org/.

*As of March 2015, Kansas Agricultural Experiment Station reports are posted at http://newprairiepress.org/kaesrr/. These reports no longer have "SRP" numbers. They are now listed by volume and issue (2015 Cattlemen's Day Research, Volume 1, Issue 1; http://newprairiepress.org/kaesrr/vol1/iss1/). Recommended citations and doi numbers are listed with each report.

Recommended Citation
16-016-J Costs of using unmanned aircraft on crop farms
N. Ireland-Otto, I. Ciampitti, M.T. Blanks, R.O. Burton, Jr., T. Balthazor
Journal of the American Society of Farm Managers and Rural Appraisers
2016:130-148

16-028-J Quantifying variety-specific heat resistance and the potential for adaptation to climate change
J.B. Tack, J.A. Barkley, T.W. Rife, J.A. Poland, L.L. Nalley
Global Change Biology
22(August 2016)8:2904-2912

16-069-J Factors affecting methane emissions from rice production in the Lower Mississippi river valley, USA
Geoderma Regional
June 2016
Vol. 7, Issue 2, 223-229
https://doi.org/10.1016/j.geodrs.2016.04.005

16-132-J Red Arrow products smokin’ into the future: Facing changing diets and new challenges in the food industry - Teaching Notes
K. Harris
International Food and Agribusiness Management Review
2015

16-182-J Implications of non-farm work to vulnerability to food poverty-recent evidence from northern Ghana
Y.A. Zereyesus, W.T. Embaya, F. Tsiboe, and V. Amanor-Boadu
World Development
March 2017
Volume 91, p. 113–124
http://dx.doi.org/10.1016/j.worlddev.2016.10.015

16-211-D Staff, programs, and publications in agricultural economics, Kansas State University, 2015
D. Foster
Department Staff Paper 16-01
2015
SP16-01(2015):1-65

16-225-A Longevity: An important aspect in SDI success
F.R. Lamm, D.H. Rogers, I. Kisekka, J. Aguilar
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
2016

16-226-A Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O’Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
https://www.ksre.k-state.edu/irrigate/oow/p16/LammUsingCPSDI16.pdf

16-240-D 2015 Fence material and construction cost survey in Kansas
L. Tsoodle and X. Li
Department Staff Paper 16-02
February 2016
SP16-02(Feb 2016):1-4

16-245-J Evaluation of climatic variables as yield-limiting factors for maize yield in Kansas
Q. Ye, X. Lin, E. Adee, D. Min, Y. Assefa, D. O’Brien, I.A. Ciampitti
International Journal of Climatology
March 2017
doi: 10.1002/joc.5015

16-295-J A case for business continuity: Product movement during a highly pathogenic avian influenza outbreak
J.M. Thomson and D.L. Pendell
Choices Magazine
2016
Quarter 2
Agricultural Research Center - Hays

15-084-J  Long-term residual effects of feedlot manure application on crop yield and soil surface chemistry
A. Obour, P.W. Stahlman, C.A. Thompson
Journal of Plant Nutrition
January 2017
Vol. 40, Issue 3
https://doi.org/10.1080/01904167.2016.1245323

15-126-J  Natural variation and genome-wide association study of antioxidants in a diverse sorghum collection
D. Rhodes, P. Gadgil, R. Perumal, T. Tesso, T.J. Herald
Cereal Chemistry
April 2017
Vol. 94, Issue 2, p. 190-198
https://doi.org/10.1094/CCHEM-03-16-0075-R

16-014-J  Comparative life histories of greenbugs and sugarcane aphids (Hemiptera: Aphididae) co-infesting susceptible and resistant sorghums
M.H. Bayoumy, R. Perumal, J.P. Michaud
Journal of Economic Entomology
February 2016
Vol. 109, Issue 1, p. 385-391
https://doi.org/10.1093/jee/tov271

16-021-S  2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S  2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-024-S  2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-025-S  2015 Kansas performance tests with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1123
Kansas Agricultural Experiment Station

16-054-J  Impact of high temperature stress on floret fertility and individual grain weight of grain sorghum: sensitive stages and thresholds for temperature and duration
P.V. Vara Prasad, M. Djanaguiraman, R. Perumal, I.A. Ciampitti
Frontiers in Plant Science
2015
6:820
doi: 10.3389/fpls.2015.00820

16-059-J  Effect of fence-line or drylot weaning on the health and performance of beef calves during weaning, receiving, and finishing
The Professional Animal Scientist
2016
32 (2016):220–228
http://dx.doi.org/10.15232/pas.2015-01456

16-072-J  Effects of number of viral respiratory disease vaccinations during preconditioning on health, performance, and carcass merit of ranch-direct beef calves during receiving and finishing
The Professional Animal Scientist
2016
32 (2016):271-278
http://dx.doi.org/10.15232/pas.2015-01461

16-093-J  Evaluation and association mapping of resistance to tan spot and Stagonospora nodorum blotch in adapted winter wheat germplasm
Z. Liu, I. El-Basyoni, G. Kariyawasam, G. Zhang, A. Fritz, J. Hansen, F. Marais, A. Friskop, S. Chao, E. Akhunov, P.S. Baenziger
Plant Disease
October 2015
99:1333-1341
https://doi.org/10.1094/PDIS-11-14-1131-RE
16-129-J Controlling honey locust (*Gleditsia triacanthos*) with cut stump- and basal bark-applied herbicides for grazed pasture. K. Harmoney and multiple co-authors
Weed Technology
September 2016
Vol. 30, Issue 3, 30:801-806
https://doi.org/10.1614/WT-D-15-00154.1

Agricultural Sciences
November 2015
Vol. 6, Issue 11
10.4236/as.201561125

16-166-J 2,4-D past, present, and future: A review of one of the world’s most widely used herbicides. P.W. Stahlman, M.A. Peterson, S.A. McMasters, D. Reichers, J. Skelton
Weed Technology
November 2015
Vol. 30, Issue 2
10.1614/WT-D-15-00131.1

16-244-J Species composition changes in Conservation Reserve Program (CRP) grassland when managed for biomass feedstock production. K.R. Harmoney, D.K. Lee, R.L. Kallenbach, E.Z. Aberle
BioEnergy Research
December 2016
Vol. 9, Issue 4, p. 1180-1188
https://doi.org/10.1007/s12155-016-9764-9

Weed Science
September 2017
Vol. 65:6
doi: 10.1017/wsc.2017.18

16-293-S Roundup 2016
K. Harmony and multiple co-authors
KAES Research Reports Roundup
2016
Vol. 2, Issue 2
http://newprairiepress.org/kaesrr/vol2/iss2/

16-322-J Camelina seed yield and fatty acid composition as influenced by genotype and environment in the U.S. Great Plains. A.K. Obour, E. Obeng, Y. Mohammed, I.A. Ciampitti, T.P. Durrett, J.A. Moreno, C. Chen
Agronomy Journal
2017
Vol. 109, Issue 3, p. 947–956
doi:10.2134/agronj2016.05.0256

**Agronomy**

Evolutionary Applications
July 2015
8, p. 705-723
doi:10.1111/eva.12281

14-053-A Assessment of long-term monthly and seasonal trends of warm (cold), wet (dry) spells in Kansas, USA. H. Dokoohaki and A. Amandhi
American Geophysical Union fall 2013 meeting
December 2013

Physics in Perspectives
September 2014
Volume 16, Issue 3
https://doi.org/10.1007/s00016-014-0141-9
**14-084-J**  Foreword
N. Bolan, S. Saggar, M.B. Kirkham, D.B. Culleres
Science of The Total Environment
November 2018
Vol. 465
https://doi.org/10.1016/j.scitotenv.2013.03.062

**14-153-J**  Health and environmental impacts of smoke from vegetation fires: A review
Z.F. Liu, D.J. Murphy, R. Maghirang, D. Devlin
Journal of Environmental Protection
November 2016
Vol. 7, No. 12, p. 1860-1885
http://dx.doi.org/10.4236/jep.2016.712148

**14-225-J**  Effects of seed protection chemicals on stand and yield of grain sorghum at Ottawa, Kansas, 2013
D.J. Jardine and E. Adee
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/PDMR/volume8/abstracts/ST009.asp

**14-236-J**  Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2013
D.J. Jardine, E. Adee, K. Kusel
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume8/abstracts/st007.asp

**14-372-J**  Changes in spatial and temporal trends in wet, dry, warm and cold spell length or duration indices in Kansas, USA
A. Anandhi, S. Hutchinson, J. Harrington, V. Rahmani, M.B. Kirkham, C.W. Rice
International Journal of Climatology
February 2016
36: 4085-4101
https://doi.org/10.1002/joc.4619

**15-030-J**  Independent mis-splicing mutations in TaPHS1 causing loss of preharvest sprouting (PHS) resistance during wheat domestication
S. Liu, S.K. Sehgal, M. Lin, J. Li, H.N. Trick, B.S. Gill, G. Bai
New Phytologist
November 2015
208: 928-935
https://doi.org/10.1111/nph.13489

**15-036-J**  Predicting soybean relative maturity and seed yield using canopy reflectance
Crop Science
January 2016
Vol. 56, No. 2, p. 625-643
doi:10.2135/cropsci2015.04.0237

**15-038-J**  Modeling the impact of global warming on the sorghum sowing window in distinct climates in Brazil
European Journal of Agronomy
November 2013
Vol. 51, p. 53-64

**15-067-J**  Assessing future drought impacts on yields based on historical irrigation reaction to drought for four major crops in Kansas
T. Zhang and X. Lin
Science of the Total Environment
April 2016
550:851-860
doi: 10.1016/j.scitotenv.2016.01.181

**15-083-J**  PM2.5 and PM10 emissions from agricultural soils by wind erosion
H. Li, J. Tatarko, M. Kucharski, Z. Dong
 Aeolian Research
December 2015
Vol. 19, Part B, p. 171-182, ISSN 1875-9637
https://doi.org/10.1016/j.acolia.2015.02.003
15-084-J Long-term residual effects of feedlot manure application on crop yield and soil surface chemistry
A. Obour, P.W. Stahlman, C.A. Thompson
Journal of Plant Nutrition
January 2017
Vol. 40, Issue 3
https://doi.org/10.1080/01904167.2016.1245323

15-119-J Lead speciation and in vitro bioaccessibility of compost-amended urban garden soils
C.P. Attanayake, G.M. Hettiarachchi, Q. Ma, G.M. Pierzynski, M.D. Ransom
Journal of Environmental Quality
September 2017
Vol. 46, No. 6, p. 1215-1224
doi: 10.2134/jeq2017.02.0065

15-126-J Natural variation and genome-wide association study of antioxidants in a diverse sorghum collection
D. Rhodes, P. Gadgil, R. Perumal, T. Tesso, T.J. Herald
Cereal Chemistry
April 2017
Vol. 94, Issue 2, p. 190-198
https://doi.org/10.1094/CCHEM-03-16-0075-R

15-143-J Synchrotron-based X-Ray spectroscopy studies for redox-based remediation of lead, zinc, and cadmium in mine waste materials
R.R. Karna, G.M. Hettiarachchi, M. Newville, C.J. Sun, Q. Ma
Journal of Environmental Quality
October 2016
Vol. 45, No. 6
10.2134/jeq2015.12.0616

15-188-J Genetic diversity and population structure among sorghum (Sorghum bicolor, L.) germplasm collections from Western Ethiopia
African Journal of Biotechnology
June 2016
Vol.15(23), p. 1147-1158
https://doi.org/5897/AJB2015.14604

15-193-J Simplified computational approach for dual-probe heat-pulse method
J.H. Knight and G.J. Kluitenberg
Soil Science Society of America Journal
February 2015
Vol. 79, No. 2, p. 495-498

15-199-J Genotyping-by-sequencing (GBS) identified SNP tightly linked to QTL for pre-harvest sprouting resistance
M. Lin, S. Cai, S. Wang, S. Liu, G. Zhang, G. Bai
Theoretical and Applied Genetics
July 2015
Vol. 128, Issue 7, p. 1385-1395
https://doi.org/10.1007/s0012

15-344-J Cover crops, fertilizer nitrogen rates, and economic return of grain sorghum
G.Y. Mahama, P.V.V. Prasad, K.L. Roozeboom, J.B. Nippert, C.W. Rice
Agronomy Journal
January 2016
Vol. 108, No. 1, p. 1-16
doi:10.2134/agronj15.0135

15-345-J Response of maize to cover crops, fertilizer nitrogen rates, and economic return
G.Y. Mahama, P.V.V. Prasad, K.L. Roozeboom, J.B. Nippert, C.W. Rice
Agronomy Journal
January 2016
Vol. 108, No. 1, p. 17-31
doi:10.2134/agronj15.0136

15-377-J Effect of insect feeding, pathogen infection, and heat stress on antioxidant properties of wheat bran
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
July 2017
Vol. 57, No. 5, p. 2662-2670
doi:10.2135/cropsci2015.06.0363

15-406-J Comparison of corn, grain sorghum, soybean, and sunflower under limited irrigation
Agronomy Journal
January 2016
doi:10.2134/agronj2015.0332
15-422-J  Liquid N and S fertilizer solutions effects on the mass, chemical, and shear strength properties of winter wheat (Triticum aestivum) residue
Y. He, D.R. Presley, J. Tatarko
Transactions of the American Society of Agricultural and Biological Engineers
February 2017
60(3): 671-682
doi: 10.13031/trans.11961

15-429-J  Wheat leaf lipids during heat stress: II. Lipids experiencing coordinated metabolism are detected by analysis of lipid co-occurrence
S. Narayanan, P.V.V. Prasad, R. Welti
Plant, Cell & Environment
March 2016
Vol. 39, Issue 3
https://doi.org/10.1111/pce.12648

15-436-J  A safety vs efficiency trade-off identified in the hydraulic pathway of grass leaves is decoupled from photosynthesis, stomatal conductance and precipitation
T.W. Ocheltree, J.B. Nippert, P.V.V. Prasad
New Phytologist
April 2016
Vol. 210, Issue 1
https://doi.org/10.1111/nph.13781

15-450-J  Bird-cherry oat aphid (Rhopalosiphum padi) feeding stress induces enhanced levels of phenolics in mature wheat grains
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
January 2017
Vol. 57
10.2135/cropsci2015.08.0476.v

15-457-J  Root iron plaque on wetland plants as a dynamic pool of nutrients and contaminants
Advances in Agronomy
2016
Vol. 138, p. 1-96
https://doi.org/10.1016/bs.agron.2016.04.002

16-014-J  Comparative life histories of greenbugs and sugarcane aphids (Hemiptera: Aphididae) co-infesting susceptible and resistant sorghums
M.H. Bayoumy, R. Perumal, J.P. Michaud
Journal of Economic Entomology
February 2016
Vol. 109, Issue 1, p. 385-391
https://doi.org/10.1093/jee/tov271

16-016-J  Costs of using unmanned aircraft on crop farms
N. Ireland-Otto, I. Ciampitti, M.T. Blanks, R.O. Burton, Jr., T. Balthazor
Journal of the American Society of Farm Managers and Rural Appraisers
JASFMRA 2016:130-148

16-019-B  Soil water cycle
M.B. Kirkham, G.M. Hettiarachchi, multiple co-authors
Task Force: Soil Matters
2015
p. 11-16

16-021-S  2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S  2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-023-S  2015 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1121
Kansas Agricultural Experiment Station

16-024-S  2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station
16-025-S  2015 Kansas performance tests with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1123
Kansas Agricultural Experiment Station

16-027-S  2015 National winter canola variety trial
Coordinating authors M. Stamm and S. Dooley, multiple co-authors
SRP1125
Kansas Agricultural Experiment Station

16-029-S  2016 Chemical weed control for field crops, pastures, rangeland and noncropland
C.R. Thompson, D.E. Peterson, W.H. Fick, R.S. Currie, V. Kumar, J.W. Slocombe
SRP1126
Kansas Agricultural Experiment Station

16-036-J  Lead in urban soils: a real or perceived concern for urban agriculture?
S. Brown, R.L. Chaney, G.M. Hettiarachchi
Journal of Environmental Quality
December 2015
Vol. 45, No. 1, p. 26-36
doi:10.2134/jeq2015.07.0376

16-037-J  Genomic selection for processing and end-use quality traits in the CIMMYT spring bread wheat breeding program
The Plant Genome
July 2016, 9(2)
doi:10.3835/plantgenome2016.01.0005

16-038-B  Herbicide-resistant Palmer amaranth
(Amaranthus palmeri S. Wats.) in the United States: Mechanisms of resistance, impact, and management
Herbicides, Agronomic Crops, and Weed Biology
In Tech Scientific Publisher, NY.
doi: 10.5772/61512

16-039-J  A multi-state study of the association between glyphosate resistance and EPSPS gene amplification in waterhemp (Amaranthus tuberculatus)
Weed Science
September 2015
63: 569-577
https://doi.org/10.1614/WS-D-14-00149.1

16-040-J  Integrated management of glyphosate-resistant giant ragweed (Ambrosia trifida) with tillage and herbicides in soybean
Weed Science Society of America, Weed Technology
January 2017
January-March, Vol. 30, No. 1, p. 45-56,
doi: 10.1614/WT-D-15-00089.1

16-041-J  Target-site point mutation in henbit (Lamium amplexicaule L.) conferring high level resistance to ALS-inhibitors
A. Varanasi, A.S. Godar, D. Shoup, D.E. Peterson, M. Jugulam
Weed Science
April 2016: Vol. 64, p. 231-239

16-054-J  Impact of high temperature stress on floret fertility and individual grain weight of grain sorghum: sensitive stages and thresholds for temperature and duration
P.V. Vara Prasad, M. Djanaguiraman, R. Perumal, I.A. Ciampitti
Frontiers in Plant Science
October 2015
6:820
doi: 10.3389/fpls.2015.00820

16-056-J  Limited irrigation for sweet corn planted at different dates on claypan soil
D.W. Sweeney, M.B. Kirkham, C.W. Marr
Crop, Forage and Turfgrass Management
August 2016, Vol. 2
doi:10.2134/cftm2015.0216
| 16-061-J | RNAi mediated, stable resistance to *Triticum* mosaic virus in wheat  
J.L. Shoup, L.F. Cruz, H.N. Trick, J.P. Fellers  
Crop Science  
April 2016  
56: 4: 1602-1610  
doi:10.2135/cropsci2015.09.0577 |
|---|---|
| 16-062-J | Utilization of biowaste for mine spoil rehabilitation  
H. Wijesekara, N.S. Bolan, M. Vithanage,  
Y. Xu, S. Mandal, S.L. Brown, G.M. Hettiarachchi, G.M. Pierzynski, L. Huang,  
Y.S. Ok, M.B. Kirkham, C. Saint, A. Surapaneni  
Advances in Agronomy  
2016  
| 16-069-J | Factors affecting methane emissions from rice production in the Lower Mississippi river valley, USA  
K.R. Brye, L.L. Nalley, J.B. Tack, B.L. Dixon,  
A.P. Barkley, C.W. Rogers, A.D. Smarrt,  
R.J. Norman, K.S.V. Jagadish  
Geoderma Regional  
June 2016  
Vol. 7, Issue 2, p. 223-229  
https://doi.org/10.1016/j.geodrs.2016.04.005 |
| 16-081-J | Ammonia volatilization from exposed soil and *Tanzania* grass pasture fertilized with urea and zeolite mixture  
Mariana Campana, Ana Carolina Alves, Patrícia Perondi Anchão de Oliveira, Alberto Carlos de Campos Bernardi, Eduardo Alvarez Santos,  
Valdo Rodrigues Herling, Jozivaldo Prudêncio Gomes de Morais, Waldomiro Barioni Júnior  
Communications in Soil Science and Plant Analysis  
April 2015  
Vol. 46, Issue 8, p. 1024-1033  
https://doi.org/10.1080/00103624.2015.1019080 |
| 16-083-J | Assessing a faculty development program for the adoption of brain-based learning strategies  
C.C. Lavis, K.A. Williams, J. Fallin, P.K. Barnes, S.J. Fishback, S. Thien  
Journal of Faculty Development  
January 2016  
30(1):57-69 |
| 16-093-J | Evaluation and association mapping of resistance to tan spot and *Stagonospora nodorum* blotch in adapted winter wheat germplasm  
Plant Disease  
October 2015  
99:1333-1341  
https://doi.org/10.1094/PDIS-11-14-1131-RE |
| 16-098-J | Multiplexed, trait-linked marker set for rapid genotyping in wheat using next generation sequencing  
A. Bernardo, S. Wang, P. St. Amand, G. Bai  
PLOS ONE  
December 2015  
10(12): e0143890  
https://doi.org/10.1371/journal.pone.0143890 |
| 16-099-J | Biomass and nutrient content by sugarcane as affected by fertilizer nitrogen sources  
Crop Science Journal  
March 2016  
56:1234-1244  
doi: 10.2135/cropsci2015.06.0349 |
| 16-105-J | Genotypic diversity effects on biomass production in native perennial bioenergy cropping systems  
Z. Hu, P.P. Grabowski, J.O. Borevitz, M.-A. de Graaff, R.M. Miller, J.D. Jastrow  
GCB Bioenergy  
October 2015  
Vol. 8, Issue 5, p. 1000-1014  
doi:10.1111/gcbb.12309 |
| 16-120-J | Historical synthesis-analysis of changes in grain nitrogen dynamics in sorghum  
I.A. Ciampitti and P.V.V. Prasad  
Frontiers in Plant Science  
March 2016  
Vol. 7, p. 275  
https://doi.org/10.3389/fpls.2016.00275 |
16-167-J Designing advanced biochar products for maximizing greenhouse gas mitigation potential
Critical Reviews in Environmental Science and Technology
September 2016
Vol. 46, Issue 17
https://doi.org/10.1080/10643389.2016.1239975

16-168-J Functional relationships of soil acidification, liming, and greenhouse gas flux
Advances in Agronomy
2016
Vol. 139, p. 1-71
https://doi.org/10.1016/bs.agron.2016.05.001

16-180-J Diurnal temperature amplitude alters physiological and growth response of maize (Zea mays L.) during the vegetative stage
V.S.J. Sunoj, K.J. Shroyer, S.V.K. Jagadish, P.V.V. Prasad
Environmental and Experimental Botany
October 2016
130, 113-121
https://doi.org/10.1016/j.envexpbot.2016.04.007

16-187-J Field crops and the fear of heat stress – opportunities, challenges, and future directions
P.V.V. Prasad and S.V.K. Jagadish
Field Crops Research
January 2017
200:114-121
https://doi.org/10.1016/j.fcr.2016.09.024

16-194-J Exploring agricultural production systems and their fundamental components with system dynamics modelling
J.P. Walters, D.W. Archer, G.F. Sassenrath, J.R. Hendrickson, J.D. Hanson, J.M. Halloran, P. Vadas
Ecological Modelling
August 2016
333:51-65
http://dx.doi.org/10.1016/j.ecolmodel.2016.04.015

16-195-J Effect of soil-test phosphorus and phosphorus fertilization on the severity of soybean sudden death syndrome
D.R. Diaz, E. Adee, C.R. Little
Crop, Forage and Turfgrass Movement
December 2016
Vol. 2, Issue 1
10.2134/cftm2015.0193

16-213-J Estimate contributions of Kansas pasture burning to ambient PM2.5 through source apportionment using Unmix Receptor Model
Z. Liu, R. Maghirang, D. Devlin, C. Blocksome
Transactions of American Society of Agricultural and Biological Engineers
2016
59(5): 1267-1275
doi:10.13031/trans.59.11612

16-230-J Limited irrigation of corn-based no-till crop rotations in west central Great Plains
Agronomy Journal
April 2016
108:1132-1141
doi:10.2134/agronj2015.0536

16-239-J Climate change challenges for extension educators: technical capacity and cultural attitudes
T.A. Becerra, G. Middendorf, A. Campbell, P. Tomlinson
Journal of Extension
December 2016
Vol. 54, No. 6, Feature, 6FEA2
16-243-J  Registration of ‘Joe’ hard white winter wheat
G. Zhang, T.J. Martin, A.K. Fritz, R. Miller,
M.S. Chen, R.L. Bowden, G. Bai
Journal of Plant Registrations
July 2016
Vol. 10, Issue 3
10.3198/jpr2016.02.0007crc

16-245-J  Evaluation of climatic variables as yield-limiting
factors for maize yield in Kansas
Q. Ye, X. Lin, E. Adee, D. Min, Y. Assefa,
D. O’Brien, I.A. Ciampitti
International Journal of Climatology
March 2017
doi: 10.1002/joc.5015

16-271-J  Timing of strobilurin fungicide for control of
top dieback in corn
E.A. Adee and S. Duncan
Plant Health Progress
May 2017
doi:10.1094/PHP-03-17-0020-RS

16-287-J  Kochia (Kochia scoparia) emergence profiles and
seed persistence across the Central Great Plains
J.A. Dille, W. Stahlman, J. Du, P.W. Geier,
J.D. Riffel, R.S. Currie, R.G. Wilson,
G.M. Sbatella, P. Westra, A.R. Kniss,
M.J. Moechnig, R.M. Cole
Weed Science
September 2017
Vol. 65:6
doi: 10.1017/wsc.2017.18

16-289-J  Transport and transformation of selenium and
other constituents of flue-gas desulfurization
wastewater in water-saturated soil materials
G. Hettiaracchi, M.B. Galkaduwa,
G.J. Kluitenberg, S.L. Hutchinson, L. Davis,
L.E. Erickson
Journal of Environmental Quality Abstract
March 2017
Vol. 46, No. 2
10.2134/jeq2016.09.0335

16-292-J  Corn response as affected by planting distance
from the center of strip-till fertilized rows
E.A. Adee, F.D. Hansel, D.A. Ruiz Diaz,
K. Janssen
Frontiers Plant Science
August 2016
https://doi.org/10.3389/fpls.2016.01232

16-300-J  Virtual nitrogen as a tool for assessment of
nitrogen management at the field scale: A crop
rotation approach
W. Grzebisch, R. Lukowiak, G.F. Sassenrath
Field Crops Research
April 2018
218:182-194
https://doi.org/10.1016/j.fcr.2018.01.009

16-301-A  Modeling and simulating nutrient management
practices for the Mobile River Watershed
V.J. Alarcon and G.F. Sassenrath
The 16th International Conference on
Computational Science and Its Applications
(ICCSA 2016)
July 2016
p. 33-43
doi: 10.1007/978-3-319-42111-7_4

16-315-S  2016 Southeast Agricultural Research Center
Research Report
L. Lomas and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 3
http://newprairiepress.org/kaesrr/vol2/iss3/

16-317-J  Stalk rot fungi affect leaf greenness (SPAD) of
grain sorghum in a genotype- and growth-stage
specific manner
Y.M.A.Y. Bandara, D.K. Weerasooriya,
T.T. Tesso, C.R. Little
Plant Disease
October 2016
Vol. 100, No. 10, p. 2062-2068
https://doi.org/10.1094/PDIS-02-16-0171-RE

16-318-J  Yield and soil water in three dryland wheat and
grain sorghum rotations
A.J. Schlegel, Y. Assefa, L.A. Haag,
C.R. Thompson, J.D. Holman, L.R. Stone
Agronomy Journal
January 2017
109:227-238
doi:10.2134/agronj2016.07.0387
16-319-J Drought-tolerant corn hybrids yield more in drought-stressed environments with no penalty in non-stressed environments
E. Adee, K. Roozeboom, G. Balboa, A. Schlegel, I.A. Ciampitti
Frontiers in Plant Science
October 2016
Vol. 7
doi: 10.3389/fpls.2016.01534

16-322-J Camelina seed yield and fatty acids as influenced by genotype and environment
A.K. Obour, E. Obeng, Y. Mohammed, I.A. Ciampitti, T.P. Durrett, J.A. Moreno, C. Chen
Agronomy Journal
May 2017
Vol. 109, Issue 3, p. 947-956
doi:10.2134/ agronj2016.05.0256

16-329-J Resistance to wheat streak mosaic virus and triticum mosaic virus in wheat lines carrying Wsm1 and Wsm3
G. Zhang, T.T. Kumssa, D. Zhao, G. Bai
European Journal of Plant Pathology
August 2016
Vol. 147, Issue 3

16-332-J Potential corn yield losses due to weeds in North America
N. Soltani, J.A. Dille, I.C. Burke, W.J. Everman, M.J. VanGessel, V.M. Davis, P.H. Sikkema
Weed Technology
February 2017
30(4):979-984

16-357-A Mine site rehabilitation with biosolids for sustainable development
A. Alghamdi, M.B. Kirkham, D.R. Presley, G. Hettiarachchi, L. Murray
American Society of Agricultural and Biological Engineers
2016
10.13031/aim.20162463072

16-380-J Transcriptome analysis reveals potential mechanisms for inhibition of intumescence development by UV radiation in tomato
Q. Wu, S. Park, M.B. Kirkham, K.A. Williams
Environmental and Experimental Botany
February 2017
Vol. 134, p. 130-140
http://dx.doi.org/10.1016/j.
envexpbot.2016.11.006

Anatomy and Physiology

15-440-J Hot topic: Early postpartum treatment of commercial dairy cows with nonsteroidal antiinflammatory drugs increases whole-lactation milk yield
Journal of Dairy Science
January 2016
Vol. 99, Issue 1, p. 672-679
http://dx.doi.org/10.3168/jds.2015-10048

16-215-J Expansion of amphibian intronless interferons revises the paradigm for interferon evolution and functional diversity
F. Belcha, Y. Sang, Q. Liu, J. Lee, W. Ma, D.S. McVey
Scientific Reports
June 2016
Article Number: 29072
https://doi.org/10.1038/srep29072

16-223-J A randomized field study comparing differences in core body temperature, health, and performance in crossbred beef heifers administered 2 antimicrobial products given upon arrival at a stocker facility
G.A. Hanzlicek, D.A. Blasi, B.E. Oleen, G.A. Anderson
The Professional Animal Scientist
August 2016
Vol. 32, Issue 4
https://doi.org/10.15232/pas.2015-01486
Porcine Wharton's jelly cells distribute throughout the body after intraperitoneal injection
K. Packthongsuk, T. Rathbun, D. Troyer, D.L. Davis
Stem Cell Research and Therapy
February 2018
Vol. 9, Issue 1
10.1186/s13287-018-0775-7

**Animal Sciences and Industry**

14-004-J Effect of subprimal type, quality grade, and aging on sensory properties of ground beef patties
C.M. Garner, J.A. Unruh, M.C. Hunt, E.A.E. Boyle, T.A. Houser
Meat Science
January 2014
Vol. 96, Issue 1, p. 467
https://doi.org/10.1016/j.meatsci.2013.07.096

14-005-J Effects of in-feed copper, chlortetracycline, and tylosin on the prevalence of transferable copper resistance gene, tcrB, among fecal enterococci of weaned piglets
Foodborne Pathogens and Disease
August 2015
12(8): 670-678
https://doi.org/10.1089/fpd.2015.1961

14-007-J The effects of diet blending and feed budgeting on finishing pig growth performance, carcass characteristics, and economic return
The Professional Animal Scientist
August 2014
Vol. 30, Issue 4, p. 375-392
https://doi.org/10.15232/pas.2013-01297

14-048-J Follicular expression of follicle stimulating hormone receptor variants in the ewe
Reproductive Biology and Endocrinology
December 2013
0.536805556
https://doi.org/10.1186/1477-7827-11-113

14-341-J Effects of pelleting conditioner retention time on nursery pig growth performance
Journal of Animal Science
March 2015
Vol. 93, No. 3, p. 1098-1102
https://doi.org/10.2527/jas.2014-0872

14-342-J Effects of menthol supplementation in feedlot cattle diets on the fecal prevalence of antimicrobial-resistant *Escherichia coli*
C.C. Aperce, R. Amachawadi, C.L. Van Bibber-Krueger, T.G. Nagaraja, H.M. Scott, J. Vinasco-Torre, J.S. Drouillard
PLOS ONE
December 2016
11(12): e0168983
https://doi.org/10.1371/journal.pone.0168983

14-353-J Yeast product supplementation modulated feeding behavior and metabolism in transition dairy cows
Journal of Dairy Science
January 2015
Vol. 98, Issue 1, p. 532–540
doi: http://dx.doi.org/10.3168/jds.2014-8468

14-354-J Yeast product supplementation modulated humoral and mucosal immunity and uterine inflammatory signals in transition dairy cows
Journal of Dairy Science
May 2015
Vol. 98, Issue 5, p. 3236-3246
doi: http://dx.doi.org/10.3168/jds.2014-8469
<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
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</tbody>
</table>
Effect of fence-line or drylot weaning on the health and performance of beef calves during weaning, receiving, and finishing
The Professional Animal Scientist
April 2016
32 (2016):220-228
http://dx.doi.org/10.15232/pas.2015-01456

Consumer and trained panel evaluation of beef strip steaks of varying marbling and enhancement levels cooked to three degrees of doneness
L.W. Lucherk, T.G. O’Quinn, J.F. Legako, R.J. Rathmann, J.C. Brooks, M.F. Miller
Meat Science
December 2016
Vol. 122
https://doi.org/10.1016/j.meatsci.2016.08.005

Effects of number of viral respiratory disease vaccinations during preconditioning on health, performance, and carcass merit of ranch-direct beef calves during receiving and finishing
The Professional Animal Scientist
June 2016
32 (2016):271-278
http://dx.doi.org/10.15232/pas.2015-01461

Efficiency of lysine utilization by growing steers
E.D. Batista, A.H. Hussein, E. Detmann, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
February 2016
94:648-655
https://doi.org/10.2527/jas.2015-9716

Effect of ruminal ammonia supply on lysine utilization by growing steers
A.H. Hussein, E.D. Batista, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
February 2016
94:656-664
doi:10.2527/ja

Managing complexity: Dealing with systemic crosstalk in bovine physiology
B.J. Bradford, K. Yuan, C. Ylioja
Journal of Dairy Science
June 2016
Vol. 99, Issue 6, p. 4983-4996
https://doi.org/10.3168/jds.2015-10271

Ovarian characteristics and timed artificial insemination pregnancy risk after presynchronization with gonadotropin-releasing hormone 7 days before PGF_2α in dairy cows
J.S. Stevenson
Theriogenology
April 2016
85(6):1139-1146
https://doi.org/10.1016/j.theriogenology.2015.11.028

Focused beam reflectance measurement (FBRM) as a tool for in situ monitoring of lactose crystallization process
K. Pandalaneni and J.K. Amamcharla
Journal of Dairy Science
July 2016
Vol. 99, Issue 7, p. 5244-5253
doi: https://doi.org/10.3168/jds.2015-10643

Evaluating the efficacy of three U.S. Department of Agriculture–approved antimicrobial sprays for reducing Shiga toxin–producing Escherichia coli surrogate populations on bov veal carcasses
Journal of Food Protection
June 2016
79(6):956-62

Effect of extended postmortem aging and steak location on myofibrillar protein degradation and Warner-Bratzler shear force of beef M. semitendinosus steaks
K.J. Phelps, J.S. Drouillard, M.B. Silva, L.D.F. Miranda, S.M. Ebarb, C.L. Van Bibber-Krueger, T.G. O’Quinn, J.M. Gonzalez
Journal of Animal Science
January 2016
94(1):412-23
doi: 10.2527/jas.2015-9862
16-110-A Metrics to assess reproductive efficiency in dairy herds
L.G.D. Mendonça
Dairy Cattle Reproduction Council
October 2016

16-111-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
Journal of Swine Health and Production 2016
24(3):154-164

16-115-J Investigation into the efficacy of Bdellovibrio bacteriovorus as a novel pre-harvest intervention to control Escherichia coli O157:H7 and Salmonella spp. in cattle using an in vitro model
J. Page, B. Lubbers, J. Maher, L. Ritsch, S. Gragg
Journal of Food Protection September 2015
Vol. 78, No. 9, p. 1745-1749

16-121-J Effect of growth-promoting technologies on Longissimus lumborum muscle fiber morphometrics, collagen solubility, and cooked meat tenderness
Journal of Animal Science February 2016
Vol. 94, Issue 2, p. 869-881
https://doi.org/10.2527/jas.2015-9888

16-126-J Novel methods to study the effect of protein content and dissolution temperature on the solubility of milk protein concentrate: Focused beam reflectance and ultrasonic flaw detector-based methods
J.K. Amamcharla and M. Hauser
Journal of Dairy Science April 2016
Vol. 99, Issue 5
https://doi.org/10.3168/jds.2015-10541

16-136-J Effects of amino acids and energy intake during late gestation of high-performing gilts and sows on piglet birth weight and reproductive performance under commercial conditions
Journal of Animal Science May 2016
Vol. 94, Issue 5
https://doi.org/10.2527/jas.2015-0087

16-149-J Standardized ileal digestable valine:lysine dose response effects in 25- to 45-kg pigs under commercial conditions
Journal of Animal Science March 2018
Vol. 96, Issue 2
10.1093/jas/skx059

16-150-J Dose-response evaluation of the standardized ileal digestible tryptophan:lysine ratio to maximize growth performance of growing-finishing gilts under commercial conditions
Animal July 2018
Vol. 12, Issue 7
https://doi.org/10.1017/S1751731117002968

16-152-J An update on modeling dose-response relationships: Accounting for correlated data structure and heterogeneous error variance in linear and nonlinear mixed models
Journal of Animal Science May 2016
Vol. 94, Issue 5
https://doi.org/10.2527/jas.2015-0106
16-153-J Evaluation of the minimum infectious dose of porcine epidemic diarrhea virus in virus-inoculated feed
American Journal of Veterinary Research
October 2016
Vol. 77, No. 10
https://doi.org/10.2460/ajvr.77.10.1108

16-158-J A review of solute encapsulating nanoparticles used as delivery systems with emphasis on branched amphipathic peptide capsules
Archives Biochemistry Biophysics
April 2016
596:22-42
doi: 10.1016/j.abb.2016.02.027

16-170-J Treatment of lactating dairy cows with gonadotropin releasing hormone before first insemination during summer heat stress
B.E. Boelz, L. Rocha, F. Scortegagna, J.S. Stevenson, L.G.D. Mendonça
Journal of Dairy Science
September 2016
Vol. 99, Issue 9, p. 7612-7623
http://dx.doi.org/10.3168/jds.2016-10970

16-175-J Fertility of lactating dairy cows treated with gonadotropin-releasing hormone at estrus, 5 days after AI, or both, during summer heat stress
L.G.D. Mendonça, F.M. Mantelo, J.S. Stevenson
Theriogenology
March 2017
Volume 91, 9 - 16
http://dx.doi.org/10.1016/j.theriogenology.2016.11.032

16-201-S Dairy Research 2015
Coordinating author B.J. Bradford and multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 1, Issue 8
http://newprairiepress.org/kaesrr/vol1/iss8/

16-205-J Effects of wheat source and particle size in meal and pelleted diets on finishing pig growth performance, carcass characteristics, and nutrient digestibility
Journal of Animal Science
August 2016
Vol. 94, Issue 8
https://doi.org/10.2527/jas.2016-0370

16-207-J Evaluating pellet and meal feeding regimens on finishing pig performance, stomach morphology, and carcass characteristics
Journal of Animal Science
November 2016
Vol. 94, Issue 11
https://doi.org/10.2527/jas.2016-0461

16-208-J Stability of four commercial phytase products under increasing thermal conditioning temperatures
Translational Animal Science
September 2017
Vol. 1, Issue 3
https://doi.org/10.2527/tas2017.0030

16-212-J Effects of dietary copper, zinc, and ractopamine-HCl on finishing pig growth performance, carcass characteristics, and antimicrobial susceptibility of enteric bacteria
Journal of Animal Science
August 2016
Vol. 94, Issue 8
https://doi.org/10.2527/jas.2016-0340
16-216-J Effects of dietary chlortetracycline, *Origanum* essential oil, and pharmacological Cu and Zn on growth performance of nursery pigs
Translational Animal Science
March 2018
Vol. 2, Issue 1
https://doi.org/10.1093/tas/txx004

16-218-J Evaluating the removal of pigs from a group and subsequent floor space allowance on the growth performance of heavy-weight finishing pigs
Journal of Animal Science
October 2016
Vol. 94, Issue 10
https://doi.org/10.2527/jas.2016-0407

16-219-J A survey of current feeding regimens for vitamins and trace minerals in the US swine industry
Journal of Swine Health and Production
November 2016
Vol. 24, No. 6

16-220-J Development of equations to predict the influence of floor space on average daily gain, average daily feed intake and gain:feed ratio of finishing pigs
Animal
October 2017, Vol. 12, Issue 5
https://doi.org/10.1017/S1751731117002440

16-223-J A randomized field study comparing differences in core body temperature, health, and performance in crossbred beef heifers administered 2 antimicrobial products given upon arrival at a stocker facility
G.A. Hanzlicek, D.A. Blasi, B.E. Oleen, G.A. Anderson
The Professional Animal Scientist
August 2016, Vol. 32, Issue 4
https://doi.org/10.15232/pas.2015-01486

16-228-J Evaluating the impact of maternal vitamin D supplementation on sow performance: I Serum vitamin metabolites and neonatal muscle characteristics
Journal of Animal Science
November 2016
Vol. 94, Issue 11
https://doi.org/10.2527/jas.2016-0409

16-229-J Evaluating the impact of maternal vitamin D supplementation on sow performance: II Subsequent growth performance and carcass characteristics of growing pigs
Journal of Animal Science
November 2016
Vol. 94, Issue 11
https://doi.org/10.2527/jas.2016-0410

16-232-J The effects of copper source and concentration on growth performance, carcass characteristics, and pen cleanliness in finishing pigs
Journal of Animal Science
September 2017
Vol. 95, Issue 9
https://doi.org/10.2527/jas2017.1624

16-234-J Effects of distillers dried grains with solubles and added fat fed immediately before slaughter on growth performance and carcass characteristics of finishing pigs
Journal of Animal Science
January 2017
Vol. 95, Issue 1
https://doi.org/10.2527/jas.2016.0679
Effects of withdrawing high-fiber ingredients before marketing on finishing pig growth performance, carcass characteristics, and intestinal weights
Journal of Animal Science
February 2018
Vol. 96, Issue 1
https://doi.org/10.1093/jas/skx048

Cattlemen's Day 2016
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 2, Issue 1
http://newprairiepress.org/kaesrr/vol2/iss1/

Using estrus-detection patches to optimally time insemination improved pregnancy risk in suckled beef cows in a fixed-time artificial insemination program
Journal of Animal Science
September 2016
94:3703-3710
doi:10.2527/jas.2016-0469

Use of electromyography to detect muscle exhaustion in finishing barrows fed ractopamine-HCl
Journal of Animal Science
June 2016
94:2344-2356
doi:10.2527/jas.2016-0398

Feeding microalgae meal (All-G Rich™, *Schizochytrium limacinum* CCAP 4087/2) to beef heifers I: Effects on fresh meat quality
Journal of Animal Science
September 2016
94:4016-4029
doi:10.2527/jas.2016-0487

Feeding microalgae meal (All-G Rich™, *Schizochytrium limacinum* CCAP 4087/2) to beef heifers II: Effects on ground beef palatability and color
Journal of Animal Science
September 2016
94:4030-4039
doi:10.2527/jas.2016-0488

Physiological predictors of ovulation and pregnancy risk in a fixed-time artificial insemination program
J.S. Stevenson
Journal of Dairy Science
2016
Vol. 99, Issue 12, 10077-10092
doi: http://dx.doi.org/10.3168/jds.2016-11247

GnRH increased pregnancy risk in suckled beef cows not detected in estrus and subjected to a split-time artificial insemination program
Journal of Animal Science
July 2016
94:3722-3728
doi:10.2527/jas.2016-0582

Kansas dairy producers' needs survey: Reproductive management of Kansas dairy farms
B.E. Voelz, C. Payne, L. Hulbert, J.S. Stevenson, M. Brouk, L.G.D. Mendonça
Journal of Extension
August 2017
Vol. 55, No. 4, Research in Brief, 4RIB6
16-316-J  Validation of baking as a kill-step for controlling *Salmonella* in muffins  
*International Journal of Food Microbiology*  
June 2017  
Vol. 250, 2017, p. 1-6, ISSN 0168-1605  
http://dx.doi.org/10.1016/j.ijfoodmicro.2017.03.007

16-331-J  Increasing estrus expression in the lactating dairy cow  
J.A. Sauls, B.E. Voelz, S.L. Hill, L.G.D. Mendonça, J.S. Stevenson  
*Journal of Dairy Science*  
January 2017  
Vol. 100, Issue 1, p. 807-820  
http://dx.doi.org/10.3168/jds.2016-11519

16-335-J  Porcine Wharton's jelly cells distribute throughout the body after intraperitoneal injection  
K. Packthongsuk, T. Rathbun, D. Troyer, D.L. Davis  
*Stem Cell Research and Therapy*  
February 2018  
Vol. 9, Issue 1  
10.1186/s13287-018-0775-7

16-340-J  Effects of potential detoxifying agents on growth performance and deoxynivalenol (DON) urinary balance characteristics of nursery pigs fed DON-contaminated wheat  
*Journal of Animal Science*  
January 2017  
Vol 95, Issue 1  
https://doi.org/10.2527/jas.2016.0664

16-358-J  Formation of pellet fines during the feed manufacturing process, transportation and feed line delivery, and their nutrient composition  
*American Society of Agricultural and Biological Engineers*  
2017  
Vol. 33, Issue 6  
10.13031/aea.12304

16-359-J  The progression of deoxynivalenol-induced growth suppression in nursery pigs and the potential of an algae-modified montmorillonite clay to mitigate these effects  
*Journal of Animal Science*  
September 2016  
Vol. 94, Issue 9  
https://doi.org/10.2527/jas.2016-0663

16-376-J  Branched amphipathic peptide capsules: Different ratios of the two constituent peptides direct distinct bilayer structures and sizes  
*Langmuir*  
June 2017  
33(28):7096-7104  
doi:10.1021/acs.langmuir.7b00912
**Apparel, Textiles, and Interior Design**

16-291-J  Black walnut, Osage orange and eastern redbud sawmill waste as natural dyes: Effect of aluminum mordant on color parameters  
S. Haar, K. Doty, J. Kim  
Fashion and Textiles  
2016  
Vol. 3, Issue 22  

**Biochemistry and Molecular Biophysics**

14-165-J  Branched amphiphilic cationic oligopeptides form peptiplexes with DNA: A study of their biophysical properties and transfection efficiency  
Molecular Pharmaceutics  
February 2015  
12 (3), 706-715  
doi: 10.1021/mp500524s

14-370-J  A multicopper oxidase-related protein is essential for insect viability, longevity and ovary development  
Z. Peng, P.G. Green, Y. Arakane, M.R. Kanost, M.J. Gorman  
PLOS ONE  
October 2014  
9(10):e111344  
doi:10.1371/journal.pone.0111344

15-105-J  Intracellular complexes of the early-onset torsion dystonia-associated AAA+ ATPase TorsinA  
H. Li, H.-C. Wu, Z. Liu, L.F. Zacchi, J.L. Brodsky, M. Zolkiewski  
SpringerPlus  
December 2014  
2014 3:743  

15-329-J  Identification and quantification of anthocyanins in transgenic purple tomato  
Food Chemistry  
July 2016  
Vol. 202, p. 184-188  
https://doi.org/10.1016/j.foodchem.2016.01.128

15-403-J  Gene delivery and immunomodulatory effects of plasmid DNA associated with branched amphiphilic peptide capsules.  
Journal of Controlled Release  
November 2018  
Vol. 241, p. 15-24  
https://doi.org/10.1016/j.jconrel.2016.08.042

16-004-J  Initiating protease with modular domains interacts with glucan recognition protein to trigger innate immune response in insects  
D. Takahashi, B.L. Garcia, M.R. Kanost  
National Academy of Sciences  
November 2015  
112 (45) 13856-13861  
https://doi.org/10.1073/pnas.1517236112

16-005-J  Differential proteins expression in the midgut of *Culex quinquefasciatus* induced by *Temephos* insecticide  
Journal Insect Biochemistry and Molecular Biology  
September 2016  
30(37):253-263  
https://doi.org/10.1111/mve.12172

16-035-J  Clip-domain serine proteases as immune factors in insect hemolymph  
M.R. Kanost and H. Jiang  
Current Opinion in Insect Science  
October 2015  
11:47-55
Necessity of high-resolution for coarse-grained modeling of flexible proteins
Z. Jia and J. Chen
Journal of Computational Chemistry
July 2016
5;37(18):1725-33
doi:10.1002/jcc.24391

Electrospray ionization mass spectrometry based quantification of acetyl-triacylglycerols
S. Bansal and T.P. Durrett
Lipids
September 2016
Vol. 5, Issue 9, p. 1093-1102
doi: 10.1007/s11745-016-4179-0

A review of solute encapsulating nanoparticles used as delivery systems with emphasis on branched amphipathic peptide capsules
Archives Biochemistry Biophysics
April 2016
596:22-42
doi:10.1016/j.abb.2016.02.027

Serpins in arthropod biology
D.A. Meekins, M.R. Kanost, K. Michel
Seminars in Cell and Developmental Biology
February 2017
Vol. 62, p. 105-119
https://doi.org/10.1016/j.semcdb.2016.09.001

Camelina seed yield and fatty acid composition as influenced by genotype and environment
A.K. Obour, E. Obeng, Y. Mohammed, I.A. Ciampitti, T.P. Durrett, J.A. Aznar-Moreno, C. Chen
Agronomy Journal
May 5, 2017
Vol. 109, Issue 3, p. 947-956
doi:10.2134/agronj2016.05.0256

Metalloprotease-disintegrin ADAM12 actively promotes the stem cell-like phenotype in claudin-low breast cancer
S. Duhachek-Muggy, Y. Qi, R. Wise, L. Alyahya, H. Li, J. Hodge, A. Zolkiewska
Molecular Cancer
February 2017
16:32
https://doi.org/10.1186/s12943-017-0599-6

Branched amphipathic peptide capsules: Different ratios of the two constituent peptides direct distinct bilayer structures and sizes
Langmuir
June 2017
33(28):7096-7104
doi:10.1021/acs.langmuir.7b00912

Biological and Agricultural Engineering

Torrefaction of conservation reserve program biomass: A techno-economic evaluation
F. Xu, K. Linnebur, D. Wang
Industrial Crops and Products
November 2014
Vol. 61, p. 382-387
doi.org/10.1016/j.indcrop.2014.07.030

Analysis of lignocellulosic biomass using infrared methodology
F. Xu and D. Wang
Pretreatment of Biomass Processes and Technologies
December 2015
Chapter 2, p. 7-25
https://doi.org/10.1016/B978-0-12-800080-9.00002-5

Health and environmental impacts of smoke from vegetation fires: A review
Z.F. Liu, D.J. Murphy, R. Maghirang, D. Devlin
Journal of Environmental Protection
November 2016
Vol. 7, No. 12, p. 1860-1885
http://dx.doi.org/10.4236/jep.2016.712148

Effects of nitrogen source on ethanol production in very high gravity fermentation of corn starch
L. Zhaofeng, D. Wang, Y.-C. Shi
Journal of the Taiwan Institute of Chemical Engineers
January 2017
Vol. 70, p. 229-235
https://doi.org/10.1016/j.jtice.2016.10.055
14-257-J Rapid determination of both structural polysaccharides and soluble sugars in sorghum biomass using near-infrared spectroscopy
F. Xu, L. Zhou, K. Zhang, J. Yu, D. Wang
BioEnergy Research
March 2015
Vol. 8, Issue 1, p. 130-136
doi: 10.1007/s12155-014-9511-z

14-328-J Final report: Validating the kinematic wave approach for rapid soil erosion assessment and improved BMP site selection to enhance training land sustainability
S.L. Hutchinson and J.M.S. Hutchinson
Environmental Security Technology Certification Program (ESTCP)
February 2014
ESTCP Project RC-200820

14-372-J Changes in spatial and temporal trends in wet, dry, warm and cold spell length or duration indices in Kansas, USA
A. Anandhi, S. Hutchinson, J. Harrington, V. Rahmani, M.B. Kirkham, C.W. Rice
International Journal of Climatology
February 2016
36: 4085-4101
https://doi.org/10.1002/joc.4619

15-109-J Sand transport and abrasion within simulated standing vegetation
Transactions of the American Society of Agricultural and Biological Engineers
2017
60(3): 791-802
doi: 10.13031/trans.11878

15-146-J Fast analysis of high heating value and elemental compositions of sorghum biomass using near-infrared spectroscopy
K. Zhang, L. Zhou, M. Brady, F. Xu, J. Yu, D. Wang
Energy
January 2017
Vol. 118, p. 1353-1360
https://doi.org/10.1016/j.energy.2016.11.015

15-194-B Overview of sorghum industrial utilization
G. Qi, N. Li, X.S. Sun, D. Wang
May 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0070

15-387-J Near-infrared spectroscopic evaluation of single-kernel deoxynivalenol accumulation and fusarium head blight resistance components in wheat
K.H.S. Peiris, W.W. Bockus, F.E. Dowell
Cereal Chemistry
June 2015
Vol. 93, Issue 1
https://doi.org/10.1094/CCHEM-03-15-0057-R

15-405-J Correlating bulk density (with dockage) and test weight (without dockage) for wheat samples
Applied Engineering in Agriculture
September 2016
Vol. 32(6): 925-930
doi: 10.13031/aea.32.11692

15-414-J Field-observed angles of repose for stored grain in the United States
Applied Engineering in Agriculture
2017
Vol. 33(1): 131-137, ISSN 0883-8542
doi: 10.13031/aea.11894

16-029-S 2016 Chemical weed control for field crops, pastures, rangeland and noncropland
C.R. Thompson, D.E. Peterson, W.H. Fick, R.S. Currie, V. Kumar, J.W. Slocombe
SRP1126
Kansas Agricultural Experiment Station
16-073-J Physico-chemical properties of camelina protein altered by sodium bisulfite and guanidine-HCl
X. Zhu, D. Wang, X.S. Sun
Industrial Crops and Products
May 2016
Vol. 83, p. 453-461
https://doi.org/10.1016/j.indcrop.2015.12.085

16-097-J A generalized model for bacterial disinfection: Stochastic approach
A. Argoti, R. Maghirang, A. Barrios, S.T. Chou, L.T. Fan
Biochemical Engineering Journal
October 2016
114: 218-225
https://doi.org/10.1016/j.bej.2016.06.024

16-124-J Optimization and modeling of flow characteristics of low-oil DDGS using RSM and PLS regression techniques
R. Bhadra, R.P.A. Kingsly, M.E. Casada, S. Simsek, S. Kaliramesh
Transactions of American Society of Agricultural and Biological Engineers
2017
Vol. 60(1): 249-258
doi: 10.13031/trans.1.1928

16-213-J Estimate contributions of Kansas pasture burning to ambient PM2.5 through source apportionment using Unmix Receptor Model
Z. Liu, Y. Liu, X. Shi, J.P. Murphy, R. Maghirang
Transactions of American Society of Agricultural and Biological Engineers
2016
59(5): 1267-1275
doi:10.13031/trans.59.11612

16-214-J Enteric methane conversion factor for dairy and beef cattle: Effects of feed digestibility and intake level
Z. Liu, Y. Liu, X. Shi, J. Wang, J.P. Murphy, R. Maghirang
Transactions of American Society of Agricultural and Biological Engineers
2017
(60) 459-464
doi: 10.13031/trans.11744

16-225-A Longevity: An important aspect in SDI success
F.R. Lamm, D.H. Rogers, I. Kisekka, J. Aguilar
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
February 2016
p. 19-28

16-226-A Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O’Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
February 2016
p. 29-37

16-255-J Variations of ammonia emissions from cattle operations: Effects of air temperature and dietary crude protein content
Z. Liu, Y. Liu, X. Shi, J.P. Murphy, R. Maghirang
Transactions of the American Society of Agricultural and Biological Engineers
2017
60(1): 215-227
doi: 10.13031/trans.11797

16-289-J Transport and transformation of selenium and other constituents of flue-gas desulfurization wastewater in water-saturated soil materials
G. Hettiaracchi, M.B. Galkaduwa, G.J. Kluitenberg, S.L. Hutchinson, L. Davis, L.E. Erickson
Journal of Environmental Quality Abstract
March 2017
Vol. 46, No. 2
10.2134/jeq2016.09.0335

16-315-S 2016 Southeast Agricultural Research Center Research Report
L. Lomas and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 3
http://newprairiepress.org/kaesrr/vol2/iss3/

16-327-J Annual baseflow variations as influenced by climate variability and agricultural land use change in the Missouri River Basin
L. Ahiablame, A.Y. Sheshukov, V. Rahmani, D. Moriasi
Water Resources Research
August 2017
551: 188-202
https://doi.org/10.1016/j.jhydrol.2017.05.055
<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Title</th>
<th>Authors</th>
<th>Journal/Conference/Book Details</th>
</tr>
</thead>
</table>
16-033-J Ord's kangaroo rats in north-central Kansas: Patterns of body size and reproduction
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
September 2015
118(3-4):251-264
doi.org/10.1660/062.118.03115

16-055-J The first to arrive and the last to leave: colonisation and extinction dynamics of common and rare fishes in intermittent prairie streams
J.E. Whitney, K.B. Gido, E.C. Martin, K.J. Hase
Freshwater Biology
September 2015
Vol. 61, Issue 8
https://doi.org/10.1111/fwb.12668

16-086-J Temperature-dependent performance as a driver of warmwater fish species replacement along the river continuum
M.J. Troia, M.A. Denk, K.B. Gido
Canadian Journal of Fisheries and Aquatic Sciences
September 2015
3:394-405
dx.doi.org/10.1139/cjfas-2015-0094

16-104-J Dissolved organic carbon concentration and flux in a grassland stream: Spatial and temporal patterns and processes from long-term data
J.J. Ruegg, J.J. Eichmiller, N. Mladenov, W.K. Dodds
Biogeochemistry
September 2015
125: 393
https://doi.org/10.1007/s10533-015-0134-z

16-118-J Woody plant encroachment, and its removal, impact bacterial and fungal communities across stream and terrestrial habitats in a tallgrass prairie ecosystem
A.M. Veach, W.K. Dodds, A. Jumpponen
Federation of European Microbiology Societies, Microbiology Ecology
October 2015
Vol. 91, Issue 10, fiv109
https://doi.org/10.1093/femsec/fiv109

16-128-J Anopheles gambiae hemocytes exhibit transient states of activation
W.B. Bryant and K. Michel
Developmental and Comparative Immunology
February 2016
Vol. 55, p. 119-29
https://doi.org/10.1016/j.dci.2015.10.020

16-134-J Baseflow physical stream characteristics differ at multiple spatial scales in stream networks across diverse biomes
Landscape Ecology
January 2016
Vol. 31, Issue 1, p. 119-136

16-144-J Least shrews in north-central Kansas: Habitat and individual characteristics
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
April 2016
119:2 129-135

16-164-J Assessing the potential for transitions from tallgrass prairie to woodlands: Are we operating beyond critical fire thresholds?
J. Briggs, Z. Ratajczak, D.G. Goodin, R.L. Mohler, J.B. Nippert, B. Obermeyer
Rangeland Ecology & Management
July 2016
Vol. 69, Issue 4
https://doi.org/10.1016/j.rama.2016.03.004
Efficacy of selected food-safe compounds to prevent infestation of the ham mite, *Tyrophagus putrescentiae* (Schrank) (Acarina: Acaridae), on southern dry cured hams
S. Abbar, B. Amoah, M.W. Schilling, T.W. Phillips
Pest Management Science
November 2015
72: 1604-1612
doi:10.1002/ps.4196

Multiple functions of Na/K-ATPase in dopamine-induced salivation of the blacklegged tick, *Ixodes scapularis*
D. Kim, J. Urban, D.L. Boyle, and Y. Park
Scientific Reports
February 2016
Vol. 6
http://dx.doi.org/10.1038/srep21047

The southern bog lemming in north-central Kansas: Unusual habitats
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
April 2016
119:136-140
https://doi.org/10.1660/062.119.0203

Serpins in arthropod biology
D.A. Meekins, M.R. Kanost, K. Michel
Seminars in Cell and Developmental Biology
February 2017
Vol. 62, 105-119
https://doi.org/10.1016/j.semcdb.2016.09.001

Ecohydrological and climate change studies at the Konza Prairie Biological Station
J. Briggs, J.M. Blair, E.A. Horne
Transactions of the Kansas Academy of Science
January 2016
Vol. 119, Issue 1
https://doi.org/10.1660/062.119.0103

A before-and-after assessment of patch-burn grazing and riparian fencing along headwater streams
Journal of Applied Ecology
May 2016
53:5 1543-1553
doi: 10.1111/1365-2664.12692

The role of polyploidy in shaping morphological diversity in natural populations of *Phlox amabilis* (Polemoniaceae)
M.T. Chansler, C.J. Ferguson, S.D. Fehlberg, L.A. Prather
American Journal of Botany
September 2016
103(9): 1546-1558
https://doi.org/10.3732/ajb.1600183

Functional validation of apoptosis genes IAP1 and DRONC in midgut tissue of the biting midge *Culicoides sonorensis* (Diptera: Ceratopogonidae) by RNAi
M.K. Mills, D. Nayduch, D.S. McVey, K. Michel
Journal of Medical Entomology
May 2017
54(3):559-567
https://doi.org/10.1093/jme/tjw225

Long terminal repeat retrotransposon content in eight diploid sunflower species inferred from next-generation sequence data
M. Ungerer and H. Tetreault
G3: Genes, Genomes, Genetics
May 2016
Vol. 6
10.1534/g3.116.029082

Fires of differing intensities rapidly select distinct soil fungal communities in a northwest US ponderosa pine forest ecosystem
C. Reazin, S. Morris, J.E. Smith, A.D. Cowan, A. Jumpponen
Forest Ecology and Management
2016
377: 118-127

The effect of temperature and host plant resistance on population growth of the soybean aphid biotype 1 (Hemiptera: Aphididae)
A.R. Hough, J.R. Nechols, B.P. McCormack, D.C. Margolies, B.K. Sandercock, D.Yan, L. Murray
Environmental Entomology
February 2017
Vol. 46, Issue 1, p. 58-67
https://doi.org/10.1093/ee/nvw160
Chemical Engineering

16-097-J  A generalized model for bacterial disinfection: Stochastic approach
A. Argoti, R. Maghirang, A. Barrios, S.T. Chou, L.T. Fan
Biochemical Engineering Journal
October 2016
114: 218-225
https://doi.org/10.1016/j.bej.2016.06.024

Clinical Sciences

16-077-J  Efficiency of lysine utilization by growing steers
E.D. Batista, A.H. Hussein, E. Detmann, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
2016
94:648-655
doi:10.2527/jas2015-9716

16-078-J  Effect of ruminal ammonia supply on lysine utilization by growing steers
A.H. Hussein, E.D. Batista, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
February 2016
94:656-664
doi:10.2527/ja

Diagnostic Medicine/Pathobiology

14-005-J  Effects of in-feed copper, chlortetracycline, and tylosin on the prevalence of transferable copper resistance gene, tcrB, among fecal enterococci of weaned piglets
Foodborne Pathogens and Disease
August 2015
12(8): 670-678
https://doi.org/10.1089/fpd.2015.1961

14-048-J  Follicular expression of follicle stimulating hormone receptor variants in the ewe
Reproductive Biology and Endocrinology
December 2013
0.536805556
https://doi.org/10.1186/1477-7827-11-113

14-342-J  Effects of menthol supplementation in feedlot cattle diets on the fecal prevalence of antimicrobial-resistant Escherichia coli
C.C. Aperce, R. Amachawadi, C.L. Van Bibber-Krueger, T.G. Nagaraja, H.M. Scott, J. Vinasco-Torre, J.S. Drouillard
PLOS ONE
December 2016
11(12): e0168983
https://doi.org/10.1371/journal.pone.0168983

15-173-J  A comparison of culture- and PCR-based methods to detect six major non-O157 serogroups of shiga toxin-producing Escherichia coli in cattle feces
L.W. Noll, P.B. Shridhar, D.M. Dewsbury, X. Shi, N. Cernicchiaro, D.G. Renter, T.G. Nagaraja
PLOS ONE
August 2015
10(8): e0135446
https://doi.org/10.1371/journal.pone.0135446
15-350-J Enhanced D-lactic acid production from renewable resources using engineered *Lactobacillus plantarum*  
Y. Zhang, P.V. Vadlani, A. Kumar, P.R. Hardwidge, R. Govind, T. Tanaka, A. Kondo  
Applied Microbiology Biotechnology  
January 2016  
Vol. 100, Issue 1, p. 279-288  
doi: 10.1007/s00253-015-7016-0

15-403-J Gene delivery and immunomodulatory effects of plasmid DNA associated with branched amphiphilic peptide capsules.  
Journal of Controlled Release  
November 2016  
Vol. 241, p. 15-24  
https://doi.org/10.1016/j.jconrel.2016.08.042

15-409-J First report of anaerobic isolation of *Salmonella enterica* from liver abscesses of feedlot cattle  
R.G. Amachawadi and T.G. Nagaraja  
Journal of Clinical Microbiology  
June 2015  
Vol. 53, No. 9, p. 3100-3101  
doi: 10.1128/JCM.01111-15

16-003-J Comparative experimental infection study in dogs with *Ehrlichia canis*, *E. chaffeensis*, *Anaplasma platis* and *A. phagocytophilum*  
PLOS ONE  
February 2016  
11(2): e0148239  
doi.org/10.1371/journal.pone.0148239

16-007-J Impact of increased feed intake during late gestation on reproductive performance of gilts and sows  
Journal of Swine Health and Production  
2016;24(5):264-266

16-008-J Considerations regarding marketing heavy weight pigs  
Journal of Swine Health and Production  
2017;25(1):29–33

16-010-J Feed efficiency adjustments to compare group closeouts in finishing pigs  
Journal of Swine Health and Production  
February 2016  
Vol. 25, No. 2  

16-013-J Comparison of *Mannheimia haemolytica* isolates from an outbreak of bovine respiratory disease  
S. Rainbolt, D.K. Pillai, B.V. Lubbers, M. Moore, R. Davis, D. Amrine, D. Mosier  
Veterinary Microbiology  
January 2016  
Vol. 182, p. 82-86  
https://doi.org/10.1016/j.vetmic.2015.10.020

16-017-J Influence of dietary fat source and feeding duration on finishing pig growth performance, carcass composition, and fat quality  
July 2016  
94(7):2851-66  
https://doi.org/10.2527/jas.2015-9521

16-020-J Effects of diet form and corn particle size on growth performance and carcass characteristics of finishing pigs  
Animal Feed Science and Technology  
April 2016  
Vol. 214, p. 136-141  
https://doi.org/10.1016/j.anifeedsci.2016.02.002
16-047-J Comparing different phytase sources for pigs
Journal of Swine Health and Production
January 2016
Vol. 24, No. 2

16-048-J Feed efficiency adjustments to compare group close-outs in finishing pigs
Journal of Swine Health and Production
March 2017
Vol. 25, No. 2

16-049-J Ingredient database management: Part I. Overview and sampling procedures
Journal of Swine Health and Production
January 2016
Vol. 24, No. 4

16-050-J Ingredient database management: Part II. Energy
Journal of Swine Health and Production
April 2016
Vol. 24, No. 4

16-052-J Fact sheet – Ingredient database management for swine: phosphorus
Journal of Swine Health and Production
July 2015
Vol. 25, No. 2

16-100-J Stable flies (Stomoxys calcitrans L.) from confined beef cattle do not carry Shiga-toxigenic Escherichia coli (STEC) in the digestive tract
R. Puri-Giri, A. Ghosh, L. Zurek
Foodborne Pathogens and Disease
February 2016
Vol. 13, No. 2
https://doi.org/10.1089/fpd.2015.2056

16-101-J Amblyomma americanum ticks infected with in vitro cultured wild-type and mutants of Ehrlichia chaffeensis are competent to produce infection in naïve deer and dogs
D.C. Jaworski, C. Cheng, A.D.S. Nair, R.R. Ganta
Ticks and Tick Borne Diseases
January 2017
8(1): 60-64
doi: 10.1016/j.ttbdis.2016.09.017

16-102-J Vaccination with an attenuated mutant of Ehrlichia chaffeensis induces pathogen-specific CD4 T cell immunity and protection from tick-transmitted wild-type challenge in a canine host
PLOS ONE
February 2016
11(2):e0148229
doi: 10.1371/journal.pone.0148229

16-111-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
Journal of Swine Health and Production
2016
24(3):154-164

16-149-J Standardized ileal digestable valine:lysine dose response effects in 25- to 45-kg pigs under commercial conditions
Journal of Animal Science
March 2018
Vol. 96, Issue 2
10.1093/jas/skx059
| 16-150-J | Dose-response evaluation of the standardized ileal digestible tryptophan:lysine ratio to maximize growth performance of growing-finishing gilts under commercial conditions  
Animal  
July 2018  
Vol. 12, Issue 7  
https://doi.org/10.1017/S1751731117002968 |
| 16-152-J | An update on modeling dose-response relationships: Accounting for correlated data structure and heterogeneous error variance in linear and nonlinear mixed models  
Journal of Animal Science  
May 2016  
Vol. 94, Issue 5  
https://doi.org/10.2527/jas.2015-0106 |
| 16-153-J | Evaluation of the minimum infectious dose of porcine epidemic diarrhea virus in virus-inoculated feed  
American Journal of Veterinary Research  
October 2016  
Vol. 77, No. 10  
https://doi.org/10.2460/ajvr.77.10.1108 |
| 16-215-J | Expansion of amphibian intronless interferons revises the paradigm for interferon evolution and functional diversity  
F. Belcha, Y. Sang, Q. Liu, J. Lee, W. Ma, D.S. McVey  
Scientific Reports  
June 2016  
Article Number: 29072  
https://doi.org/10.1038/srep29072 |
| 16-218-J | Evaluating the removal of pigs from a group and subsequent floor space allowance on the growth performance of heavy-weight finishing pigs  
Journal of Animal Science  
October 2016  
Vol. 94, Issue 10  
https://doi.org/10.2527/jas.2016-0407 |
| 16-159-J | A survey of current feeding regimens for vitamins and trace minerals in the US swine industry  
Journal of Swine Health and Production  
November 2016  
Vol. 24, No. 6  
| 16-220-J | Development of equations to predict the influence of floor space on average daily gain, average daily feed intake and gain:feed ratio of finishing pigs  
Animal  
October 2017  
Vol. 12, Issue 5  
https://doi.org/10.1017/S1751731117002440 |
| 16-223-J | A randomized field study comparing differences in core body temperature, health, and performance in crossbred beef heifers administered 2 antimicrobial products given upon arrival at a stocker facility  
G.A. Hanzlicek, D.A. Blasi, B.E. Oleen, G.A. Anderson  
The Professional Animal Scientist  
August 2016  
Vol. 32, Issue 4  
https://doi.org/10.15232/pas.2015-01486 |


Effect of insect feeding, pathogen infection, and heat stress on antioxidant properties of wheat bran
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
July 2017
Vol. 57, No. 5, p. 2662-2670
doi:10.2135/cropsci2015.06.0363

Four new species of Cymatodera Gray from central and southern Mexico (Coleoptera, Cleridae, Tillinae)
A.F. Burke, J. Rifkind, G. Zolnerowich
ZooKeys
July 2015
513: 105-121
https://doi.org/10.3897/zookeys.513.9935

Bird-cherry oat aphid (Rhopalosiphum padi) feeding stress induces enhanced levels of phenolics in mature wheat grains.
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
January 2017
Vol. 57
10.2135/cropsci2015.08.0476

Comparative life histories of greenbugs and sugarcane aphids (Hemiptera: Aphididae) co-infesting susceptible and resistant sorghums
M.H. Bayoumy, R. Perumal, J.P. Michaud
Journal of Economic Entomology
February 2016
Vol. 109, Issue 1, p. 385-391
https://doi.org/10.1093/jeec/tov271

Alternatively spliced orco kinin isoforms and their functions in Tribolium castaneum
H. Jiang, H.G. Kim, Y. Park
Insect Biochemistry and Molecular Biology
October 2015
65:1-9
https://doi.org/10.1016/j.ibmb.2015.07.009

Residual efficacy of deltamethrin and ß-cyfluthrin against Trogoderma variabile and Trogoderma inclusum (Coleoptera: Dermestidae)
M.N. Ghimire, F.H. Arthur, S.W. Myers, T.W. Phillips
Journal of Stored Product Research
March 2016
66:6-11
https://doi.org/10.1016/j.jspr.2015.12.002

Movement and orientation decision modeling of Rhyzopertha dominica (Coleoptera: Bostrichidae) in the grain mass
E.M.G. Cordeiro, J.F. Campbell, T.W. Phillips
Environmental Entomology
April 2016
Vol. 45, Issue 2, p. 410-419
https://doi.org/10.1093/ee/nvv232
Stable flies (*Stomoxys calcitrans* L.) from confined beef cattle do not carry Shiga-toxigenic *Escherichia coli* (STEC) in the digestive tract.

R. Puri, Giri, A. Ghosh, L. Zurek

*Foodborne Pathogens and Disease*

February 2016

Vol. 13, No. 2

https://www.liebertpub.com/doi/10.1089/fpd.2015.2056

A checklist of the New World species of Tillinae (Coleoptera: Cleridae), with a key to genera and new country records

A.F. Burke, J.M. Leavengood, G. Zolnerowich

*Zootaxa*

December 2015

Vol. 4059, No. 1

http://dx.doi.org/10.11646/zootaxa.4059.1.1

Wheat genotypes with combined resistance to wheat curl mite, wheat streak mosaic virus, wheat mosaic virus, and triticum mosaic virus

Wen-Po Chuang, Lina Maria Aguirre Rojas, Luay Kahtan Khalaf, Guorong Zhang, Allan K. Fritz, Anna E. Whitfield, C. Michael Smith

*Journal of Economic Entomology*

April 2017

110(2):711-718

https://doi.org/10.1093/jee/tow255

Pheromone trapping to determine Hessian fly (Diptera: Cecidomyiidae) activity in Kansas

H.N. Schwarting, R.J. Whitworth, G. Cramer, M.-S. Chen

*Journal of the Kansas Entomological Society*

2015

88(4):411-417

https://doi.org/10.2317/0022-8567-88.4.411

Monitoring *Tyrophagus putrescentiae* (Schrank) (Acari: Acaridae) with traps in dry-cured ham aging rooms

B. Amoah, M.W. Schilling, T.W. Phillips

*Environmental Entomology*

August 2016

Volume 45, Issue 4

https://doi.org/10.1093/ee/nvw059

Efficacy of selected pesticides against *Tyrophagus putrescentiae* (Schrank): Influence of application rate, application surface, and residual activity

S. Abbar, M.W. Schilling, R.J. Whitworth, T.W. Phillips

*Journal of Pest Science*

February 2017

Vol. 90, Issue 1, p. 379-387


Efficacy of selected food-safe compounds to prevent infestation of the ham mite, *Tyrophagus putrescentiae* (Schrank) (Acarina: Acaridae), on southern dry cured hams

S. Abbar, B. Amoah, M.W. Schilling, T.W. Phillips

*Pest Management Science*

November 2015

72: 1604-1612

doi:10.1002/ps.4196

Ligand selectivity in tachykinin and natalisin neuropeptidergic systems of the honey bee parasitic mite *Varroa destructor*

Y. Park, H. Jiang, D. Kim, S. Dobesh, J.D. Evans, R.J. Nachman, K. Kaczmarek, J. Zabrocki

*Scientific Reports*

January 2016

Vol. 6

http://dx.doi.org/10.1038/srep19547

Multiple functions of Na/K-ATPase in dopamine-induced salivation of the blacklegged tick, *Ixodes scapularis*

D. Kim, J. Urban, D.L. Boyle, Y. Park

*Scientific Reports*

February 2016

Vol. 6

http://dx.doi.org/10.1038/srep21047

Dual resistance to lambda-cyhalothrin and dicrotophos in *Hippodamia convergens* (Coleoptera: Coccinellidae).

J.P. Michaud, P.R.R. Barbosa, A.R.S. Rodrigues, J.B. Torees

*Chemosphere*

September 2016

Vol. 159, Issue 159

10.1016/j.chemosphere.2016.05.075
Impact of Hessian fly (Mayetiola destructor) on developmental aspects of hard red winter wheat in Kansas
H.N. Schwarting, R.J. Whitworth, M.-S. Chen, G. Cramer, T. Maxwell
Southwestern Entomologist
2016
http://dx.doi.org/10.3958/059.041.0208

Taxonomic revision of the New World genus Callotillus Wolcott (Cleridae, Tillinae), with the description of the new genus Neocallotillus, and an illustrated key of identification to species
A.F. Burke and G. Zolnerowich
ZooKeys
2016
Vol. 617
https://doi.org/10.3897/zookeys.617.9970

Relative toxicity of two aphicides to Hippodamia convergens (Coleoptera: Coccinellidae): Implications for integrated management of sugarcane aphid, Melanaphis sacchari (Hemiptera: Aphididae).
J.P. Michaud, F. Colares, C.L. Bain, J.B. Torres
Journal of Economic Entomology
February 2017
Vol. 110, Issue 1
https://doi.org/10.1093/jee/tow265

Toxicity of three aphicides to the generalist predators Chrysoperla carnea (Neuroptera: Chrysopidae) and Orius insidiosus (Hemiptera: Anthocoridae)
J.P. Michaud, P.R.R. Barbosa, C.L. Bain, J.B. Torres
Ecotoxicology
March 2017
Vol. 26, Issue 5
10.1007/s10646-017-1792-5

Efficacy of selected food-safe compounds to prevent infestation of the ham mite, Tyrophagus putrescentiae (Schrank) (Acari: Acaridae), on southern dry-cured hams
T. Phillips, S. Abbar, B. Amoah, M.W. Schilling
Pest Management Science
November 2015
Vol. 72, Issue 8
https://doi.org/10.1002/ps.4196

Oviposition by female Plodia interpunctella (Lepidoptera: Pyralidae): Description and time budget analysis of behaviors
K.R. Sambaraju, S.L. Donelson, J. Bozic, T.W. Phillips
Insects
January 2016
7(1), 4

Monitoring Tyrophagus putrescentiae (Acari: Acaridae) with traps in dry-cured ham aging rooms
T. Philips, B. Amoah, M.W. Schilling
Environmental Entomology
May 2016
Vol. 45, Issue 4
https://doi.org/10.1093/ee/nvw059

Sampling methods to detect and estimate populations of Tyrophagus putrescentiae (Schrank) (Sarcoptiformes: Acaridae) infesting dry-cured hams
B. Amoah, D. Hagstrum, B. Subramanyam, J.F. Campbell, M.W. Schilling, T.W. Phillips
Journal of Stored Product Research
September 2017
Vol. 73, p. 98-108
https://doi.org/10.1016/j.jspr.2017.07.004

Time-mortality relationships to control Tyrophagus putrescentiae (Acarina: Acari) exposed to high and low temperatures
S. Abbar, M.W. Schilling, T.W. Phillips
Journal of Economic Entomology
October 2016
Vol. 109, Issue 5, p. 2215–2220
https://doi.org/10.1093/jee/tow159

Extending the ‘ecology of fear’ beyond prey: Reciprocal non-consumptive effects among competing aphid predators.
J.P. Michaud, P.R.R. Barbosa, C.L. Bain, J.B. Torres
Environmental Entomology
September 2016
Vol. 45, Issue 6
https://doi.org/10.1093/ee/nvw133
16-372-J Efficacy of four insecticides against alfalfa weevil with comparison of impacts on beneficial species, 2016
J.P. Michaud and C.L. Bain
Arthropod Management Tests
September 2016
Vol. 41, Issue 1
https://doi.org/10.1093/amt/tsw118

16-379-J The effect of temperature and host plant resistance on population growth of the soybean aphid biotype 1 (Hemiptera: Aphididae)
A.R. Hough, J.R. Nechols, B.P. McCormack, D.C. Margolies, B.K. Sandercock, D.Yan, L. Murray
Environmental Entomology
February 2017
Vol. 46, Issue 1, p. 58-67
https://doi.org/10.1093/ee/nvw160

14-344-J Line spread as a visual clinical tool for thickened liquids
A.M. Lund, J.M. Garcia, E. Chambers
American Journal of Speech-Language Pathology
August 2013, Vol. 22, Issue 3, 566-571
https://pubs.asha.org/doi/10.1044/1058-0360%282013%2912-0044%29

15-329-J Identification and quantification of anthocyanins in transgenic purple tomato
Food Chemistry
July 2016
Vol. 202, p. 184-188
https://doi.org/10.1016/j.foodchem.2016.01.128

16-114-J University students and faculty have positive perceptions of open/alternative resources and their utilization in a textbook replacement initiative
N. Delimont, E.C. Turtle, A. Bennett, K. Adhikari, B.L. Lindshield
Research in Learning Technology
June 2016
Vol. 24
doi: 10.3402/rlt.v24.29920

16-137-J Effect of saw palmetto supplements on androgen-sensitive LNCaP human prostate cancer cell number and syrian hamster flank organ growth
B. Lindshield, A.B. Opoku-Acheampong, K. Penugonda
Evidence-Based Complementary and Alternative Medicine
April 2016
http://dx.doi.org/10.1155/2016/8135135

16-163-J Exercise activates p53 and negatively regulates IGF01 pathway in epidermis within a skin cancer model
M. Yu, B. King, E. Ewert, X. Su, N. Mardiyati, Z. Zhao, W. Wang
PLOS ONE
August 2016
11(8): e0160939
https://doi.org/10.1371/journal.pone.0160939

Food, Nutrition, Dietetics and Health

14-344-J Line spread as a visual clinical tool for thickened liquids
A.M. Lund, J.M. Garcia, E. Chambers
American Journal of Speech-Language Pathology
August 2013, Vol. 22, Issue 3, 566-571
https://pubs.asha.org/doi/10.1044/1058-0360%282013%2912-0044%29

15-329-J Identification and quantification of anthocyanins in transgenic purple tomato
Food Chemistry
July 2016
Vol. 202, p. 184-188
https://doi.org/10.1016/j.foodchem.2016.01.128

16-114-J University students and faculty have positive perceptions of open/alternative resources and their utilization in a textbook replacement initiative
N. Delimont, E.C. Turtle, A. Bennett, K. Adhikari, B.L. Lindshield
Research in Learning Technology
June 2016
Vol. 24
doi: 10.3402/rlt.v24.29920

Grain Science and Industry

14-110-J Temporal changes in stored-product insect populations associated with boot, pit, and load-out areas of grain elevators and feed mills
D.R. Tilley, M.E. Casada, B. Subramanyam, F.H. Arthur
Journal of Stored Products Research
September 2017
Vol. 73, p. 62-73

14-167-J Effects of nitrogen source on ethanol production in very high gravity fermentation of corn starch
L. Zhaofeng, D. Wang, Y.-C. Shi
Journal of the Taiwan Institute of Chemical Engineers
January 2017
Vol. 70, January 2017, p. 229-235
https://doi.org/10.1016/j.jtice.2016.10.055

14-168-J Energy and cost for pelleting and transportation of select cellulosic biomass feedstocks for ethanol production
Applied Engineering in Agriculture
2014
Volume: 30, Issue 1, p. 77-85
doi: 10.13031/aea.30.9719
15-360-J Changes in protein and starch digestibility in sorghum flour during heat–moisture treatments
T.-H. Vu, S. Bean, C.-F. Hsieh, Y.-C. Shi
Journal of the Science of Food and Agriculture
May 2017
97: 4770-4779
doi:10.1002/jsfa.8346

14-402-J Lactic acid production from biomass-derived sugars via co-fermentation of Lactobacillus brevis and Lactobacillus plantarum
Y. Zhang and P.V. Vadlani
Journal of Bioscience and Bioengineering
June 2015
Vol. 119, Issue 6, p. 694-699
https://doi.org/10.1016/j.jbiosc.2014.10.027

15-045-J Optimization and modeling of flow characteristics of low-oil DDGS using regression techniques
R. Bhadra, R.P. Kingsly Ambrose, M.E. Casada, S. Simsek, K. Siliveru
Transactions of the American Society of Agricultural and Biological Engineers
2017
60(1): 249-258
doi: 10.13031/trans.11928

15-184-J Effect of chaff on bulk flow properties of wheat
Q. Bian, R.P.K. Ambrose, B. Subramanyam
Journal of Stored Products Research
October 2015
Vol. 64, Part A, p. 21-26
https://doi.org/10.1016/j.jspr.2015.08.004

15-185-J Effects of insect-infested kernels on bulk flow properties of wheat
Q. Bian, R.P.K. Ambrose, B. Subramanyam
Journal of Stored Products Research
July 2015
Volume 63, p. 51-56
https://doi.org/10.1016/j.jspr.2015.06.002

15-194-B Overview of sorghum industrial utilization
G. Qi, N. Li, X.S. Sun, D. Wang
May 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0070

15-267-J Anticancer drug camptothecin test in 3D hydrogel networks with HeLa cells
J. Liang, X.S. Sun, Z. Yang, S. Cao
Scientific Reports
February 2017
7: 37626
doi:10.1038/srep37626

15-350-J Enhanced D-lactic acid production from renewable resources using engineered Lactobacillus plantarum
Y. Zhang, P.V. Vadlani, A. Kumar, P.R. Hardwidge, R. Govind, T. Tanaka, A. Kondo
Applied Microbiology Biotechnology
January 2016
Vol. 100, Issue 1, p. 279-288
doi: 10.1007/s00253-015-7016-0

15-377-J Effect of insect feeding, pathogen infection, and heat stress on antioxidant properties of wheat bran
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
July 2017
Vol. 57, No. 5, p. 2662-2670
doi:10.2135/cropsci2015.06.0363

15-401-J Evaluation of structural treatment efficacy against Tribolium castaneum and Tribolium confusum (Coleoptera: Tenebrionidae) using meta-analysis of multiple studies conducted in food facilities
J.F. Campbell, K.A. Buckman, P.G. Fields, B. Subramanyam
Journal of Economic Entomology
July 2015
Vol. 108, Issue 5, p. 2125-2140
https://doi.org/10.1093/jee/tov215

15-434-J Image analysis approach to understand the differences in flour particle surface and shape characteristics
Cereal Chemistry
March 2016
Vol. 93, Issue 3, p. 234-241
15-450-J  Bird-cherry oat aphid (*Rhopalosiphum padi*) feeding stress induces enhanced levels of phenolics in mature wheat grains  
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl  
Crop Science  
January 2017  
Vol. 57  
10.2135/cropsci2015.08.0476.v

16-011-J  Profiling endosperm purity of commercial mill streams preceded by debranning using quantitative chemical imaging  
M.D. Boatwright, E.S. Posner, R. Lopes, D.L. Wetzl  
Cereal Foods World  
October 2015, Vol. 60, No. 5

16-049-J  Ingredient database management: Part I. Overview and sampling procedures  
Journal of Swine Health and Production  
January 2016  
Vol. 24, No. 4  

16-050-J  Ingredient database management: Part II. Energy  
Journal of Swine Health and Production  
April 2016  
Vol. 24, No. 4  

16-052-J  Fact sheet – Ingredient database management for swine: phosphorus  
Journal of Swine Health and Production  
July 2015  
Vol. 25, No. 2  

16-073-J  Physico-chemical properties of camelina protein altered by sodium bisulfite and guanidine-HCl  
X. Zhu, D. Wang, X.S. Sun  
Industrial Crops and Products  
May 2016  
Vol. 83, p. 453-461  
https://doi.org/10.1016/j.indcrop.2015.12.085

16-095-J  Production of single cell oil from *Lipomyces starkeyi* ATCC 56304 using biorefinery by-products  
K. Probst and P.V. Vadlani  
Bioresource Technology  
December 2015  
98:268-75  
doi: 10.1016/j.biortech.2015.09.018

16-106-J  Novel biomass pretreatment using alkaline organic solvents: A green approach for biomass fractionation, and 2,3-butanediol production  
Y.N. Guragain, K.P. Bastola, R.L. Madl, P.V. Vadlani  
Bioenergy Research  
June 2016  
Vol. 9, Issue 2, p. 643-655  
doi: 10.1007/s12155-015-9706-y

16-172-J  Sucrose replacement in high ratio white layer cakes  
R.A. Miller, O.E. Dann, A.R. Oakley, M.E. Angermayer, K.H. Brackebusch  
Journal of the Science of Food and Agriculture  
December 2016  
Vol. 97, Issue 10  
https://doi.org/10.1002/jsfa.8170

16-241-S  Cattlemen’s Day 2016  
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors  
Kansas Agricultural Experiment Station Research Reports  
Vol. 2, Issue 1  
http://newprairiepress.org/kaesrr/vol2/iss1/

16-250-J  Effect of RS4 resistant starch on dietary fiber content of white pan bread  
R. Miller and E. Bianchi  
Cereal Chemistry  
July 2016, Vol. 94, Issue 2  
https://doi.org/10.1094/CCHEM-03-16-0048-R
16-278-J Significance of composition and particle size on the shear flow properties of wheat flour
K. Siliveru, R.P.K. Ambrose, P.V. Vadhani
Journal of the Science of Food and Agriculture
September 2016
https://doi.org/10.1002/jsfa.8038

16-334-J Sampling methods to detect and estimate populations of Tyrophagus putrescentiae (Schrank) (Sarcoptiformes: Acaridae) infesting dry-cured hams
B. Amoah, D. Hagstrum, B. Subramanyam, J.F. Campbell, M.W. Schilling, T.W. Phillips
Journal of Stored Product Research
September 2017
Vol. 73, p. 98-108
https://doi.org/10.1016/j.jspr.2017.07.004

16-342-J Granular bond number model to predict the flow of fine flour powders using particle properties
Journal of Food Engineering
September 2017
Vol. 208
https://doi.org/10.1016/j.jfoodeng.2017.04.003

16-358-J Formation of pellet fines during the feed manufacturing process, transportation and feed line delivery, and nutrient composition of pellets and fines
American Society of Agricultural and Biological Engineers
Vol. 33, Issue 6
10.13031/aea.12304

Horticulture and Natural Resources

14-116-J Growth responses of Zoysia spp. under tree shade in the midwestern United States
K.W. Peterson, J.D. Fry, D.J. Bremer
HortScience
November 2014
Vol. 49, No. 11 1444-1448

14-343-J Applicator and primo effects on the persistence of painted golf course water hazard and out-of-bounds lines on bermudagrass
J.D. Fry and J.K. Kruse
Applied Turfgrass Science
April 2014
Vol. 11, Issue 1
doi:10.2134/ATS-2014-0037-RS

15-262-J Relationship between high school student participation in state-level Future Farmers of America Career Development events and matriculation at the host university: A case study in horticulture at Kansas State University
K.A. Williams, C.T. Miller, W. Upham
HortTechnology
December 2016
Vol. 26, No. 6 862-868
doi: 10.21273/HORTTECH03506-16

15-400-J Assessing impact of online delivery of turfgrass and landscape information
M.M. Kennelly and J.A. Hoyle
Journal of Extension
October 2015
Vol. 53, No. 5
https://www.joe.org/joe/2015october/tt4.php

15-420-J Colorant application volume and color persistence on a ‘Chisholm’ zoysiagrass lawn
R. Braun, J. Fry, M. Kennelly, D. Bremer, J. Griffin
HortTechnology
June 2016
Vol. 26, No. 3 3341-319

data:10.2134/cftm2015.0213

16-031-J Evaluation of selective herbicide combinations and Paclobutrazol on rough bluegrass control
C. Thompson, M. Sousek, Z. Reicher, J. Fry, M. Kennelly
Crop, Forage and Turfgrass Management
July 2016
2:1-3
doi:10.2134/cftm2015.0213
16-032-J Rough bluegrass incidence in a new tall fescue sward as affected by seeding rate and mowing height
C. Thompson, J. Fry, R. Braun, M. Kennelly
Crop, Forage and Turfgrass Management
March 2017
3:2016-11-0074
doi:10.2134/cftrm2016.11.0074

16-083-J Assessing a faculty development program for the adoption of brain-based learning strategies
C.C. Lavis, K.A. Williams, J. Fallin, P.K. Barnes, S.J. Fishback, S. Thien
Journal of Faculty Development
January 2016
30(1):57-69

16-084-J Rooting stem cuttings of herbaceous and woody ornamentals in substrates containing eastern redbud (Juniperus virginiana)
J.A. Brock, J.J. Griffin, C.R. Boyer
Journal of Environmental Horticulture
December 2015
33(4):155-159

16-217-J Registration of KSUZ 0802 zoysiagrass
Journal of Plant Registrations
April 2017
11: 2: 100-106
doi:10.3198/jpr2016.03.0010crc

16-262-J Evaluation of spring and fall fungicide applications for large patch management in zoysiagrass
K. Obassa, J. Fry, D. Bremer, M. Kennelly
International Turfgrass Society Research Journal
October 2017
Vol. 13, Issue 1
10.2134/itsrj2016.04.0274

16-272-J Measurement of evapotranspiration in turfgrass: A comparison of techniques
K.W. Peterson, D.J. Bremer, K.B. Shonkwiler, J.M. Ham
Agronomy Journal
June 2017
doi:10.2134/agronj2017.02.0088

16-273-J Effects of soil moisture-based irrigation controllers, mowing height, and trinexapac-ethyl on tall fescue irrigation amounts and mowing requirements
J. Chabon, D.J. Bremer, J.D. Fry, C. Lavis
International Turfgrass Society Research Journal
March 2017
Vol. 91, p. 9-16
http://dx.doi.org/10.1016/j.theriogenology.2016.11.032

16-305-J Estimating transpiration from turfgrass using stomatal conductance values derived from infrared thermometry
K.W. Peterson, D.J. Bremer, J.M. Blonquist Jr.
International Turfgrass Society Research Journal
October 2017
Vol. 13, No. 1, p. 113-118
doi:10.2134/itsrj2016.09.0788

16-323-J Physiological and pathogenic contributors to the summer decline of Poa trivialis
C. Thompson, M. Kennelly, J. Fry, M. Sousek, Z. Reicher
International Turfgrass Research Journal
October 2017
Vol. 13, Issue 1
doi: 10.2134/itsrj2016.05.0304

16-373-J Evapotranspiration from spider and jade plants can improve relative humidity in an interior environment
K. Williams, E.W. Kerschen, C. Garten, M.M. Derby
HortTechnology
December 2016
Vol. 26, Issue 26, p. 803-810
10.21273/HORTTECH03473-16

16-380-J Transcriptome analysis reveals potential mechanisms for inhibition of intumescence development by UV radiation in tomato
Q. Wu, S. Park, M.B. Kirkham, K.A. Williams
Environmental and Experimental Botany
February 2017
Vol. 134, p. 130-140
http://dx.doi.org/10.1016/j.envexpbot.2016.11.006
Comparison of corn, grain sorghum, soybean, and sunflower under limited irrigation
Agronomy Journal
January 2016
doi:10.2134/agronj2015.0332

Simplified equations to estimate flushline diameter for subsurface drip irrigation systems
F.R. Lamm and J. Puig-Bargués
Transactions of the American Society of Agricultural and Biological Engineers
November 2016
Vol. 60(1): 185-192
doi: 10.13031/trans.12131

2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

2015 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1121
Kansas Agricultural Experiment Station

2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

Longevity: An important aspect in SDI success
F.R. Lamm, D.H. Rogers, I. Kisekka, J. Aguilar
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
2016

Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O’Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE

Mycotoxins in grain chains
J.F. Leslie and A.F. Logrieco
Mycotoxin reduction in grain chains
July 2014

Effects of seed protection chemicals on stand and yield of grain sorghum at Ottawa, Kansas, 2013
D.J. Jardine and E. Adee
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/PDMR/volume8/abstracts/ST009.asp

Effects of seed protection chemicals on stand and yield of soybeans at Courtland, Kansas, 2013
D.J. Jardine
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/PDMR/volume8/abstracts/ST008.asp

Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2013
D.J. Jardine, E. Adee, K. Kusel
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume8/abstracts/st007.asp

Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O’Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
15-030-J Independent mis-splicing mutations in TaPHS1 causing loss of preharvest sprouting (PHS) resistance during wheat domestication
S. Liu, S.K. Sehgal, M. Lin, J. Li, H.N. Trick, B.S. Gill, G. Bai
New Phytologist
November 2015
208: 928-935
https://doi.org/10.1111/nph.13489

15-039-J Adult plant resistance to *Puccinia triticina* in a geographically diverse collection of *Aegilops tauschii*
B. Kalia, D.L. Wilson, R.L. Bowden, R.P. Singh, B.S. Gill
Genetic Resources and Crop Evolution
June 2017
(2017) 64: 913-926
https://doi.org/10.1007/s10722-016-0411-2

15-070-B Pathology for the curious: Why study pathology?
W.W. Bockus
2015
University of Canberra Press, Canberra, Australia

15-217-J Morphological characterization and trichothecene genotype analysis of a fusarium head blight population in South Africa
A. Minnaar-Ontong, L. Herselman, W-M. Kriel, J.F. Leslie
European Journal of Plant Pathology
June 2017
Vol. 148, Issue 2, p. 261-269

15-314-J RNA interference tools for the western flower thrips, *Frankliniella occidentalis*
I.E. Badillo-Vargas, D. Rotenberg, B.A. Schneweis, A.E. Whitfield
Journal of Insect Physiology
May 2015
Vol. 76, p. 36-46
https://doi.org/10.1016/j.jinsphys.2015.03.009

15-387-J Near-Infrared spectroscopic evaluation of single-kernel deoxynivalenol accumulation and fusarium head blight resistance components in wheat
K.H.S. Peiris, W.W. Bockus, F.E. Dowell
Cereal Chemistry
June 2015
Vol. 93, Issue 1
https://doi.org/10.1094/CCHEM-03-15-0057-R

15-400-J Assessing impact of online delivery of turfgrass and landscape information
M.M. Kennelly and J.A. Hoyle
Journal of Extension
October 2015
Vol. 53, No. 5
https://www.joe.org/joe/2015october/tt4.php

15-420-J Colorant application volume and color persistence on a 'Chisholm' zoysiagrass lawn
R. Braun, J. Fry, M. Kennelly, D. Bremer, J. Griffin
HortTechnology
June 2016
Vol. 26, No. 3 3341-319

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-028-J Quantifying variety-specific heat resistance and the potential for adaptation to climate change
J.B. Tack, J.A. Barkley, T.W. Rife, J.A. Poland, L.L. Nalley
Global Change Biology
22(August 2016)8:2904-2912
16-031-J Evaluation of selective herbicide combinations and Paclobutrazol on rough bluegrass control
C. Thompson, M. Sousek, Z. Reicher, J. Fry, M. Kennelly
Crop, Forage and Turfgrass Management
July 2016
2:1-3
doi:10.2134/cftm2015.0213

16-032-J Rough bluegrass incidence in a new tall fescue sward as affected by seeding rate and mowing height
C. Thompson, J. Fry, R. Braun, M. Kennelly
Crop, Forage and Turfgrass Management
March 2017
3:2016-11-0074
doi:10.2134/cftm2016.11.0074

16-034-J Phylogenomics of Xanthomonas field strains infecting pepper and tomato reveals diversity in effector repertoires and identifies determinants of host specificity
Frontiers in Microbiology
June 2015
http://journal.frontiersin.org/article/10.3389/fmicb.2015.00535

16-037-J Genomic selection for processing and end-use quality traits in the CIMMYT spring bread wheat breeding program
The Plant Genome
July 2016, 9(2)
doi:10.3835/plantgenome2016.01.0005

16-053-J Thrips transmission of tospoviruses
D. Rotenberg, A.L. Jacobson, D.J. Schneweis, A.E. Whitfield
Current Opinion in Virology
December 2015
15:80–89
https://doi.org/10.1016/j.coviro.2015.08.003

16-061-J RNAi mediated, stable resistance to Triticum mosaic virus in wheat
J.L. Shoup, L.F. Cruz, H.N. Trick, J.P. Fellers
Crop Science
April 2016
56: 4: 1602-1610
doi:10.2135/cropsci2015.09.0577

16-074-J Gene targeting by the TAL effector PthXo2 reveals cryptic resistance gene for bacterial blight of rice
The Plant Journal
May 2015
Vol. 82, Issue 4
doi: 10.1111/tpj.12838

16-076-J The maize brown midrib4 (bm4) gene encodes a functional folylpolyglutamate synthase (FPGS)
The Plant Journal
February 2015
81(3):493-504
doi: 10.1111/tpj.12745

16-080-J Precisely mapping a major gene conferring resistance to Hessian fly in bread wheat using genotyping-by-sequencing
G. Li, M.-S. Chen, E. Edae, J. Poland, E. Akhunov, S. Chao, G. Bai, B.F. Carver, L. Yan
BMC Genomics
2015
0.741666667

16-082-J Influence of nitrogen source and application timing on large patch of zoysiagrass
G.L. Miller, D.T. Earlywine, R. Braun, J. Fry, M.M. Kennelly
Crop, Forage and Turfgrass Management
May 2016
2:1-9
doi:10.2134/cftm2015.0189
Precisely mapping a major gene conferring resistance to Hessian fly in bread wheat using genotyping-by-sequencing
G. Li, Y. Wang, M.-S. Chen, E. Edae, J. Poland, E. Akhunov, S. Chao, G. Bai, B.F. Carver, L. Yan
BioMed Central Genomics
February 2015
0.741666667
https://doi.org/10.1186/s12864-015-1297-7

Fine mapping and characterization of Sr21, a temperature-sensitive diploid wheat resistance gene effective against the Puccinia graminis f. sp. tritici Ug99 race group
S. Chen, M.N. Rouse, W. Zhang, Y. Jin, E. Akhunov, Y. Wei, J. Dubcovsky
Theoretical and Applied Genetics
April 2015
128(4):645-656
doi: 10.1007/s00122-015-2460-x

Impact of the D genome and quantitative trait loci on quantitative traits in a spring durum by spring bread wheat cross
J.R. Kalous, J.M. Martin, J.D. Sherman, H.Y. Heo N.K. Blake, S.P. Lanning, J.L. Eckhoff, S. Chao, E. Akhunov, L.E. Talbert
Theoretical and Applied Genetics
September 2015
128(9):1799-1811

Genetic diversity among wheat accessions from the USDA National Small Grains Collection
Crop Science Society of America
2015
55:1243-1253

Evaluation and association mapping of resistance to tan spot and Stagonospora nodorum blotch in adapted winter wheat germplasm
Z. Liu, I. El-Basyoni, G. Kariyawasam, G. Zhang, A. Fritz, J. Hansen, F. Marais, A. Friskop, S. Chao, E. Akhunov, P.S. Baenziger
Plant Disease
October 2015
99:1333-1341
https://doi.org/10.1094/PDIS-11-14-1131-RE

Multiplexed, trait-linked marker set for rapid genotyping in wheat using next generation sequencing
A. Bernardo, S. Wáng, P. St. Amand, G. Bai
PLOS ONE
December 2015
10(12): e0143890
https://doi.org/10.1371/journal.pone.0143890

Development of a D genome specific marker resource for diploid and hexaploid wheat
BMC Genomics
August 2015
1.115277778

GSP: A web-based platform for designing genome-specific primers in polyploids
Y. Wáng, V.K. Tiwari, N. Rawat, B.S. Gill, N. Huo, F.M. You, D. Coleman-Derr, Y.Q. Gu
Bioinformatics
August 2016
Vol. 32, Issue 15
https://doi.org/10.1093/bioinformatics/btw134

A whole-genome, radiation hybrid mapping resource of hexaploid wheat
The Plant Journal
April 2016
https://doi.org/10.1111/tpj.13153

Emergence of a new population of the select agent Rathayibacter toxicus: An ecologically complex, geographically isolated bacterium
M. Arif, G.Y. Busot, R. Mann, B. Rodoni, S. Liu, J.P. Stack
PLOS ONE
May 2016
11(5): e0156182
https://doi.org/10.1371/journal.pone.0156182
16-135-J Genome analysis of *Rathayibacter toxicus* strain WAC3373 from Western Australia, sequencing, assembly and annotation
M. Arif, G.Y. Busot, R. Mann, B. Rodoni, S. Liu, J.P. Stack
Phytopathology
December 2016
Vol. 106, Issue 12, p. 22-25, S5

16-139-J Natural occurrence of viruses and associated grain yields of paired symptomatic and nonsymptomatic tillers in Kansas winter wheat fields
Phytopathology
2016
106(2) 202-210

16-151-J The lolium pathotype of *magnaporthe oryzae* recovered from a single blasted wheat plant in the United States
Plant Disease
May 2017
Vol. 101, No. 5, p. 684-692
https://doi.org/10.1094/PDIS-05-16-0700-RE

16-162-J Environmental conditions associated with stripe rust in Kansas winter wheat
B.S. Grabow, D.A. Shah, E.D. DeWolf
Plant Disease
November 2016
Vol. 100, No. 11, p. 2306-2312
http://dx.doi.org/10.1094/PDIS-11-15-1321-RE

16-165-J Management strategies for barley yellow dwarf on winter wheat in Kansas
W.W. Bockus, E.D. De Wolf, T.C. Todd
Plant Health Progress
2016
17:122-127

16-171-J United States Culture Collection Network: 2015 meeting report and call to action
USDA-ARS publication 326614

16-174-J Active dispersal through soil and colonization of organic matter by *Fusarium proliferatum*
A.R. Gaige, T. Todd, J. Stack
Phytopathology
2016
106:S4.1

16-189-J An evaluation of the status of living collections for plant, environmental, and microbial research
K. McCluskey, J.P. Parsons, K. Quach, C.S. Duke
Journal of Biosciences
May 2017, Vol. 42, Issue 2
https://doi.org/10.1007/s12038-017-9685-6

16-195-J Effect of soil-test phosphorus and phosphorus fertilization on the severity of soybean sudden death syndrome
D.R. Diaz, E. Adee, C.R. Little
Crop, Forage and Turfgrass Movement
December 2016
Vol. 2, Issue 1
10.2134/cftm2015.0193

16-197-J Gene targeting by the TAL effector PthXo2 reveals cryptic resistance gene for bacterial blight of rice
The Plant Journal
2015
82(4)632-643

16-198-J The maize brown midrib4 (bm4) gene encodes a functional folylpolyglutamate synthase
The Plant Journal
2015
81(3)493-504


16-246-J Plant organ evolution revealed by phytotranscriptomics in *Arabidopsis thaliana* L. Lei, J.G. Steffen, E. J. Osborne, C. Toomajian Scientific Reports 5.546527778 doi:10.1038/s41598-017-07866-6


<table>
<thead>
<tr>
<th>Citation</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Volume</th>
<th>Issue</th>
<th>Pages</th>
<th>Year</th>
<th>DOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-021-S</td>
<td>2015 Kansas performance tests with winter wheat varieties</td>
<td>J. Lingenfelser and multiple co-authors</td>
<td>Kansas Agricultural Experiment Station</td>
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<td></td>
<td></td>
<td>2015</td>
<td></td>
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<tr>
<td>16-022-S</td>
<td>2015 Kansas performance tests with corn hybrids</td>
<td>J. Lingenfelser and multiple co-authors</td>
<td>Kansas Agricultural Experiment Station</td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>16-023-S</td>
<td>2015 Kansas performance tests with soybean varieties</td>
<td>J. Lingenfelser and multiple co-authors</td>
<td>Kansas Agricultural Experiment Station</td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>16-024-S</td>
<td>2015 Kansas performance tests with grain sorghum hybrids</td>
<td>J. Lingenfelser and multiple co-authors</td>
<td>Kansas Agricultural Experiment Station</td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>16-025-S</td>
<td>2015 Kansas performance tests with sunflower hybrids</td>
<td>J. Lingenfelser and multiple co-authors</td>
<td>SRP1123</td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>16-326-J</td>
<td>Corn yield and grain nutrient uptake from 50 years of nitrogen and phosphorus fertilization</td>
<td>A. Schlegel and J. Havlin</td>
<td>Agronomy Journal</td>
<td>2016</td>
<td></td>
<td>109:335-342</td>
<td>2016</td>
<td>10.2134/agronj2016.05.0294</td>
</tr>
</tbody>
</table>
Statistics

14-028-J Intraspecific variation of a dominant grass and local adaptation in reciprocal garden communities along a US Great Plains’ precipitation gradient: implications for grassland restoration with climate change
Evolutionary Applications
July 2015
8, p. 705-723
doi:10.1111/eva.12281

15-147-J Effect of mouse antisera targeting the Phlebotomus papatasi midgut chitinase PpChit1 on sandfly physiology and fitness
M. Robles-Murguia, N. Bloedow, L. Murray, M. Ramalho-Ortigao
Memorias Institute Oswaldo Cruz
December 2014
Vol. 109(8): 1064-1069

15-329-J Identification and quantification of anthocyanins in transgenic purple tomato
Food Chemistry
July 2016
Vol. 202, p. 184-188
https://doi.org/10.1016/j.foodchem.2016.01.128

15-342-J Evaluation of ammoniated wheat straw during a receiving and growing period for beef cattle
The Professional Animal Scientist
June 2016
Vol. 32, Issue 3, p. 295-301
http://dx.doi.org/10.15232/pas.2015-01448

15-413-J Shelf life of fresh meat products under LED or fluorescent lighting
Meat Science
July 2016
Vol. 117, p. 75-84, ISSN 0309-1740
https://doi.org/10.1016/j.meatsci.2016.02.032

16-241-S Cattlemen’s Day 2016
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 2, Issue 1
http://newprairiepress.org/kaesrr/vol2/iss1/

16-379-J The effect of temperature and host plant resistance on population growth of the soybean aphid biotype 1 (Hemiptera: Aphididae)
A.R. Hough, J.R. Nechols, B.P. McCornack, D.C. Margolies, B.K. Sandercock, D.Yan, L. Murray
Environmental Entomology
February 2017
Vol. 46, Issue 1, p. 58-67
https://doi.org/10.1093/ee/nvw160
Director's Report of Research in Kansas 2016

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